UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2021

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from __________ to __________

Commission File Number 001-34791

Magnachip

Magnachip Semiconductor Corporation

(Exact name of registrant as specified in its charter)

Delaware **(State or Other Jurisdiction of Incorporation or Organization)**	**83-0406195** **(I.R.S. Employer Identification No.)**

c/o MagnaChip Semiconductor S.A.
1, Allée Scheffer, L-2520
Luxembourg, Grand Duchy of Luxembourg
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (352) 45-62-62

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value $0.01 per share	**MX**	**New York Stock Exchange**
Preferred Stock Purchase Rights		**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☒ Yes ☐ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ☐ Yes ☒ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically, every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files. ☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer	☒	Accelerated Filer	☐
Non-Accelerated Filer	☐	Smaller Reporting Company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). ☐ Yes ☒ No

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter. $1,093,768,455.

As of February 14, 2022, the registrant had 45,810,893 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement relating to its 2022 annual meeting of stockholders will be incorporated by reference into Part III of this Annual Report on Form 10-K or included by amendment to this report within 120 days after the end of the fiscal year to which this report relates.

MAGNACHIP SEMICONDUCTOR CORPORATION AND SUBSIDIARIES
FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2021
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PART I

INDUSTRY AND MARKET DATA

We have made statements in this Annual Report on Form 10-K for the year ended December 31, 2021 (this “Report”) regarding our industry and our position in the industry based on our experience in the industry and our own views of market conditions, but we have not independently verified those statements. We do not have any obligation to announce or otherwise make publicly available updates or revisions to forecasts contained in these documents.

Statements made in this Report, unless the context otherwise requires, include the use of the terms “us,” “we,” “our,” the “Company” and “Magnachip” to refer to Magnachip Semiconductor Corporation and its consolidated subsidiaries. The term “Korea” refers to the Republic of Korea or South Korea. On September 1, 2020, we completed the sale of our Foundry Services Group business and our fabrication facility located in Cheongju to Key Foundry Co., Ltd. Unless otherwise noted herein, historical operational metrics presented herein do not include those of the Foundry Services Group.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

We have made certain “forward-looking” statements in this Report within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), that involve risks and uncertainties. Forward-looking statements give our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business. You can identify these statements by the fact that they do not relate strictly to historical or current facts. These statements may include words such as “anticipate,” “estimate,” “expect,” “project,” “intend,” “plan,” “believe” and other words and terms of similar meaning in connection with any discussion of the timing or nature of future operating or financial performance or other events. All statements other than statements of historical facts included in this Report that address activities, events or developments that we expect, believe or anticipate will or may occur in the future are forward-looking statements.

These forward-looking statements are largely based on our expectations and beliefs concerning future events, which reflect estimates and assumptions made by our management. These estimates and assumptions reflect our best judgment based on currently known market conditions and other factors relating to our operations and business environment, all of which are difficult to predict and many of which are beyond our control. Although we believe our estimates and assumptions to be reasonable, they are inherently uncertain and involve a number of risks and uncertainties that are beyond our control. In addition, management’s assumptions about future events may prove to be inaccurate. Management cautions all readers that the forward-looking statements contained in this Report are not guarantees of future performance, and we cannot assure any reader that those statements will be realized or the forward-looking events and circumstances will occur. Actual results may differ materially from those anticipated or implied in the forward-looking statements due to the factors listed in the “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business” sections and elsewhere in this Report.

All forward-looking statements speak only as of the date of this Report. We do not intend to publicly update or revise any forward-looking statements as a result of new information or future events or otherwise, except as required by law. These cautionary statements qualify all forward-looking statements attributable to us or persons acting on our behalf.

Item 1. Business

General

We are a designer and manufacturer of analog and mixed-signal semiconductor platform solutions for communications, Internet of Things (“IoT”) applications, consumer, computing, industrial and automotive applications. We have a proven record with more than 40 years of operating history, a portfolio of approximately 1,150 registered patents and pending applications and extensive engineering and manufacturing process expertise. Our standard products business includes our Display Solutions and Power Solutions business lines. Our Display Solutions products provide panel display solutions to major suppliers of large and small rigid and flexible panel displays, and mobile, automotive applications and home appliances. Our Power Solutions products include discrete and integrated circuit solutions for power management in communications, consumer, computing, servers, automotive, and industrial applications.

Our wide variety of analog and mixed-signal semiconductor products allow us to address multiple high-growth end markets and rapidly develop and introduce new products in response to market demands. Our design center and substantial manufacturing operations in Korea place us at the core of the global electronics device supply chain. We believe this enables us to quickly and efficiently respond to our customers’ needs, and allows us to better serve and capture additional demand from existing and new customers. Certain of our OLED products are produced using external 12-inch foundries. Through a strategic cooperation with external 12-inch foundries, we are managing to ensure outsourcing wafers at competitive price and produce quality products.

We have a long history of supplying and collaborating on product and technology development with leading innovators in the consumer electronics market. As a result, we have been able to strengthen our technology and develop products that are in high demand by our customers and end consumers. We sold approximately 380 distinct products in the year ended December 31, 2021 with a substantial portion of our revenues derived from a concentrated number of customers.

Our business is largely driven by innovation in the consumer electronics markets and the growing adoption by consumers worldwide of electronic devices for use in their daily lives. The consumer electronics market is large and growing rapidly, largely due to consumers increasingly accessing a wide variety of rich media content, such as high definition audio and video, mobile devices, televisions and games on advanced consumer electronic devices. Electronics manufacturers are continuously implementing advanced technologies in new generations of electronic devices using analog and mixed-signal semiconductor components, such as display drivers that enable display of high resolution images, encoding and decoding devices that allow playback of high definition audio and video, and power semiconductors that increase power efficiency, thereby improving heat dissipation and extending battery life.

For the year ended December 31, 2021, we generated total revenues of $474.2 million, net income of $56.7 million, Adjusted EBITDA of $70.7 million, Adjusted Operating Income of $56.1 million and Adjusted Net Income of $51.1 million. See “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” elsewhere in this Report for an explanation of our use of Adjusted EBITDA, Adjusted Operating Income and Adjusted Net Income and a reconciliation to income (loss) from continuing operations prepared in accordance with United States Generally Accepted Accounting Principles (“U.S. GAAP”).

Our History

Our business was named “MagnaChip Semiconductor” when it was acquired from SK hynix Inc., formerly known as Hynix Semiconductor, Inc. (“SK hynix”), in October 2004.

On March 10, 2011, we completed our initial public offering. In connection with our initial public offering, we converted from a Delaware limited liability company to a Delaware corporation.

On December 30, 2020, we changed our name from “MagnaChip Semiconductor Corporation” to “Magnachip Semiconductor Corporation.”

Legacy Foundry Services Group Business

On September 1, 2020, we completed the sale of our Foundry Services Group business and our fabrication facility located in Cheongju known as “Fab 4” to Key Foundry Co., Ltd. This sale was part of a strategic shift in our operational focus to our standard products business. The Foundry Services Group business provided specialty analog and mixed signal foundry services mainly for fabless and Integrated Device Manufacturer semiconductor companies.

Our Products

Our Display Solutions line of products provide flat panel display solutions to major suppliers of large and small flat panel displays. These products include source and gate drivers and timing controllers that cover a wide range of flat panel displays used in mobile communications, automobiles, entertainment devices, notebook PCs, monitors and liquid crystal display (LCD), organic light emitting diodes (OLED) and Micro light emitting diode (Micro LED) televisions. Our Display Solutions line of products support the industry’s most advanced display technologies, such as OLEDs, and low temperature polysilicon thin film transistor (LTPS TFT), as well as high-volume display technologies such as amorphous silicon thin film transistors (a-Si TFTs). Our Display Solutions products represented 43.3%, 59.0% and 59.3% of our total revenues for the fiscal years ended December 31, 2021, 2020 and 2019, respectively.

We expanded our business and market opportunity by establishing our Power Solutions product line in late 2007. We have introduced a number of power management semiconductor products, including discrete and integrated circuit solutions for power management in high-volume consumer applications. These products include metal oxide semiconductor field effect transistors (MOSFETs), insulated-gate bipolar transistors (IGBTs), AC-DC/DC-DC converters, LED drivers, regulators and power management integrated circuits (PMICs) for a range of devices, including televisions, smartphones, mobile phones, wearable devices, desktop PCs, notebooks, tablet PCs, other consumer electronics, automotive, and industrial applications such as power suppliers, e-bikes, photovoltaic inverters, LED lighting and motor drives. Our Power Solutions products represented 48.0%, 32.8% and 33.9% of our total revenues for the fiscal years ended December 31, 2021, 2020 and 2019, respectively.

Market Opportunity

The semiconductor market is large and is expanding its applications. Growth in this market is being driven by consumers seeking to enjoy a wide variety of rich media content, such as high definition audio and video, mobile devices, televisions and games. Recently, industrial applications such as power suppliers, e-bikes, photovoltaic inverters, LED lighting, motor drives, and automotive applications such as on board chargers, electric motor drives, electric pumps, DC-DC converters and powertrain inverters in hybrid & battery electric vehicle (HEV & BEV) are also driving growth in the semiconductor market. Electronics device manufacturers recognize that the consumer entertainment experience plays a critical role in differentiating their products. To address and further stimulate consumer demand, electronics manufacturers have been driving rapid advances in the technology, functionality, form factor, cost, quality, reliability and power consumption of their products. Electronics manufacturers are continuously implementing advanced technologies in new generations of electronic devices using analog and mixed-signal semiconductor components, such as display drivers that enable display of high resolution images, encoding and decoding devices that allow playback of high definition audio and video, and power semiconductors that increase power efficiency, thereby improving heat dissipation and extending battery life. These advanced generations of consumer devices are growing faster than the overall electronics device market.

The user experience delivered by a consumer electronic device is substantially driven by the quality of the display, audio and video processing capabilities and power efficiency of the device. Analog and mixed-signal semiconductors enable and enhance these capabilities. Examples of these analog and mixed-signal semiconductors include display drivers, timing controllers, audio encoding and decoding devices, or codecs, and interface circuits, as well as power semiconductors such as voltage regulators, converters and switches.

Requirements of Leading Electronic Devices Manufacturers

We believe our target customers view the following characteristics and capabilities as key differentiating factors among available analog and mixed-signal semiconductor suppliers:

- ***Broad Offering of Differentiated Products with Advanced System-Level Features and Functions.*** Leading electronic devices manufacturers seek to differentiate their products by incorporating innovative semiconductor products that enable unique system-level functionality and enhance performance. These consumer electronics manufacturers seek to closely collaborate with semiconductor solutions providers that continuously develop new and advanced products, and technologies that enable state of the art features and functions, such as bright and thin displays, small form factor and energy efficiency.
- ***Fast Time-to-Market with New Products.*** As a result of rapid technological advancements and short product lifecycles, our target customers typically prefer suppliers who have a compelling pipeline of new products and capacity to leverage a substantial intellectual property and technology base to accelerate product design and manufacturing when needed.
- ***Ability to Deliver Cost Competitive Solutions.*** Electronics manufacturers are under constant pressure to deliver cost-competitive solutions. To accomplish this objective, they need strategic semiconductor suppliers that have the ability to provide system-level solutions, highly integrated products and a broad product offering at a range of price points and have the design and manufacturing infrastructure and logistical support to deliver cost competitive products.
- ***Focus on Delivering Highly Energy-Efficient Products.*** Consumers increasingly seek longer run-time, environmentally friendly and energy-efficient consumer electronic products. In addition, there is an increasing regulatory focus on reducing energy consumption of consumer electronic products. As a result of a global focus on more environmentally friendly products, our customers are seeking analog and mixed-signal semiconductor suppliers that have the technological expertise to deliver solutions that satisfy these ever increasing regulatory and consumer power efficiency demands.

Our Competitive Strengths

Designing and manufacturing analog and mixed-signal semiconductors capable of meeting the evolving functionality requirements for electronics devices are challenging. In order to grow and succeed in the industry, we believe semiconductor suppliers must have a broad, advanced intellectual property portfolio, product design expertise, comprehensive product offerings and specialized manufacturing process technologies and capabilities. Our competitive strengths enable us to offer our customers solutions to solve their key challenges. We believe our strengths include:

- ***Advanced Analog and Mixed-Signal Semiconductor Technology.*** Our long operating history, large patent portfolio, extensive engineering and manufacturing process expertise and analog and mixed-signal intellectual property allow us to leverage our technology and develop new products across multiple end markets. Our product development efforts are supported by a team of over 230 engineers as of the date of this Annual Report. Our platform allows us to develop and introduce new products quickly and integrate numerous functions into a single product. For example, we were one of the first companies to introduce a commercial OLED display driver for mobile phones.
- ***Established Relationships and Close Collaboration with Leading Global Electronics Companies.*** We have a long history of supplying and collaborating on product and technology development with leading

innovators in the consumer electronics market. Our close customer relationships have been built based on many years of close collaborative product development, which provides us with deep system-level knowledge and key insights into our customers' needs. As a result, we are able to continuously strengthen our technology in areas of strategic interest for our customers and focus on those products that our customers and end consumers demand the most.

- ***Longstanding Presence in Asia and Proximity to Global Electronics Devices Supply Chain.*** Our presence in Asia facilitates close contact with our customers and fast response to their needs, and enhances our visibility into new product opportunities, markets and technology trends. Our design center and substantial manufacturing operations in Korea place us close to many of our largest customers and to the core of the global electronics devices supply chain. We have active applications, engineering, product design and customer support resources, as well as senior management and marketing resources, in geographic locations close to our customers. This allows us to strengthen our relationship with customers through better service, faster turnaround time and improved product design collaboration. We believe this also helps our customers to deliver products faster than their competitors and to solve problems more efficiently than would be possible with other suppliers.
- ***Broad Portfolio of Product Offerings Targeting Large, High-Growth Markets.*** We continue to develop a wide variety of analog and mixed-signal semiconductor solutions for multiple high-growth electronics device end markets. We believe our expanding product offerings allow us to provide additional products to new and existing customers and to cross-sell our products to our established customers. For example, we have leveraged our technology expertise and customer relationships to develop and grow power management solutions to customers. Our power management solutions enable our customers to increase system stability and improve heat dissipation and energy use, resulting in improved system efficiency and system cost savings for our customers, as well as environmental benefits. We have been able to sell these new products to our existing customers as well as expand our customer base.
- ***Highly Efficient Manufacturing Capabilities.*** Our manufacturing strategy is focused on optimizing our asset utilization across our display driver and power management products, which enables us to maintain the price competitiveness of our products through our low-cost operating structure and improve our operational efficiency. We believe the location of our primary manufacturing and research and development facilities in Asia and the relatively low need for ongoing capital expenditures provide us with a number of cost advantages.

Our Strategy

Our objective is to grow our business, cash flow and profitability and to continue strengthening our position in the semiconductor industry as a leading provider of analog and mixed-signal semiconductor products for high-volume markets. Our business strategy emphasizes the following key elements:

- ***Increase Business with Existing Customers.*** We have a global customer base consisting of leading consumer electronics OEMs that sell into multiple end markets. We intend to continue to strengthen our relationships with our customers by collaborating on critical design and product development in order to improve our design-win rates. We seek to increase our customer penetration by more closely aligning our product roadmap with those of our key customers and take advantage of our broad product portfolio, our deep knowledge of customer needs and existing relationships to sell more existing and new products.
- ***Broaden Our Customer Base.*** We expect to continue to expand our global customer base, particularly in China, Hong Kong, and Taiwan, which we collectively refer to as Greater China, and other high-growth geographies, to penetrate new accounts. In addition, we intend to introduce new products and variations of existing products to address a broader customer base. In order to broaden our market penetration, we are complementing our direct customer relationships and sales with an improved base of distributors, with a particular focus on the growth of our power management business.
- ***Drive Execution Excellence.*** We intend to improve our execution through a number of management initiatives, new processes for product development, customer service and personnel development. We

expect these ongoing initiatives will contribute to improvement of our new product development and customer service as well as enhance our commitment to a culture of quick action and execution by our workforce. In addition, we have focused on improving our manufacturing efficiency during the past several years.

- ***Return on Capital Investments and Cash Flow Generation.*** We manufacture most of our Display Solutions products at external foundries. Through a strategic cooperation with external foundries, we are able to adapt dynamically to changing customer requirements and address growing markets without substantial capital investments. We manufacture our Power Solutions products by utilizing our in-house manufacturing facility and external foundry to address a broad portfolio of power products while we seek to maximize return on capital investments and our cash flow generation. We intend to keep our capital expenditures relatively low by maintaining our focus on specialty process technologies that do not require substantial investment in frequent upgrades to the latest manufacturing equipment. However, from time to time, we make special investments to enhance our manufacturing capabilities by investing in new equipment and expanding our facility, which we expect will have a positive impact on our future new product development and revenue, particularly during the period of global shortage of capacity.

Our Technology

We continuously strengthen our advanced analog and mixed-signal semiconductor technology platform by developing innovative technologies and integrated circuit building blocks that enhance the functionality of electronics devices through brighter, thinner displays, enhanced image quality, smaller form factor and longer battery life. Our goal is to leverage our experience and development initiatives across multiple end markets and utilize our understanding of system-level issues our customers face to introduce new technologies that enable our customers to develop more advanced, higher performance products.

Our display technology portfolio includes building blocks for display drivers and timing controllers, processor and interface technologies, as well as sophisticated production techniques, such as chip-on-glass (COG), chip-on-film (COF) and chip-on-plastic (COP) for rigid, flexible bezel-less, edge type, and trench type OLED displays. Our advanced display drivers incorporate Oxide, Low-Temperature Polycrystalline Oxide (LTPO) OLED panel technologies that enable the highest resolution displays. Furthermore, we are developing a broad intellectual property portfolio to improve the quality and the power efficiency of displays, including the development of our high speed interface, high quality image enhancement display data compression and optical compensation technology for OLED displays.

Expertise in ultra-high voltage (UHV), high voltage and deep trench BCDMOS process technologies, low power analog and mixed-signal design capabilities and packaging know-how are key requirements in the power management market. We are currently leveraging our capabilities in these areas with products such as AC-DC/DC-DC converters, -LED drivers, regulators, power management integrated circuits (PMICs), power MOSFETs and IGBTs. We believe our system-level understanding of applications such as LCD televisions, smartphones, computing, and servers, automotive, and industrial applications will allow us to more quickly develop and customize power management solutions for our customers in these markets.

Products by Business Line

Our broad portfolio of products addresses multiple high-growth, consumer-focused end markets. A key component of our product strategy is to supply multiple related product offerings to each of the end markets that we serve.

Display Solutions

Display Driver Characteristics. Display drivers deliver defined analog voltages and currents that activate pixels to exhibit images on displays. The following key characteristics determine display driver performance and end-market application:

- ***Resolution and Number of Channels.*** Resolution determines the level of detail displayed within an image and is defined by the number of pixels per line multiplied by the number of lines on a display. For large displays, higher resolution typically requires more display drivers for each panel. Display drivers that have a greater number of channels, however, generally require fewer display drivers for each panel and command a higher selling price per unit. Mobile displays, conversely, are typically single chip solutions designed to deliver a specific resolution. We cover resolutions ranging from VGA (640 x 480) to UHD (3840 x 2160).
- ***Color Depth.*** Color depth is the number of colors that can be displayed on a panel. For example, for TFT-LCD panels, 262 thousand colors are supported by 6-bit source drivers; 16 million colors are supported by 8-bit source drivers; and 1 billion colors are supported by 10-bit source drivers.
- ***Operational Voltage.*** Display drivers are characterized by input and output voltages. Source drivers typically operate at input voltages from 1.62 to 3.6 volts and output voltages between 9 and 18 volts. Gate drivers typically operate at input voltages from 1.62 to 3.6 volts and output voltages from 30 to 45 volts. Lower input voltage results in lower power consumption and electromagnetic interference (EMI).
- ***Gamma Curve.*** The relationship between the light passing through a pixel and the voltage applied to the pixel by the source driver is referred to as the gamma curve. The gamma curve of the source driver can correct some imperfections in picture quality in a process generally known as gamma correction. Some advanced display drivers feature up to three independent gamma curves to facilitate this correction.
- ***Driver Interface.*** Driver interface refers to the connection between the timing controller and the display drivers. Display drivers increasingly require higher bandwidth interface technology to address the larger data transfer rate necessary for higher definition images. The principal types of interface technologies are embedded clock point to point interface (EPI), mini-low voltage differential signaling (m-LVDS), unified standard interface (USI) and mobile industry processor interface (MIPI).
- ***Package Type.*** The assembly of display drivers typically uses COF, COG and COP package types.
- ***Large Display Solutions.*** We provide display solutions for a wide range of flat panel display sizes used in LCD TVs, OLED TVs, Micro LED TVs as well as IT applications such as monitors, notebook PCs, tablet PCs, automobiles and public information displays.

Our large display solutions include source and gate drivers and timing controllers with a variety of interfaces, voltages, frequencies and packages to meet customers' needs. These products include advanced technologies such as high channel count, with products in mass production to provide up to 1,542 channels. Our large display solutions are designed to allow customers to cost-effectively meet the increasing demand for high resolution displays. We have focused extensively on reducing the die size of our large display drivers and other solutions products to reduce costs without having to migrate to smaller geometries. For example, we have implemented several solutions to reduce die size in large display drivers, such as optimizing design schemes and design rules and applying specific technologies that we have developed internally. We are currently focusing on growing display segments such as OLED TVs and automotive. We have recently introduced a number of new display driver ICs for OLED TV and automotive.

The table below sets forth the features of our products, both in mass production and in customer qualification, which is the final stage of product development, for large-sized displays:

Product	Key Features	Applications
TFT-LCD Source Drivers	• 480 to 1,542 output channels • 6-bit (262 thousand colors), 8-bit (16 million colors), 10-bit (1 billion colors) • Output voltage ranging from 9V to 18V • Low power consumption and low EMI • COF package types • EPI, m-LVDS, USI interface technologies	• LCD/LED TVs • Notebooks • LCD/LED monitors • Automotive
TFT-LCD Gate Drivers	• 272 to 960 output channels • Output voltage ranging from 30V to 45V • COF and COG package types	• Tablet PCs • LCD/LED TVs • Notebooks • Automotive
Timing Controllers	• Wide range of resolutions • EPI, m-LVDS, MIPI, USI-T interface technologies • Input voltage ranging from 1.6V to 3.6V	• Tablet PCs • Public information display
OLED Source Drivers	• 960 output channels • 10 bit (1 billion colors) • Output voltage: 18V • COF package type • EPI interface technology	• OLED TVs
Micro LED Drivers*	• 552 output channels (3 Mux) • 10 bit (1 billion colors) • Output voltage: max 18V • COF package type • USI interface technology	• Micro LED TVs

* In customer qualification stage

Mobile Display Solutions. Our mobile display solutions incorporate the industry's most advanced display technologies, such as OLED and LTPS, as well as high-volume technologies such as a-Si TFT. Our mobile display products offer specialized capabilities, including high speed serial interfaces, such as mobile display digital interface (MDDI), MIPI, reduced swing differential signaling interface (RSDS) and logic-based OTP memory. We focus extensively on reducing the die size of our mobile display drivers and other solutions products to reduce costs. For example, we have implemented several solutions to reduce die size in mobile display drivers, such as optimizing design schemes and design rules and applying specific technologies that we have developed internally. Further, we are building a distinctive intellectual property portfolio that allows us to provide features that reduce power consumption, such as CABC and ACL. This intellectual property portfolio will also support our power management product development initiatives, as we leverage our system level understanding of power efficiency. Our OLED driver ICs can support various configurations such as high resolution from FHD+(2,240x1,080) to QHD+(3,360x1,440), wide aspect ratio from 16:9 to 21:9 and flexible bezel-less, edge type, and trench type OLED displays. In the transition to, and adoption of, 5G, fast responses and high frame rates such as 90Hz and 120Hz are becoming essential product offerings. To meet this new and evolving demand, we have developed and mass produced our OLED display driver IC, which supports 90Hz/120Hz/144Hz high frame rates.

The following table summarizes the features of our products, both in mass production and in customer qualification, which is the final stage of product development, for mobile displays:

Product	Key Features	Applications
OLED	• Resolutions of HD720, WXGA, FHD, FHD+, QHD and QHD+ • Aspect ratio from 16:9 to 21:9 • Color depth of 1 billion • MIPI, eRVDS interface • Logic-based OTP • Image enhancement IP • Display data compression IP	• Smartphones • Game consoles • Digital still cameras • Tablet PCs • Virtual reality headsets • Automotive
LTPS	• Resolutions of VGA, WSVGA, WVGA and DVGA • Color depth of 16 million • MDDI, MIPI interface • Logic-based OTP • Separated gamma control	• Smartphones • Digital still cameras
a-Si TFT	• Resolutions of WQVGA and HVGA • Color depth of 16 million • RSDS, MDDI, MIPI interface • CABC • Separated gamma control	• Mobile phones • Digital still cameras • Automotive

Power Solutions

We develop, manufacture and market power management solutions for a wide range of end-market customers. The products include MOSFETs, IGBTs, AC-DC/DC-DC converters, LED drivers, regulators, power management integrated circuits (PMICs) for a range of devices, including LCD, LED, and UHD televisions, digital signage, smartphones, mobile phones, wearable devices, desktop PCs, notebooks, tablet PCs, other consumer electronics, consumer appliances, automotive, and industrial applications such as power suppliers, e-bikes, photovoltaic inverters, LED lighting and motor drives.

- ***MOSFETs.*** Our MOSFETs include low-voltage from 12V to 30V, medium-voltage from 40V to150V, high-voltage planar MOSFETs, 200V through 650V, and super junction MOSFETs, 500V through 900V.

  MOSFETs are used in applications to switch, shape or transfer electricity under varying power requirements. The key application segments are smartphones, mobile phones, wearable devices, LCD, LED, and UHD televisions, desktop PCs, notebooks, tablet PCs, servers, lighting and power supplies for consumer electronics and industrial equipment. MOSFETs allow electronics manufacturers to achieve specific design goals of high efficiency and low standby power consumption. For example, computing solutions focus on delivering efficient controllers and MOSFETs for power management in VCORE, DDR and chipsets for audio, video and graphics processing systems.

- ***IGBTs.*** Our IGBTs include 650V to 1200V field stop trench IGBTs. IGBTs are used in automotive and high power industrial applications, such as UPSs, power supplies, motor drives, solar inverters, welding machines and consumer appliances.

- ***AC-DC/DC-DC Converters.*** We offer AC-DC/DC-DC converters targeting mobile applications and high power applications like LCD, LED, and UHD televisions, notebooks, smartphones, mobile phones, set-top boxes and display modules. We expect our AC-DC/DC-DC converters will meet customer's green power requirements by featuring wide input voltage ranges, high efficiency and small size.
- ***LED Drivers.*** LED backlighting drivers serve the fast-growing LCD and LED panel backlighting market for LCD and LED televisions, LCD monitors, digital signage, notebooks, smartphones and tablet PCs. Our products are designed to provide high efficiency and wide input voltage range, as well as pulse width modulation (PWM) dimming for accurate white LED dimming control. LED lighting drivers have a wide input voltage range applicable to incandescent bulb and fluorescent lamp replacement.
- ***Regulators.*** We also provide analog regulators for mobile, computing and consumer applications. Our products are designed for high efficiency and low power consumption in mobile applications.
- ***SSD PMICs.*** We also provide solid state drive power management integrated circuits (SSD PMICs) for the computing segment. Our product is designed for high frequency switching, high efficiency and pulse frequency modulation (PFM) function to reduce power consumption in low load converters.
- ***Logic PMICs.*** We also provide logic power management integrated circuits (PMICs) for organic light-emitting diode (OLED) display panel. Our PMICs provide optimized power to source driver, gate driver and timing controller (T-CON) of OLED display panel with multi-channel power block (boost converter, buck converter, Op-Amps and positive/negative LDOs.)

Our power management solutions enable customers to increase system stability and improve heat dissipation and energy use, resulting in cost savings for our customers and consumers, as well as environmental benefits. Our in-house process technology capabilities and eight-inch wafer production lines increase efficiency and contribute to the competitiveness of our products.

The following table summarizes the features of our products, both in mass production and in customer qualification, which is the final stage of product development:

Product	Key Features	Applications
Low Voltage MOSFET	• Voltage options of 12V-30V • Advanced Trench MOSFET Process • High cell density • Advanced packages to enable reduction of PCB mounting area	• Smartphones, mobile phones, and wearable devices • Tablet PCs, Notebooks • Desktop PCs, Servers • LCD/LED TVs • Industrial applications • Cryptocurrency miner
Medium Voltage MOSFET	• Voltage options of 40V-150V • Advanced Trench MOSFET Process • High cell density • High system efficiency • Advanced packages to enable reduction of PCB mounting area	• e-Bikes and Motor controls • Battery Management Systems • Power tools and Servers • Other computing applications (Tablet PCs, Notebooks, Desktops) • Industrial applications • Automotive*

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Product	Key Features	Applications
High Voltage MOSFET	• Voltage options of 200V-650V • R2FET (rapid recovery) option to shorten reverse diode recovery time • Zener diode option for MOSFET protection for abnormal input • Advanced Planar MOSFET Process • Advanced packages to enable reduction of PCB mounting area	• Adaptors for tablet PC/mobile phone/smartphone • Power supplies • Lighting (ballast, HID, LED) • Industrial applications • LCD/LEDTVs
Super Junction MOSFET	• Voltage options of 500V-900V • Low $R_{DS(ON)}$ • Epi stack process • Zener diode option for MOSFET protection for abnormal input • Advanced SJ MOSFET process • Advanced packages to enable reduction of PCB mounting area	• LCD/LED/UHD TVs • Lightings applications (ballast, HID, LED) • Smartphones • Power supplies • Servers • Industrial applications
IGBTs	• Voltage options of 650V/1200V • Field Stop Trench IGBT • Current options from 15A to 100A	• Automotive • Industrial applications • Consumer appliances
AC-DC/DC-DC Converter	• Wide control range for high power application (>150W) • Advanced BCDMOS process • High Precision Voltage Reference • Very low startup current consumption • Fast load and line regulation • Accurate output voltage • OCP, SCP and thermal protections	• LCD/LED/UHD TVs • Power supplies • Smartphones • Mobile phones • Notebooks • Set-top boxes
LED Backlighting Drivers	• High efficiency, wide input voltage range • Advanced BCDMOS process • OCP, SCP, OVP and UVLO protections • Accurate LED current control and multi-channel matching • Programmable current limit, boost up frequency	• Tablet PCs • Notebooks • Smartphones • LED/UHD TVs • LED monitors

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Product	Key Features	Applications
Digital Controlled LED Driver	• Multi-channel constant current control • 12Bit gray scale with SPI	• Digital signage
LED Lighting Drivers	• High efficiency, wide input voltage range • Simple solutions with external components fully integrated • Advanced high voltage BCDMOS process • Accurate LED current control and high power factor and low THB	• AC and DC LED lighting
Regulators	• Single and multi-regulators • Low Noise Output regulators • Wide range of input voltage and various output current • CMOS and BCDMOS processes • LDO (Low Drop Out — Linear Regulator)	• Smartphones and Mobile phones • Notebooks • Computing applications
SSD PMIC	• High current buck • PFM function • High frequency switching • High efficiency • High integration technology • Small QFN package	• Computing applications
Logic PMIC	• High current boost • Integrated pass transistor • LDO • 3channel high current buck • Negative Charge Pump • 2channel buffer Op-Amp. • Tiny Wafer Level CSP	• Notebooks • Tablet PCs

* In customer qualification stage

Sales and Marketing

We focus our sales and marketing strategy on continuing to grow and leverage our existing relationships with leading consumer electronics OEMs, while expanding into industrial and automotive end markets. We believe our close collaboration with customers allows us to align our product and technology development with our customers' existing and future needs. Because our customers often service multiple end markets, our product sales teams are organized by customers within the major geographies. We believe this facilitates the sale of products that address multiple end-market applications to each of our customers.

We sell our products through a direct sales force and a network of authorized agents and distributors. We have strategically located our sales and technical support offices near our customers. Our direct sales force consists primarily of representatives co-located with our design center in Korea, as well as our local sales and support offices and sales liaisons in Japan, Greater China, Taiwan and Europe. We have a network of agents and distributors in United States, Europe and the Asia Pacific region. For the years ended December 31, 2021, 2020 and 2019, we derived 62%, 75% and 75% of net sales from our standard products business through our direct sales force, respectively, and 38%, 25% and 25% of net sales from our standard products business through our network of authorized agents and distributors, respectively.

Customers

We sell our Display Solutions and Power Solutions products to consumer, computing and industrial electronics OEMs, original design manufacturers and electronics manufacturing services companies, as well as subsystem designers. For the years ended December 31, 2021, 2020 and 2019, our ten largest customers accounted for 79.8%, 87.6% and 89.5% of net sales from our standard products business, respectively. Our arrangements with and reliance on key customers, particularly customers for our display products, may make it less practicable to pursue certain opportunities with other potential new and existing customers. For the year ended December 31, 2021, sales to Samsung Display represented 42.5% of net sales from our standard products business and 89.7% of our Display Solutions division's net sales, and SAMT represented 10.4% of net sales from our standard products business and 19.8% of our Power Solutions division's net sales. For the year ended December 31, 2020, sales to Samsung Display represented 56.2% of net sales from our standard products business and 87.5% of our Display Solutions division's net sales. For the year ended December 31, 2019, sales to Samsung Display represented 53.8% of net sales from our standard products business and 84.5% of our Display Solutions division's net sales. For the year ended December 31, 2021, we recorded revenues of $6.1 million from customers in the US and $427.0 million from all foreign countries, of which 47.2% was from Greater China, 26.6% from Korea and 18.9% from Vietnam. For the year ended December 31, 2020, we recorded revenues of $5.1 million from customers in the US and $460.4 million from all foreign countries, of which 61.9% was from Greater China, 23.1% from Korea and 10.8% from Vietnam. For the year ended December 31, 2019, we recorded revenues of $2.4 million from customers in the US and $482.4 million from all foreign countries, of which 68.2% was from Greater China and 27.5% from Korea. All information pertaining to the geographic source of revenues is with respect to the geographic location to which our products are billed.

Intellectual Property

As of December 31, 2021, our portfolio of intellectual property assets included approximately 1,004 registered patents and 142 pending patent applications. Approximately 490 and 46 of our patents and pending applications, respectively, are novel in that they are not a foreign counterpart of an existing patent or patent application. Because we file patents in multiple jurisdictions, we additionally have approximately 514 registered patents and 96 pending applications that relate to identical technical claims in our base patent portfolio. Our patents expire at various times approximately over the next 19 years. While these patents are in the aggregate important to our competitive position, we do not believe that any single registered or pending patent is material to us.

See "Item 1A. Risk Factors—Risks Related to Our Business—Our ability to compete successfully and achieve future growth will depend, in part, on our ability to protect our intellectual property, proprietary technology and know-how, as well as our ability to operate without infringing the proprietary rights of others."

National Core Technology

Under the Act on Prevention of Leakage and Protection of Industrial Technology of Korea (the "ITA"), any export (including various means of outflow such as sale or transfer outside Korea) of technology designated as "national core technology" ("National Core Technology" or "NCT") by the Korean Ministry of Trade, Industry and Energy (the "MOTIE") requires the filing of a prior-report with, and the acceptance of the same by, the MOTIE. Any such export of NCT without the acceptance of the prior report with the MOTIE may be subject to corrective orders by the relevant authorities, and failure to comply with such corrective orders may potentially result in criminal liabilities.

The Notification Regarding Designation of National Core Technologies issued by the MOTIE was amended on July 14, 2021 to add certain technologies to the list of National Core Technology designated by the MOTIE, and the amended list includes the design technology for OLED Display Driver IC for driving display panels (“OLED DDI”). In the ordinary course of business, our Korean subsidiary may provide certain information relating to its products, including OLED DDI, to customers, suppliers or vendors, and such disclosure of information may be subject to the NCT-related regulations under the ITA, and therefore the MOTIE’s acceptance of prior-reports. Since the amendment of the foregoing NCT list in July 2021, we have filed prior-reports with the MOTIE for the export of our OLED DDI product-related information to certain overseas vendors that manufacture our products, and all such reports have thus far been accepted by the MOTIE.

Competition

We operate in highly competitive markets characterized by rapid technological change and continually advancing customer requirements. Although no one company competes with us in all of our product lines, we face significant competition in each of our market segments. Our competitors include other independent and captive manufacturers and designers of analog and mixed-signal integrated circuits, including display driver and power management semiconductor devices.

We compete based on design experience, manufacturing capabilities, the ability to satisfy customer needs from the design phase through the shipping of a completed product, length of design cycle and quality of technical support and sales personnel. Our ability to compete successfully will depend on internal and external variables, both within and outside of our control. These variables include the timeliness with which we can develop new products and technologies, product performance and quality, manufacturing yields, capacity availability, customer service, pricing, industry trends and general economic trends.

Human Capital

Our worldwide workforce consisted of 890 employees (full- and part-time) as of December 31, 2021, of which 188 were involved in sales, marketing, general and administrative, 232 in research and development (including 100 with advanced degrees), 41 in quality, reliability and assurance, and 429 in manufacturing (comprised of 46 in engineering and 383 in operations, maintenance and others). Our employees leverage their extensive expertise in engineering, design and process to accelerate the advancement of technology and be leaders in our industry. We pride our company on being a great workplace where employees from diverse backgrounds can reach their full potential.

Labor Unions

As disclosed in previous reports, we have a labor union at our Korean subsidiary (the “First Union”). On Sep 16, 2021, the formation of a second labor union at our Korean subsidiary (the “Second Union”) was approved by the local authorities (the First Union and the Second Union are collectively referred to as the “Magnachip Semiconductor Labor Unions”). Both the First Union and the Second Union are members of a supervisory association named “Federation of Korean Trade Unions.” The First Union represents member employees who are factory workers and the Second Union represents member employees who are office workers, in both cases at our Korean subsidiary.

As of December 31, 2021, of the 868 employees at our Korean subsidiary, 389 were represented by the First Union, and 82 employees were represented by the Second Union. Approximately 53% of our employees at our Korean subsidiary were represented by the Magnachip Semiconductor Labor Unions.

See “Item 1A. Risk Factors—Risks Related to Our Business—If we encounter future labor problems, we may fail to deliver our products and services in a timely manner, which would adversely affect our revenues and profitability.”

Values and Culture

Our core values represent a commitment to building an environment of trust with our employees, customers, investors and the communities in which we operate. Through our values and culture, we strive to shape a better future not only for ourselves and our customers, but for humanity as a whole. At Magnachip, we strive to foster effective collaboration by respecting different perspectives, giving and receiving constructive feedback, and supporting one another.

Inclusion and Diversity

We support all employees, regardless of gender, gender identity or expression, age, veteran status, race, ethnicity, national origin, religion or disability. We place great importance on inclusion and diversity within the workplace. An inclusive and diverse culture creates a happier, more relaxed work environment.

Labor and Ethics

Magnachip strives to provide and maintain a working environment where management and employees are happy and treated with dignity and respect. Magnachip adheres to human rights and labor standards of international labor organizations, such as the United Nations and the International Labor Organization. Magnachip prohibits all forms of discrimination based on gender, race, nationality, religion and age to ensure all employees work in a safe and fair environment.

Empowering Great Talent

We offer a variety of offline training programs, including courses in the areas of design, engineering and technology, as well as courses at different job levels and leadership education. We also offer a number of online training programs, including in the areas of management/leadership and business skills such as presentation, negotiation, reporting, Information Technology and foreign language, which allow employees to improve their capabilities without time and space constraints. Every year, a majority of our employees are required to complete certain educational programs in the areas of information security, industrial safety and health, and sexual harassment prevention.

We believe the foundation of Magnachip is our research and development (“R&D”) talent. To ensure R&D technical professionals continue to advance their skills and knowledge, we have technology committees that attend regular seminars and conduct periodic research. We have a reward program for exemplary research.

We also offer a Vision Seminar, which is led by our CEO and is designed to share our company’s vision, strategy and the management’s key messages to employees. Additionally, the CEO and management regularly communicate with employees through CEO letters and town hall meetings.

Compensation and Benefits

We strive to reward employees with competitive compensation based on contribution and performance. We periodically evaluate market practices for compensation and benefits, including with respect to job function, role and responsibility, job level and region, and regularly review whether our compensation levels and distribution methods are fair and equitable. Additionally, we have long- and mid-term retention programs to attract and retain high-performing key talent.

We offer various employee benefits under the company philosophy that ensuring employees enjoy a happier life with their families is as critical as promoting their own health and well-being. All employees and their family members have access to annual medical checkup programs. Employees also have access to other benefits such as personal pensions, housing assistance, medical reimbursement plans and educational assistance programs.

Safety and Wellness

During and after the ongoing COVID-19 pandemic, our top priority is ensuring health and safety of our employees and their families. We built a companywide control tower to provide appropriate response guidance as the pandemic has evolved, and have secured internal/external capabilities to respond to emergencies systematically. In response to the ongoing COVID-19 pandemic, we quickly instituted infrastructure to support remote working, so that our employees could work from home in a safe and stable environment. In addition, we have installed safety facilities within our business sites.

Environmental

We are subject to a variety of environmental, health and safety laws and regulations in each of the jurisdictions in which we operate, governing, among other things, air emissions, wastewater discharges, the generation, use, handling, storage and disposal of, and exposure to, hazardous substances (including asbestos) and waste, soil and groundwater contamination and employee health and safety. These laws and regulations are complex, change frequently and have tended to become more stringent over time. Since 2015, our Korean subsidiary has been subject to a new set of greenhouse gas emissions regulation, the Korean Emissions Trading Scheme, or K-ETS, under the Act on Allocation and Trading of Greenhouse Gas Emission Allowances. Under K-ETS, our Korean subsidiary was allocated a certain amount of emissions allowance in accordance with the National Allocation Plan prepared by the Korean government and is required to meet its allocated target by either reducing the emission or purchasing the allowances from other participants in the emission trading market.
Another example is the newly reinforced regulations on chemicals under Chemicals Control Act and K-REACH, which came into effect on January 1, 2015. Under these laws, our Korean subsidiary is required to comply with various requirements to report, evaluate, manage and ensure the safe usage of the chemicals used in its facilities. There can be no assurance that we have been or will be in compliance with all of these laws and regulations, or that we will not incur material costs or liabilities in connection with these laws and regulations in the future. The adoption of new environmental, health and safety laws and the failure to comply with new or existing laws or issues relating to hazardous substances could subject us to material liability (including substantial fines or penalties), impose the need for additional capital equipment or other process requirements upon us, curtail our operations or restrict our ability to expand operations.

Raw Materials

We use processes that require specialized raw materials that are generally available from a limited number of suppliers. We continue to attempt to qualify additional suppliers for our raw materials. The Securities and Exchange Commission (the “SEC”), as mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, has adopted disclosure regulations for public companies that manufacture products containing certain minerals that are mined from the Democratic Republic of Congo and adjoining countries. These “conflict minerals” are commonly found in metals used in the manufacture of semiconductors. The implementation of these requirements could adversely affect the sourcing, availability and pricing of metals used in the manufacture of our products. See “Item 1A. Risk Factors—Risks Related to Our Business—Compliance with regulations regarding the use of “conflict minerals” could limit the supply and increase the cost of certain raw materials used in manufacturing our products.”

Available Information

Our principal executive office is located at: c/o MagnaChip Semiconductor S.A., 1, Allée Scheffer, L-2520 Luxembourg, Grand Duchy of Luxembourg, and our telephone number is (352) 45-62-62. Our website address is www.magnachip.com. Our annual, quarterly and current reports on Forms 10-K, 10-Q or 8-K, respectively, and all amendments thereto filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, can be accessed, free of charge, at our website as soon as practicable after such reports are filed with the SEC. In addition, our Corporate Governance Guidelines, Code of Business Conduct and Ethics, Clawback Policy, Audit

Committee Charter, Compensation Committee Charter, Nominating and Governance Committee Charter and Risk Committee Charter are available on our website. Information contained on our website does not constitute, and shall not be deemed to constitute, part of this Report and shall not be deemed to be incorporated by reference into this Report. In addition, the SEC maintains an internet site, www.sec.gov, from which you can access our annual, quarterly and current reports on Form 10-K, 10-Q and 8-K, respectively, and all amendments to these materials after such reports and amendments are filed with the SEC. You may also request a copy of these filings, at no cost, by writing or telephoning us at the following address or phone number: c/o Magnachip Semiconductor, Ltd., 15F 501 Teheran-ro, Gangnam-gu, Seoul 06168, Korea Attention: General Counsel and Secretary; the telephone number at that address is 82-2-6903-3666.

Information About Our Executive Officers

The following table sets forth certain information regarding our current executive officers:

Name	Age	Position
Young-Joon (YJ) Kim	57	Director and Chief Executive Officer
Shin Young Park	41	Chief Financial Officer
Theodore Kim	52	Chief Compliance Officer, General Counsel and Secretary
Woung Moo Lee	59	General Manager of Worldwide Sales
Chan Ho Park	58	General Manager of Power Solutions

Young-Joon (YJ) Kim, Director, Member of the Risk Committee and Chief Executive Officer. Mr. YJ Kim became our Chief Executive Officer in May 2015 and has also served as a director on our Board since that time. In February 2020, Mr. Kim assumed the additional role of General Manager of the Display business to capitalize on attractive growth opportunities in OLED display and other relevant emerging markets. He also served as the acting General Manager of Foundry Services Group from January 2019 until the completion of the sale of the Foundry Services Group and the factory in Cheongju (“Fab 4”) on September 1, 2020. Mr. Kim joined our company in May 2013 and served as our Executive Vice President and General Manager, Display Solutions Division. He was promoted to Interim Chief Executive Officer in May 2014. Prior to joining our company, Mr. Kim held a variety of senior management roles at several global semiconductor firms in a career spanning about 34 years. His past roles include marketing, engineering, product development and strategic planning, and his product expertise includes microprocessors, network processors, FLASH, EPROM, analog, mixed-signal, sensors, wireless base station, workstations and servers. Immediately before joining our company, Mr. Kim served as Vice President, Infrastructure Processor Division, and General Manager of the OCTEON Multi-Core Processor Group of Cavium, Inc., where he worked from 2006 to 2013. Prior to Cavium, Mr. Kim served as Core Team Lead and General Manager of the Tolapai Program at Intel Corporation from 2004 to 2006. In 1998, Mr. Kim co-founded API Networks, a joint venture between Samsung and Compaq, where he served as the head of product management, worldwide sales and business development for Alpha processors. Prior to API Networks, Mr. Kim served as Director of Marketing at Samsung Semiconductor, Inc. from 1996 to 1998. Mr. Kim began his career as a product engineer at Intel Corporation in 1988. Mr. Kim holds B.S. and M. Eng. degrees in Electrical Engineering from Cornell University. Our Board has concluded that Mr. YJ Kim is a valuable member of the Board based on his understanding of our company’s products and technology as our Chief Executive Officer and his deep knowledge of the semiconductor industry.

Shin Young Park, Chief Financial Officer. Ms. Shin Young Park became our Chief Financial Officer in January 2022 and became our Chief Accounting Officer in March 2020. Ms. Park previously served as our Corporate Controller from November 2018 to February 2020. Prior to that, she served as the SEC Reporting and Accounting Director from April 2015 to October 2018. Before joining Magnachip in April 2014, from 2005 to March 2014, Ms. Park served in various senior advisory and audit service positions at Deloitte, a public accounting firm. From 2005 to 2009, she worked at Deloitte & Touche in Chicago, Illinois; from 2009 to 2011 and then from 2013 to March 2014, she worked at Deloitte Anjin in Seoul, South Korea; and from 2011 to 2013, she worked at Deloitte in London, U.K. Ms. Park holds a B.A. degree in Business Administration from Sogang University, Seoul, Korea, and a Master's degree in Hospitality Industry Studies from New York University.

Theodore Kim, Chief Compliance Officer, General Counsel and Secretary. Mr. Theodore Kim (T. Kim) became our Chief Compliance Officer in May 2015, and became our General Counsel and Secretary in November 2013. Mr. T. Kim previously served as our Senior Vice President from November 2013 to May 2015. Prior to joining Magnachip, Mr. T. Kim served as Head Lawyer, Global Business Development at Samsung Fire & Marine Insurance from October 2012 to October 2013. Mr. T. Kim was employed by Gibson, Dunn & Crutcher LLP, a law firm, from October 2005 to July 2012, serving most recently as Of Counsel. Prior to that, he served as Foreign Legal Consultant at Kim & Chang, a law firm in Korea, from 2001 to 2005, and prior to that, he worked as an associate attorney at Morrison & Foerster LLP, a law firm, from 1997 to 2001. Mr. Kim holds a B.A. degree in Economics and a B.S. degree in Mechanical Engineering from the University of California, Irvine, and a J.D. degree from the University of California, Los Angeles, School of Law.

Woung Moo Lee, General Manager of Worldwide Sales. Mr. Woung Moo Lee was named as General Manager of Worldwide Sales since June of 2020. Prior to that, Mr. Lee served as General Manager of Worldwide Sales and Power Solutions from February 2020. Mr. Lee had been appointed as General Manager of the Standard Products Group in 2015 and prior to that served as our Senior Vice President, Korea Sales from 2013. Before joining our company, he was one of the founding executives and served as Vice President of Global Strategy and Marketing, Samsung LED Co., Ltd. from 2009 to 2011. In 1984, Mr. Lee began his career as a memory semiconductor design engineer and served as Vice President of Memory Strategy & Marketing Team at Samsung Electronics Co., Ltd. until 2009. Mr. Lee received the prestigious "Proud Samsung Employee Award" in 2005 and holds a B.S. degree in Electronic Engineering from Inha University.

Chan Ho Park, General Manager of Power Solutions. Dr. Chan Ho Park became our General Manager of Power Solutions in June 2020 with over 30 years of hands-on experience in the development of discrete power devices and market insights throughout the power semiconductor industry. Prior to joining our company, he was a senior staff at Vishay Intertechnology Inc. since March, 2014. He developed cutting-edge technology platforms for low voltages MOSFETs having 1.5 giga-cell density and provided high and low side MOSFETs for DrMOS to various power stage solutions. Dr. Park started his professional career in 1986 as a design engineer in the field of BJT, J-FET, and Schottky Diode at Samsung Electronics, located in Bucheon, Korea. Afterwards, he worked for Fairchild Semiconductor in West Jordan, Utah and for Vishay Siliconix in San Jose, California. He rejoined Samsung Electronics, System LSI Business in 2011 as the Vice President of Discrete Development Team, where he led R&D, PE, FAE and high voltage power IC technologies for IGBTs, super-junction MOSFETs, split gate MOSFETs and driver ICs. He received a Ph.D. in Electrical Engineering from KAIST (Korea Advanced Institute of Science and Technology) and a B.S. in Physics from Seoul National University. He is a member of IEEE and a peer reviewer for IEEE transactions on Electron Devices and Electron Device Letters.

Item 1A. Risk Factors

You should carefully consider the risk factors set forth below as well as the other information contained in this Report. Any of the following risks could materially and adversely affect our business, financial condition or results of operations. As a result, the price of our common stock could decline and you could lose all or part of your investment in our common stock. Additional risks and uncertainties not currently known to us or those currently viewed by us to be immaterial may also materially and adversely affect our business, financial condition or results of operations.

Risk Factors Summary

The following is a summary of the risk factors included herein.

- ***We manufacture our products based on our estimates of customer demand, and if our estimates are incorrect, our financial results could be negatively impacted.***

- ***A significant portion of our sales comes from a relatively limited number of customers, the loss of which could adversely affect our financial results.***
- ***The average selling prices of our semiconductor products have at times declined rapidly and will likely do so in the future, which could harm our revenue and gross profit.***
- ***We are subject to risks associated with currency fluctuations, and changes in the exchange rates of applicable currencies could impact our results of operations.***
- ***Global shortages in manufacturing capacities could interrupt or negatively affect our operations, increase cost to manufacture and negatively impact our results of operations.***
- ***Expanded trade restrictions may limit our ability to sell to certain customers.***
- ***Recent changes in international trade policy and the imposition and threats of international tariffs, including tariffs applied to goods traded between the United States and China, could materially and adversely affect our business and results of operations.***
- ***Our Korean subsidiary has been designated as a regulated business under Korean environmental law, and such designation could have an adverse effect on our financial position and results of operations.***
- ***Our compliance with the Serious Accidents Punishment Act (the "SAPA") could require significant expenditures and management time and expose us to liability for violations.***
- ***Our business depends on international customers, suppliers and operations in Asia, and as a result we are subject to regulatory, operational, financial and political risks, which could adversely affect our financial results.***
- ***We cannot guarantee that our share repurchase program will be successfully consummated, or that it will enhance shareholder value, and share repurchases could affect the price of our common stock.***
- ***Our Rights Plan and provisions in our charter documents and Delaware Law may make it difficult for a third party to acquire us and could depress the price of our common stock.***
- ***We have not historically paid dividends and do not currently have any dividend or distribution policy, and therefore, investors may need to rely on sales of their common stock as the only way to realize any future gains on their investments.***

Risks Related to Our Business

We operate in the highly cyclical semiconductor industry, which is subject to significant downturns that may negatively impact our results of operations.

The semiconductor industry is highly cyclical and is characterized by constant and rapid technological change and price erosion, evolving technical standards, short product life cycles (for semiconductors and for the end-user products in which they are used) and wide fluctuations in product supply and demand. From time to time, these and other factors, together with changes in general economic conditions, cause significant upturns and downturns in the industry in general and in our business in particular. Periods of industry downturns have been characterized by diminished demand for end-user products, high inventory levels, underutilization of manufacturing capacity, changes in revenue mix and accelerated erosion of average selling prices. We have experienced these conditions in our business in the past and may experience renewed, and possibly more severe and prolonged, downturns in the future as a result of such cyclical changes. This may reduce our results of operations. Recently, the semiconductor industry has experienced a period of upturn, which has resulted in shortages in manufacturing capacity. To the extent there are shortages, we may experience difficulties in sourcing sufficient manufacturing capacity or could be forced to pay increased prices for such services, either of which could negatively impact our results of operations.

We base our planned operating expenses in part on our expectations of future revenue, and a significant portion of our expenses is relatively fixed in the short term. If revenue for a particular quarter is lower than we expect, we likely will be unable to proportionately reduce our operating expenses for that quarter, which would harm our operating results for that quarter.

Our restructuring activities and dispositions of assets and businesses could result in lost business and other costs that could have a material adverse effect on our results of operations.

From time to time, we may choose to sell assets, restructure business operations, shut down manufacturing lines or otherwise dispose of assets and businesses as part of management's strategies to better align our product offerings with market demands and our customers' needs. In connection with these activities, we face risks that we will disrupt service to our customers, lose business and incur significant costs related to such activities. These risks include potential damage to our reputation and customer relationships if we are unable to effectively transition such customer relationships to other production lines or products or if we cannot effectively manage our supplier and vendor relationships during such activities. In addition, we may also face claims or costs associated with transitioning or eliminating certain employee positions and modifying or terminating vendor relationships in connection with those exit activities.

If we fail to develop new products and technologies or enhance our existing products in order to react to rapid technological change and market demands, our business will suffer.

Our industry is subject to constant and rapid technological change and product obsolescence as customers and competitors create new and innovative products and technologies. Products or technologies developed by other companies may render our products or technologies obsolete or noncompetitive, and we may not be able to access advanced process technologies, including smaller geometries, or to license or otherwise obtain essential intellectual property required by our customers.

We must develop new products and enhance our existing products to meet rapidly evolving customer requirements. We design products for customers that continually require higher performance and functionality at lower costs. We must, therefore, continue to enhance the performance and functionality of our products. The development process for these advancements is lengthy and requires us to accurately anticipate technological changes and market trends. Developing and enhancing these products is uncertain and can be time-consuming, costly and complex.

Customer and market requirements can change during the development of a product. There is a risk that these developments and enhancements will be late, fail to meet customer or market specifications or not be competitive with products from our competitors that offer comparable or superior performance and functionality. Any new products, such as our expanding line of power management solutions, or product enhancements, may not be accepted in new or existing markets. Our business will suffer if we fail to develop and introduce new products or product enhancements on a timely and cost-effective basis.

We manufacture our products based on our estimates of customer demand, and if our estimates are incorrect, our financial results could be negatively impacted.

We make significant decisions, including determining the levels of business that we will seek and accept, production schedules, component procurement commitments, personnel needs and other resource requirements, based on our estimates of customer demand and expected demand for and success of their products. The short-term nature of commitments by many of our customers and the possibility of rapid changes in demand for their products reduces our ability to estimate accurately future customer demand for our products. On occasion, customers may require rapid increases in supply, which can challenge our production resources and reduce margins. We may not have sufficient capacity at any given time to meet our customers' increased demand for our products. Conversely, downturns in the semiconductor industry have caused and may in the future cause our customers to reduce significantly the amount of products they order from us. Because many of our costs and operating expenses are relatively fixed, a reduction in customer demand would decrease our results of operations, including our gross profit.

Our customers may cancel their orders, reduce quantities or delay production, which would adversely affect our margins and results of operations.

We generally do not obtain firm, long-term purchase commitments from our customers. Customers may cancel their orders, reduce quantities or delay production for a number of reasons. Cancellations, reductions or delays by a significant customer or by a group of customers, which we have experienced as a result of periodic downturns in the semiconductor industry, or failure to achieve design-wins, have affected and may continue to affect our results of operations adversely. These risks are exacerbated because many of our products are customized, which hampers our ability to sell excess inventory to the general market. We may incur charges resulting from the write-off of obsolete inventory. In addition, while we do not obtain long-term purchase commitments, we generally agree to the pricing of a particular product over a set period of time. If we underestimate our costs when determining pricing, our margins and results of operations would be adversely affected.

Our fab manufacturing depends on high utilization of our manufacturing capacity, a reduction of which could have a material adverse effect on our business, financial condition and the results of our operations.

An important factor in our success is the extent to which we are able to utilize the available capacity in our fabrication facility. As many of our costs are fixed, a reduction in capacity utilization, as well as changes in other factors, such as reduced yield or unfavorable product mix, could reduce our profit margins and adversely affect our operating results. A number of factors and circumstances may reduce utilization rates, including periods of industry overcapacity, the inability to source sufficient materials necessary for manufacturing, low levels of customer orders, operating inefficiencies, strategic evaluations and decisions by our Board related our overall business, divisions and business lines, mechanical failures and disruption of operations due to expansion or relocation of operations, power interruptions and fire, flood or other natural disasters or calamities. The potential delays and costs resulting from these factors and circumstances could have a material adverse effect on our business, financial condition and results of operations.

A significant portion of our sales comes from a relatively limited number of customers, the loss of which could adversely affect our financial results.

Historically, we have relied on a limited number of customers for a substantial portion of our total revenue. If we were to lose key customers or if customers cease to place orders for our high-volume products, particularly our display products, our financial results could be adversely affected. In addition, our arrangements with and reliance on key customers may make it less practicable to pursue certain opportunities with other potential new and existing customers. For the years ended December 31, 2021, 2020 and 2019, our ten largest customers accounted for 79.8%, 87.6% and 89.5% of net sales from our standard products business, respectively. For the year ended December 31, 2021, sales to Samsung Display represented 42.5% of net sales from our standard products business and 89.7% of our Display Solutions division’s net sales, and SAMT represented 10.4% of net sales from our standard products business and 19.8% of our Power Solutions division’s net sales. For the year ended December 31, 2020, sales to Samsung Display represented 56.2% of net sales from our standard products business and 87.5% of our Display Solutions division’s net sales. For the year ended December 31, 2019, sales to Samsung Display represented 53.8% of net sales from our standard products business and 84.5% of our Display Solutions division’s net sales. Significant reductions in sales to any of these customers, especially our few largest customers, the loss of other major customers or a general curtailment in orders for our high-volume products within a short period of time could adversely affect our business.

The average selling prices of our semiconductor products have at times declined rapidly and will likely do so in the future, which could harm our revenue and gross profit.

The semiconductor products we develop and sell are subject to rapid declines in average selling prices. From time to time, we have had to reduce our prices significantly to meet customer requirements, and we may be required to reduce our prices in the future. This would cause our gross profit to decrease. Our financial results will suffer if we are unable to offset any reductions in our average selling prices by increasing our sales volumes, reducing our costs or developing new or enhanced products on a timely basis with higher selling prices or gross profit.

Our industry is highly competitive, and our ability to compete could be negatively impacted by a variety of factors.

The semiconductor industry is highly competitive and includes hundreds of companies, a number of which have achieved substantial market share within both our product categories and end markets. Current and prospective customers for our products and services evaluate our capabilities against the merits of our competitors. Some of our competitors are well established as independent companies and have substantially greater market share and manufacturing, financial, research and development and marketing resources than we do. We also compete with emerging companies that are attempting to sell their products in certain of our end markets and with the internal semiconductor design and manufacturing capabilities of many of our significant customers. We expect to experience continuing competitive pressures in our markets from existing competitors and new entrants.

Any consolidation among our competitors could enhance their product offerings and financial resources, further enhancing their competitive position. Our ability to compete will depend on a number of factors, including the following:

- our ability to offer cost-effective and high quality products and services on a timely basis using our technologies;
- our ability to accurately identify and respond to emerging technological trends and demand for product features and performance characteristics;
- our ability to continue to rapidly introduce new products that are accepted by the market;
- our ability to adopt or adapt to emerging industry standards;
- the number and nature of our competitors and competitiveness of their products and services in a given market;
- entrance of new competitors into our markets; and
- our ability to enter the highly competitive power management market.

Many of these factors are outside of our control. In the future, our competitors may replace us as a supplier to our existing or potential customers, and our customers may satisfy more of their requirements internally. As a result, we may experience declining revenues and results of operations.

Changes in demand for consumer electronics in our end markets can impact our results of operations.

Demand for our products will depend in part on the demand for various consumer electronics products, in particular, mobile phones and multimedia devices, digital televisions, flat panel displays, mobile PCs and digital cameras, which in turn depends on general economic conditions and other factors beyond our control. If our customers fail to introduce new products that employ our products or component parts, demand for our products will suffer. To the extent that we cannot offset periods of reduced demand that may occur in these markets through greater penetration of these markets or reduction in our production and costs, our sales and gross profit may decline, which would negatively impact our business, financial condition and results of operations.

If we fail to achieve design-wins for our semiconductor products, we may lose the opportunity for sales to customers for a significant period of time and be unable to recoup our investments in our products.

We expend considerable resources on winning competitive selection processes, known as design-wins, to develop semiconductor products for use in our customers' products. These selection processes are typically lengthy and can require us to incur significant design and development expenditures. We may not win the competitive selection process and may never generate any revenue despite incurring significant design and development expenditures. Once a customer designs a semiconductor into a product, that customer is likely to continue to use the same semiconductor or enhanced versions of that semiconductor from the same supplier across a number of similar and successor products for a lengthy period of time due to the significant costs associated with qualifying a new supplier and potentially redesigning the product to incorporate a different semiconductor. If we fail to achieve initial design-wins in a customer's qualification process, we may lose the opportunity for significant sales to that customer for a number of products and for a lengthy period of time. This may cause us to be unable to recoup our investments in our semiconductor products, which would harm our business.

We have lengthy and expensive design-to-mass production and manufacturing process development cycles that may cause us to incur significant expenses without realizing meaningful sales, the occurrence of which would harm our business.

The cycle time from the design stage to mass production for some of our products is long and requires the investment of significant resources with many potential customers without any guarantee of sales. Our design-to-mass production cycle typically begins with a three-to-twelve month semiconductor development stage and test period followed by a three-to-twelve month end-product qualification period by our customers. The fairly lengthy front end of our sales cycle creates a risk that we may incur significant expenses but may be unable to realize meaningful sales. Moreover, prior to mass production, customers may decide to cancel their products or change production specifications, resulting in sudden changes in our product specifications, increasing our production time and costs. Failure to meet such specifications may also delay the launch of our products or result in lost sales.

Research and development investments may not yield profitable and commercially viable products, and thus will not necessarily result in increases in revenues for us.

We invest significant resources in our research and development. Our research and development efforts, however, may not yield profitable or commercially viable products. During each stage of research and development, there is a substantial risk that we will have to abandon a potential product that is no longer marketable and in which we have invested significant resources. In the event we are able to develop viable new products, a significant amount of time will have elapsed between our investment in the necessary research and development effort and the receipt of any related revenues.

We face numerous challenges relating to executing our growth strategy, and if we are unable to execute our growth strategy effectively, our business and financial results could be materially and adversely affected.

Our growth strategy is to leverage our advanced analog and mixed-signal technology platform, continue to innovate and deliver new products, increase business with existing customers, broaden our customer base, aggressively grow our power business, and drive execution excellence. If we are unable to execute our growth strategy effectively, we may not be able to take advantage of market opportunities, execute our business plan or respond to competitive pressures. Moreover, if our allocation of resources does not correspond with future demand for particular products, we could miss market opportunities and our business and financial results could be materially and adversely affected.

We are subject to risks associated with currency fluctuations, and changes in the exchange rates of applicable currencies could impact our results of operations.

Historically, a portion of our revenues and greater than the majority of our operating expenses and costs of sales have been denominated in non-U.S. currencies, principally the Korean won, and we expect that this will remain true in the future. Because we report our results of operations in U.S. dollars, changes in the exchange rate between the Korean won and the U.S. dollar could materially impact our reported results of operations and distort period to period comparisons. In particular, because of the difference in the amount of our consolidated revenues and expenses that are in U.S. dollars relative to Korean won, a depreciation in the U.S. dollar relative to the Korean won could result in a material increase in reported costs relative to revenues, and therefore could cause our profit margins and operating income to appear to decline materially, particularly relative to prior periods. The converse is true if the U.S. dollar were to appreciate relative to the Korean won. For example, foreign currency fluctuations had an unfavorable impact on our reported profit margins and operating income from operations for the fiscal year ended December 31, 2021 due to a relatively stronger Korean won during the period. Moreover, our foreign currency gain or loss would be affected by changes in the exchange rate between the Korean won and the U.S. dollar as a substantial portion of non-cash translation gain or loss is associated with the intercompany long-term loans to our Korean subsidiary, which is denominated in U.S. dollars. As of December 31, 2021, the outstanding intercompany loan balance including accrued interests between our Korean subsidiary and our Dutch subsidiary was $344.4 million. Our Dutch subsidiary uses the U.S. dollar as their functional currency. As a result of foreign currency fluctuations, it could be more difficult to detect underlying trends in our business and results of operations. In addition, to the extent that fluctuations in currency exchange rates cause our results of operations to differ from our expectations or the expectations of our investors, the trading price of our common stock could be adversely affected.

From time to time, we may engage in exchange rate hedging activities in an effort to mitigate the impact of exchange rate fluctuations. Our Korean subsidiary enters into foreign currency forward and zero cost collar contracts in order to mitigate a portion of the impact of U.S. dollar-Korean won exchange rate fluctuations on our operating results. These foreign currency forward and zero cost collar contracts typically require us to sell specified notional amounts in U.S. dollars and provide us the option to sell specified notional amounts in U.S. dollars during successive months to our counterparty in exchange for Korean won at specified exchange rates. Obligations under these foreign currency forward and zero cost collar contracts must be cash collateralized if our exposure exceeds certain specified thresholds. These forward and zero cost collar contracts may be terminated by the counterparty in a number of circumstances, including if our long-term debt rating falls below B-/B3 or if our total cash and cash equivalents is less than $30 million at the end of a fiscal quarter. We cannot assure that any hedging technique we implement will be effective. If our hedging activities are not effective, changes in currency exchange rates may have a more significant impact on our results of operations. See “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations—Factors Affecting our Results of Operations” for further details.

The loss of our key employees would materially adversely affect our business, and we may not be able to attract or retain the technical or management employees necessary to compete in our industry.

Our key executives have substantial experience and have made significant contributions to our business, and our continued success is dependent upon the retention of our key management executives. The loss of such key personnel would have a material adverse effect on our business. In addition, our future success depends on our ability to attract and retain skilled technical and managerial personnel. We do not know whether we will be able to retain all of these employees as we continue to pursue our business strategy. The loss of the services of key employees, especially our key design and technical personnel, or our inability to retain, attract and motivate qualified design and technical personnel, could have a material adverse effect on our business, financial condition and results of operations. This could hinder our research and product development programs or otherwise have a material adverse effect on our business.

If we encounter future labor problems, we may fail to deliver our products and services in a timely manner, which would adversely affect our revenues and profitability.

As of December 31, 2021, 471 employees, or approximately 53% of our employees, were represented by the Magnachip Semiconductor Labor Unions. We can offer no assurance that any issues with the labor union and other employees will be resolved favorably for us in the future, that we will not experience work stoppages or other labor problems in future years or that we will not incur significant expenses related to such issues.

We may incur costs to engage in future business combinations or strategic investments, and we may not realize the anticipated benefits of those transactions.

As part of our business strategy, we may seek to enter into business combinations, investments, joint ventures and other strategic alliances with other companies in order to maintain and grow revenue and market presence as well as to provide us with access to technology, products and services. Any such transaction would be accompanied by risks that may harm our business, such as difficulties in assimilating the operations, personnel and products of an acquired business or in realizing the projected benefits, disruption of our ongoing business, potential increases in our indebtedness and contingent liabilities and charges if the acquired company or assets are later determined to be worth less than the amount paid for them in an earlier original acquisition. In addition, our indebtedness may restrict us from making acquisitions that we may otherwise wish to pursue.

The failure to achieve acceptable manufacturing yields could adversely affect our business.

The manufacturing of semiconductors involves highly complex processes that require precision, a highly regulated and sterile environment and specialized equipment. Defects or other difficulties in the manufacturing process can prevent us from achieving acceptable yields in the manufacturing of our products, which could lead to higher costs, a loss of customers or delay in market acceptance of our products. Slight impurities or defects in the photomasks used to print circuits on a wafer or other factors can cause significant difficulties, particularly in connection with the production of a new product, the adoption of a new manufacturing process or any expansion of our manufacturing capacity and related transitions. We may also experience manufacturing problems in achieving acceptable yields as a result of, among other things, transferring production to other facilities, upgrading or expanding existing facilities or changing our process technologies. Yields below our target levels can negatively impact our gross profit and may cause us to eliminate underperforming products.

We rely on a number of independent subcontractors and the failure of any of these independent subcontractors to perform as required could adversely affect our operating results.

A substantial portion of our net sales are derived from semiconductor devices assembled in packages or on film. The packaging and testing of semiconductors require technical skills and specialized equipment. For the portion of packaging and testing that we outsource, we use subcontractors located in Korea, China, Taiwan and Thailand. We rely on these subcontractors to package and test our devices with acceptable quality and yield levels, and, while we specify quality standards, we are not able to directly oversee their day-to-day operations and the packaging and testing of our devices. Onboarding of a new subcontractor, including as a result of switching from one subcontractor to another, takes approximately three to six months to verify the subcontractor’s capabilities and an additional six to twelve months to receive approval from our customers to use such subcontractor. We could be adversely affected by political disorders, labor disruptions, public health issues (including viral outbreaks such as COVID-19) and natural disasters where our subcontractors are located due to the time it would take to onboard a new subcontractor. If our semiconductor packagers and test service subcontractors experience problems in packaging and testing our semiconductor devices, experience prolonged quality or yield problems, experience shutdowns or delays associated with public health issues (such as those associated with COVID-19), or decrease the capacity of their operations available to us, our operating results could be adversely affected.

We cooperate with independent foundries to produce certain advanced technology Display Solutions products, and the failure of such independent foundries to satisfy our demand could materially disrupt our business.

We use independent foundry services for certain of our OLED Display Solutions products and Power Solutions products. Silicon wafer production at these facilities is allocated solely by our vendors and beyond our direct control. Therefore, any disruption in wafer supply form these vendors could have a material impact on our revenue and results of operations.

Global shortages in manufacturing capacities could interrupt or negatively affect our operations, increase cost to manufacture and negatively impact our results of operations.

Recent sharp increases in demand for semiconductor products have resulted in a global shortage of manufacturing capacities. As a result, we may experience increases in the costs to manufacture our products and may not be able to manufacture and deliver all of the orders placed by our customers. We are not able to foresee when the current shortage of manufacturing capacity will subside. If we are unable secure manufacturing capacities from our current subcontractors, our ability to deliver our products to our customers may be negatively impacted. Also, our subcontractors may increase their fees, which would result in an increase in our manufacturing costs, which we may not be fully able to pass to our customers. These factors could cause a negative impact on our results of operations.

We depend on successful parts and materials procurement for our manufacturing processes, and a shortage or increase in the price of these materials could interrupt our operations and result in a decline of revenues and results of operations.

We procure materials and electronic and mechanical components from international sources and original equipment manufacturers. We use a wide range of parts and materials in the production of our semiconductors, including silicon, processing chemicals, processing gases, precious metals and electronic and mechanical components, some of which, such as silicon wafers, are specialized raw materials that are generally only available from a limited number of suppliers. If demand increases or supply decreases for any reason, the costs of our raw materials could significantly increase. For example, worldwide supplies of silicon wafers, an important raw material for the semiconductors we manufacture, have been constrained in recent years due to an increased demand for silicon. We from time to time may enter into multi-year agreements, which specify future quantities and pricing of materials to be supplied by the vendors of these materials; however, this option may not be available to us and we cannot assure that supply increases will match demand increases. If we cannot obtain adequate materials in a timely manner or on favorable terms for the manufacture of our products, revenues and results of operations will decline.

Compliance with regulations regarding the use of “conflict minerals” could limit the supply and increase the cost of certain raw materials used in manufacturing our products.

The SEC, as mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, adopted disclosure regulations for public companies that manufacture products containing certain minerals that are mined from the Democratic Republic of Congo and adjoining countries and procedures pertaining to a manufacturer’s efforts regarding the source of such minerals. These “conflict minerals” are commonly found in metals used in the manufacture of semiconductors. Manufacturers are also required to disclose their efforts to prevent the sourcing of such minerals and metals produced from them. The implementation of these requirements could adversely affect the sourcing, availability and pricing of metals used in the manufacture of our products. We may also incur additional costs to comply with the disclosure requirements, including costs related to determining the source of any of the relevant minerals used in our products. We may also face difficulties in satisfying customers who may require that our products be certified as free of “conflict materials,” which could harm our relationships with these customers and lead to a loss of revenue.

We face warranty claims, product return, litigation and liability risks and the risk of negative publicity if our products fail.

Our semiconductors are incorporated into a number of end products, and our business is exposed to product return, warranty and product liability risk and the risk of negative publicity if our products fail. Although we maintain insurance for product liability claims, the amount and scope of our insurance may not be adequate to cover a product liability claim that is asserted against us. In addition, product liability insurance could become more expensive and difficult to maintain and, in the future, may not be available on commercially reasonable terms, or at all.

In addition, we are exposed to the product liability risk and the risk of negative publicity affecting our customers. Our sales may decline if any of our customers are sued on a product liability claim. We also may suffer a decline in sales from the negative publicity associated with such a lawsuit or with adverse public perceptions in general regarding our customers' products. Further, if our products are delivered with impurities or defects, we could incur additional development, repair or replacement costs, and our credibility and the market's acceptance of our products could be harmed.

We could suffer adverse tax and other financial consequences as a result of changes in, or differences in the interpretation of, applicable tax laws, or the adoption of new U.S. or international tax legislation.

Our company's organizational structure was created in part based on certain interpretations and conclusions regarding various tax laws, including withholding tax and other tax laws of applicable jurisdictions. Our interpretations and conclusions regarding tax laws, however, are not binding on any taxing authority and, if these interpretations and conclusions are incorrect, if our business were to be operated in a way that rendered us ineligible for tax exemptions or caused us to become subject to incremental tax, or if the authorities were to change, modify or have a different interpretation of the relevant tax laws, we could suffer adverse tax and other financial consequences, and the anticipated benefits of our organizational structure could be materially impaired. Our company's organizational structure and other tax positions are subject to review by tax authorities in the local and other jurisdictions where we operate our business.

Our provision for income taxes is subject to volatility and could be negatively affected by earnings being (i) lower than anticipated in jurisdictions that have lower statutory tax rates or (ii) higher than anticipated in jurisdictions that have higher statutory tax rates. In addition, our provision for income taxes could be negatively affected by changes in the valuation of our deferred tax assets and liabilities, changes to global intangible low-tax income tax laws, transfer pricing adjustments, or changes in tax laws, regulations, or accounting principles.

Additional changes in the U.S. tax regime or in how U.S. multinational corporations are taxed on foreign income, including changes in how existing tax laws are interpreted or enforced, could adversely affect our business, financial condition or results of operations. For example, the Organization for Economic Cooperation and Development (OECD) has recommended changes to numerous long-standing international tax principles through its base erosion and profit shifting (BEPS) project. These changes, to the extent adopted, may increase tax uncertainty, result in higher compliance costs and adversely affect our provision for income taxes, results of operations and/or cash flow.

We are also subject to regular reviews, examinations and audits by the IRS and other taxing authorities, including the Korean National Tax Service, with respect to income and non-income based taxes both within and outside the U.S. In connection with the OECD's BEPS project, companies are required to disclose more information to tax authorities on operations around the world, which may lead to greater audit scrutiny of income earned in various countries. Economic and political pressures to increase tax revenues in jurisdictions in which we operate, or the adoption of new or reformed tax legislation or regulation, may make resolving tax disputes more difficult and the final resolution of tax audits and any related litigation could differ from our historical provisions and accruals, resulting in an adverse impact on our business, financial condition or results of operations.

Expanded trade restrictions imposed by the United States may limit our ability to sell to certain customers.

On August 17, 2020, the U.S. Department of Commerce expanded the scope of export restrictions as applied to products directed to Huawei and its affiliates listed on the Bureau of Industry and Security's Entity List (collectively, "Huawei"). While prior restrictions had minimal effect on our ability to supply to customers, the newly expanded restrictions would limit our ability to supply to a variety of customers who we believe incorporate our products to those customers' products directly or indirectly sold to Huawei. As of the date of this Annual Report, we are uncertain on the seriousness of the restrictions' impact or duration and the future trajectory of our business from customers who directly or indirectly supply Huawei with products that incorporate our products. For export of some of our products, we have successfully obtained the necessary export licenses, and if exports of other products require export licenses due to the restrictions, we will consider applying for the necessary export licenses to continue to sell to the affected customers. Although we have thus far successfully obtained the necessary export licenses for exporting some of our products, we are unsure whether our other applications will be successful. There is also a possibility that export restrictions may be further expanded to target companies in addition to Huawei, which may have an additional impact on our ability to sell to our customers. Export restrictions may also affect our contractors, suppliers or customers, and we cannot assure that they will not violate the restrictions, and any such violations may result in fines or criminal sanctions against us and damage our reputation.

Expanded trade restrictions imposed by South Korea may limit our ability to sell to certain customers or engage in any potential strategic opportunities.

Under the ITA, any export (including various means of outflow, such as sale or transfer outside Korea) of National Core Technology by MOTIE requires the filing of a prior-report with, and the acceptance of the same by, the MOTIE. Any such export of NCT without the acceptance of the prior-report with the MOTIE may be subject to corrective orders by the relevant authorities, and failure to comply with such corrective orders may potentially result in criminal liabilities.

The Notification Regarding Designation of National Core Technologies issued by the MOTIE was amended on July 14, 2021 to add certain technologies to the list of National Core Technology designated by the MOTIE, and the amended list includes the design technology for OLED DDI. In the ordinary course of business, our Korean subsidiary may provide certain information relating to its products, including OLED DDI, to customers, suppliers or vendors, and such disclosure of information may be subject to the NCT-related regulations under the ITA, and therefore the MOTIE's acceptance of prior reports. Since the amendment of the foregoing NCT list in July 2021, we have filed prior-reports with the MOTIE for the export of our OLED DDI product-related information to certain overseas vendors that manufacture our products, and all such reports have thus far been accepted by the MOTIE.

There is no assurance, however, that any future prior-reports for the export of our product-related information will be accepted by the MOTIE. In the event that any future prior-report is not accepted, we may be unable to continue our business with the overseas customers, suppliers or vendors, including the manufacturing and delivery of our OLED DDI products.

In addition, in the event that there is any M&A transaction with respect to our Korean subsidiary that results in non-Korean ownership of 50% or more, or exertion of control over the appointment of officers/management by a non-Korean person or entity as the largest shareholder, a prior-report with and the acceptance by the MOTIE is required under the ITA. There is no assurance that any report for an M&A transaction involving non-Korean acquirers or investors will be accepted by the MOTIE when such transaction is pursued in the future.

Recent changes in international trade policy and the imposition and threats of international tariffs, including tariffs applied to goods traded between the United States and China, could materially and adversely affect our business and results of operations.

Since the beginning of 2018, there have been increasing public threats and, in some cases, legislative or executive action, from U.S. and foreign leaders regarding instituting tariffs against foreign imports of certain materials. More specifically, since March of 2018, the U.S. and China have applied tariffs to certain of each other's exports. The institution of trade tariffs globally, and between the U.S. and China specifically, may negatively impact the affected countries' economic conditions, which could negatively affect demand for our products in those countries and materially and adversely affect our business and results of operations of our customers serving the affected markets. Additionally, it is currently unclear how the recent change in presidential administration in the U.S. may further impact international trade tariffs going forward. Imposition of tariffs could increase costs of the end-user products we supply that we may not be able to pass on to our customers, which could in turn cause a decrease in the sales of our products and materially and adversely affect our business and results of operations.

Our ability to compete successfully and achieve future growth will depend, in part, on our ability to protect our intellectual property, proprietary technology and know-how, as well as our ability to operate without infringing the proprietary rights of others.

We attempt to protect our intellectual property rights, both in the US and in foreign countries, through a combination of patent, trademark, copyright, mask works and trade secret laws, as well as licensing agreements and third-party nondisclosure and assignment agreements. Because of the differences in foreign trademark, patent and other laws concerning proprietary rights, our intellectual property rights may not receive the same degree of protection in foreign countries as they would in the US. In particular, the validity, enforceability and scope of protection of intellectual property in China, where we derive a significant portion of our net sales, and certain other countries where we derive net sales, are uncertain and still evolving and historically have not protected, and may not protect in the future, intellectual property rights to the same extent as do the laws and enforcement procedures in the US. Our failure to obtain or maintain adequate protection of our intellectual property rights for any reason could have a material adverse effect on our business, results of operations and financial condition.

We seek to protect our proprietary technologies and know-how through the use of patents, trade secrets, confidentiality agreements and other security measures. The process of seeking patent protection takes a long time and is expensive. There can be no assurance that patents will issue from pending or future applications or that, if patents issue, they will not be challenged, invalidated or circumvented, or that the rights granted under the patents will provide us with meaningful protection or any commercial advantage. Many of our patents are subject to cross licenses, several of which are with our competitors. Some of our technologies are not covered by any patent or patent application. The confidentiality agreements on which we rely to protect these technologies may be breached and may not be adequate to protect our proprietary technologies. Further, it is possible that others will independently develop the same or similar technologies, even without access to our proprietary technologies.

We rely on our trademarks, trade names, and brand names to distinguish our products from the products of our competitors, and have registered or applied to register many of these trademarks. We cannot assure you that our trademark applications will be approved. Third parties may also oppose our trademark applications, or
otherwise challenge our use of the trademarks. In the event that our trademarks are successfully challenged, we could be forced to rebrand our products, which could result in loss of brand recognition, and could require us to devote resources advertising and marketing new brands. Further, we cannot assure you that competitors will not infringe our trademarks, or that we will have adequate resources to enforce our trademarks.

Our ability to compete successfully depends on our ability to operate without infringing the proprietary rights of others. We have no means of knowing what patent applications have been filed until they are published. In addition, the semiconductor industry is characterized by frequent litigation regarding patent and other intellectual property rights. We may need to file lawsuits to enforce our patents or intellectual property rights, and we may need to defend against claimed infringement of the rights of others. Any litigation could result in substantial costs to us and divert our resources, and we cannot assure you that we will prevail. Any claims of intellectual property infringement or misappropriation against use, even those without merit, could require us to:

- pay substantial damages or indemnify customers or licensees for damages they may suffer if the products they purchase from us or the technology they license from us violate the intellectual property rights of others;
- stop our manufacture, use, sale or importation of the accused products;
- redesign, reengineer or rebrand our products, if feasible;

- expend significant resources to develop or acquire non-infringing technologies;
- discontinue processes; or
- obtain licenses to a third party's intellectual property.

There can be no assurance that we would be successful in such development or acquisition or that such licenses would be available under reasonable terms, or at all.

We license certain intellectual property from third parties. The termination of key third-party licenses relating to the use of intellectual property in our products and our design processes would adversely affect certain areas of our business.

We are subject to many environmental laws and regulations that could affect our operations or result in significant expenses.

We are subject to a variety of environmental, health and safety laws and regulations in each of the jurisdictions in which we operate, governing, among other things, air emissions, wastewater discharges, the generation, use, handling, storage and disposal of, and exposure to, hazardous substances (including asbestos) and wastes, soil and groundwater contamination and employee health and safety. These laws and regulations are complex, change frequently and have tended to become more stringent over time. Among them is the Act on Remediation and Compensation for Damages arising from Environmental Contamination which came into effect in Korea on January 1, 2016 and provides for strict liability of business entities in violation of the act and alleviates the burden of proof for the damaged party. Further, under the amendment to the Act on the Control and Aggravated Punishment of Environmental Offenses that becomes effective on November 27, 2020, certain environmental offenses such as illegally emitting specified hazardous air pollutants or emitting air pollutants without necessary permits will be subject to penalties of up to 5% of the sales amount generated from the relevant business. As a result, we have increased potential exposure to liability for environmental contaminations that might have existed in the past or would arise in the future. There can be no assurance that we have been, or will be, in compliance with all such laws and regulations or that we will not incur material costs or liabilities in connection with these laws and regulations in the future. The adoption of new environmental, health and safety laws, the failure to comply with new or existing laws, or issues relating to hazardous substances could subject us to material liability (including substantial fines or penalties), impose the need for additional capital equipment or other process requirements upon us, curtail our operations or restrict our ability to expand operations.

Our Korean subsidiary has been designated as a regulated business under Korean environmental law, and such designation could have an adverse effect on our financial position and results of operations.

Since 2015, our Korean subsidiary has been subject to K-ETS, a new set of greenhouse gas emissions regulations, under the Act on Allocation and Trading of Greenhouse Gas Emission Allowances. Under K-ETS, our Korean subsidiary was allocated a certain amount of emissions allowance in accordance with the National Allocation Plan prepared by the Korean government, and is required to meet its allocated target by either reducing emissions or purchasing allowances from other participants or the government in the emission trading market. Reduction of our emissions or energy consumption may result in additional and potentially costly compliance or remediation expenses, including potentially the installation of equipment and changes in the type of materials we use in manufacturing, as well as cost of procuring emission allowances to cover the excess emissions, which could adversely affect our financial position and results of operations. During the first implementation period from 2015 to 2017 and second implementation period from 2018 to 2020, we did not exceed the allocated emission amount. Our Korean subsidiary has been allocated emissions allowance in the third implementation period from 2021 to 2025, and we do not expect to exceed the allocated emission amount during the third implementation period. If, however, our Korean subsidiary exceeds the allocated emission amount the third implementation period, we will be required to pay for the excess emissions and may be subject to other regulatory action. We will continue to monitor our compliance with the emissions allowance on a yearly basis. In addition, from time to time, if we assess that we have excess allowances, we may sell such excess allowances to manufacturers in the emission market in Korea.

Furthermore, the Korean legislature enacted the Framework Act on Carbon Neutrality and Green Growth for Responding to Climate Change (the "Carbon Neutrality Framework Act") on September 24, 2021. The Carbon Neutrality Framework Act aims to reduce greenhouse gas emissions by more than 35% by 2030 (compared to 2018) and proclaims the achievement of carbon neutrality by 2050 as a national vision. The Carbon Neutrality Framework Act is significant in that it legislates carbon neutrality and greenhouse gas reduction objectives, and enables the central administrative agencies, local governments and public institutions to implement various measures towards such objectives. On November 11, 2021, the Korean Ministry of Environment announced the proposed enactment of the Enforcement Decree of the Carbon Neutrality Framework Act (the "Proposed Enforcement Decree"). The Proposed Enforcement Decree aims to provide details required for the execution of items prescribed under the Carbon Neutrality Framework Act. The key provisions of the Proposed Enforcement Decree include those setting the mid- to long-term greenhouse gas reduction goal at 40% and implementing the climate change impact assessment scheme. It is anticipated that the Carbon Neutrality Framework Act, which aims to promote the harmonious development of the economy and the environment in conjunction with active greenhouse gas reduction measures, will serve as the foundation for the government's climate change response policy going forward. The Proposed Enforcement Decree will be promulgated after regulatory review and deliberation by the Ministry of Government Legislation.

Our compliance with the Serious Accidents Punishment Act (the "SAPA") could require significant expenditures and management time and expose us to liability for violations.

Enacted on January 26, 2021 and effective as of January 27, 2022 in Korea, the SAPA will impose enhanced liability exposure for workplace accidents. The legislative goal of the SAPA is to prevent serious accidents by prescribing punishments and punitive damages liability for business owners or responsible management personnel who have violated safety and health measures in the event of such serious accidents (serious industrial accidents and serious civil accidents). Since the law applies to businesses in Korea with 50 or more full-time employees starting from January 27, 2022, our Korean subsidiary becomes subject to the law after the effective date. According to the SAPA, if a serious occupational accident occurs that results in at least one deceased person, at least two persons wounded for six months or more, or at least three persons suffering from occupational diseases within a one year period, if the "business owners or responsible management personnel" of the relevant business place is found to have failed to perform its "obligation to secure safety and health," that person may be subject to imprisonment for up to 7 year or a fine of up to KRW 100 million (in case of death, imprisonment for not less than 1 year or a fine of not less than KRW 1 billion). Relevant responsible management personnel will also be required to spend more time, effort and cost to comply with the SAPA and perform the necessary additional duties imposed by the law to ensure compliance.

We may need additional capital in the future, and such capital may not be available on acceptable terms or at all, which would have a material adverse effect on our business, financial condition and results of operations.

We may require more capital in the future from equity or debt financings to fund operating expenses, such as research and development costs, finance investments in equipment and infrastructure, acquire complementary businesses and technologies, and respond to competitive pressures and potential strategic opportunities. If we raise additional funds through further issuances of equity or other securities convertible into equity, our existing stockholders could suffer significant dilution, and any new shares we issue could have rights, preferences or privileges senior to those of the holders of our common stock. There can be no assurance that any additional equity or debt financing would be available to us, or if available, that such financing would be on favorable terms to us. Accordingly, if we are unable to obtain additional capital or our business does not generate sufficient cash flows from operating activities to fund our working capital needs and planned capital expenditures, and our cash reserves are depleted, we may need to take various actions, such as down-sizing and/or eliminating certain operations, which could include additional exit costs, reducing or delaying capital expenditures, selling assets, or other restructuring actions. There can be no assurance that we would be successful in taking such actions and, in any event, such actions may result in a material adverse effect on our business and results of operations. In addition, our indebtedness limits our ability to incur additional indebtedness under certain circumstances.

Our business depends on international customers, suppliers and operations in Asia, and as a result we are subject to regulatory, operational, financial and political risks, which could adversely affect our financial results.

We rely on, and expect to continue to rely on, suppliers, subcontractors and operations located primarily in Asia. As a result, we face risks inherent in international operations, such as unexpected changes in regulatory requirements, tariffs and other market barriers, political, social and economic instability, adverse tax consequences, war, civil disturbances and acts of terrorism, public health issues (including viral outbreaks such as COVID-19), difficulties in accounts receivable collection, extended payment terms and differing labor standards, enforcement of contractual obligations and protection of intellectual property. These risks may lead to increased costs or decreased revenue growth, or both.

Our business, results of operations and financial condition and prospects may be materially and adversely affected by the ongoing COVID-19 pandemic or any future pandemic, epidemic or outbreak of any other highly infectious disease.

As a result of COVID-19, including the emergence of various variants, including Delta and Omicron, governments in affected countries have imposed travel bans, quarantines and other emergency public health measures. In response to the virus, national and local governments in numerous countries around the world have implemented substantial business restrictions and lockdown measures and may continue to impose similar policies in the future from time to time in response to further outbreaks of the virus. Private sector companies have also taken precautionary measures, such as requiring employees to work remotely, imposing travel restrictions and temporarily closing businesses and facilities. These restrictions have had, and these and future prevention and mitigation measures, may continue to have, an adverse impact on global economic conditions, which could materially adversely affect our future operations.

These measures have impacted and may further impact our workforce and operations, the operations of our customers, and those of our respective vendors, suppliers, and partners. The disruptions to our operations caused by the COVID-19 outbreak may result in inefficiencies, delays and additional costs in our research and development, sales and marketing, and customer service efforts that we cannot fully mitigate through remote or other alternative work arrangements. Also, some suppliers of materials used in the production of our products may have been or will be more severely impacted by COVID-19, which could limit our ability to obtain sufficient materials for our products. In addition, the severe global economic disruption caused by COVID-19 may cause our customers and end-users of our products to suffer significant economic hardship, which could result in decreased demand for our products in the future and materially adversely affect our business, results of operations, financial condition (including liquidity) and prospects.

The full extent to which COVID-19, or any future pandemic, epidemic or outbreak of any other highly infectious disease, impacts our operations and causes disruptions on our customers, end-users, overall demand for our products, supply chain, and the related financial impact to us, will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the scope, severity and duration of such pandemic, the emergence and characteristics of new variants, the actions taken to contain the pandemic or mitigate its impact, including the adoption, administration and effectiveness of available COVID-19 vaccines, and the direct and indirect economic effects of the pandemic and containment measures, among others. Should such disruptions continue for an extended period of time, the impact could have a more severe adverse effect on our business, results of operations and financial condition (including liquidity). Additionally, weaker economic conditions generally could result in impairment in value of our tangible or intangible assets, or our ability to raise additional capital, if needed.

Tensions with North Korea could have an adverse effect on us and the market value of our shares.

Relations between South Korea and North Korea have been tense throughout Korea’s modern history. The level of tension between the two Koreas has fluctuated and may increase abruptly as a result of current and future events. In particular, in recent years, there have been heightened security concerns stemming from North Korea's nuclear weapon and long-range missile programs and increased uncertainty regarding North Korea's actions and possible responses from the international community.

North Korea's economy also faces severe challenges, and any adverse economic developments may further aggravate social and political tensions within North Korea.

Although we do not derive any revenue from, nor sell any products in, North Korea, any future increase in tensions between South Korea and North Korea that may occur, for example, if North Korea experiences a leadership crisis, high-level contacts between South Korea and North Korea break down, or military hostilities occur, could have a material adverse effect on the South Korean economy and on our business, financial condition, results of operations and the market value of our common stock.

We may be subject to disruptions, breaches or cyber-attacks of our secured networks and information technology systems that could damage our reputation, harm our business, expose us to liability and materially adversely affect our results of operations.

In the ordinary course of our business, we collect and store sensitive data, including IP and other proprietary information about our business and that of our customers, suppliers and business partners. Secure maintenance, processing and transmission of this information is critical to our operations and business strategy. We may be subject to disruptions, breaches or cyber-attacks of our secured networks and information technology systems caused by illegal hacking, criminal fraud or impersonation, computer viruses, acts of vandalism or terrorism or employee error, and our security measures or those of any third party service providers we use may not detect or prevent such security breaches. We may incur significant costs to eliminate or alleviate cybersecurity breaches and vulnerabilities, which could be significant, and our efforts to protect against such breaches or vulnerabilities may not be successful and could result in system interruptions that may materially impede our sales, manufacturing, distribution, finance or other critical functions. Any such compromise of our information security could also result in the unauthorized publication of our confidential business or proprietary information or that of other parties with which we do business, an interruption in our operations, the unauthorized transfer of cash or other assets, the unauthorized release of customer or employee data or a violation of privacy or other laws in the jurisdictions in which we operate. Any of the foregoing could irreparably damage our reputation and business and/or expose us to material monetary liability, which could have a material adverse effect on our results of operations.

You may not be able to bring an action or enforce any judgment obtained in United States courts, or bring an action in any other jurisdiction, against us or our subsidiaries or our directors, officers or independent auditors that are organized or residing in jurisdictions other than the United States.

Most of our subsidiaries are organized or incorporated outside of the US and some of our directors and executive officers as well as our independent auditors are organized or reside outside of the US. Most of our and our subsidiaries' assets are located outside of the US and in particular, in Korea. Accordingly, any judgment obtained in the US against us or our subsidiaries may not be collectible in the US. As a result, it may not be possible for you to effect service of process within the US upon these persons or to enforce against them or us court judgments obtained in the US that are predicated upon the civil liability provisions of the federal securities laws of the US or of the securities laws of any state of the US. In particular, there is doubt as to the enforceability in Korea or any other jurisdictions outside the US, either in original actions or in actions for enforcement of judgments of US courts, of civil liabilities predicated on the federal securities laws of the US or the securities laws of any state of the US.

We are a holding company and depend on the business of our subsidiaries to make payments to us.

We are a holding company with no independent operations of our own. Our subsidiaries conduct substantially all of the operations necessary to fund our obligations. Our ability to pay dividends or to make payments on any future obligations will depend on our subsidiaries' cash flow and their payment of funds to us. Our subsidiaries' ability to make payments to us will depend on:

- their earnings;
- covenants contained in any debt agreements to which we may then be subject, including any debt agreements of our subsidiaries;
- covenants contained in other agreements to which we or our subsidiaries are or may become subject;
- business and tax considerations; and
- applicable law, including any restrictions under Korean law that may be imposed on Magnachip Korea that would restrict its ability to make payments on intercompany loans from MagnaChip Semiconductor B.V.

We cannot assure that the operating results of our subsidiaries at any given time will be sufficient to make distributions or other payments to us.

We may at times need to incur impairment, restructuring and other restructuring related charges, which could materially affect our results of operations and financial condition.

During industry downturns and for other reasons, we may need to record impairment, restructuring or other restructuring related charges. In the future, we may need to record additional impairment charges or to further restructure our business or incur additional restructuring charges, any of which could have a material adverse effect on our results of operations or financial condition.

We are subject to litigation risks, which may be costly to defend and the outcome of which is uncertain.

All industries, including the semiconductor industry, are subject to legal claims, with and without merit, that may be particularly costly and which may divert the attention of our management and our resources in general. We are involved in a variety of legal matters, most of which we consider routine matters that arise in the normal course of business. These routine matters typically fall into broad categories such as those involving customers, employment and labor and intellectual property. Even if the final outcome of these legal claims does not have a material adverse effect on our financial position, results of operations or cash flows, defense and settlement costs can be substantial. Due to the inherent uncertainty of the litigation process, the resolution of any particular legal claim or proceeding could have a material effect on our business, financial condition, results of operations or cash flows.

The price of our common stock may be volatile and you may lose all or a part of your investment.

The trading price of our common stock might be subject to wide fluctuations. Factors, some of which are beyond our control, that could affect the trading price of our common stock may include:

- actual or anticipated variations in our results of operations from quarter to quarter or year to year;
- announcements by us or our competitors of significant agreements, technological innovations or strategic alliances;
- changes in recommendations or estimates by any securities analysts who follow our securities;
- addition or loss of significant customers;
- recruitment or departure of key personnel;

- changes in economic performance or market valuations of competing companies in our industry;
- price and volume fluctuations in the overall stock market;
- market conditions in our industry, end markets and the economy as a whole;
- subsequent sales of stock and other financings; and
- litigation, legislation, regulation or technological developments that adversely affect our business.

In the past, following periods of volatility in the market price of a public company's securities, securities class action litigation often has been instituted against the public company. Regardless of its outcome, this type of litigation could result in substantial costs to us and a likely diversion of our management's attention. You may not receive a positive return on your investment when you sell your shares, and you could lose some or the entire amount of your investment.

We cannot guarantee that our share repurchase program will be successfully consummated, or that it will enhance shareholder value, and share repurchases could affect the price of our common stock.

On December 21, 2021, the Board of Directors authorized us to repurchase up to $75.0 million of our outstanding common stock and we entered into an accelerated stock repurchase agreement (the "ASR Agreement") with JPMorgan Chase Bank, National Association ("JPM") to repurchase an aggregate of $37.5 million of our common stock. Pursuant to the terms of the ASR Agreement, we paid JPM $37.5 million in cash and received an initial delivery of 994,695 shares of our common stock. Upon final settlement of the ASR Agreement, which is expected to occur during the fiscal quarter ending March 31, 2022, we may be entitled to receive additional shares of common stock from JPM or, under certain circumstances specified in the ASR Agreement, we may be required to deliver shares of common stock or make a cash payment, at its option, to JPM. This share repurchase program under the ASR Agreement could affect the price of our common stock, increase volatility and diminish our cash reserves.

See "Item 8. Financial Statements and Supplementary Data—Notes to Consolidated Financial Statements—Note 14. Stockholders' Equity and Stock-Based Compensation" for more information.

Significant ownership of our common stock by certain stockholders could adversely affect our other stockholders.

The concentration of ownership of our common stock by certain stockholders may limit the ability of other stockholders to influence corporate matters and, as a result, we may take actions that our public stockholders do not view as beneficial. For example, any concentration of ownership could have the effect of delaying or preventing a change in control or otherwise discouraging a potential acquirer from attempting to obtain control of us, which in turn could cause the market price of our common stock to decline or prevent our stockholders from realizing a premium over the market price for their shares of our common stock.

Under our certificate of incorporation, our non-employee directors and non-employee holders of five percent or more of our outstanding common stock do not have a duty to refrain from engaging in a corporate opportunity in the same or similar activities or lines of business as those engaged in by us, our subsidiaries and other related parties. Also, we have renounced any interest or expectancy in such business opportunities even if the opportunity is one that we might reasonably have pursued or had the ability or desire to pursue if granted an opportunity to do so.

Our Rights Plan and provisions in our charter documents and Delaware Law may make it difficult for a third party to acquire us and could depress the price of our common stock.

On December 12, 2021, our Board of Directors adopted a stockholder rights plan (the "Rights Plan") and declared a dividend of one preferred stock purchase right (a "Right" and collectively, the "Rights") for each share of our common stock, par value $0.01 per share, outstanding at the close of business on December 23, 2021. Each Right, once exercisable, will entitle the registered holder to purchase one one-thousandth of a share of our Series A-1 Junior Participating Preferred Stock, par value $0.01 per share, at a purchase price of $80, subject to certain adjustments (the “Purchase Price”). Under certain circumstances, if a person or group acquires 12.5% (or 20% in the case of a passive institutional investor) or more of our outstanding common stock, each Right (other than Rights held by the person or group triggering their exercise) will enable the holder thereof to purchase, for the Purchase Price, a number of shares of common stock having a market value of twice the Purchase Price. The Rights expire at the close of business on December 12, 2022 unless earlier redeemed or exchanged by us. Because the Rights may substantially dilute the stock ownership of a person or group attempting to acquire us without the approval of our Board of Directors, our Rights Plan could make it more difficult for a third party to acquire us (or a significant percentage of our outstanding capital stock) without first negotiating with our Board of Directors regarding such acquisition. See “Item 8. Financial Statements and Supplementary Data—Note 22. Earnings (Loss) Per Share—Rights Plan” in this Report for more information.

In addition, provisions in our certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control or changes in our management. Among other things, our certificate of incorporation and bylaws:

- authorize our Board of Directors to issue, without stockholder approval, preferred stock with such terms as the Board of Directors may determine;
- prohibit action by written consent of our stockholders;
- prohibit any person other than our Board of Directors, the chairman of our Board of Directors, our Chief Executive Officer or holders of at least 25% of the voting power of all then outstanding shares of capital stock of the corporation entitled to vote generally in the election of directors to call a special meeting of our stockholders; and
- specify advance notice requirements for stockholder proposals and director nominations.

In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law (the “DGCL”), regulating corporate takeovers and which has an anti-takeover effect with respect to transactions not approved in advance by our Board of Directors, including discouraging takeover attempts that might result in a premium over the market price for shares of our common stock. In general, those provisions prohibit a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder, unless:

- the transaction is approved by the board of directors before the date the interested stockholder attained that status;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or
- on or after such date, the business combination is approved by the board of directors and authorized at a meeting of stockholders, and not by written consent, by at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

In general, DGCL Section 203 defines a business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;

- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, DGCL Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by any such entity or person.

A Delaware corporation may opt out of this provision by express provision in its original certificate of incorporation or by amendment to its certificate of incorporation or bylaws approved by its stockholders. However, we have not opted out of, and do not currently intend to opt out of, this provision.

Provisions in our charter documents and Delaware Law may make it difficult for a third party to acquire us and could depress the price of our common stock.

Provisions in our certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control or changes in our management. Among other things, our certificate of incorporation and bylaws:

- authorize our Board of Directors to issue, without stockholder approval, preferred stock with such terms as the Board of Directors may determine;
- prohibit action by written consent of our stockholders;
- prohibit any person other than our Board of Directors, the chairman of our Board of Directors, our Chief Executive Officer or holders of at least 25% of the voting power of all then outstanding shares of capital stock of the corporation entitled to vote generally in the election of directors to call a special meeting of our stockholders; and
- specify advance notice requirements for stockholder proposals and director nominations.

In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law (the “DGCL”), regulating corporate takeovers and which has an anti-takeover effect with respect to transactions not approved in advance by our Board of Directors, including discouraging takeover attempts that might result in a premium over the market price for shares of our common stock. In general, those provisions prohibit a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder, unless:

- the transaction is approved by the board of directors before the date the interested stockholder attained that status;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or
- on or after such date, the business combination is approved by the board of directors and authorized at a meeting of stockholders, and not by written consent, by at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

In general, DGCL Section 203 defines a business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;

- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, DGCL Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by any such entity or person.

A Delaware corporation may opt out of this provision by express provision in its original certificate of incorporation or by amendment to its certificate of incorporation or bylaws approved by its stockholders. However, we have not opted out of, and do not currently intend to opt out of, this provision.

We have not historically paid dividends and do not currently have any dividend or distribution policy, and therefore, investors may need to rely on sales of their common stock as the only way to realize any future gains on their investments.

We have not historically paid cash dividends and do not currently have any dividend or distribution policy. Any determination to pay dividends in the future will be at the discretion of our Board of Directors. Accordingly, unless the Board implements a future dividend or distribution policy, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

Our manufacturing operations take place in a single fabrication facility located in Korea in Gumi. Our facility has a capacity of approximately 34,000 eight-inch equivalent wafers per month. We manufacture wafers utilizing geometries ranging from 0.35 to 0.50 microns. The Gumi facility has one main building with 41,022 square meters devoted to manufacturing, testing and packaging.

In addition to our fabrication facility in Gumi, we lease facilities in Cheongju and Seoul, Korea. Each of these facilities includes administration, sales and marketing and research and development functions. We lease sales and marketing offices through our subsidiaries in several other countries.

The ownership of our wafer manufacturing assets is an important component of our business strategy. Maintaining manufacturing control enables us to develop proprietary, differentiated products and results in higher production yields, as well as shortened design and production cycles. We believe our facilities are suitable and adequate for the conduct of our business for the foreseeable future and that we have sufficient production capacity to service our business as currently contemplated without significant capital investment.

A substantial majority of our assembly, test and packaging services for our Display Solutions business and all of such services for our Power Solutions business are outsourced with the balance handled in-house. The independent providers of these outsourced services are located in Korea, China, Taiwan and Thailand. The relative cost of outsourced services, as compared to in-house services, depends upon many factors specific to each product and circumstance. However, we generally incur higher costs for outsourced services, which can result in lower margins.

Item 3. Legal Proceedings

We are involved in a variety of legal matters, most of which we consider routine matters that arise in the normal course of business. These routine matters typically fall into broad categories such as those involving customers, employment and labor and intellectual property. Intellectual property litigation and infringement claims, in particular, could cause us to incur significant expenses or prevent us from selling our products. We are currently not involved in any legal proceedings that we believe would have a material adverse effect on our business, financial condition or results of operations.

See also “Item 1A. Risk Factors” in this Report for additional information.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information

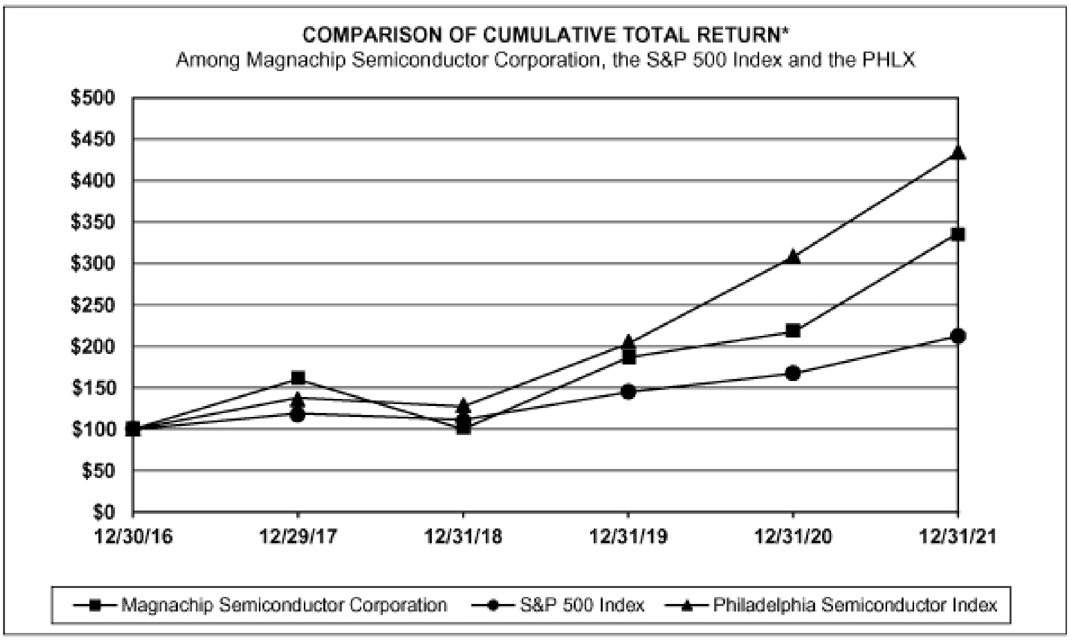
Our common stock is listed on the New York Stock Exchange under the symbol "MX."

Stock Performance Graph

The graph and table below compare the cumulative total stockholder return of our common shares with the cumulative total return of the S&P 500 Index and the Philadelphia Semiconductor Index (PHLX) from December 30, 2016 (the last trading day before the beginning of our fifth preceding fiscal year) through December 31, 2021. The graph assumes that $100 was invested on December 30, 2016 in our common shares and in each index and that any dividends were reinvested. No cash dividends have been declared on our common shares during the five-year period ended December 31, 2021.

Comparison of Cumulative Total Return*

Among Magnachip Semiconductor Corporation, the S&P 500 Index and the PHLX



* The stock performance included in this graph is not necessarily indicative of future stock performance.

Total Return to Stockholders (Including Reinvestment of Dividends)

Indexed Returns

Company/Index	Base Period 12/30/2016	12/29/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021
Magnachip Semiconductor Corporation	100	160.48	100.16	187.26	218.06	338.23
S&P 500 Index	100	119.42	111.97	145.52	167.77	212.89
Philadelphia Semiconductor Index	100	138.23	127.44	204.05	308.39	435.33

Holders

The approximate number of record holders of our outstanding common stock as of February 14, 2022 was 70. This number does not include beneficial owners for whom shares are held by nominees in street name.

Stock-Based Compensation

For information on securities authorized for issuance under our equity compensation plans, see Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Dividends

We have not historically paid any cash dividends on our common stock. Our Board of Directors continuously evaluates our capital allocation strategy and liquidity targets, but has not currently implemented any dividend or distribution policy. Any determination to pay dividends in the future will be at the discretion of our Board of Directors.

Issuer Purchases of Equity Securities

The following table shows the monthly activity related to our repurchases of common stock for the quarter ended December 31, 2021.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs(1)	Approximate dollar value of Shares that may yet be Purchased under the Plans or Programs (in thousands)(1)
October 2021	—	—	—	—
November 2021	—	—	—	—
December 2021	994,695	$ 20.18	994,695	$ 54,927
Total	994,695			$ 54,927

(1) On December 21, 2021, the Company's Board of Directors authorized the Company to repurchase up to $75 million of the Company's common stock. As an immediate step towards implementing the approved stock repurchase program, the Company entered into an accelerated stock repurchase agreement on December 21, 2021 with JPMorgan Chase Bank, National Association to repurchase an aggregate of $37.5 million of the Company's common stock.

See "Item 8. Financial Statements and Supplementary Data—Notes to Consolidated Financial Statements—Note 14. Stockholders' Equity and Stock-Based Compensation" in this Report for a description of the Accelerated Stock Repurchase Program.

Rights Plan

For information on our rights plan, see "Item 8. Financial Statements and Supplementary Data—Notes to Consolidated Financial Statements—Note 22. Earnings (Loss) Per Share—Rights Plan" in this Report.

Item 6. [Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis should be read in conjunction with the audited consolidated financial statements, together in each case with the related notes, included elsewhere in this Report. This discussion and analysis contains, in addition to historical information, forward-looking statements that include risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those set forth under the heading "Risk Factors" and elsewhere in this Report.

Overview

We are a designer and manufacturer of analog and mixed-signal semiconductor platform solutions for communications, IoT applications, consumer, computing, industrial and automotive applications. We have a proven record with more than 40 years of operating history, a portfolio of approximately 1,150 registered patents and pending applications and extensive engineering and manufacturing process expertise.

Our standard products business includes our Display Solutions and Power Solutions business lines.

Our Display Solutions line of products provide flat panel display solutions to major suppliers of large and small flat panel displays. These products include source and gate drivers and timing controllers that cover a wide range of flat panel displays used in mobile communications, automobiles, entertainment devices, notebook PCs, monitors and liquid crystal display (LCD), organic light emitting diodes (OLED) and Micro light emitting diode (Micro LED) televisions. Our Display Solutions products support some of the industry's most advanced display technologies, such as OLEDs, low temperature polysilicons thin film transistors (LTPS TFTs), as well as high-volume display technologies such as amorphous silicon thin film transistors (a-Si TFTs). Since 2007, we have designed and manufactured OLED display driver integrated circuit (IC) products. Our current portfolio of OLED solutions address a wide range of resolutions ranging from HD (High Definition) to WQHD (Wide Quadruple High Definition) for applications including smartphones, TVs, and other mobile devices.

Our Power Solutions business line produces power management semiconductor products including discrete and integrated circuit solutions for power management in communications, consumer, computing, servers, automotive, and industrial applications. These products include metal oxide semiconductor field effect transistors (MOSFETs), insulated-gate bipolar transistors (IGBTs), AC-DC/DC-DC converters, LED drivers, regulators and power management integrated circuits (PMICs) for a range of devices, including televisions, smartphones, mobile phones, wearable devices, desktop PCs, notebooks, tablet PCs, other consumer electrics, automotive, and industrial applications such as power suppliers, e-bikes, photovoltaic inverters, LED lighting and motor drives.

Our wide variety of analog and mixed-signal semiconductor products combined with our mature technology platform allow us to address multiple high-growth end markets and rapidly develop and introduce new products and services in response to market demands. Our design center and substantial manufacturing operations in Korea place us at the core of the global electronics device supply chain. We believe this enables us to quickly and efficiently respond to our customers' needs, and allows us to better serve and capture additional demand from existing and new customers. Certain of our OLED products are produced using external 12-inch foundries. Through a strategic cooperation with external 12-inch foundries, we are managing to ensure outsourcing wafers at competitive price and produce quality products.

To maintain and increase our profitability, we must accurately forecast trends in demand for electronics devices that incorporate semiconductor products we produce. We must understand our customers' needs as well as the likely end market trends and demand in the markets they serve. We must also invest in relevant research and development activities and purchase necessary materials on a timely basis to meet our customers' demand while maintaining our target margins and cash flow.

The semiconductor markets in which we participate are highly competitive. The prices of our products tend to decrease regularly over their useful lives, and such price decreases can be significant as new generations of products are introduced by us or our competitors. We strive to offset the impact of declining selling prices for existing products through cost reductions and the introduction of new products that command selling prices above the average selling price of our existing products. In addition, we seek to manage our inventories and manufacturing capacity so as to mitigate the risk of losses from product obsolescence.

Demand for our products and services is driven by overall demand for communications, IoT, consumer and industrial products and can be adversely affected by periods of weak consumer and enterprise spending or by market share losses by our customers. In order to mitigate the impact of market volatility on our business, we continually strive to diversify our portfolio of products, customers, and target applications. We also expect that new competitors will emerge in these markets that may place increased pressure on the pricing for our products and services. While we believe we are well positioned competitively to compete in these markets and against these new competitors as a result of our long operating history, existing manufacturing capacity and our worldwide customer base, if we are not effective in competing in these markets, our operating results may be adversely affected.

Net sales for our standard products business are driven by design wins in which we are selected by an electronics original equipment manufacturer (OEM) or other potential customer to supply its demand for a particular product. A customer will often have more than one supplier designed into multi-source components for a particular product line. Once we have design wins and the products enter into mass production, we often specify the pricing of a particular product for a set period of time, with periodic discussions and renegotiations of pricing with our customers. In any given period, our net sales depend heavily upon the end-market demand for the goods in which our products are used, the inventory levels maintained by our customers and, in some cases, allocation of demand for components for a particular product among selected qualified suppliers.

In contrast to completely fabless semiconductor companies, our internal manufacturing capacity provides us with greater control over certain manufacturing costs and the ability to implement process and production improvements for our internally manufactured products, which can favorably impact gross profit margins. Our internal manufacturing capacity also allows for better control over delivery schedules, improved consistency over product quality and reliability and improved ability to protect intellectual property from misappropriation on these internally manufactured products. However, having internal manufacturing capacity exposes us to the risk of under-utilization of manufacturing capacity that results in lower gross profit margins, particularly during downturns in the semiconductor industry.

Our standard products business requires investments in capital equipment. Analog and mixed-signal manufacturing facilities and processes are typically distinguished by the design and process implementation expertise rather than the use of the most advanced equipment. Many of these processes also tend to migrate more slowly to smaller geometries due to technological barriers and increased costs. For example, some of our products use high-voltage technology that requires larger geometries and that may not migrate to smaller geometries for several years, if at all. As a result, our manufacturing base and strategy do not require substantial investment in leading edge process equipment for those products, allowing us to utilize our facilities and equipment over an extended period of time with moderate required capital investments. In addition, we are less likely to experience significant industry overcapacity, which can cause product prices to decline significantly. In general, we seek to invest in manufacturing capacity that can be used for multiple high-value applications over an extended period of time. In addition, we outsource manufacturing of those products which do require advanced technology and 12-inch and 8-inch wafer capacity, such as organic light emitting diodes (OLED). We believe this balanced capital investment strategy enables us to optimize our capital investments and facilitates more diversified product and service offerings.

Since 2007, we had designed and manufactured OLED display driver ICs in our internal manufacturing facilities. As we expanded our design capabilities to products that require lower geometries unavailable at our existing manufacturing facilities, we began outsourcing manufacturing of certain OLED display driver ICs to an external 12-inch foundry starting in the second half of 2015 and we have started outsourcing 8-inch wafer for OLED TV IC after the sale of our fabrication facility located in Cheongju. This additional source of manufacturing is an increasingly important part of our supply chain management. By outsourcing manufacturing of OLED products to external foundries, we are able to adapt dynamically to changing customer requirements and address growing markets without substantial capital investments by us. However, relying on external foundries exposes us to the risk of being unable to secure manufacturing capacity, particularly under the current global shortage of foundry services. Although we are working strategically with external foundries to ensure long-term wafer capacity, if these efforts are unsuccessful, our ability to deliver products to our customers may be negatively impacted, which would adversely affect our relationship with customers and opportunities to secure new design-wins.

Our success going forward will depend upon our ability to adapt to future challenges such as the emergence of new competitors for our products and services or the consolidation of current competitors. Additionally, we must innovate to remain ahead of, or at least rapidly adapt to, technological breakthroughs that may lead to a significant change in the technology necessary to deliver our products and services. We believe that our established relationships and close collaboration with leading customers enhance our awareness of new product opportunities, market and technology trends and improve our ability to adapt and grow successfully.

Recent Developments

Accelerated Stock Repurchase Program

On December 21, 2021, the Board of Directors authorized the repurchase of up to $75.0 million of our outstanding common stock and we entered into an accelerated stock repurchase agreement (the “ASR Agreement”) with JPM to repurchase an aggregate of $37.5 million of our common stock.

Pursuant to the terms of the ASR Agreement dated December 21, 2021, we paid to JPM $37.5 million in cash and received an initial delivery of 994,695 shares of our common stock in the open market for an aggregate purchase price of $20.1 million and a price per share of $20.18 on December 22, 2021.

As of December 31, 2021, we accounted for the remaining portion of the ASR Agreement as a forward contract indexed to our common stock and recorded $17.4 million in additional paid-in capital in stockholders’ equity in our consolidated balance sheets. The final number of shares to be delivered will be based on our volume-weighted average stock price under the terms of the ASR Agreement less an agreed upon discount.

The ASR Agreement contains provisions customary for agreements of this type, including provisions for adjustments to the transaction terms, the circumstances under which the ASR Agreement may be accelerated, extended or terminated early by JPM and various acknowledgments, representations and warranties made by the parties to one another. Final settlement of the ASR Agreement is expected to occur during the fiscal quarter ending March 31, 2022.

Additional details about the ASR Agreement are contained in the Current Report on Form 8-K filed by us with the SEC on December 21, 2021.

Rights Plan

We entered into a Rights Agreement, dated as of December 13, 2021, with American Stock Transfer & Trust Company, LLC, as rights agent (the “Rights Agreement”), and the Board of Directors authorized and declared a dividend of one preferred stock purchase right (a “Right” and collectively, the “Rights”) for each share of our common stock, par value $0.01 per share, outstanding at the close of business on December 23, 2021. Each Right, once exercisable, will entitle the registered holder to purchase from us one one-thousandth of a share of Series A-1 Junior Participating Preferred Stock, par value $0.01 per share, at a purchase price of $80, subject to adjustment (the "Purchase Price"). The Rights are not presently exercisable and remain attached to the shares of common stock unless and until the occurrence of the earlier of the following (the "Distribution Date"): (i) the tenth day after the public announcement or disclosure by us or any person or group of affiliated or associated persons that any person or group of affiliated or associated persons has become an "Acquiring Person" by obtaining beneficial ownership of 12.5% (or 20% in the case of a "passive institutional investor," which is defined generally as any person who has reported beneficial ownership of shares of common stock on Schedule 13G under the Securities Exchange Act of 1934) or more of our outstanding common stock, subject to certain exceptions; or (ii) the tenth business day (or such later date as our Board of Directors may designate before a person or group of affiliated or associated persons becomes an Acquiring Person) after (and not including) the commencement of, or first public announcement of the intent of any person to commence, a tender or exchange offer by any person or group of affiliated or associated persons, which would, if consummated, result in such person or group becoming an Acquiring Person. The Board of Directors may redeem all of the Rights for $0.001 per Right at any time before any person or group of affiliated or associated persons becomes an Acquiring Person. In addition, at any time on or after any person or group of affiliated or associated persons becomes an Acquiring Person (but before any person or group of affiliated or associated persons becomes the owner of 50% or more of our outstanding common stock), the Board of Directors may exchange all or part of the Rights (other than the Rights beneficially owned by the Acquiring Person and certain affiliated persons) for shares of common stock at an exchange ratio of one share of common stock per Right. The Rights will expire at the close of business on December 12, 2022, unless redeemed or exchanged prior to that time.

If any person or group of affiliated or associated persons becomes an Acquiring Person, then, after the Distribution Date, each Right (other than Rights beneficially owned by the Acquiring Person and certain affiliated persons or transferees thereof) will entitle the holder to purchase, for the Purchase Price, a number of shares of common stock having a market value of twice the Purchase Price. Alternatively, if, after any person or group of affiliated or associated persons becomes an Acquiring Person, (1) we are involved in a merger or other business combination in which we are not the surviving corporation or our common stock is changed into or exchanged for other securities or assets; or (2) we or one or more of our subsidiaries sell or otherwise transfer assets or earning power aggregating more than 50% of the assets or earning power of us and our subsidiaries, taken as a whole, then each Right (other than Rights beneficially owned by the Acquiring Person and certain affiliated persons) will entitle the holder to purchase, for the Purchase Price, a number of shares of common stock of the other party to such business combination or sale (or in certain circumstances, an affiliate) having a market value of twice the Purchase Price.

Additional details about the Rights Agreement are contained in the Current Report on Form 8-K filed by us with the SEC on December 14, 2021.

The Terminated Merger

On March 25, 2021, we entered into an Agreement and Plan of Merger (the "Merger Agreement") with South Dearborn Limited, an exempted company incorporated in the Cayman Islands with limited liability ("Parent"), formed by an affiliate of Wise Road Capital LTD, and Michigan Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Parent ("Merger Sub"), providing for, among other things, and subject to the terms and conditions thereof, Merger Sub would be merged with and into us (the "Merger"), with us continuing our corporate existence as the surviving corporation in the Merger and becoming a wholly owned subsidiary of Parent.

The closing of the Merger was subject to certain conditions, including clearance by the Committee on Foreign Investment in the United States ("CFIUS") under the Defense Production Act of 1950, as amended. We and Parent were advised that CFIUS clearance of the Merger would not be forthcoming and received permission from CFIUS to withdraw our joint filing. In connection therewith, we and Parent entered into a Termination and Settlement Agreement, dated December 13, 2021 (the “Termination Agreement”), which was attached as Exhibit 10.1 in our Current Report on Form 8-K, dated December 13, 2021.

On December 20, 2021, the Merger Agreement was terminated pursuant to the Termination Agreement after our receipt of a fee of $51.0 million from Parent and a new standby letter of credit, which secures a deferred fee of $19.2 million from Parent due on or before March 31, 2022.

We recorded in our consolidated statement of operations $70.2 million income as part of merger-related costs (income), net for the year ended December 31, 2021, and in our consolidated balance sheet a $19.2 million deferred fee as other receivables at December 31, 2021.

Global Semiconductor Chip Shortage

Recent sharp increases in demand for semiconductor products have resulted in a global shortage of manufacturing capacity. As a result, we may experience increased costs to manufacture our products and may not be able to manufacture and deliver all of the orders placed by our customers. Specifically, if we are unable to secure manufacturing capacity from the external foundries we rely on, our ability to deliver products to our customers may be negatively impacted. Also, this shortage of manufacturing capacity may lead to an increase in our manufacturing costs which we may not be fully able to pass on to our customers. Total revenues for the year ended December 31, 2021 were negatively impacted by these persisting supply shortages, in particular for 28nm 12-inch OLED wafers.

In an effort to minimize the potential adverse impact of the supply shortage, we are working strategically with certain external foundries to help ensure long-term wafer capacity. If these efforts are unsuccessful, however, such shortage could limit our ability to meet demand for our products in the future, which would adversely affect our reputation and competitive position, resulting in a negative impact on results of operations.

We are not able to foresee when the current shortage of manufacturing capacity will subside. A prolonged global supply shortage could negatively impact our financial condition, potentially resulting in a need for additional capital to fund strategic initiatives or operating activities.

Conversion of 5.0% Exchangeable Senior Notes due 2021 (the “Exchangeable Notes”)

Prior to the March 1, 2021 maturity of our Exchangeable Notes, holders thereof elected to exchange the Exchangeable Notes for an aggregate of 10,144,131 shares of our common stock in satisfaction in full of the outstanding obligations under the Exchangeable Notes. On March 1, 2021, we paid the final interest payment on the Exchangeable Notes of $2.1 million and no longer have any Exchangeable Notes obligations outstanding as of such date.

Voluntary Resignation Program

On October 16, 2020, we commenced a voluntary resignation program (the “Program”), which was available for all employees. In connection with the Program, we recorded in our consolidated statement of operations $4.4 million of termination related charges within “early termination and other charges, net” for the year ended December 31, 2020.

Redemption of 6.625% Senior Notes due 2021 (the “2021 Notes”)

We completed the redemption of all of our outstanding 2021 Notes on October 2, 2020. We paid approximately $227.4 million to fully redeem all of the outstanding $224.25 million aggregate principal amount of the 2021 Notes at a redemption price equal to the sum of 100% of the principal amount of the 2021 Notes, plus accrued and unpaid interest through but excluding the redemption date. The redemption of the 2021 Notes was funded by our Korean subsidiary's repayment of intercompany loans using the cash proceeds that it received from the sale of the Foundry Services Group business and Fab 4. On October 12, 2020, we paid a withholding tax of approximately $20.6 million, attributable to the repaid accrued interests on the related intercompany loans.

Completion of Sale of the Foundry Services Group business and Fab 4

On September 1, 2020 (the "Closing Date"), we completed the sale of our Foundry Services Group business and Fab 4 to Key Foundry Co., Ltd. (the "Buyer") in exchange for a purchase price equal to approximately $350.6 million in cash. The purchase price was paid in a combination of U.S. Dollars in the amount of $46.5 million and Korean Won in the amount of approximately KRW 360.6 billion. In addition to the purchase price, the Buyer assumed all severance liabilities relating to the transferred employees, which had a value of approximately $100 million.

The divestiture of the Foundry Services Group business and Fab 4 was to strategically shift our operational focus to the standard products business. As a result, the results of the Foundry Services Group business were classified as discontinued operations in our consolidated statements of operations and excluded from both continuing operations and segment results for all periods presented. Accordingly, we have one reportable segment: our standard products business, together with transitional foundry services associated with our fabrication facility located in Gumi, Korea, known as Fab 3, which we expect to perform for the Buyer up to September 1, 2023 (the "Transitional Fab 3 Foundry Services").

Power Outage

On July 20, 2020, our Fab 3 facility in Gumi, South Korea experienced a temporary power outage for approximately 9 hours and 15 minutes. The recovery from this power outage took longer than expected, which limited our ability to produce products in Fab 3 at full capacity, resulting in a lower factory utilization primarily during the third quarter of 2020. The accident caused certain damage to our work in process wafers and we incurred charges for facility recovery, resulting in an incremental cost of approximately $1.2 million.

COVID-19 Pandemic

In December 2019, a strain of coronavirus causing a disease known as COVID-19 surfaced in Wuhan, China, resulting in significant disruptions among Chinese manufacturing and other facilities and travel throughout China. In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. Governmental authorities throughout the world have implemented numerous containment measures, including travel bans and restrictions, quarantines, shelter-in-place orders, and business restrictions and shutdowns, resulting in rapidly changing market and economic conditions. Although some of these restrictions and other containment measures have since been lifted or scaled back, ongoing surges of COVID-19 have, in some cases, resulted in the re-imposition of certain restrictions and containment measures, and may continue to lead to other restrictions being re-implemented in the foreseeable future in response to efforts to reduce the rapid spread of COVID-19.

We experienced some minor disruption in our Power Solutions business from assembly and test subcontractors located in China in the first quarter of 2020 as a result of the COVID-19 pandemic. To date, our external Display Solutions business contractors and sub-contractors have not been materially impacted by the COVID-19 pandemic. We are, however, unable to accurately predict the full impact that the COVID-19 pandemic will have on future results of operations due to numerous uncertainties. The extent to which the COVID-19 pandemic impacts our business, results of operations and financial condition will depend on future developments, which, despite progress in vaccination efforts, are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak, new information that may emerge concerning the severity of the COVID-19 pandemic, such as new strains of the virus, including the Delta and Omicron variants and any future variants that may emerge, which may impact rates of infection and vaccination efforts, developments or perceptions regarding the safety of vaccines and the extent and effectiveness of actions to contain the COVID-19 pandemic or treat its impact, including vaccination campaigns and lockdown measures, among others. In addition, recurrences or additional waves of COVID-19 cases could cause other widespread or more severe impacts depending on where infection rates are highest. We cannot presently predict the scope and severity of any potential business shutdowns or disruptions, but if we or any of our customers and suppliers were to experience prolonged business shutdowns or other disruptions, our ability to conduct our business could be materially and negatively affected, which could have a material adverse impact on our business, results of operations and financial condition.

We continue to closely monitor and evaluate the nature and scope of the impact of the COVID-19 pandemic to our business, consolidated results of operations, and financial condition, and may take further actions altering our business operations and managing our costs and liquidity that we deem necessary or appropriate to respond to this ongoing and uncertain global health crisis and the resulting global economic consequences.

Explanation and Reconciliation of Non-U.S. GAAP Measures

Adjusted EBITDA, Adjusted Operating Income and Adjusted Net Income

We use the terms Adjusted EBITDA, Adjusted Operating Income and Adjusted Net Income (including on a per share basis) in this Report. Adjusted EBITDA, as we define it, is a non-U.S. GAAP measure. We define Adjusted EBITDA for the periods indicated as EBITDA (as defined below), adjusted to exclude (i) equity-based compensation expense, (ii) foreign currency loss, net, (iii) derivative valuation loss (gain), net, (iv) loss on early extinguishment of borrowings, net, (v) inventory reserve related to Huawei impact of downstream trade restrictions, (vi) expenses related to Fab 3 power outage, (vii) merger-related costs (income), net and (viii) early termination and other charges, net. EBITDA for the periods indicated is defined as income (loss) from continuing operations before interest expense (income), net, income tax expense (benefit), and depreciation and amortization.

See the footnotes to the table below for further information regarding these items. We present Adjusted EBITDA as a supplemental measure of our performance because:

- we believe that Adjusted EBITDA, by eliminating the impact of a number of items that we do not consider to be indicative of our core ongoing operating performance, provides a more comparable measure of our operating performance from period-to-period and may be a better indicator of future performance;
- we believe that Adjusted EBITDA is commonly requested and used by securities analysts, investors and other interested parties in the evaluation of a company as an enterprise level performance measure that eliminates the effects of financing, income taxes and the accounting effects of capital spending, as well as other one time or recurring items described above; and
- we believe that Adjusted EBITDA is useful for investors, among other reasons, to assess a company’s period-to-period core operating performance and to understand and assess the manner in which management analyzes operating performance.

We use Adjusted EBITDA in a number of ways, including:

- for planning purposes, including the preparation of our annual operating budget;
- to evaluate the effectiveness of our enterprise level business strategies;
- in communications with our Board of Directors concerning our consolidated financial performance; and
- in certain of our compensation plans as a performance measure for determining incentive compensation payments.

We encourage you to evaluate each adjustment and the reasons we consider them appropriate. In evaluating Adjusted EBITDA, you should be aware that in the future we may incur expenses similar to the adjustments in this presentation. Adjusted EBITDA is not a measure defined in accordance with U.S. GAAP and should not be construed as an alternative to income (loss) from continuing operations, cash flows from operating activities or net income, as determined in accordance with U.S. GAAP. A reconciliation of income (loss) from continuing operations to Adjusted EBITDA from continuing operations is as follows:

	Year Ended December 31, 2021	Year Ended December 31, 2020	Year Ended December 31, 2019
		(Dollars in millions)	
Income (loss) from continuing operations	$ 56.7	$ 57.1	$ (20.4)
Interest expense (income), net	(1.2)	15.4	19.5
Income tax expense (benefit)	17.3	(46.2)	2.2
Depreciation and amortization	14.2	11.1	10.3
EBITDA	$ 87.0	$ 37.4	$ 11.6
Adjustments:			
Equity-based compensation expense(a)	7.7	6.3	6.1
Foreign currency loss, net(b)	11.9	0.4	22.3
Derivative valuation loss (gain), net(c)	(0.1)	(0.1)	0.3
Loss on early extinguishment of borrowings, net(d)	—	0.8	0.0
Inventory reserve related to Huawei impact of downstream trade restrictions(e)	(1.5)	1.5	—
Expenses related to Fab 3 power outage(f)	—	1.2	—
Merger-related costs (income), net(g)	(35.5)	0.7	—
Early termination and other charges, net(h)	1.3	5.0	0.6
Adjusted EBITDA	$ 70.7	$ 52.9	$ 40.9

(a) This adjustment eliminates the impact of non-cash equity-based compensation expenses. Although we expect to incur non-cash equity-based compensation expenses in the future, these expenses do not generally require cash settlement, and, therefore, are not used by us to assess the profitability of our operations. We believe that analysts and investors will find it helpful to review our operating performance without the effects of these non-cash expenses as supplemental information.

(b) This adjustment mainly eliminates the impact of non-cash foreign currency translation associated with intercompany debt obligations and foreign currency denominated receivables and payables, as well as the cash impact of foreign currency transaction gains or losses on collection of such receivables and payment of such payables. Although we expect to incur foreign currency translation gains or losses in the future, we believe that analysts and investors will find it helpful to review our operating performance without the effects of these primarily non-cash gains or losses, which we cannot control. Additionally, we believe the isolation of this adjustment provides investors with enhanced comparability to prior and future periods of our operating performance results.

(c) This adjustment eliminates the impact of gain or loss recognized in income on derivatives, which represents derivatives value changes excluded from the risk being hedged. We enter into derivative transactions to mitigate foreign exchange risks. As our derivative transactions are limited to a certain portion of our expected cash flows denominated in U.S. dollars, and we do not enter into derivative transactions for trading or speculative purposes, we do not believe that these charges or gains are indicative of our core operating performance.

(d) For the year ended December 31, 2020, this adjustment eliminates $0.8 million in expenses related to the full redemption of our outstanding 2021 Notes in the fourth quarter of 2020. For the year ended December 31, 2019, this adjustment eliminates expenses related to the repurchase of a portion of the 2021 Notes and the Exchangeable Notes in the first quarter of 2019.

(e) For the year ended December 31, 2020, this adjustment eliminates the impact of excess and obsolete inventory charge that we recorded in relation to the U.S. Government's export restrictions on Huawei, which is a downstream customer of some of our direct customers. For the year ended December 31, 2021, this adjustment eliminates a reversal of such inventory charge as such reserved inventory was subsequently sold to certain other customers. As this charge and the timing of its reversal meaningfully impacted our operational results and are not expected to represent an ongoing operating expense subject to our ability to foresee and control, we believe our operating performance results are more meaningfully compared if this charge and related reversal are excluded.

(f) This adjustment eliminates $1.2 million in expenses related to the write-off of the damaged work in process wafers and charges for facility recovery. These charges are inconsistent in amount and frequency, and we do not believe that these charges are indicative of our core operation performance and have been excluded for comparative purposes.

(g) For the year ended December 31, 2021, this adjustment eliminates $70.2 million income from the recognition of termination fee from the Parent as a result of the termination of the merger transaction. For the years ended December 31, 2021 and 2020, respectively, this adjustment eliminates non-recurring professional service fees and expenses of $34.7 million and $0.7 million, incurred in connection with the contemplated merger transaction. As these adjustments meaningfully impacted our operating results and are not expected to represent an ongoing operating expense or income to us, we believe our operating performance results are more usefully compared if these adjustments are excluded.

(h) For the year ended December 31, 2021, this adjustment eliminates $3.4 million non-recurring professional service fees and expenses incurred in connection with the regulatory requests, which was offset in part by $1.4 million gain on sale of certain legacy equipment of the closed back-end line in our fabrication facility in Gumi (which was closed during the year ended December 31, 2018), and $0.7 million legal settlement gain related to certain expenses incurred in prior periods in connection with our legacy Fab 4 (which was sold during the year ended December 31, 2020) and awarded in the third quarter of 2021. For the year ended December 31, 2020, this adjustment eliminates $4.4 million of charges related to the reduction of workforce under the Program and $0.6 million of non-recurring professional service fees and expenses incurred in connection with certain treasury and finance initiatives. For the year ended December 31, 2019, this adjustment primarily eliminates a $0.5 million legal settlement charge related to dispute with a prior customer and a legal expense related to the indemnification of a former employee during the three months ended March 31, 2019. As these adjustments meaningfully impacted our operating results and are not expected to represent an ongoing operating expense or income to us, we believe our operating performance results are more usefully compared if these adjustments are excluded.

Adjusted EBITDA has limitations as an analytical tool, and you should not consider it in isolation, or as a substitute for analysis of our results as reported under U.S. GAAP. Some of these limitations are:

- Adjusted EBITDA does not reflect our cash expenditures, or future requirements, for capital expenditures or contractual commitments;
- Adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs;
- Adjusted EBITDA does not reflect the interest expense, or the cash requirements necessary to service interest or principal payments, on our debt;
- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized will often need to be replaced in the future, and Adjusted EBITDA does not reflect any cash requirements for such replacements;
- Adjusted EBITDA does not consider the potentially dilutive impact of issuing equity-based compensation to our management team and employees;
- Adjusted EBITDA does not reflect the costs of holding certain assets and liabilities in foreign currencies; and
- other companies in our industry may calculate Adjusted EBITDA differently than we do, limiting its usefulness as a comparative measure.

Because of these limitations, Adjusted EBITDA should not be considered as a measure of discretionary cash available to us to invest in the growth of our business. We compensate for these limitations by relying primarily on our U.S. GAAP results and using Adjusted EBITDA only supplementally.

We present Adjusted Operating Income as supplemental measures of our performance. We prepare Adjusted Operating Income by adjusting operating income to eliminate the impact of equity-based compensation expenses and other items that may be either one time or recurring that we do not consider to be indicative of our core ongoing operating performance. We believe that Adjusted Operating Income is useful to investors to provide a supplemental way to understand our underlying operating performance and allows investors to monitor and understand changes in our ability to generate income from ongoing business operations.

Adjusted Operating Income is not a measure defined in accordance with U.S. GAAP and should not be construed as an alternative to operating income, income from continuing operations, cash flows from operating activities or net income, as determined in accordance with U.S. GAAP. We encourage you to evaluate each adjustment and the reasons we consider them appropriate. Other companies in our industry may calculate Adjusted Operating Income differently than we do, limiting its usefulness as a comparative measure. In addition, in evaluating Adjusted Operating Income, you should be aware that in the future we may incur expenses similar to the adjustments in this presentation. We define Adjusted Operating Income for the periods indicated as operating income adjusted to exclude (i) equity-based compensation expense, (ii) inventory reserve related to Huawei impact of downstream trade restrictions, (iii) expenses related to Fab 3 power outage, (iv) merger-related costs (income), net and (v) early termination and other charges.

The following table summarizes the adjustments to operating income that we make in order to calculate Adjusted Operating Income from continuing operations for the periods indicated:

	Year Ended December 31, 2021	Year Ended December 31, 2020	Year Ended December 31, 2019
		(Dollars in millions)	
Operating income	$ 83.4	$ 27.0	$ 23.7
Adjustments:			
Equity-based compensation expense(a)	7.7	6.3	6.1
Inventory reserve related to Huawei impact of downstream trade restrictions(b)	(1.5)	1.5	—
Expenses related to Fab 3 power outage(c)	—	1.2	—
Merger-related costs (income), net(d)	(35.5)	0.7	—
Early termination and other charges(e)	2.0	5.0	0.6
Adjusted Operating Income	$ 56.1	$ 41.6	$ 30.4

(a) This adjustment eliminates the impact of non-cash equity-based compensation expenses. Although we expect to incur non-cash equity-based compensation expenses in the future, these expenses do not generally require cash settlement, and, therefore, are not used by us to assess the profitability of our operations. We believe that analysts and investors will find it helpful to review our operating performance without the effects of these non-cash expenses as supplemental information.

(b) For the year ended December 31, 2020, this adjustment eliminates the impact of excess and obsolete inventory charge that we recorded in relation to the U.S. Government's export restrictions on Huawei, which is a downstream customer of some of our direct customers. For the year ended December 31, 2021, this adjustment eliminates a reversal of such inventory charge as such reserved inventory was subsequently sold to certain other customers. As this charge and the timing of its reversal meaningfully impacted our operational results and are not expected to represent an ongoing operating expense subject to our ability to foresee and control, we believe our operating performance results are more meaningfully compared if this charge and related reversal are excluded.

(c) This adjustment eliminates $1.2 million in expenses related to the write-off of the damaged work in process wafers and charges for facility recovery. These charges are inconsistent in amount and frequency, and we do not believe that these charges are indicative of our core operation performance and have been excluded for comparative purposes.

(d) For the year ended December 31, 2021, this adjustment eliminates $70.2 million income from the recognition of termination fee from the Parent as a result of the termination of the merger transaction. For the years ended December 31, 2021 and 2020, respectively, this adjustment eliminates non-recurring professional service fees and expenses of $34.7 million and $0.7 million, incurred in connection with the contemplated merger transaction. As these adjustments meaningfully impacted our operating results and are not expected to represent an ongoing operating expense or income to us, we believe our operating performance results are more usefully compared if these adjustments are excluded.

(e) For the year ended December 31, 2021, this adjustment eliminates $3.4 million non-recurring professional service fees and expenses incurred in connection with the regulatory requests, which was offset in part by $1.4 million gain on sale of certain legacy equipment of the closed back-end line in our fabrication facility in Gumi (which was closed during the year ended December 31, 2018). For the year ended December 31, 2020, this adjustment eliminates $4.4 million of charges related to the reduction of workforce under the Program and $0.6 million of non-recurring professional service fees and expenses incurred in connection with certain treasury and finance initiatives. For the year ended December 31, 2019, this adjustment primarily eliminates a $0.5 million legal settlement charge related to dispute with a prior customer and a legal expense related to the indemnification of a former employee during the three months ended March 31, 2019. As these adjustments meaningfully impacted our operating results and are not expected to represent an ongoing operating expense or income to us, we believe our operating performance results are more usefully compared if these adjustments are excluded.

We present Adjusted Net Income (including on a per share basis) as a further supplemental measure of our performance. We prepare Adjusted Net Income (including on a per share basis) by adjusting income (loss) from continuing operations to eliminate the impact of a number of non-cash expenses and other items that may be either one time or recurring that we do not consider to be indicative of our core ongoing operating performance. We believe that Adjusted Net Income (including on a per share basis) is particularly useful because it reflects the impact of our asset base and capital structure on our operating performance. We present Adjusted Net Income (including on a per share basis) for a number of reasons, including:

- we use Adjusted Net Income (including on a per share basis) in communications with our Board of Directors concerning our consolidated financial performance without the impact of non-cash expenses and the other items as we discussed below since we believe that it is a more consistent measure of our core operating results from period to period; and
- we believe that reporting Adjusted Net Income (including on a per share basis) is useful to readers in evaluating our core operating results because it eliminates the effects of non-cash expenses as well as the other items we discuss below, such as foreign currency gains and losses, which are out of our control and can vary significantly from period to period.

Adjusted Net Income (including on a per share basis) is not a measure defined in accordance with U.S. GAAP and should not be construed as an alternative to income (loss) from continuing operations, cash flows from operating activities or net income, as determined in accordance with U.S. GAAP. We encourage you to evaluate each adjustment and the reasons we consider them appropriate. Other companies in our industry may calculate Adjusted Net Income (including on a per share basis) differently than we do, limiting its usefulness as a comparative measure. In addition, in evaluating Adjusted Net Income (including on a per share basis), you should be aware that in the future we may incur expenses similar to the adjustments in this presentation. We define Adjusted Net Income (including on a per share basis); for the periods indicated as income (loss) from continuing operations, adjusted to exclude (i) equity-based compensation expense, (ii) foreign currency loss, net, (iii) derivative valuation loss (gain), net, (iv) loss on early extinguishment of borrowings, net, (v) inventory reserve related to Huawei impact of downstream trade restrictions, (vi) expenses related to Fab 3 power outage,

(vii) merger-related costs (income), net, (viii) early termination and other charges, net, (ix) GAAP and cash tax expense difference and (x) income tax effect on non-GAAP adjustments.

The following table summarizes the adjustments to income (loss) from continuing operations that we make in order to calculate Adjusted Net Income (including on a per share basis) from continuing operations for the periods indicated:

	Year Ended December 31, 2021	Year Ended December 31, 2020	Year Ended December 31, 2019
	(Dollars in millions, except per share data)		
Income (loss) from continuing operations	$ 56.7	$ 57.1	$ (20.4)
Adjustments:			
Equity-based compensation expense(a)	7.7	6.3	6.1
Foreign currency loss, net(b)	11.9	0.4	22.3
Derivative valuation loss (gain), net(c)	(0.1)	(0.1)	0.3
Loss on early extinguishment of borrowings, net(d)	—	0.8	0.0
Inventory reserve related to Huawei impact of downstream trade restrictions(e)	(1.5)	1.5	—
Expenses related to Fab 3 power outage(f)	—	1.2	—
Merger-related costs (income), net(g)	(35.5)	0.7	—
Early termination and other charges, net(h)	1.3	5.0	0.6
GAAP and cash tax expense difference(i)	0.9	(43.9)	—
Income tax effect on non-GAAP adjustments(j)	9.7	(0.5)	—
Adjusted Net Income	$ 51.1	$ 28.3	$ 9.0
Reported earnings (loss) per share—basic	$ 1.26	$ 1.62	$ (0.59)
Reported earnings (loss) per share—diluted	$ 1.21	$ 1.35	$ (0.59)
Weighted average number of shares—basic	44,879,412	35,213,525	34,321,888
Weighted average number of shares—diluted	47,709,373	46,503,586	34,321,888
Adjusted earnings per share—basic	$ 1.14	$ 0.80	$ 0.26
Adjusted earnings per share—diluted	$ 1.09	$ 0.73	$ 0.25
Weighted average number of shares—basic	44,879,412	35,213,525	34,321,888
Weighted average number of shares—diluted	47,709,373	46,503,586	35,405,077

(a) This adjustment eliminates the impact of non-cash equity-based compensation expenses. Although we expect to incur non-cash equity-based compensation expenses in the future, these expenses do not generally require cash settlement, and, therefore, are not used by us to assess the profitability of our operations. We believe that analysts and investors will find it helpful to review our operating performance without the effects of these non-cash expenses as supplemental information.

(b) This adjustment mainly eliminates the impact of non-cash foreign currency translation associated with intercompany debt obligations and foreign currency denominated receivables and payables, as well as the cash impact of foreign currency transaction gains or losses on collection of such receivables and payment of such payables. Although we expect to incur foreign currency translation gains or losses in the future, we believe that analysts and investors will find it helpful to review our operating performance without the effects of these primarily non-cash gains or losses, which we cannot control. Additionally, we believe the isolation of this adjustment provides investors with enhanced comparability to prior and future periods of our operating performance results.

(c) This adjustment eliminates the impact of gain or loss recognized in income on derivatives, which represents derivatives value changes excluded from the risk being hedged. We enter into derivative transactions to mitigate foreign exchange risks. As our derivative transactions are limited to a certain portion of our expected cash flows denominated in U.S. dollars, and we do not enter into derivative transactions for trading or speculative purposes, we do not believe that these charges or gains are indicative of our core operating performance.

(d) For the year ended December 31, 2020, this adjustment eliminates $0.8 million in expenses related to the full redemption of our outstanding 2021 Notes in the fourth quarter of 2020. For the year ended December 31, 2019, this adjustment eliminates expenses related to the repurchase of a portion of the 2021 Notes and the Exchangeable Notes in the first quarter of 2019.

(e) For the year ended December 31, 2020, this adjustment eliminates the impact of excess and obsolete inventory charge that we recorded in relation to the U.S. Government's export restrictions on Huawei, which is a downstream customer of some of our direct customers. For the year ended December 31, 2021, this adjustment eliminates a reversal of such inventory charge as such reserved inventory was subsequently sold to certain other customers. As this charge and the timing of its reversal meaningfully impacted our operational results and are not expected to represent an ongoing operating expense subject to our ability to foresee and control, we believe our operating performance results are more meaningfully compared if this charge and related reversal are excluded.

(f) This adjustment eliminates $1.2 million in expenses related to the write-off of the damaged work in process wafers and charges for facility recovery. These charges are inconsistent in amount and frequency, and we do not believe that these charges are indicative of our core operation performance and have been excluded for comparative purposes.

(g) For the year ended December 31, 2021, this adjustment eliminates $70.2 million income from the recognition of termination fee from the Parent as a result of the termination of the merger transaction. For the years ended December 31, 2021 and 2020, respectively, this adjustment eliminates non-recurring professional service fees and expenses of $34.7 million and $0.7 million, incurred in connection with the contemplated merger transaction. As these adjustments meaningfully impacted our operating results and are not expected to represent an ongoing operating expense or income to us, we believe our operating performance results are more usefully compared if these adjustments are excluded.

(h) For the year ended December 31, 2021, this adjustment eliminates $3.4 million non-recurring professional service fees and expenses incurred in connection with the regulatory requests, which was offset in part by $1.4 million gain on sale of certain legacy equipment of the closed back-end line in our fabrication facility in Gumi (which was closed during the year ended December 31, 2018), and $0.7 million legal settlement gain related to certain expenses incurred in prior periods in connection with our legacy Fab 4 (which was sold during the year ended December 31, 2020) and awarded in the third quarter of 2021. For the year ended December 31, 2020, this adjustment eliminates $4.4 million of charges related to the reduction of workforce under the Program and $0.6 million of non-recurring professional service fees and expenses incurred in connection with certain treasury and finance initiatives. For the year ended December 31, 2019, this adjustment primarily eliminates a $0.5 million legal settlement charge related to dispute with a prior customer and a legal expense related to the indemnification of a former employee during the three months ended March 31, 2019. As these adjustments meaningfully impacted our operating results and are not expected to represent an ongoing operating expense or income to us, we believe our operating performance results are more usefully compared if these adjustments are excluded.

(i) This adjustment eliminates the impact of difference between GAAP and cash tax expense.

(j) For the years ended December 31, 2021 and 2020, income tax effect on non-GAAP adjustments were calculated by calculating the tax expense of each jurisdiction with or without the non-GAAP adjustments. For the year ended December 31, 2021, income tax effect on non-GAAP adjustments related to our Korean subsidiary and the U.S parent entity were $2.8 million and $6.9 million, respectively. For the year ended December 31, 2020, income tax effect on non-GAAP adjustments related to our Korean subsidiary was $0.5 million. For the year ended December 31, 2019, there was no tax impact from the adjustments to net income (loss) from continuing operations to calculate our Adjusted Net Income due to net operating loss carry-forwards available to offset taxable income and full allowance for deferred tax assets.

We believe that all adjustments to income (loss) from continuing operations used to calculate Adjusted Net Income was applied consistently to the periods presented.

Adjusted Net Income has limitations as an analytical tool, and you should not consider it in isolation, or as a substitute for analysis of our results as reported under U.S. GAAP. Some of these limitations are:

- Adjusted Net Income does not reflect changes in, or cash requirements for, our working capital needs;
- Adjusted Net Income does not consider the potentially dilutive impact of issuing equity-based compensation to our management team and employees;
- Adjusted Net Income does not reflect the costs of holding certain assets and liabilities in foreign currencies; and
- other companies in our industry may calculate Adjusted Net Income differently than we do, limiting its usefulness as a comparative measure.

Because of these limitations, Adjusted Net Income should not be considered as a measure of profitability of our business. We compensate for these limitations by relying primarily on our U.S. GAAP results and using Adjusted Net Income only as a supplement.

Factors Affecting Our Results of Operations

Net Sales. We derive substantially all of our sales (net of sales returns and allowances) from our standard products business. We outsource manufacturing of mobile OLED products to external 12-inch foundries. Our product inventory is primarily located in Korea and is available for drop shipment globally. Outside of Korea, we maintain limited product inventory, and our sales representatives generally relay orders to our factories in Korea for fulfillment. We have strategically located our sales offices near concentrations of major customers. Our sales offices are located in Korea, Japan and Greater China. Our network of authorized agents and distributors is in the United States, Europe and the Asia Pacific region.

We recognize revenue when a customer obtains control of the product, which is generally upon product shipment, delivery at the customer's location or upon customer acceptance, depending on the terms of the arrangement. For the years ended December 31, 2021, 2020 and 2019, we sold products to 177, 178 and 180 customers, respectively, and our net sales to our ten largest customers represented 80%, 88% and 90% of our net sales—standard products business, respectively.

We will provide the Transitional Fab 3 Foundry Services up to September 1, 2023 at an agreed upon cost plus a mark-up. For the periods prior to the closing of the sale of the Foundry Services Group business and Fab 4 as of September 1, 2020 (which are accounted for as discontinued operations beginning in the first quarter of 2020), revenue derived from the Transitional Fab 3 Foundry Services is recorded at cost in both our continuing and discontinued operations.

Gross Profit. Our overall gross profit generally fluctuates as a result of changes in overall sales volumes and in the average selling prices of our products and services. Other factors that influence our gross profit include changes in product mix, the introduction of new products and services and subsequent generations of existing products and services, shifts in the utilization of our manufacturing facility and the yields achieved by our manufacturing operations, changes in material, labor and other manufacturing costs including outsourced manufacturing expenses, and variation in depreciation expense.

Average Selling Prices. Average selling prices for our products tend to be highest at the time of introduction of new products which utilize the latest technology and tend to decrease over time as such products mature in the market and are replaced by next generation products. We strive to offset the impact of declining selling prices for existing products through our product development activities and by introducing new products that command selling prices above the average selling price of our existing products. In addition, we seek to manage our inventories and manufacturing capacity so as to preclude losses from product and productive capacity obsolescence.

Material Costs. Our material costs consist of costs of raw materials, such as silicon wafers, chemicals, gases and tape and packaging supplies. We use processes that require specialized raw materials, such as silicon wafers, that are generally available from a limited number of suppliers. If demand increases or supplies decrease, the costs of our raw materials could increase significantly.

Labor Costs. A significant portion of our employees are located in Korea. Under Korean labor laws, most employees and certain executive officers with one or more years of service are entitled to severance benefits upon the termination of their employment based on their length of service and rate of pay. As of December 31, 2021, approximately 98% of our employees were eligible for severance benefits.

Depreciation Expense. We periodically evaluate the carrying values of long-lived assets, including property, plant and equipment and intangible assets, as well as the related depreciation periods. We depreciated our property, plant and equipment using the straight-line method over the estimated useful lives of our assets. Depreciation rates vary from 30-40 years on buildings to 5 to 12 years for certain equipment and assets. Our evaluation of carrying values is based on various analyses including cash flow and profitability projections. If our projections indicate that future undiscounted cash flows are not sufficient to recover the carrying values of the related long-lived assets, the carrying value of the assets is impaired and will be reduced, with the reduction charged to expense so that the carrying value is equal to fair value.

Selling Expenses. We sell our products worldwide through a direct sales force as well as a network of sales agents and representatives to OEMs, including major branded customers and contract manufacturers, and indirectly through distributors. Selling expenses consist primarily of the personnel costs for the members of our direct sales force, a network of sales representatives and other costs of distribution. Personnel costs include base salary, benefits and incentive compensation.

General and Administrative Expenses. General and administrative expenses consist of the costs of various corporate operations, including finance, legal, human resources and other administrative functions. These expenses primarily consist of payroll-related expenses, consulting and other professional fees and office facility-related expenses.

Research and Development. The rapid technological change and product obsolescence that characterize our industry require us to make continuous investments in research and development. Product development time frames vary but, in general, we incur research and development costs one to two years before generating sales from the associated new products. These expenses include personnel costs for members of our engineering workforce, cost of photomasks, silicon wafers and other non-recurring engineering charges related to product design. Additionally, we develop base line process technology through experimentation and through the design and use of characterization wafers that help achieve commercially feasible yields for new products. The majority of research and development expenses of our display business are material and design-related costs for OLED display driver IC product development involving 28-nanometer or finer processes. The majority of research and development expenses of our power business are certain equipment, material and design-related costs for power discrete products and material and design-related costs for power IC products. Power IC uses standard BCD process technologies which can be sourced from multiple foundries, including Fab 4.

Interest Expense. Our interest expense was incurred primarily under our 2021 Notes and our Exchangeable Notes. We redeemed all outstanding 2021 Notes on October 2, 2020. Our Exchangeable Notes were exchanged for common stock prior to their maturity date of March 1, 2021. From and after October 2, 2020 and March 1, 2021, we have not incurred interest expense associated with the 2021 Notes and Exchangeable Notes, respectively.

Impact of Foreign Currency Exchange Rates on Reported Results of Operations. Historically, a portion of our revenues and cost of sales and greater than the majority of our operating expenses have been denominated in non-U.S. currencies, principally the Korean won, and we expect that this will remain true in the future. Because we report our results of operations in U.S. dollars converted from our non-U.S. revenues and expenses based on monthly average exchange rates, changes in the exchange rate between the Korean won and the U.S. dollar could materially impact our reported results of operations and distort period to period comparisons. In particular, because of the difference in the amount of our consolidated revenues and expenses that are in U.S. dollars relative to Korean won, depreciation in the U.S. dollar relative to the Korean won could result in a material increase in reported costs relative to revenues, and therefore could cause our profit margins and operating income to appear to decline materially, particularly relative to prior periods. The converse is true if the U.S. dollar were to appreciate relative to the Korean won. Moreover, our foreign currency gain or loss would be affected by changes in the exchange rate between the Korean won and the U.S. dollar as a substantial portion of non-cash translation gain or loss is associated with the intercompany long-term loans to our Korean subsidiary, which is denominated in U.S. dollars. As of December 31, 2021, the outstanding intercompany loan balance including accrued interest between our Korean subsidiary and our Dutch subsidiary was $344.4 million. As a result of such foreign currency fluctuations, it could be more difficult to detect underlying trends in our business and results of operations. In addition, to the extent that fluctuations in currency exchange rates cause our results of operations to differ from our expectations or the expectations of our investors, the trading price of our stock could be adversely affected.

From time to time, we may engage in exchange rate hedging activities in an effort to mitigate the impact of exchange rate fluctuations. Our Korean subsidiary enters into foreign currency zero cost collar contracts in order to mitigate a portion of the impact of U.S. dollar-Korean won exchange rate fluctuations on our operating results. Obligations under these foreign currency zero cost collar contracts must be cash collateralized if our exposure exceeds certain specified thresholds. These zero cost collar contracts may be terminated by a counterparty in a number of circumstances, including if our credit rating falls below B-/B3 or if our total cash and cash equivalents is less than $30.0 million at the end of a fiscal quarter unless a waiver is obtained from the counterparty. We cannot assure that any hedging technique we implement will be effective. If our hedging activities are not effective, changes in currency exchange rates may have a more significant impact on our results of operations. See “Note 10. Derivative Financial Instruments” to our consolidated financial statements under “Item 8. Financial Statements and Supplementary Data” for additional information regarding our foreign exchange hedging activities.

Foreign Currency Gain or Loss. Foreign currency translation gains or losses on transactions by us or our subsidiaries in a currency other than our or our subsidiaries’ functional currency are included in foreign currency gain (loss), net in our statements of operations. A substantial portion of this net foreign currency gain or loss relates to non-cash translation gain or loss related to the principal balance of intercompany balances at our Korean subsidiary that are denominated in U.S. dollars. This gain or loss results from fluctuations in the exchange rate between the Korean won and U.S. dollar.

Income Taxes. We record our income taxes in each of the tax jurisdictions in which we operate. This process involves using an asset and liability approach whereby deferred tax assets and liabilities are recorded for differences in the financial reporting bases and tax basis of our assets and liabilities. We exercise significant management judgment in determining our provision for income taxes, deferred tax assets and liabilities. We assess whether it is more likely than not that the deferred tax assets existing at the period-end will be realized in future periods. In such assessment, we consider all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies and recent results of operations. In the event we were to determine that we would be able to realize the deferred income tax assets in the future in excess of their net recorded amount, we would adjust the valuation allowance, which would reduce the provision for income taxes.

We are subject to income- or non-income-based tax examinations by tax authorities of the U.S., Korea and multiple other foreign jurisdictions for all open tax years. Significant estimates and judgments are required in determining our worldwide provision for income- or non-income based taxes. Some of these estimates are based on interpretations of existing tax laws or regulations. The ultimate amount of tax liability may be uncertain as a result.

Discontinued Operations. On March 30, 2020, we entered into the Business Transfer Agreement for the sale of our Foundry Services Group business and Fab 4 to the Buyer. As a result, the results of the Foundry Services Group business were classified as discontinued operations in our consolidated statements of operations and excluded from both continuing operations and segment results for all periods presented. On September 1, 2020, we completed the sale for a purchase price of approximately $350.6 million in cash.

Capital Expenditures. We primarily invest in manufacturing equipment, software design tools and other tangible assets mainly for fabrication facility maintenance, capacity expansion and technology improvement. Capacity expansions and technology improvements typically occur in anticipation of increases in demand. We typically pay for capital expenditures in partial installments with portions due on order, delivery and final acceptance. Our capital expenditures mainly include our payments for the purchase of property, plant and equipment.

Inventories. We monitor our inventory levels in light of product development changes and market expectations. We may be required to take additional charges for quantities in excess of demand, cost in excess of market value and product age. Our analysis may take into consideration historical usage, expected demand, anticipated sales price, new product development schedules, the effect new products might have on the sales of existing products, product age, customer design activity, customer concentration and other factors. These forecasts require us to estimate our ability to predict demand for current and future products and compare those estimates with our current inventory levels and inventory purchase commitments. Our forecasts for our inventory may differ from actual inventory use.

Results of Operations

The following table sets forth, for the periods indicated, certain information related to our operations, expressed in U.S. dollars and as a percentage of our total revenues:

	Year Ended December 31, 2021		Year Ended December 31, 2020		Year Ended December 31, 2019	
	Amount	% of Total revenues	Amount	% of Total revenues	Amount	% of Total revenues
			(Dollars in millions)			
Consolidated statements of operations data:						
Revenues						
Net sales—standard products business	$433.1	91.3%	$465.5	91.8%	$484.8	93.1%
Net sales—transitional Fab 3 foundry services	41.1	8.7	41.5	8.2	35.8	6.9
Total revenues	474.2	100.0	507.1	100.0	520.7	100.0
Cost of sales						
Cost of sales—standard products business	283.5	59.8	338.4	66.7	368.5	70.8
Cost of sales—transitional Fab 3 foundry services	37.2	7.8	40.3	8.0	35.8	6.9
Total cost of sales	320.7	67.6	378.7	74.7	404.3	77.6
Gross profit	153.5	32.4	128.3	25.3	116.4	22.4
Selling, general and administrative expenses	52.4	11.1	50.0	9.9	47.6	9.1
Research and development expenses	51.2	10.8	45.7	9.0	45.0	8.6
Merger-related costs (income), net	(35.5)	(7.5)	0.7	0.1	—	—
Early termination and other charges, net	2.0	0.4	5.0	1.0	0.1	0.0
Operating income	83.4	17.6	27.0	5.3	23.7	4.6
Interest expense	(1.4)	(0.3)	(18.1)	(3.6)	(22.2)	(4.3)
Foreign currency loss, net	(11.9)	(2.5)	(0.4)	(0.1)	(22.3)	(4.3)
Loss on early extinguishment of borrowings, net	—	—	(0.8)	(0.2)	(0.0)	(0.0)
Others, net	3.8	0.8	3.1	0.6	2.6	0.5
	(9.4)	(2.0)	(16.2)	(3.2)	(41.9)	(8.1)
Income (loss) from continuing operations before income tax expense	74.0	15.6	10.8	2.1	(18.2)	(3.5)
Income tax expense (benefit)	17.3	3.6	(46.2)	(9.1)	2.2	0.4
Income (loss) from continuing operations	56.7	12.0	57.1	11.3	(20.4)	(3.9)
Income (loss) from discontinued operations, net of tax	—	—	287.9	56.8	(1.4)	(0.3)
Net income (loss)	$ 56.7	12.0%	$345.0	68.0%	$ (21.8)	(4.2)%
Revenues:						
Net sales—standard products business						
Display Solutions	205.3	43.3	299.1	59.0	308.5	59.3
Power Solutions	227.8	48.0	166.5	32.8	176.3	33.9
Total standard products business	433.1	91.3	465.5	91.8	484.8	93.1
Net sales—transitional Fab 3 foundry services	41.1	8.7	41.5	8.2	35.8	6.9
Total revenues	$474.2	100.0%	$507.1	100.0%	$520.7	100.0%

Results of Operations—Comparison of Years Ended December 31, 2021 and 2020

The following table sets forth consolidated results of operations for the years ended December 31, 2021 and 2020:

	Year Ended December 31, 2021		Year Ended December 31, 2020		
	Amount	% of Total revenues	Amount	% of Total revenues	Change Amount
	(Dollars in millions)				
Revenues					
Net sales—standard products business	$433.1	91.3%	$465.5	91.8%	$ (32.4)
Net sales—transitional Fab 3 foundry services	41.1	8.7	41.5	8.2	(0.4)
Total revenues	474.2	100.0	507.1	100.0	(32.8)
Cost of sales					
Cost of sales—standard products business	283.5	59.8	338.4	66.7	(54.9)
Cost of sales—transitional Fab 3 foundry services	37.2	7.8	40.3	8.0	(3.1)
Total cost of sales	320.7	67.6	378.7	74.7	(58.1)
Gross profit	153.5	32.4	128.3	25.3	25.2
Selling, general and administrative expenses	52.4	11.1	50.0	9.9	2.5
Research and development expenses	51.2	10.8	45.7	9.0	5.5
Merger-related costs (income), net	(35.5)	(7.5)	0.7	0.1	(36.2)
Early termination and other charges, net	2.0	0.4	5.0	1.0	(3.0)
Operating income	83.4	17.6	27.0	5.3	56.4
Interest expense	(1.4)	(0.3)	(18.1)	(3.6)	16.8
Foreign currency loss, net	(11.9)	(2.5)	(0.4)	(0.1)	(11.5)
Loss on early extinguishment of borrowings, net	—	—	(0.8)	(0.2)	0.8
Others, net	3.8	0.8	3.1	0.6	0.7
	(9.4)	(2.0)	(16.2)	(3.2)	6.7
Income from continuing operations before income tax expense	74.0	15.6	10.8	2.1	63.1
Income tax expense (benefit)	17.3	3.6	(46.2)	(9.1)	63.5
Income from continuing operations	56.7	12.0	57.1	11.3	(0.4)
Income from discontinued operations, net of tax	—	—	287.9	56.8	(287.9)
Net income	$ 56.7	12.0%	$345.0	68.0%	$(288.3)

Results by business line

	Year Ended December 31, 2021		Year Ended December 31, 2020		
	Amount	% of Total revenues	Amount	% of Total revenues	Change Amount
	(Dollars in millions)				
Revenues					
Net sales—standard products business					
Display Solutions	205.3	43.3	299.1	59.0	(93.7)
Power Solutions	227.8	48.0	166.5	32.8	61.3
Total standard products business	433.1	91.3	465.5	91.8	(32.4)
Net sales—transitional Fab 3 foundry services	41.1	8.7	41.5	8.2	(0.4)
Total revenues	$474.2	100.0%	$507.1	100.0%	$ (32.8)

	Year Ended December 31, 2021		Year Ended December 31, 2020		
	Amount	% of Net Sales	Amount	% of Net Sales	Change Amount
	(Dollars in millions)				
Gross Profit					
Gross profit—standard products business	149.6	34.5	127.1	27.3	22.5
Gross profit—transitional Fab 3 foundry services	3.9	9.6	1.2	2.9	2.7
Total gross profit	$153.5	32.4%	$128.3	25.3%	$ 25.2

Revenues

Total revenues were $474.2 million for the year ended December 31, 2021, a $32.8 million, or 6.5%, decrease compared to $507.1 million for the year ended December 31, 2020. This decrease was primarily due to a decrease in net sales from our Display Solutions business line, which was partially offset by an increase in net sales from our Power Solutions business line as described below.

The standard products business. Net sales from our standard products business were $433.1 million for the year ended December 31, 2021, a $32.4 million, or 7.0%, decrease compared to $465.5 million for the year ended December 31, 2020. The decrease in net sales from our Display Solutions business line was primarily attributable to a decrease in revenue from our mobile OLED display driver ICs stemming from a continuing severe global shortage in manufacturing capacity (in particular for 28nm 12-inch OLED wafers), as we outsource manufacturing of these products to external 12-inch foundries, and a strategic reduction of our lower margin non-auto LCD business, which was offset in part by a higher demand for auto-LCD DDIC business. The increase in net sales from our Power Solutions business line was attributable to a strong demand for power products such as MOSFETs, including high-end MOSFETs, primarily for TVs and e-bikes, whereas the revenue for power products in 2020 was impacted by COVID-19-related supply chain issues and market softness in China.

Gross Profit

Total gross profit was $153.5 million for the year ended December 31, 2021 compared to $128.3 million for the year ended December 31, 2020, representing a $25.2 million, or 19.7%, increase. Gross profit as a percentage of total revenues for the year ended December 31, 2021 increased to 32.4% compared to 25.3% for the year ended December 31, 2020. The increase in gross profit and gross profit as a percentage of total revenues was primarily due to the increase in gross profit and gross profit as a percentage of total revenues from our standard products business as further described below.

The standard products business. Gross profit from our standard products business was $149.6 million for the year ended December 31, 2021, representing a $22.5 million, or 17.7%, increase from $127.1 million for the year ended December 31, 2020. Gross profit as a percentage of net sales for the year ended December 31, 2021 increased to 34.5% compared to 27.3% for the year ended December 31, 2020. The increase in both gross profit and gross profit as a percentage of net sales was primarily attributable to an improved product mix, an increase in average selling price benefited from the favorable pricing environment and a higher utilization rate of our internal fabrication facility in Gumi, whereas unexpected excess and obsolete inventory charge of $1.5 million in relation to the U.S. Government's export restrictions on Huawei, which is a downstream customer of some of our direct customers, negatively affected both gross profit and gross profit as a percentage of net sales for the year ended December 31, 2020. This excess and obsolete inventory charge was reversed in full during 2021 as such reserved inventory was subsequently sold to certain other customers, which also positively affected both gross profit and gross profit as a percentage of net sales for the year ended December 31, 2021.

Net Sales—Standard Products Business by Geographic Region

We report net sales—standard products business by geographic region based on the location to which the products are billed. The following table sets forth our net sales—standard products business by geographic region and the percentage of total net sales—standard products business represented by each geographic region for the years ended December 31, 2021 and 2020:

	Year Ended December 31, 2021		Year Ended December 31, 2020		
	Amount	% of Net Sales – standard products business	Amount	% of Net Sales – standard products business	Change Amount
	(Dollars in millions)				
Korea	$113.8	26.3%	$106.4	22.9%	$ 7.4
Asia Pacific (other than Korea)	306.3	70.7	347.6	74.7	(41.3)
United States	6.1	1.4	5.1	1.1	0.9
Europe	5.7	1.3	4.3	0.9	1.4
Others	1.2	0.3	2.0	0.4	(0.8)
	$433.1	100.0%	$465.5	100.0%	$ (32.4)

Net sales—standard products business in Korea for the year ended December 31, 2021 increased from $106.4 million to $113.8 million compared to the year ended December 31, 2020, or by $7.4 million, or 6.9%, primarily due to a strong demand for power products such as MOSFETs, including high-end MOSFETs, primarily for TV and smartphone applications. This increase was offset in part by a decrease in revenue related to our mobile OLED display driver ICs stemming from a continuing severe global shortage in manufacturing capacity (in particular for 28nm 12-inch OLED wafers), as we outsource manufacturing of these products to external 12-inch foundries, and a strategic reduction of our lower margin non-auto LCD business. The U.S. Government's export restrictions on Huawei, which is a downstream customer of some of our direct customers, also unfavorably impacted the demand for certain of our mobile OLED display driver ICs from our customers.

Net sales—standard products business in the Asia Pacific for the year ended December 31, 2021 decreased from $347.6 million to $306.3 million compared to the year ended December 31, 2020, or by $41.3 million, or 11.9%, primarily due to a decrease in revenue from our mobile OLED display driver ICs stemming from a continuing global shortage in manufacturing capacity (in particular for 28nm 12-inch OLED wafers), as we outsource manufacturing of these products to external 12-inch foundries, which was offset in part by a higher demand for power products such as MOSFETs, including high-end MOSFETs, primarily for TVs and e-bikes, and a higher demand for auto-LCD DDIC business.

Operating Expenses

Selling, General and Administrative Expenses. Selling, general and administrative expenses were $52.4 million, or 11.1% of total revenues for the year ended December 31, 2021, compared to $50.0 million, or 9.9% of total revenues for the year ended December 31, 2020. The year over year increase of $2.5 million, or 4.9%, was primarily attributable to certain non-income-based tax assessments of $0.6 million as a result of a regular tax examination completed for our primary operating entity in Korea for multiple tax years, the grant timing of equity-based compensation, and increased depreciation and amortization expense, which was primarily attributable to certain one-time investments relating to separating the IT systems and establishing a new IT infrastructure to support our continuing operations after the sale of the Foundry Services Group business and Fab 4.

Research and Development Expenses. Research and development expenses were $51.2 million, or 10.8% of total revenues for the year ended December 31, 2021, compared to $45.7 million, or 9.0%, of total revenues for the year ended December 31, 2020. The increase of $5.5 million, or 12.1%, was primarily attributable to an increase in personnel costs, outside service fees and variable overhead expenses.

Merger-related Costs (Income), Net. For the year ended December 31, 2021, we recorded a $70.2 million income from the recognition of termination fee from the Parent as a result of the termination of the merger transaction, which was offset in part by a $34.7 million of non-recurring professional service fees and expenses incurred in connection with the contemplated merger transaction. For the year ended December 31, 2020, we recorded a $0.7 million of non-recurring professional service fees and expenses incurred in connection with the contemplated merger transaction.

Early Termination and Other Charges, Net. For the year ended December 31, 2021, we recorded a $3.4 million of non-recurring professional service fees and expenses incurred in connection with the regulatory requests, which was offset in part by a $1.4 million gain on sale of certain legacy equipment of the closed back-end line in our fabrication facility in Gumi (which was closed during the year ended December 31, 2018). For the year ended December 31, 2020, we recorded a $4.4 million of charges related to the reduction of workforce under the Program and $0.6 million of non-recurring professional service fees and expenses incurred in connection with certain treasury and finance initiatives.

Operating Income

As a result of the foregoing, operating income of $83.4 million was recorded for the year ended December 31, 2021 compared to operating income of $27.0 million the year ended December 31, 2020. The increase in operating income of $56.4 million resulted primarily from a $36.2 million net increase in merger-related income, a $25.2 million increase in gross profit, and a $3.0 million decrease in early termination and other charges, which was offset in part by a $5.5 million increase in research and development expenses and a $2.5 million increase in selling, general and administrative expenses.

Other Income (Expense)

Interest Expense. Interest expenses for the year ended December 31, 2021 were $1.4 million compared to $18.1 million of interest expenses for the year ended December 31, 2020. Interest expenses was incurred primarily under our 2021 Notes and Exchangeable Notes. We redeemed all outstanding 2021 Notes on October 2, 2020. Our Exchangeable Notes were exchanged for common stock prior to their maturity date of March 1, 2021. From and after October 2, 2020 and March 1, 2021, we have not incurred interest expense associated with the 2021 Notes and Exchangeable Notes, respectively.

Foreign Currency Loss, Net. Net foreign currency loss for the year ended December 31, 2021 was $11.9 million compared to net foreign currency loss of $0.4 million for the year ended December 31, 2020. The net foreign currency losses for the years ended December 31, 2021 and 2020 were due to the depreciation in the value of the Korean won relative to the U.S. dollar during each period.

A substantial portion of our net foreign currency gain or loss is non-cash translation gain or loss associated with the intercompany long-term loans to our Korean subsidiary, which is denominated in U.S. dollars, and is affected by changes in the exchange rate between the Korean won and the U.S. dollar. As of December 31, 2021 and 2020, the outstanding intercompany loan balance including accrued interest between our Korean subsidiary and our Dutch subsidiary was $344.4 million and $378.9 million, respectively. Foreign currency translation gain or loss from intercompany balances were included in determining our consolidated net income since the intercompany balances were not considered long-term investments in nature because management intended to settle these intercompany balances at their respective maturity dates.

Loss on Early Extinguishment of Borrowings, Net. For the year ended December 31, 2020, we recorded $0.8 million of loss on early extinguishment of borrowings, which was attributable to the full redemption of our outstanding 2021 Notes on October 2, 2020. In connection with the redemption of the 2021 Notes, we reclassified the remaining unamortized discount and debt issuance costs on the redemption date as a loss on early extinguishment of borrowings.

Others, Net. Others were comprised of interest income, rental income, and gains and losses from valuation of derivatives which were designated as hedging instruments. Others, net for the years ended December 31, 2021 and 2020 was $3.8 million and $3.1 million, respectively. Others, net for the year ended December 31, 2021, included a $0.7 million legal settlement gain related to certain expenses incurred in prior periods in connection with our legacy Fab 4 (which was sold during the year ended December 31, 2020) and awarded in the third quarter of 2021.

Income Tax Expense (Benefit)

We are subject to income taxes in the United States and many foreign jurisdictions and our effective tax rate is affected by changes in the mix of earnings between countries with differing tax rates.

We recorded a $17.3 million income tax expense for the year ended December 31, 2021, which was primarily composed of the income tax expense of $6.9 million from our Korean subsidiary, primarily due to its taxable income for the year, and the income tax expense of $8.2 million from the parent entity in the U.S. The U.S. parent's tax expense was mainly attributable to the recognition of income and expenses related to the Merger combined with the utilization of its available net operating loss carry-forwards.

We recorded a $46.2 million income tax benefit for the year ended December 31, 2020, primarily as a result of releasing valuation allowances established against the related deferred tax assets related to our Korean subsidiary and the parent entity in the U.S. Our Korean subsidiary had generated three years of cumulative profits adjusted for permanent differences and is anticipated to generate taxable basis for the subsequent years. As a result, $39.4 million of valuation allowances, established against the Korean subsidiary's deferred tax assets, were released as of December 31, 2020. In addition, we believe it is more likely than not that the parent entity in the U.S. would be able to utilize its net operating loss in future tax years, which would provide incremental tax savings of approximately $4.5 million. Therefore, we released the valuation allowances, established against the U.S. parent's deferred tax assets, up to these anticipated tax savings as of December 31, 2020.

Income from Continuing Operations

Income from continuing operations for the year ended December 31, 2021 was $56.7 million compared to income from continuing operations of $57.1 million for the year ended December 31, 2020. The $0.4 million decrease in income from continuing operations was primarily attributable to a $63.5 million net increase in income tax expense and an $11.5 million increase in net foreign currency loss, which was offset in part by a $56.4 million increase in operating income and a $16.8 million decrease in interest expense.

Income from Discontinued Operations, Net of Tax

On March 30, 2020, we entered into the Business Transfer Agreement for the sale of our Foundry Services Group business and Fab 4. As a result, the results of the Foundry Services Group business were classified as discontinued operations in our consolidated statements of operations and excluded from our continuing operations for all periods presented. Income from discontinued operations, net of tax was $287.9 million for the year ended December 31, 2020. On September 1, 2020, we completed the sale of our Foundry Services Group business and Fab 4 for a purchase price equal to approximately $350.6 million in cash. We have not incurred a gain or loss from discontinued operations in 2021 as the sale of the Foundry Service Group business and Fab 4 was completed in 2020.

Net Income

As a result of the foregoing, net income of $56.7 million was recorded for the year ended December 31, 2021 compared to net income of $345.0 million for the year ended December 31, 2020. As discussed above, the decrease in net income of $288.3 million primarily resulted from a $287.9 million decrease in income from discontinued operations, net of tax, and a $0.4 million decrease in income from continuing operations.

Results of Operations—Comparison of Years Ended December 31, 2020 and 2019

The following table sets forth consolidated results of operations for the years ended December 31, 2020 and 2019:

	Year Ended December 31, 2020		Year Ended December 31, 2019		
	Amount	% of Total revenues	Amount	% of Total revenues	Change Amount
	(Dollars in millions)				
Revenues					
Net sales—standard products business	$465.5	91.8%	$484.8	93.1%	$ (19.3)
Net sales—transitional Fab 3 foundry services	41.5	8.2	35.8	6.9	5.7
Total revenues	507.1	100.0	520.7	100.0	(13.6)
Cost of sales					
Cost of sales—standard products business	338.4	66.7	368.5	70.8	(30.0)
Cost of sales—transitional Fab 3 foundry services	40.3	8.0	35.8	6.9	4.5
Total cost of sales	378.7	74.7	404.3	77.6	(25.5)
Gross profit	128.3	25.3	116.4	22.4	11.9
Selling, general and administrative expenses	50.0	9.9	47.6	9.1	2.4
Research and development expenses	45.7	9.0	45.0	8.6	0.7
Merger-related costs	0.7	0.1	—	—	0.7
Early termination and other charges	5.0	1.0	0.1	0.0	4.9
Operating income	27.0	5.3	23.7	4.6	3.3
Interest expense	(18.1)	(3.6)	(22.2)	(4.3)	4.0
Foreign currency loss, net	(0.4)	(0.1)	(22.3)	(4.3)	21.9
Loss on early extinguishment of borrowings, net	(0.8)	(0.2)	(0.0)	(0.0)	(0.7)
Others, net	3.1	0.6	2.6	0.5	0.5
	(16.2)	(3.2)	(41.9)	(8.1)	25.8
Income (loss) from continuing operations before income tax expense	10.8	2.1	(18.2)	(3.5)	29.0
Income tax expense (benefit)	(46.2)	(9.1)	2.2	0.4	(48.4)
Income (loss) from continuing operations	57.1	11.3	(20.4)	(3.9)	77.5
Income (loss) from discontinued operations, net of tax	287.9	56.8	(1.4)	(0.3)	289.3
Net income (loss)	$345.0	68.0%	$ (21.8)	(4.2)%	$366.8

Results by business line

	Year Ended December 31, 2020		Year Ended December 31, 2019		
	Amount	% of Total revenues	Amount	% of Total revenues	Change Amount
	(Dollars in millions)				
Revenues					
Net sales—standard products business					
Display Solutions	299.1	59.0	308.5	59.3	(9.5)
Power Solutions	166.5	32.8	176.3	33.9	(9.9)
Total standard products business	465.5	91.8	484.8	93.1	(19.3)
Net sales—transitional Fab 3 foundry services	41.5	8.2	35.8	6.9	5.7
Total revenues	$507.1	100.0%	$520.7	100.0%	$ (13.6)

	Year Ended December 31, 2020		Year Ended December 31, 2019		
	Amount	% of Net Sales	Amount	% of Net Sales	Change Amount
	(Dollars in millions)				
Gross Profit					
Gross profit—standard products business	127.1	27.3	116.4	24.0	10.7
Gross profit—transitional Fab 3 foundry services	1.2	2.9	—	—	1.2
Total gross profit	$128.3	25.3%	$116.4	22.4%	$ 11.9

Revenues

Total revenues were $507.1 million for the year ended December 31, 2020, a $13.6 million, or 2.6%, decrease compared to $520.7 million for the year ended December 31, 2019. This decrease was primarily due to a decrease in revenue related to our standard products business as described below.

The standard products business. Net sales from our standard products business were $465.5 million for the year ended December 31, 2020, a $19.3 million, or 4.0%, decrease compared to $484.8 million for the year ended December 31, 2019. The decrease in net sales from our Display Solutions business line was primarily attributable to a strategic reduction of our lower margin non-auto LCD DDIC business, which was offset in part by an increase in revenue related to our mobile OLED display driver ICs due to an increase in demand for production of OLED smartphones by Chinese manufacturers in the second half of 2020 due in part to the geographic diversification of our OLED product portfolio. This increase continued until the U.S. Government’s export restrictions on Huawei, which is a downstream customer of some of our direct customers, impacted the shipment of certain mobile OLED display driver ICs to certain of our customers. The decrease in net sales from our Power Solutions business line was primarily attributable to the significant global macro-economic market disruption in the first half of 2020 due to the COVID-19 pandemic and the Fab 3 power outage, which affected our ability to meet customer demand for some of our Power Solution products during the third quarter of 2020.

Gross Profit

Total gross profit was $128.3 million for the year ended December 31, 2020 compared to $116.4 million for the year ended December 31, 2019, representing an $11.9 million, or 10.2%, increase. Gross profit as a percentage of total revenues for the year ended December 31, 2020 increased to 25.3% compared to 22.4% for the year ended December 31, 2019. The increase in gross profit and gross profit as a percentage of total revenues was due to the increase in gross profit and gross profit as a percentage of total revenues from our standard products business as further described below.

The standard products business. Gross profit from our standard products business was $127.1 million for the year ended December 31, 2020, representing a $10.7 million, or 9.2%, increase from $116.4 million for the year ended December 31, 2019. Gross profit as a percentage of net sales for the year ended December 31, 2020 increased to 27.3% compared to 24.0% for the year ended December 31, 2019. The increase in both gross profit and gross profit as a percentage of net sales was primarily attributable to inventory reserves related to certain legacy display products that were recorded in the first half of 2019 and an improved product mix, which was offset in part by an $1.5 million unexpected excess and obsolete inventory charge that we recorded in the second half of 2020 in relation to the U.S. Government’s export restrictions on Huawei, which is a downstream customer of some of our direct customers. The delayed recovery of Fab 3 from the power outage, resulting in a lower than anticipated utilization rate, also negatively affected both gross profit and gross profit as a percentage of net sales in the third quarter of 2020.

Net Sales—Standard Products Business by Geographic Region

We report net sales—standard products business by geographic region based on the location to which the products are billed. The following table sets forth our net sales—standard products business by geographic region and the percentage of total net sales—standard products business represented by each geographic region for the years ended December 31, 2020 and 2019:

	Year Ended December 31, 2020		Year Ended December 31, 2019		
	Amount	% of Net Sales – standard products business	Amount	% of Net Sales – standard products business	Change Amount
	(Dollars in millions)				
Korea	$106.4	22.9%	$132.6	27.4%	$ (26.2)
Asia Pacific (other than Korea)	347.6	74.7	343.7	70.9	3.9
United States	5.1	1.1	2.4	0.5	2.7
Europe	4.3	0.9	4.8	1.0	(0.5)
Others	2.0	0.4	1.4	0.3	0.7
	$465.5	100.0%	$484.8	100.0%	$ (19.3)

Net sales—standard products business in Korea for the year ended December 31, 2020 decreased from $132.6 million to $106.4 million compared to the year ended December 31, 2019, or by $26.2 million, or 19.8%, primarily due to a strategic reduction of our lower margin non-auto LCD DDIC business and lower demand for certain power products such as MOSFETs, primarily for smartphone applications, which was offset in part by an increase in revenue related to our mobile OLED display driver ICs due to an increase in demand for production of OLED smartphones by Chinese manufacturers in the second half of 2020 due in part to the geographic diversification of our OLED product portfolio. This increase continued until the U.S. Government's export restrictions on Huawei, which is a downstream customer of some of our direct customers, impacted the shipment of certain mobile OLED display driver ICs to certain of our customers.

Net sales—standard products business in the Asia Pacific for the year ended December 31, 2020 increased from $343.7 million to $347.6 million compared to the year ended December 31, 2019, or by $3.9 million, or 1.1%, primarily due to higher demand for certain auto LCD DDIC products. The revenue related to our mobile OLED display driver IC remained flat year over year.

Operating Expenses

Selling, General and Administrative Expenses. Selling, general and administrative expenses were $50.0 million, or 9.9% of total revenues for the year ended December 31, 2020, compared to $47.6 million, or 9.1% of total revenues for the year ended December 31, 2019. The increase of $2.4 million, or 5.0%, was primarily attributable to an increase in certain employee incentives, including equity-based compensation and professional fees, which were mainly comprised of legal and consulting services. This increase was offset in part by a $0.5 million legal settlement charge related to dispute with a prior customer recorded in the first quarter of 2019.

Research and Development Expenses. Research and development expenses were $45.7 million, or 9.0% of total revenues for the year ended December 31, 2020, compared to $45.0 million, or 8.6%, of total revenues for the year ended December 31, 2019. The increase of $0.7 million, or 1.5%, was primarily attributable to an increase in certain employee incentives, including equity-based compensation, which was offset in part by decreased material costs.

Merger-related costs. For the year ended December 31, 2020, we recorded a $0.7 million of non-recurring professional service fees and expenses incurred in connection with the contemplated merger transaction.

Early Termination and Other Charges. For the year ended December 31, 2020, we recorded a $4.4 million of charges related to the reduction of workforce under the Program and $0.6 million of non-recurring professional service fees and expenses incurred in connection with certain treasury and finance initiatives.

Operating Income

As a result of the foregoing, operating income of $27.0 million was recorded for the year ended December 31, 2020 compared to operating income of $23.7 million the year ended December 31, 2019. The increase in operating income of $3.3 million resulted primarily from an $11.9 million increase in gross profit, which was offset in part by a $4.9 million increase in early termination and other charges, a $2.4 million increase in selling, general and administrative expenses, a $0.7 million increase in research and development expenses and a $0.7 million increase in merger-related costs.

Other Income (Expense)

Interest Expense. Interest expenses for the year ended December 31, 2020 were $18.1 million compared to $22.2 million of interest expenses for the year ended December 31, 2019. The $4.0 million decrease in interest expenses was attributable to the full redemption of our outstanding 2021 Notes on October 2, 2020. We did not incur interest expense associated with the 2021 Notes from and after October 2, 2020.

Foreign Currency Loss, Net. Net foreign currency loss for the year ended December 31, 2020 was $0.4 million compared to net foreign currency loss of $22.3 million for the year ended December 31, 2019. The net foreign currency losses for the years ended December 31, 2020 and 2019 were due to the depreciation in the value of the Korean won relative to the U.S. dollar during each period.

A substantial portion of our net foreign currency gain or loss is non-cash translation gain or loss associated with the intercompany long-term loans to our Korean subsidiary, which is denominated in U.S. dollars, and is affected by changes in the exchange rate between the Korean won and the U.S. dollar. As of December 31, 2020 and 2019, the outstanding intercompany loan balance including accrued interest between our Korean subsidiary and our Dutch subsidiary was $378.9 million and $686.5 million, respectively. The decrease in the outstanding intercompany loan balances including accrued interest was primarily attributable to our Korean subsidiary's repayment of certain loans by our Dutch subsidiary to fund the redemption of the outstanding 2021 Notes on October 2, 2020. Foreign currency translation gain or loss from intercompany balances were included in determining our consolidated net income since the intercompany balances were not considered long-term investments in nature because management intended to settle these intercompany balances at their respective maturity dates.

Loss on Early Extinguishment of Borrowings, Net. Loss on early extinguishment of borrowings for the year ended December 31, 2020 were $0.8 million compared to $0.04 million of loss for the year ended December 31, 2019. The $0.7 million increase in loss on early extinguishment of borrowings was attributable to the full redemption of our outstanding 2021 Notes on October 2, 2020. In connection with the redemption of the 2021 Notes, we reclassified the remaining unamortized discount and debt issuance costs on the redemption date as a loss on early extinguishment of borrowings.

Others, Net. Others were comprised of gains and losses on the valuation of derivatives which were designated as hedging instruments, rental income and interest income. Others for the years ended December 31, 2020 and 2019 were $3.1 million and $2.6 million, respectively.

Income Tax Expense (Benefit)

We are subject to income taxes in the United States and many foreign jurisdictions and our effective tax rate is affected by changes in the mix of earnings between countries with differing tax rates.

We recorded a $46.2 million income tax benefit for the year ended December 31, 2020, primarily as a result of releasing valuation allowances established against the related deferred tax assets related to our Korean subsidiary and the parent entity in the U.S. Our Korean subsidiary had generated three years of cumulative profits adjusted for permanent differences and is anticipated to generate taxable basis for the subsequent years. As a result, $39.4 million of valuation allowances, established against the Korean subsidiary's deferred tax assets, were released as of December 31, 2020. In addition, we believe it is more likely than not that the parent entity in the U.S. would be able to utilize its net operating loss in future tax years, which would provide incremental tax savings of approximately $4.5 million. Therefore, we released the valuation allowances, established against the U.S. parent's deferred tax assets, up to these anticipated tax savings as of December 31, 2020.

For the year ended December 31, 2019, we recorded $3.8 million income tax expenses, primarily attributable to interest on intercompany loan balances, which was offset in part by an income tax benefit of $1.7 million, resulting in a net income tax expense of $2.2 million. The income tax benefit of $1.7 million was due to the application of the exception rule under Accounting Standards Codification 740, "Income Taxes" ("ASC 740") in connection with the intra-period allocation, which resulted in tax benefits in our continuing operations and tax expenses in the discontinued operations for an equal and offsetting amount for the presentation purposes only.

Income (Loss) from Continuing Operations

Income from continuing operations for the year ended December 31, 2020 was $57.1 million compared to loss from continuing operations of $20.4 million for the year ended December 31, 2019. The $77.5 million improvement in results from continuing operations was primarily attributable to a $48.4 million improvement in income tax expense, a $21.9 million improvement in net foreign currency loss, a $4.0 million decrease in interest expense and a $3.3 million increase in operating income.

Income (Loss) from Discontinued Operations, Net of Tax

Income from discontinued operations, net of tax for the year ended December 31, 2020 was $287.9 million compared to loss from discontinued operations, net of tax of $1.4 million for the year ended December 31, 2019. The $289.3 million increase in income from discontinued operations, net of tax primarily resulted from a $287.1 million increase in gain on sale of discontinued operations, a $10.8 million decrease in research and development expenses, a $9.2 million decrease in selling, general and administrative expenses and a $7.6 million increase in gross profit due in part to depreciation and amortization associated with the assets classified as those held for sale having been ceased starting in the second quarter of 2020, which were offset in part by a $10.8 million increase in transaction costs, a $8.9 million increase in income tax expense and a $6.7 million increase in restructuring and other charges.

Net Income (Loss)

As a result of the foregoing, net income of $345.0 million was recorded for the year ended December 31, 2020 compared to net loss of $21.8 million for the year ended December 31, 2019. As discussed above, the increase in net income of $366.8 million primarily resulted from a $289.3 million increase in income from discontinued operations, net of tax, mainly attributable to the completion of the sale of the Foundry Service Group business and Fab 4, and a $77.5 million improvement in loss from continuing operations.

Liquidity and Capital Resources

Our principal capital requirements are to fund sales and marketing, invest in research and development and capital equipment, and to fund working capital needs. We calculate working capital as current assets less current liabilities.

Our principal sources of liquidity are our cash, cash equivalents, our cash flows from operations and our financing activities. Our ability to manage cash and cash equivalents may be limited, as our primary cash flows are dictated by the terms of our sales and supply agreements, contractual obligations, debt instruments and legal and regulatory requirements. From time to time, we may sell accounts receivable to third parties under factoring agreements or engage in accounts receivable discounting to facilitate the collection of cash. For a description of our factoring arrangements and accounts receivable discounting, please see “Item 8. Financial Statements and Supplementary Data—Notes to Consolidated Financial Statements—Note 4. Accounts Receivable” included elsewhere in this Report. In addition, from time to time, we may make payments to our vendors on extended terms with their consent. As of December 31, 2021, we did not have any accounts payable on extended terms or payment deferment with our vendors.

On September 1, 2020, we completed the sale of our Foundry Services Group business and Fab 4 to the Buyer in exchange for a purchase price equal to approximately $350.6 million in cash. The purchase price was paid in a combination of U.S. Dollars in the amount of $46.5 million and Korean Won in the amount of approximately KRW 360.6 billion.

On October 2, 2020, we redeemed of all of our outstanding 2021 Notes. We paid approximately $227.4 million to fully redeem all of the outstanding $224.25 million aggregate principal amount of the 2021 Notes at a redemption price equal to the sum of 100% of the principal amount plus accrued and unpaid interest thereon.

On January 17, 2017, we issued an aggregate of $86.3 million in principal amount of our Exchangeable Notes. Prior to the March 1, 2021 maturity of our Exchangeable Notes, holders elected to exchange for an aggregate of 10,144,131 shares of our common stock in satisfaction in full of the outstanding obligations under the Exchangeable Notes.

As of June 29, 2018, our Korean subsidiary entered into an arrangement whereby it (i) acquired a water treatment facility from SK hynix for $4.2 million to support our fabrication facility in Gumi, Korea, and (ii) subsequently sold the water treatment facility for $4.2 million to a third party management company that we engaged to run the facility for a 10-year term beginning July 1, 2018. As of December 31, 2021, the outstanding obligation of this arrangement is approximately $24.0 million for remaining service term through 2028.

As of December 31, 2021, cash and cash equivalents held by our Korean subsidiary were $273.6 million, which represents 98% of our total cash and cash equivalents on a consolidated basis. We currently believe that we will have sufficient cash reserves from cash on hand and expected cash from operations to fund our operations as well as capital expenditures for the next twelve months and the foreseeable future.

Year ended December 31, 2021 compared to year ended December 31, 2020

As of December 31, 2021, our cash and cash equivalents balance was $279.5 million, which remained flat, compared to $279.9 million as of December 31, 2020.

Cash inflow provided by operating activities totaled $87.7 million for the year ended December 31, 2021, compared to $7.5 million of cash inflow provided by operating activities for the year ended December 31, 2020. The net operating cash inflow for the year ended December 31, 2021 reflects our net income of $56.7 million, as adjusted favorably by $65.5 million, which mainly consisted of depreciation and amortization, provision for severance benefits, net foreign currency loss and stock-based compensation, and net unfavorable impact of $34.4 million from changes of operating assets and liabilities.

Our working capital balance as of December 31, 2021 was $323.6 million compared to $236.0 million as of December 31, 2020. The $87.6 million increase was primarily attributable to the exchange of our Exchangeable Notes for common stock prior to their maturity date of March 1, 2021.

Cash outflow used in investing activities totaled $31.4 million for the year ended December 31, 2021, compared to $318.5 million of cash inflow provided by investing activities for the year ended December 31, 2020. The $349.9 million decrease in cash inflow was attributable to $350.6 million of proceeds received from the sale of the Foundry Services Group business and Fab 4 in the third quarter of 2020, a $3.1 million net increase in hedge collateral, and a $1.6 million net increase in guarantee deposits, which was offset in part by a $3.9 million decrease in purchase of property, plant and equipment, and a $1.4 million increase in proceeds from disposal of property, plant and equipment.

Cash outflow used in financing activities totaled $35.5 million for the year ended December 31, 2021, compared to $222.3 million of cash outflow used in financing activities for the year ended December 31, 2020. The financing cash outflow for the year ended December 31, 2021 was primarily attributable to a payment of $37.5 million for accelerated stock repurchase program and a payment of $1.7 million for the repurchase of our common stock to satisfy tax withholding obligations in connection with the vesting of restricted stock units, which was offset in part by $4.3 million of proceeds received from the issuance of common stock in connection with the exercise of stock options. The financing cash outflow for the year ended December 31, 2020 was primarily attributable to a payment of $224.3 million for the full redemption of the outstanding 2021 Notes in the fourth quarter of 2020 and a payment of $1.1 million for the repurchase of our common stock to satisfy tax withholding obligation in connection with the vesting of restricted stock units, which was offset in part by $3.9 million of proceeds received from the issuance of common stock in connection with the exercise of stock options.

We routinely make capital expenditures for fabrication facility maintenance, enhancement of our existing facilities and reinforcement of our global research and development capability. For the year ended December 31, 2021, capital expenditures for property, plant and equipment were $32.2 million, a $3.9 million, or 10.8%, decrease from $36.1 million, including $5.8 million capital expenditures for discontinued operations, for the year ended December 31, 2020. The capital expenditures for the years ended December 31, 2021 and 2020 were related to meeting our customer demand and supporting technology and facility improvement at our fabrication facilities.

Year ended December 31, 2020 compared to year ended December 31, 2019

As of December 31, 2020, our cash and cash equivalents balance was $279.9 million, a $128.3 million increase compared to $151.7 million as of December 31, 2019. The increase resulted from a $318.5 million cash inflow provided by investing activities and a $7.5 million of cash inflow provided by operating activities, which were partially offset by a $222.3 million cash outflow used in financing activities.

Cash inflow provided by operating activities totaled $7.5 million for the year ended December 31, 2020, compared to $50.5 million of cash inflow provided by operating activities for the year ended December 31, 2019. The net operating cash inflow for the year ended December 31, 2020 reflects our net income of $57.8 million, excluding gain on sale of discontinued operations, as adjusted unfavorably by $17.4 million, which mainly consisted of depreciation and amortization, provision for severance benefits, net foreign currency loss and deferred income tax assets, and net unfavorable impact of $33.0 million from changes of operating assets and liabilities.

Our working capital balance as of December 31, 2020 was $236.0 million compared to $245.5 million as of December 31, 2019. The decrease in working capital was primarily attributable to reclassification of the outstanding Exchangeable Notes, which were reclassified as a current liability in the first quarter of 2020, which was offset in part by increased cash and cash equivalents as a result of the completion of sale of our Foundry Services Group business and Fab 4 and redemption of our outstanding 2021 Notes.

Cash inflow provided by investing activities totaled $318.5 million for the year ended December 31, 2020, compared to $28.9 million of cash outflow used in investing activities for the year ended December 31, 2019.

The $347.4 million increase in cash inflow was attributable to $350.6 million of proceeds received from the sale of the Foundry Services Group business and Fab 4, a $9.2 million net decrease in hedge collateral, which was offset in part by a $13.1 million increase in purchase of property, plant and equipment.

Cash outflow used in financing activities totaled $222.3 million for the year ended December 31, 2020, compared to $1.8 million of cash outflow used in financing activities for the year ended December 31, 2019. The financing cash outflow for the year ended December 31, 2020 was primarily attributable to a payment of $224.3 million for the full redemption of the outstanding 2021 Notes in the fourth quarter of 2020 and a payment of $1.1 million for the repurchase of our common stock to satisfy tax withholding obligation in connection with the vesting of restricted stock units, which was offset in part by $3.9 million of proceeds received from the issuance of common stock in connection with the exercise of stock options. The financing cash outflow for the year ended December 31, 2019 was primarily attributable to a payment of $1.2 million for the repurchase of 2021 Notes and Exchangeable Notes in the first quarter of 2019 and a payment of $2.4 million for the repurchase of our common stock in January 2019 pursuant to our stock repurchase plan, which was offset in part by $2.9 million of proceeds received from the issuance of common stock in connection with the exercise of stock options.

For the year ended December 31, 2020, capital expenditures for property, plant and equipment were $36.1 million, a $13.1 million, or 57.3% increase from $23.0 million of capital expenditures for the year ended December 31, 2019. The capital expenditures for the year ended December 31, 2020 included certain one-time investments relating to separating shared IT infrastructure and R&D building upon the sale of the Foundry Services Group business and Fab 4. In addition, we routinely make capital expenditures for fabrication facility maintenance, enhancement of our existing facilities and reinforcement of our global research and development capabilities. The routine capital expenditures for the years ended December 31, 2020 and 2019 were related to meeting customer demand, supporting technology and facility improvement at our fabrication facilities.

Critical Accounting Policies and Estimates

Preparing financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the financial statements, the reported amounts of revenues and expenses during the reporting periods and the related disclosures in our consolidated financial statements and accompanying notes.

We believe that the accounting policies discussed below are critical due to the fact that they involve a high degree of judgment and estimates about the effects of matters that are inherently uncertain. We base these estimates and judgments on historical experience, knowledge of current conditions and other assumptions and information that we believe to be reasonable. Estimates and assumptions about future events and their effects cannot be determined with certainty. Accordingly, these estimates may change as new events occur, as more experience is acquired, as additional information is obtained and as the business environment in which we operate changes.

Inventories

Inventories are stated at the lower of cost or net realizable value, using the first in, first out method (“FIFO”). If net realizable value is less than cost at the balance sheet date, the carrying amount is reduced to the realizable value, and the difference is recognized as a loss on valuation of inventories within cost of sales. Inventory reserves are established when conditions indicate that the net realizable value is less than costs due to physical deterioration, obsolescence, changes in price levels, or other causes based on individual facts and circumstances. We evaluate the sufficiency of inventory reserves and take into consideration historical usage, expected demand, anticipated sales price, new product development schedules, the effect new products might have on the sale of existing products, product age and other factors. Reserves are also established for excess inventory based on our current inventory levels and projected demand and our ability to sell those specific products. Situations that could cause these inventory reserves include a decline in business and economic conditions, decline in consumer confidence caused by changes in market conditions, sudden and significant decline in demand for our products, inventory obsolescence because of rapidly changing technology and consumer requirements, or failure to estimate end customer demand properly. A reduction of these inventory reserves may be recorded if previously reserved items are subsequently sold as a result of unexpected changes to certain aforementioned situations.

The gross amount of inventory reserves charged to cost of sales totaled $7.6 million, $7.3 million and $12.9 million in the fiscal years ended December 31, 2021, 2020 and 2019, respectively. The new cost base related to the sale of inventory that was previously written down totaled $5.3 million, $4.3 million and $2.9 million in the fiscal years ended December 31, 2021, 2020 and 2019, respectively.

As prescribed in ASC 330, “Inventory,” once a reserve is established for a particular item based on our assessment as described above, it is maintained until the related item is sold or scrapped as a new cost basis has been established that cannot subsequently be marked up. In addition, the cost of inventories is determined based on the normal capacity of each fabrication facility. In case the capacity utilization is lower than a certain level that management believes to be normal, the fixed overhead costs per production unit which exceed those under normal capacity are charged to cost of sales rather than capitalized as inventories.

Income Taxes

We are subject to income taxes in the U.S. and foreign jurisdictions. Significant judgments and estimates are required in evaluating our uncertain tax positions and determining our provision for income taxes.

We make an ongoing assessment of our deferred tax assets for recoverability considering historical profitability, projected future taxable income, the expected timing of the reversals of existing temporary differences, expiration of tax credits and net operating loss carry-forwards and tax planning strategies. Then, if necessary, we record valuation allowances against our deferred tax assets in order for the net amount of deferred tax assets to be recorded only to the extent that we conclude that it is more likely than not that our net deferred tax assets will be realized. We will continue to evaluate the ability to realize our net deferred tax assets on an ongoing basis to identify whether any significant changes in circumstances or assumptions have occurred that could materially affect the ability to realize deferred tax assets.

We recognize and measure uncertain tax positions taken or expected to be taken in a tax return utilizing a two-step process. In the first step, recognition, we determine whether it is more likely than not that a tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The second step addresses measurement of a tax position that meets the more likely than not criteria. The tax position is measured at the largest amount of benefit that has a likelihood of greater than 50 percent of being realized upon ultimate settlement.

Although we believe our reserves are reasonable, no assurance can be given that the final tax outcome of these matters will not be different from that which is reflected in our historical income tax provisions and accruals. We adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will impact the provisions for income taxes in the period in which such determination is made. The provision for income taxes includes the effect of reserve provisions and changes to reserves that are considered appropriate, as well as the related net interest and penalties.

Recent Accounting Pronouncements

See Note 1 “Business, Basis of Presentation and Summary of Significant Accounting Policies” in the Notes to the Consolidated Financial Statements in Item 8 of Part II of this Report, for a full description of recent accounting pronouncements, including the expected dates of adoption, which is incorporated herein by reference.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to the market risk that the value of a financial instrument will fluctuate due to changes in market conditions, primarily from changes in foreign currency exchange rates. In the normal course of our business, we are subject to market risks associated with currency movements on our assets and liabilities.

Foreign Currency Exposures

We have exposure to foreign currency exchange rate fluctuations on net income from our subsidiaries denominated in currencies other than U.S. dollars, as our foreign subsidiaries in Korea, Taiwan, China, Japan and Hong Kong use local currency as their functional currency. From time to time these subsidiaries have cash and financial instruments in local currency. The amounts held in Japan, Taiwan, Hong Kong and China are not material in regards to foreign currency movements. However, based on the cash and financial instruments balance at December 31, 2021 for our Korean subsidiary, a 10% devaluation of the Korean won against the U.S. dollar would have resulted in a decrease of $1.9 million in our U.S. dollar financial instruments and cash balances.

See "Note 10. Derivative Financial Instruments" to our consolidated financial statements under "Item 8. Financial Statements and Supplementary Data" and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Factors Affecting Our Results of Operations—Impact of Foreign Currency Exchange Rates on Reported Results of Operations" for additional information regarding our foreign exchange hedging activities.

Item 8. Financial Statements and Supplementary Data

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
Magnachip Semiconductor Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Magnachip Semiconductor Corporation and its subsidiaries (the "Company") as of December 31, 2021 and 2020, and the related consolidated statements of operations, comprehensive income (loss), changes in stockholders' equity and cash flows for each of the three years in the period ended December 31, 2021, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020**,** and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021 in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Realizability of Deferred Tax Assets

As described in Notes 1 and 17 to the consolidated financial statements, the Company has net deferred tax assets of $41.1 million, including a valuation allowance of $94.2 million, as of December 31, 2021. Management determines deferred tax assets and liabilities based upon the difference between the financial statement carrying amounts and the tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. Valuation allowances are established when it is necessary to reduce deferred tax assets to the amount expected to be realized. The evaluation of the recoverability of the deferred tax asset and the need for a valuation allowance requires management to weigh all positive and negative evidence to reach a conclusion that it is more likely than not that all or some portion of the deferred tax asset will not be realized. Realization of the future tax benefits related to the deferred tax assets is dependent on many factors, including historical operating results, expected timing of the reversals of existing temporary differences, the Company's ability to generate future taxable income, and tax planning strategies.

The principal considerations for our determination that performing procedures relating to the realizability of deferred tax assets is a critical audit matter are (i) the significant judgment by management when assessing the available positive and negative evidence surrounding the realizability of deferred tax assets, including the application of tax law to the projected tax calculation and a high degree of estimation uncertainty relative to the estimates of future taxable income, (ii) a high degree of auditor judgment, subjectivity and effort in performing procedures and evaluating audit evidence related to management's estimates of future taxable income, (iii) auditor judgment in assessing management's application of tax law to the projected tax calculation, and (iv) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the realizability of deferred tax assets. These procedures also included, among others, (i) evaluating the appropriateness of management's calculation used, (ii) testing the completeness, accuracy and relevance of the underlying data used in the calculation, and (iii) evaluating the reasonableness of significant assumptions used in the calculation of future taxable income. Evaluating management's assumptions related to estimates of future taxable income involved evaluating whether the assumptions used were reasonable considering (i) current and past profitability, (ii) the consistency with external market and industry data, and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in evaluating management's assumptions and calculation for assessing the realizability of deferred tax assets, including the mechanics and application of tax law to the projected tax calculation.

/s/ Samil PricewaterhouseCoopers
Seoul, Korea
February 23, 2022

We have served as the Company's auditor since 2004.

MAGNACHIP SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	December 31, 2021	December 31, 2020
	(In thousands of U.S. dollars, except share data)	
Assets		
Current assets		
Cash and cash equivalents	$ 279,547	$ 279,940
Accounts receivable, net	50,954	64,390
Inventories, net	39,370	39,039
Other receivables (Note 19)	25,895	4,338
Prepaid expenses	7,675	7,332
Hedge collateral (Note 10)	3,060	5,250
Other current assets	2,619	9,321
Total current assets	409,120	409,610
Property, plant and equipment, net	107,882	96,383
Operating lease right-of-use assets	4,275	4,632
Intangible assets, net	2,377	2,727
Long-term prepaid expenses	8,243	4,058
Deferred income taxes (Note 17)	41,095	44,541
Other non-current assets	10,662	9,739
Total assets	$ 583,654	$ 571,690
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable	$ 37,593	$ 52,164
Other accounts payable	6,289	2,531
Accrued expenses (Note 9)	20,071	16,241
Accrued income taxes	11,823	12,398
Operating lease liabilities	2,323	2,210
Current portion of long-term borrowings, net	—	83,479
Other current liabilities	7,382	4,595
Total current liabilities	85,481	173,618
Accrued severance benefits, net	33,064	40,462
Non-current operating lease liabilities	1,952	2,422
Other non-current liabilities	10,395	9,588
Total liabilities	130,892	226,090
Commitments and contingencies (Note 20)		
Stockholders' equity		
Common stock, $0.01 par value, 150,000,000 shares authorized, 55,905,320 shares issued and 45,659,304 outstanding at December 31, 2021 and 44,943,854 shares issued and 35,783,347 outstanding at December 31, 2020	559	450
Additional paid-in capital	241,197	163,010
Retained earnings	343,542	286,834
Treasury stock, 10,246,016 shares at December 31, 2021 and 9,160,507 shares at December 31, 2020, respectively	(130,306)	(108,397)
Accumulated other comprehensive income (loss)	(2,230)	3,703
Total stockholders' equity	452,762	345,600
Total liabilities and stockholders' equity	$ 583,654	$ 571,690

The accompanying notes are an integral part of these consolidated financial statements

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MAGNACHIP SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2021	2020	2019
	(In thousands of U.S. dollars, except share data)		
Revenues:			
Net sales—standard products business	$ 433,099	$ 465,519	$ 484,847
Net sales—transitional Fab 3 foundry services	41,131	41,540	35,824
Total revenues	474,230	507,059	520,671
Cost of sales:			
Cost of sales—standard products business	283,503	338,420	368,450
Cost of sales—transitional Fab 3 foundry services	37,184	40,322	35,824
Total cost of sales	320,687	378,742	404,274
Gross profit	153,543	128,317	116,397
Operating expenses:			
Selling, general and administrative expenses	52,440	49,974	47,595
Research and development expenses	51,212	45,698	45,024
Merger-related costs (income), net	(35,527)	653	—
Early termination and other charges, net	2,011	4,976	53
Total operating expenses	70,136	101,301	92,672
Operating income:	83,407	27,016	23,725
Interest expense	(1,371)	(18,147)	(22,157)
Foreign currency loss, net	(11,853)	(382)	(22,316)
Loss on early extinguishment of borrowings, net	—	(766)	(42)
Other income, net	3,786	3,110	2,577
Income (loss) from continuing operations before income tax expense	73,969	10,831	(18,213)
Income tax expense (benefit)	17,261	(46,228)	2,200
Income (loss) from continuing operations	56,708	57,059	(20,413)
Income (loss) from discontinued operations, net of tax	—	287,906	(1,413)
Net income (loss)	$ 56,708	$ 344,965	$ (21,826)
Basic earnings (loss) per common share—			
Continuing operations	$ 1.26	$ 1.62	$ (0.59)
Discontinued operations	—	8.18	(0.05)
Total	$ 1.26	$ 9.80	$ (0.64)
Diluted earnings (loss) per common share—			
Continuing operations	$ 1.21	$ 1.35	$ (0.59)
Discontinued operations	—	6.19	(0.05)
Total	$ 1.21	$ 7.54	$ (0.64)
Weighted average number of shares—			
Basic	44,879,412	35,213,525	34,321,888
Diluted	47,709,373	46,503,586	34,321,888

The accompanying notes are an integral part of these consolidated financial statements

MAGNACHIP SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Year Ended December 31,		
	2021	2020	2019
	(In thousands of U.S. dollars)		
Net income (loss)	$56,708	$344,965	$(21,826)
Other comprehensive income (loss)			
Foreign currency translation adjustments	(2,839)	6,274	15,856
Derivative adjustments			
Fair valuation of derivatives	(3,913)	1,452	(2,894)
Reclassification adjustment for loss (gain) on derivatives included in net income (loss)	819	(1,363)	4,488
Total other comprehensive income (loss)	(5,933)	6,363	17,450
Total comprehensive income (loss)	$50,775	$351,328	$ (4,376)

The accompanying notes are an integral part of these consolidated financial statements

MAGNACHIP SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

(In thousands of U.S. dollars, except share data)	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Retained Earnings (Deficit)	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total
Balance at December 31, 2018	34,441,232	$ 431	$ 142,600	$ (36,305)	$ (103,926)	$ (20,110)	$ (17,310)
Stock-based compensation	—	—	6,952	—	—	—	6,952
Exercise of stock options	452,819	4	2,856	—	—	—	2,860
Settlement of restricted stock units	344,714	4	(4)	—	—	—	—
Acquisition of treasury stock	(438,453)	—	—	—	(3,107)	—	(3,107)
Other comprehensive income, net	—	—	—	—	—	17,450	17,450
Net loss	—	—	—	(21,826)	—	—	(21,826)
Balance at December 31, 2019	34,800,312	$ 439	$ 152,404	$ (58,131)	$ (107,033)	$ (2,660)	$ (14,981)
Stock-based compensation	—	—	6,699	—	—	—	6,699
Exercise of stock options	510,648	5	3,913	—	—	—	3,918
Settlement of restricted stock units	581,215	6	(6)	—	—	—	—
Acquisition of treasury stock	(108,828)	—	—	—	(1,364)	—	(1,364)
Other comprehensive income, net	—	—	—	—	—	6,363	6,363
Net income	—	—	—	344,965	—	—	344,965
Balance at December 31, 2020	35,783,347	$ 450	$ 163,010	$ 286,834	$ (108,397)	$ 3,703	$ 345,600
Stock-based compensation	—	—	7,704	—	—	—	7,704
Exchange of exchangeable senior note	10,144,131	101	83,639	—	—	—	83,740
Exercise of stock options	336,870	3	4,276	—	—	—	4,279
Settlement of restricted stock units	480,465	5	(5)	—	—	—	—
Accelerated stock repurchase	(994,695)	—	(17,427)	—	(20,073)	—	(37,500)
Acquisition of treasury stock	(90,814)	—	—	—	(1,836)	—	(1,836)
Other comprehensive loss, net	—	—	—	—	—	(5,933)	(5,933)
Net income	—	—	—	56,708	—	—	56,708
Balance at December 31, 2021	45,659,304	$ 559	$ 241,197	$ 343,542	$ (130,306)	$ (2,230)	$ 452,762

The accompanying notes are an integral part of these consolidated financial statements

MAGNACHIP SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2021	2020	2019
	(In thousands of U.S. dollars)		
Cash flows from operating activities			
Net income (loss)	$ 56,708	$ 344,965	$ (21,826)
Adjustments to reconcile net income (loss) to net cash provided by operating activities			
Depreciation and amortization	14,239	16,481	32,729
Provision for severance benefits	8,282	16,743	17,139
Amortization of debt issuance costs and original issue discount	261	2,220	2,299
Loss (gain) on foreign currency, net	32,432	(23,233)	24,692
Provision for inventory reserves	2,244	3,695	10,468
Stock-based compensation	7,704	6,699	6,952
Loss on early extinguishment of borrowings, net	—	766	42
Gain on sale of discontinued operations	—	(287,117)	—
Deferred income tax assets	918	(44,441)	35
Other, net	(613)	217	301
Changes in operating assets and liabilities			
Accounts receivable, net	7,505	(19,268)	(19,824)
Unbilled accounts receivable, net	—	14,260	19,274
Inventories	(5,939)	(816)	(14,678)
Other receivables	(21,538)	6,954	(6,200)
Other current assets	12,397	13,561	11,984
Accounts payable	(11,437)	4,907	7,375
Other accounts payable	(7,798)	(12,000)	(8,514)
Accrued expenses	4,637	(26,201)	8,819
Accrued income taxes	(1)	10,825	267
Deferred revenue	(131)	2,174	(4,768)
Other current liabilities	1,445	279	(4,727)
Other non-current liabilities	(1,398)	3,521	(306)
Contributions to severance insurance deposit accounts	(5,688)	(11,921)	(2,262)
Payment of severance benefits	(6,679)	(12,076)	(9,288)
Other, net	193	(3,724)	514
Net cash provided by operating activities	87,743	7,470	50,497
Cash flows from investing activities			
Proceeds from settlement of hedge collateral	5,214	13,762	13,583
Payment of hedge collateral	(3,349)	(8,839)	(17,833)
Proceeds from disposal of property, plant and equipment	1,446	65	202
Purchase of property, plant and equipment	(32,212)	(36,100)	(22,955)
Payment for intellectual property registration	(614)	(741)	(1,103)
Collection of guarantee deposits	3,192	1,024	549
Payment of guarantee deposits	(5,001)	(1,236)	(1,349)
Proceeds from sale of discontinued operations	—	350,553	—
Other, net	(114)	(6)	9
Net cash provided by (used in) investing activities	(31,438)	318,482	(28,897)
Cash flows from financing activities			
Repayment of borrowings	—	(224,250)	(1,175)
Proceeds from exercise of stock options	4,279	3,918	2,860
Acquisition of treasury stock	(1,653)	(1,125)	(2,702)
Acquisition of stock under accelerated stock repurchase agreement	(20,073)	—	—
Payment under accelerated stock repurchase agreement	(17,427)	—	—
Repayment of financing related to water treatment facility arrangement	(563)	(546)	(552)
Others	(107)	(278)	(233)
Net cash used in financing activities	(35,544)	(222,281)	(1,802)
Effect of exchange rates on cash and cash equivalents	(21,154)	24,612	(579)
Net increase (decrease) in cash and cash equivalents	(393)	128,283	19,219
Cash and cash equivalents at beginning of period	279,940	151,657	132,438
Cash and cash equivalents at end of period	$279,547	$ 279,940	$151,657
Supplemental cash flow information			
Cash paid for interest	$ 2,094	$ 22,221	$ 19,071
Cash paid for income taxes	$ 12,672	$ 23,056	$ 2,081
Non-cash investing and financing activities			
Property, plant and equipment additions in other accounts payable	$ 747	$ —	$ 2,542
Acquisition of treasury stock to satisfy the tax withholding obligations in connection with equity-based compensation	$ (826)	$ (643)	$ (405)
Exchange of exchangeable senior notes into common stock	$ 83,740	$ —	$ —

The accompanying notes are an integral part of these consolidated financial statements

MAGNACHIP SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(TABULAR DOLLARS IN THOUSANDS, EXCEPT SHARE DATA)

1. Business, Basis of Presentation and Significant Accounting Policies

Business

Magnachip Semiconductor Corporation (together with its subsidiaries, the “Company”) is a designer and manufacturer of analog and mixed-signal semiconductor platform solutions for communications, Internet of Things (“IoT”) applications, consumer, computing, industrial and automotive applications.

On September 1, 2020 (the “Closing Date”), the Company completed the sale of the Company’s Foundry Services Group business and its fabrication facility located in Cheongju, Korea, known as “Fab 4” to Key Foundry Co., Ltd. (the “Buyer”), a Korean corporation, in exchange for a purchase price equal to approximately $350.6 million in cash, pursuant to the terms of a business transfer agreement (the “Business Transfer Agreement”) dated March 31, 2020 by and among the Company and Magnus Semiconductor, LLC, a Korean limited liability company (“Magnus”). The purchase price was paid in a combination of U.S. Dollars in the amount of $46.5 million and Korean Won in the amount of approximately KRW 360.6 billion. In addition to the purchase price, the Buyer assumed all severance liabilities relating to the transferred employees, which had a value of approximately $100 million. The Buyer is a wholly owned subsidiary of Magnus, which was established by Alchemist Capital Partners Korea Co., Ltd. and Credian Partners, Inc. On April 20, 2020, Magnus assigned, and the Buyer assumed, all rights and obligations of Magnus under the Business Transfer Agreement. This divestiture of the Foundry Services Group business and Fab 4 was made in connection with the Company’s strategic shift of its operational focus to its standard products business. The Foundry Services Group was historically a reportable segment. The Foundry Services Group business was classified as discontinued operations in the Company’s consolidated statements of operations and excluded from both continuing operations and segment results for all periods presented. Accordingly, the Company has one reportable segment, its standard products business, together with transitional foundry services associated with its fabrication facility located in Gumi, Korea, known as “Fab 3,” that it expects to perform for the Buyer for a period of up to three years from the Closing Date (the “Transitional Fab 3 Foundry Services”).

The Company’s standard products business includes its Display Solutions and Power Solutions business lines. The Company’s Display Solutions products provide panel display solutions to major suppliers of large and small rigid and flexible panel displays, and mobile, automotive applications and home appliances. The Company’s Power Solutions products include discrete and integrated circuit solutions for power management in communications, consumer, computing, servers, automotive, and industrial applications.

Basis of Presentation

The consolidated financial statements are presented in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”).

Significant accounting policies followed by the Company in the preparation of the accompanying consolidated financial statements are summarized below.

The consolidated statements of cash flows for the 2020 and 2019 fiscal years have not been adjusted to separately disclose cash flows related to discontinued operations, but the material items in the operating and investing activities of the cash flow relating to discontinued operations for the same period are disclosed in Note 2. Unless otherwise stated, information in these notes to consolidated financial statements relates to the Company’s continuing operations and excludes the discontinued operations. See Note 2 “Discontinued Operations” for additional information.

MAGNACHIP SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(CONTINUED)
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Principles of Consolidation

The consolidated financial statements include the accounts of the Company including its wholly-owned subsidiaries. All intercompany transactions and balances are eliminated in consolidation.

Use of Estimates

The preparation of financial statements in accordance with U.S. GAAP requires management to make estimates and assumptions about future events. These estimates and the underlying assumptions affect the amounts of assets and liabilities reported, disclosures about contingent assets and liabilities, and reported amounts of revenue and expenses. Such estimates include the valuation of accounts receivable, inventories, stock-based compensation, property, plant and equipment, leases, other long-lived assets, long-term employee benefits, contingencies liabilities, estimated future cash flows and other assumptions used in long-lived asset impairment tests and calculation of current and deferred income taxes and deferred tax valuation allowances, and assumptions used in the calculation of sales incentives, among others. Although these estimates and assumptions are based on management's best knowledge of current events and actions that the Company may undertake in the future, actual results may be significantly different from the estimates. The Company assessed the impact of COVID-19 on the estimates and assumptions to the extent applicable, and determined that there was no material impact on the Company's consolidated financial statements as of and for the years ended December 31, 2021 and 2020. However, the Company is not able to predict with certainty the future impact of COVID-19 on its estimates and assumptions due to the rapidly changing nature of the COVID-19 pandemic.

Reclassification

Certain prior year amounts have been reclassified to conform to the current year presentation.

Discontinued Operations

The Company reports the results of operations of a business as discontinued operations if a disposal represents a strategic shift that has or will have a major effect on the Company's operations and financial results when the business is sold and classified as held for sale, in accordance with the criteria of Accounting Standards Codification ("ASC") 205, "Presentation of Financial Statements" ("ASC 205") and ASC 360, "Property, Plant and Equipment" ("ASC 360"). The results of discontinued operations are reported in "Income (loss) from discontinued operations, net of tax" in the accompanying consolidated statements of operations for the prior periods commencing in the period in which the business meets the criteria.

Foreign Currency Translation

The Company has assessed in accordance with ASC 830, "Foreign Currency Matters" ("ASC 830"), the functional currency of each of its subsidiaries in Luxembourg and the Netherlands and has designated the U.S. dollar to be their respective functional currencies. The Korean Won is the functional currency for the Company's Korean subsidiary, which is the primary operating subsidiary of the Company. The Company and its other subsidiaries are utilizing their local currencies as their functional currencies. The financial statements of the subsidiaries in functional currencies other than the U.S. dollar are translated into the U.S. dollar in accordance with ASC 830. All the assets and liabilities are translated to the U.S. dollar at the end-of-period exchange rates. Capital accounts are determined to be of a permanent nature and are therefore translated using historical exchange rates. Revenues and expenses are translated using average exchange rates for the respective periods. Foreign currency translation adjustments arising from differences in exchange rates from period to period are included in the foreign currency translation adjustment account in accumulated other comprehensive income or loss of stockholders' equity. Foreign currency translation gains or losses on transactions by the Company or its subsidiaries in a currency other than its or its subsidiaries' functional currency are included in foreign currency loss, net in its statements of operations.

Cash and Cash Equivalents

Cash equivalents consist of highly liquid investments with an original maturity date of three months or less when purchased.

Accounts Receivable Reserves

The Company makes estimates of expected credit losses for the allowance for credit losses based upon its assessment of various factors, including historical collection experience, the age of the accounts receivable balances, current economic conditions, reasonable and supportable forecasts of future economic conditions, and other factors that may affect its ability to collect from customers. The Company also records an estimate for sales returns, included within accounts receivable, net, based on the historical experience of the amount of goods that will be returned and refunded or replaced.

Sales of Accounts Receivable

The Company accounts for transfers of financial assets under ASC 860, "Transfers and Servicing," as either sales or financings. Transfers of financial assets that result in sales accounting are those in which (1) the transfer legally isolates the transferred assets from the transferor, (2) the transferee has the right to pledge or exchange the transferred assets and no condition both constrains the transferee's right to pledge or exchange the assets and provides more than a trivial benefit to the transferor, and (3) the transferor does not maintain effective control over the transferred assets. If the transfer does not meet these criteria, the transfer is accounted for as a financing. Financial assets that are treated as sales are removed from the Company's accounts with any realized gain or loss reflected in earning during the period of sale.

Inventories

Inventories are stated at the lower of cost or net realizable value, using the first in, first out method ("FIFO"). If net realizable value is less than cost at the balance sheet date, the carrying amount is reduced to the realizable value, and the difference is recognized as a loss on valuation of inventories within cost of sales. Inventory reserves are established when conditions indicate that the net realizable value is less than costs due to physical deterioration, obsolescence, changes in price levels, or other causes based on individual facts and circumstances. The Company evaluates the sufficiency of inventory reserves and takes into consideration historical usage, expected demand, anticipated sales price, new product development schedules, the effect new products might have on the sale of existing products, product age and other factors. Reserves are also established for excess inventory based on the Company's current inventory levels and projected demand and its ability to sell those specific products. Situations that could cause these inventory reserves include a decline in business and economic conditions, decline in consumer confidence caused by changes in market conditions, sudden and significant decline in demand for the Company's products, inventory obsolescence because of rapidly changing technology and consumer requirements, or failure to estimate end customer demand properly. A reduction of these inventory reserves may be recorded if previously reserved items are subsequently sold as a result of unexpected changes to certain aforementioned situations.

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In addition, as prescribed in ASC 330, “Inventory,” once a reserve is established for a particular item based on the Company’s assessment as described above, it is maintained until the related item is sold or scrapped as a new cost basis has been established that cannot subsequently be marked up. In addition, the cost of inventories is determined based on the normal capacity of the Company’s fabrication facility. In case the capacity utilization is lower than a certain level that management believes to be normal, the fixed overhead costs per production unit which exceeds those under normal capacity are charged to cost of sales rather than capitalized as inventories.

Advances to Suppliers

The Company, from time to time, may make advances in form of prepayments or deposits to suppliers to procure materials to meet its planned production. The Company recorded advances of $1,708 thousand and $5,500 thousand as other current assets as of December 31, 2021 and 2020, respectively.

Property, Plant and Equipment

Property, plant and equipment are stated at cost, less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the assets as set forth below.

Buildings	30 - 40 years
Building related structures	10 - 20 years
Machinery and equipment	10 - 12 years
Others	3 - 10 years

Routine maintenance and repairs are charged to expense as incurred. Expenditures that enhance the value or significantly extend the useful lives of the related assets are capitalized.

Impairment of Long-Lived Assets

The Company reviews property, plant and equipment and other long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable in accordance with ASC 360, “Property, Plant and Equipment.” Recoverability is measured by comparing its carrying amount with the future net undiscounted cash flows the assets are expected to generate. If such assets are considered to be impaired, the impairment is measured as the difference between the carrying amount of the assets and the fair value of assets using the present value of the future net cash flows generated by the respective long-lived assets.

Leases

The Company determines if an arrangement is a lease at inception of a contract considering whether the arrangement conveys the right to control the use of an identified asset over the period of use. Control of an underlying asset is conveyed if the Company has the right to direct the use of, and to obtain substantially all of the economic benefits from the use of, the identified asset. The Company accounts for lease transactions as either an operating or a finance lease, depending on the terms of the underlying lease arrangement. Assets related to operating leases are recorded on the balance sheet as operating lease right-of-use assets; the related liabilities are recorded as operating lease liabilities for the current portion and non-current operating lease liabilities for the non-current portion. Finance lease right-of-use assets are included in property, plant and equipment, net and the related lease liabilities are included in other current liabilities and other non-current liabilities on the consolidated balance sheets.

Right-of-use assets represent the Company's right to use an underlying asset during the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Right-of-use assets and liabilities are recognized based on the present value of the future minimum lease payments over the lease term. As most of the Company's leases do not provide a readily determinable implicit rate, the Company estimates its incremental borrowing rates in determining the present value of future payments based on the lease term of each lease and market information available at commencement date. Finance lease right-of-use assets are amortized on a straight-line basis over the respective lease term with the interest expense on the lease liability recorded using the interest method. The amortization and interest expense are recorded separately in the consolidated statements of operations. Amortization of operating lease right-of-use assets and interest expense on operating lease liabilities are recognized on a straight-line basis over the respective lease term.

An extension or contraction of a lease term is considered if the related option to extend or early terminate the lease is reasonably certain to be exercised by the Company. Operating lease right-of-use assets may also include any advance lease payments made and exclude lease incentives and initial direct costs incurred. The Company has lease agreements with lease and non-lease components, which are generally accounted for separately. For certain equipment leases, lease and non-lease components are accounted for as a single lease component.

Variable lease payment amounts that cannot be determined at the commencement of the lease such as increases in lease payments based on changes in index rates are not included in the right-of-use assets or liabilities. These variable lease payments are expensed as incurred.

The Company does not recognize operating lease right-of-use assets and operating lease liabilities that arise from short-term leases but rather recognizes fixed lease payments in the statements of operations on a straight-line basis and variable payments in the period in which the related obligations incur.

Intangible Assets

Intellectual property assets acquired represent rights under patents, trademarks and property use rights and are amortized over their respective periods of benefit, ranging up to ten years, on a straight-line basis.

Fair Value Disclosures of Financial Instruments

The Company follows ASC 820, "Fair Value Measurements and Disclosures" ("ASC 820") for measurement and disclosures about fair value of its financial instruments. ASC 820 establishes a framework for measuring fair value in U.S. GAAP, and expands disclosures about fair value measurements. To increase consistency and comparability in fair value measurements and related disclosures, ASC 820 establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The three levels of fair value hierarchy defined by ASC 820 are:

Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2—Inputs (other than quoted market prices included in Level 1) are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument's anticipated life.

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Level 3—Inputs reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model. Valuation of instruments includes unobservable inputs to the valuation methodology that are significant to the measurement of fair value of assets or liabilities.

As defined by ASC 820, the fair value of a financial instrument is the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale, which was further clarified as the price that would be received to sell an asset or paid to transfer a liability ("an exit price") in an orderly transaction between market participants at the measurement date. The carrying amounts of the Company's financial assets and liabilities, such as cash equivalents, accounts receivable, other receivables, accounts payable and other accounts payable approximate their fair values because of the short maturity of these instruments.

Accrued Severance Benefits

The majority of accrued severance benefits are for employees in the Company's Korean subsidiary, Magnachip Semiconductor, Ltd. Pursuant to the Employee Retirement Benefit Security Act of Korea, eligible employees and executive officers with one or more years of service are entitled to severance benefits upon the termination of their employment based on their length of service and rate of pay. As of December 31, 2021, 98% of all employees of the Company were eligible for severance benefits.

Beginning in July 2018, the Company began contributing to certain severance insurance deposit accounts a percentage of severance benefits, which may be adjusted from time to time, accrued for eligible employees for their services beginning January 1, 2018. These accounts consist of time deposits and other guaranteed principal and interest accounts, and are maintained at insurance companies, banks or security companies for the benefit of the Company's employees.

Accrued severance benefits are partly funded through a group severance insurance plan. The amounts funded under this insurance plan are classified as a reduction of the accrued severance benefits. Subsequent accruals are to be funded at the discretion of the Company.

In accordance with the National Pension Act of the Republic of Korea, a certain portion of accrued severance benefits is deposited with the National Pension Fund and deducted from the accrued severance benefits. The contributed amount is paid to employees from the National Pension Fund upon their retirement.

Revenue Recognition

The Company recognizes revenue when it satisfies the performance obligation of transferring control over a product or service to a customer. Revenue is measured based on the consideration specified in a contract with a customer, which consideration is paid in exchange for a product or service.

The Company sells products manufactured based on the Company's design. The Company's products are either standardized with an alternative use or the Company does not have an enforceable right to payment for the related manufacturing services completed to date. Therefore, revenue for the products is recognized when a customer obtains control of the product, which is generally upon product shipment, delivery at the customer's location or upon customer acceptance, depending on the terms of the arrangement.

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In accordance with revenue recognition guidance, any tax assessed by a governmental authority that is both imposed on and concurrent with a specific revenue-producing transaction, and that is collected by the Company from a customer, is excluded from revenue and related revenue is presented in the statements of operations on a net basis.

The Company provides warranties under which customers can return defective products. The Company estimates the costs related to warranty claims and repair or replacements, and records them as components of cost of sales.

In addition, the Company offers sales returns (other than those that relate to defective products under warranty), cash discounts for early payments and sales incentives, and certain allowances to the Company's customers, including the Company's distributors. The Company records reserves for those returns, discounts, incentives and allowances as a deduction from sales, based on historical experience and other quantitative and qualitative factors.

Substantially all of the Company's contracts are one year or less in duration. The standard payment terms with customers are generally thirty to sixty days from the time of shipment, product delivery to the customer's location or customer acceptance, depending on the terms of the related arrangement.

All amounts billed to a customer related to shipping and handling are classified as sales while all costs incurred by the Company for shipping and handling are classified as selling, general and administrative expenses. The amounts charged to selling, general and administrative expenses were $1,271 thousand, $993 thousand and $990 thousand for the years ended December 31, 2021, 2020 and 2019, respectively.

Of the recorded deferred revenue of $2,680 thousand as of December 31, 2020 and $559 thousand as of December 31, 2019, $2,680 thousand and $559 thousand were recognized as revenue during the years ended December 31, 2021 and 2020, respectively.

Advertising

The Company expenses advertising costs as incurred. Advertising expenses were $71 thousand, $87 thousand and $62 thousand for the years ended December 31, 2021, 2020 and 2019, respectively.

Product Warranties

The Company records, in other current liabilities, warranty liabilities for the estimated costs that may be incurred under its basic limited warranty. The standard limited warranty period is one to two years for the majority of products. This warranty covers defective products, and related liabilities are accrued when product revenues are recognized. Factors that affect the Company's warranty liabilities include historical and anticipated rates of warranty claims and repair or replacement costs per claim to satisfy the Company's warranty obligation. The Company periodically assesses the adequacy of those recorded warranty liabilities and adjusts its estimates when necessary.

Derivative Financial Instruments

The Company applies the provisions of ASC 815, "Derivatives and Hedging" ("ASC 815"). This statement requires the recognition of all derivative instruments as either assets or liabilities measured at fair value.

Under the provisions of ASC 815, the Company may designate a derivative instrument as hedging the exposure to variability in expected future cash flows that are attributable to a particular risk (a “cash flow hedge”) or hedging the exposure to changes in the fair value of an asset or a liability (a “fair value hedge”). Special accounting for qualifying hedges allows the effective portion of a derivative instrument’s gains and losses to offset related results on the hedged item in the consolidated statements of operations and requires that a company formally document, designate and assess the effectiveness of the transactions that receive hedge accounting treatment. Both at the inception of a hedge and on an ongoing basis, a hedge must be expected to be highly effective in achieving offsetting changes in cash flows or fair value attributable to the underlying risk being hedged. If the Company determines that a derivative instrument is no longer highly effective as a hedge, it discontinues hedge accounting prospectively and future changes in the fair value of the derivative are recognized in current earnings. The Company assesses hedge effectiveness at the end of each quarter. The Company does not offset derivative assets and liabilities within the consolidated balance sheets.

In accordance with ASC 815, changes in the fair value of derivative instruments that are cash flow hedges are recognized in accumulated other comprehensive income (loss) and reclassified into earnings in the period in which the hedged item affects earnings. Derivative instruments that do not qualify, or cease to qualify, as hedges must be adjusted to fair value and the adjustments are recorded through net income (loss).

The cash flows from derivative instruments receiving hedge accounting treatment are classified in the same categories as the hedged items in the consolidated statements of cash flows.

Research and Development

Research and development expenses are expensed as incurred and include wafers, masks, employee expenses, contractor fees, building costs, utilities and administrative expenses.

Licensed Patents and Technologies

The Company has entered into a number of royalty agreements to license patents and technology used in the design of its products. The Company carries two types of royalties: lump-sum and running basis. Lump-sum royalties, which require initial payments, usually paid in installments, represent a non-refundable commitment, such that the total present value of these payments is recorded as a prepaid expense and a liability upon execution of the agreements and the costs are amortized over the contract period using the straight-line method and charged to research and development expenses in the consolidated statements of operations.

Running royalties are paid based on the revenue of related products sold by the Company.

Stock-Based Compensation

The Company follows the provisions of ASC 718, “Compensation-Stock Compensation” (“ASC 718”). Under ASC 718, stock-based compensation cost is measured at the grant date, based on the fair value of the award, and is recognized as expense, net of the estimated forfeiture rate, over the requisite service period. As permitted under ASC 718, the Company elected to recognize compensation expense for all options with graded vesting based on the graded attribution method.

The Company uses the Black-Scholes option-pricing model to measure the grant-date-fair-value of options. The Black-Scholes model requires certain assumptions to determine an option’s fair value, including expected term, risk free interest rate and expected volatility. The expected term of each option grant was based on employees' expected exercises and post-vesting employment termination behavior and the risk free interest rate was based on the U.S. Treasury yield curve for the period corresponding with the expected term at the time of grant. No dividends were assumed for this calculation of option value.

Earnings Per Share

In accordance with ASC 260, "Earnings Per Share", the Company computes basic earnings per share by dividing net income (loss) available to common stockholders by the weighted average number of common shares outstanding during the period. Diluted earnings per share reflect the dilution of potential common stock outstanding during the period including stock options and restricted stock units, using the treasury stock method (by using the average stock price for the period to determine the number of shares assumed to be purchased from the exercise of stock options and restricted stock units), and convertibles, using the if-converted method. In determining the hypothetical shares repurchased, the Company uses the average share price for the period. In the case that earnings are negative, any potential common stock equivalents would have the effect of being anti-dilutive in the computation of net loss per share.

Income Taxes

The Company accounts for income taxes in accordance with ASC 740, "Income Taxes" ("ASC 740"). ASC 740 requires recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in a company's financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based upon the difference between the financial statement carrying amounts and the tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. Income tax expense is the tax payable for the period and the change during the period in deferred tax assets and liabilities. Valuation allowances are established when it is necessary to reduce deferred tax assets to the amount expected to be realized. The evaluation of the recoverability of the deferred tax assets and the need for a valuation allowance requires management to weigh all positive and negative evidence to reach a conclusion that it is more likely than not that all or some portion of the deferred tax assets will not be realized. Realization of the future tax benefits related to the deferred tax assets is dependent on many factors, including historical operating results, expected timing of the reversals of existing temporary differences, the Company's ability to generate future taxable income, and tax planning strategies.

The Company recognizes and measures uncertain tax positions taken or expected to be taken in a tax return utilizing a two-step process. In the first step, recognition, the Company determines whether it is more likely than not that a tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The second step addresses measurement of a tax position that meets the more likely than not criteria. The tax position is measured at the largest amount of benefit that has a likelihood of greater than 50 percent of being realized upon ultimate settlement.

Concentration of Credit Risk

The Company performs periodic credit evaluations of its customers' financial condition and generally does not require collateral for customers on accounts receivable. The Company maintains reserves for potential credit losses, which are periodically reviewed.

Recent Accounting Pronouncements Not Yet Adopted

In August 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2020-06, "Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40)" ("ASU 2020-06"), which updates various codification topics to simplify the accounting guidance for certain financial instruments with characteristics of liabilities and equity, with a specific focus on convertible instruments and the derivative scope exception for contracts in an entity's own equity and amends the diluted EPS computation for these instruments. The Company will adopt as of the reporting period beginning January 1, 2022. The Company does not expect the adoption of ASU 2020-06 to have a material effect on the Company's consolidated financial statements.

In May 2021, the FASB issued ASU No. 2021-04, "Earnings Per Share (Topic 260), Debt-Modifications and Extinguishments (Subtopic 470-50)", Compensation-Stock Compensation (Topic 718), and Derivatives and Hedging-Contracts in Entity's Own Equity (Subtopic 815-40): Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options" ("ASU 2021-04"), ASU 2021-04 clarifies the accounting for modifications or exchanges of freestanding equity-classified written call options so that the transaction should be treated as an exchange of the original instrument for a new instrument. ASU 2021-04 is effective for fiscal years beginning after December 15, 2021 on a prospective basis, with early adoption permitted. The Company does not expect the adoption of ASU 2021-04 to have a material effect on the Company's consolidated financial statements.

Recently Adopted Accounting Pronouncements

In December 2019, the FASB issued ASU No. 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes" ("ASU 2019-12"). ASU 2019-12 removes certain exceptions to the general principles in Topic 740 and improves consistent application of and simplifies GAAP for other areas of Topic 740 by clarifying and amending existing guidance. The Company adopted ASU 2019-12 as of January 1, 2021, and the adoption of ASU 2019-12 did not have a material impact on the Company's consolidated financial statements.

2. Discontinued Operations

On September 1, 2020, the Company completed the sale of its Foundry Services Group business and Fab 4. As a result of the sale of the Foundry Services Group business and Fab 4, the Company recorded a gain of $287,117 thousand and all operations from the Foundry Services Group business and Fab 4 were classified as discontinued operations for all periods presented. Following the consummation of the sale, and for up to three years, the Company is expected to provide the Transitional Fab 3 Foundry Services at an agreed upon cost plus mark-up. For the periods prior to the Closing Date, revenue from providing the Transitional Fab 3 Foundry Services to the Foundry Services Group is recorded at cost on both of the continuing and discontinued businesses for comparative purposes. Cash inflows to the Company from the Buyer related to providing the Transitional Fab 3 Foundry Services were $46,611 thousand and $7,643 thousand for the years ended December 31, 2021 and 2020, respectively.

MAGNACHIP SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(CONTINUED)
(TABULAR DOLLARS IN THOUSANDS, EXCEPT SHARE DATA)

The following table summarizes the results from discontinued operations, net of tax, for the years ended December 31, 2020 and 2019.

	Year Ended December 31, 2020	Year Ended December 31, 2019
	(In thousands of U.S. dollars)	
Revenues:		
Net sales—Foundry Services Group	$ 254,732	$ 307,348
Net sales—transitional Fab 3 foundry services	(25,887)	(35,824)
Total revenues	228,845	271,524
Cost of sales:		
Cost of sales—Foundry Services Group	182,872	243,134
Cost of sales—transitional Fab 3 foundry services	(25,887)	(35,824)
Total cost of sales	156,985	207,310
Gross profit	71,860	64,214
Operating expenses:		
Selling, general and administrative expenses	14,797	24,042
Research and development expenses	19,484	30,332
Restructuring and other charges	15,873	9,142
Total operating expenses	50,154	63,516
Operating income from discontinued operations	21,706	698
Foreign currency gain, net	1,277	503
Others, net	72	(67)
Income from discontinued operations before income tax expense	23,055	1,134
Income tax expense	11,452	2,547
Gain on sale of discontinued operations	287,117	—
Transaction costs	(10,814)	—
Income (loss) from discontinued operations, net of tax	287,906	(1,413)

For the years ended December 31, 2020 and 2019, the Company recorded $15,873 thousand and $6,991 thousand, respectively, in professional fees and transaction related expenses incurred in connection with the sale of the Foundry Services Group business and Fab 4, and recorded such costs as restructuring and other charges. For the year ended December 31, 2019, the Company also recorded in restructuring and other charges a $2,151 thousand restructuring-related charge to its fab employees.

MAGNACHIP SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(CONTINUED)
(TABULAR DOLLARS IN THOUSANDS, EXCEPT SHARE DATA)

The following table provides supplemental cash flows information related to discontinued operations:

	Year Ended December 31, 2020	Year Ended December 31, 2019
	(In thousands of U.S. dollars)	
Significant non-cash operating activities:		
Depreciation and amortization	$ 5,365	$ 22,411
Provision for severance benefits	8,209	10,879
Stock-based compensation	388	899
Investing activities:		
Capital expenditures	$ (5,838)	$ (11,653)

3. Fair Value Measurements

ASC 820 defines fair value, establishes a consistent framework for measuring fair value and expands disclosure requirements about fair value measurements. ASC 820 requires, among other things, the Company's valuation techniques used to measure fair value to maximize the use of observable inputs and minimize the use of unobservable inputs.

Fair Value of Financial Instruments

As of December 31, 2021, the following table represents the Company's liabilities measured at fair value on a recurring basis and the basis for that measurement (in thousands):

	Carrying Value December 31, 2021	Fair Value Measurement December 31, 2021	Quoted Prices in Active Markets for Identical Liability (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Liabilities:					
Derivative liabilities (other current liabilities)	$ 2,020	$ 2,020	—	$ 2,020	—

As of December 31, 2020, the following table represents the Company's assets and liabilities measured at fair value on a recurring basis and the basis for that measurement (in thousands):

	Carrying Value December 31, 2020	Fair Value Measurement December 31, 2020	Quoted Prices in Active Markets for Identical Asset / Liability (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:					
Derivative assets (other current assets)	$ 2,036	$ 2,036	—	$ 2,036	—
Liabilities:					
Derivative liabilities (other current liabilities)	$ 195	$ 195	—	$ 195	—

Items not reflected in the table above include cash equivalents, accounts receivable, other receivables, accounts payable, and other accounts payable, fair value of which approximate carrying values due to the short-term nature of these instruments. The fair value of assets and liabilities whose carrying value approximates fair value is determined using Level 2 inputs.

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Fair Value of Borrowings

	December 31, 2020	
	Carrying Value	Fair Value
	(In thousands of U.S. dollars)	
Borrowings:		
5.0% Exchangeable Senior Notes due March 2021 (Level 2)	$83,479	$145,466

On January 17, 2017, the Company's wholly-owned subsidiary, MagnaChip Semiconductor S.A., closed an offering (the "Exchangeable Notes Offering") of 5.0% Exchangeable Senior Notes due March 1, 2021 (the "Exchangeable Notes"), of $86,250 thousand, which represents the principal amount, excluding $5,902 thousand of debt issuance costs. In December 2018 and February 2019, MagnaChip Semiconductor S.A. repurchased a principal amount equal to $1,590 thousand and $920 thousand, respectively, of the Exchangeable Notes in the open market. The Company estimates the fair value of the Exchangeable Notes using the market approach, which utilizes quoted market prices that fall under Level 2. For further description of the Exchangeable Notes, see Note 12, "Borrowings."

Fair Values Measured on a Non-recurring Basis

The Company's non-financial assets, such as property, plant and equipment, and intangible assets are recorded at fair value upon acquisition and are remeasured at fair value only if an impairment charge is recognized. As of December 31, 2021 and 2020, the Company did not have any assets or liabilities measured at fair value on a non-recurring basis.

4. Accounts Receivable

Accounts receivable as of December 31, 2021 and 2020 consisted of the following (in thousands):

	December 31, 2021	December 31, 2020
Accounts receivable	$50,363	$63,145
Notes receivable	1,242	1,606
Less:		
Allowance for credit losses	(466)	(188)
Sales return reserves	(185)	(173)
Accounts receivable, net	$50,954	$64,390

Changes in allowance for credit losses for the years ended December 31, 2021, 2020 and 2019 are as follows (in thousands):

	Year Ended December 31, 2021	2020	2019
Beginning balance	$ (188)	$ (49)	$ (51)
Provision	(302)	(131)	—
Translation adjustments	24	(8)	2
Ending balance	$ (466)	$ (188)	$ (49)

Changes in sales return reserves for the years ended December 31, 2021, 2020 and 2019 are as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Beginning balance	$ (173)	$ (387)	$ (439)
Reversal (provision)	(27)	22	(136)
Usage	—	196	170
Translation adjustments	15	(4)	18
Ending balance	$ (185)	$ (173)	$ (387)

Commencing in March 2012, the Company has been a party to an agreement to sell selected trade accounts receivable to a financial institution from time to time. After a sale, the Company does not retain any interest in the receivables and the applicable financial institution collects these accounts receivable directly from the customer. There were no sale of accounts receivable for the years ended December 31, 2021 and 2020. The proceeds from the sales of these accounts receivable totaled $14,474 thousand for the year ended December 31, 2019, and this sale resulted in pre-tax losses of $45 thousand for the year ended December 31, 2019, which is included in selling, general and administrative expenses in the consolidated statements of operations. Net proceeds of this accounts receivable sale program are recognized in the consolidated statements of cash flows as part of operating cash flows.

The Company uses receivable discount programs with certain customers. These discount arrangements allow the Company to accelerate collection of customers' receivables.

5. Inventories

Inventories as of December 31, 2021 and 2020 consist of the following (in thousands):

	December 31, 2021	December 31, 2020
Finished goods	$ 9,594	$ 6,425
Semi-finished goods and work-in-process	25,968	30,968
Raw materials	9,443	6,526
Materials in-transit	95	1,021
Less: inventory reserve	(5,730)	(5,901)
Inventories, net	$39,370	$39,039

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Changes in inventory reserve for the years ended December 31, 2021, 2020 and 2019 are as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Beginning balance	$(5,901)	$(5,947)	$ (4,845)
Change in reserve			
Inventory reserve charged to costs of sales	(7,626)	(7,268)	(12,941)
Sale of previously reserved inventory	5,349	4,349	2,938
	(2,277)	(2,919)	(10,003)
Write off	1,875	2,679	8,451
Translation adjustments	573	(408)	450
Reclassified to assets held for sale	—	694	—
Ending balance	$(5,730)	$(5,901)	$ (5,947)

Inventory reserve represents the Company’s best estimate in value lost due to excessive inventory level, physical deterioration, obsolescence, changes in price levels, or other causes based on individual facts and circumstances. Inventory reserve relates to inventory items including finished goods, semi-finished goods, work-in-process and raw materials. Write off of this reserve is recognized only when the related inventory has been disposed or scrapped.

6. Property, Plant and Equipment

Property, plant and equipment as of December 31, 2021 and 2020 are comprised of the following (in thousands):

	December 31,	
	2021	2020
Buildings and related structures	$ 24,273	$ 24,882
Machinery and equipment	105,300	106,244
Finance lease right-of-use assets	316	344
Others	32,396	31,208
	162,285	162,678
Less: accumulated depreciation	(94,119)	(90,370)
Land	13,898	15,167
Construction in progress	25,818	8,908
Property, plant and equipment, net	$107,882	$ 96,383

Aggregate depreciation expenses totaled $13,495 thousand, $10,448 thousand and $9,720 thousand for the years ended December 31, 2021, 2020 and 2019, respectively.

7. Intangible Assets

Intangible assets as of December 31, 2021 and 2020 are comprised of the following (in thousands):

	December 31, 2021		
	Gross amount	Accumulated amortization	Net amount
Intellectual property assets	$9,312	$ (6,935)	$2,377
Intangible assets	$9,312	$ (6,935)	$2,377

	December 31, 2020		
	Gross amount	Accumulated amortization	Net amount
Intellectual property assets	$9,486	$ (6,759)	$2,727
Intangible assets	$9,486	$ (6,759)	$2,727

Aggregate amortization expense for intangible assets totaled $744 thousand, $668 thousand and $598 thousand for the years ended December 31, 2021, 2020 and 2019, respectively.

The aggregate amortization expense of intangible assets for the next five years are estimated to be $704 thousand, $590 thousand, $438 thousand, $309 thousand and $196 thousand for the years ended December 31, 2022, 2023, 2024, 2025 and 2026, respectively.

8. Leases

The Company has operating and finance leases for buildings and other assets such as vehicles and office equipment. The Company's leases have remaining lease terms ranging from 1 year to 4 years.

The tables below present financial information related to the Company's leases.

Supplemental balance sheets information related to leases as of December 31, 2021 and 2020 are as follows (in thousands):

Leases	Classification	December 31, 2021	2020
Assets			
Operating lease	Operating lease right-of-use assets	$4,275	$ 4,632
Finance lease	Property, plant and equipment, net	126	206
Total lease assets		$4,401	$ 4,838
Liabilities			
Current			
Operating	Operating lease liabilities	$2,323	$ 2,210
Finance	Other current liabilities	68	68
Non-current			
Operating	Non-current operating lease liabilities	1,952	2,422
Finance	Other non-current liabilities	73	153
Total lease liabilities		$4,416	$ 4,853

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The following table presents the weighted average remaining lease term and discount rate:

	December 31,	
	2021	2020
Weighted average remaining lease term		
Operating leases	2.4 years	3.0 years
Finance leases	2.0 years	3.0 years
Weighted average discount rate		
Operating leases	4.20%	5.55%
Finance leases	7.75%	7.75%

The components of lease cost included in the Company's consolidated statements of operations, are as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Operating lease cost	$2,777	$1,885	$1,990
Finance lease cost			
Amortization of right-of-use assets	65	63	64
Interest on lease liabilities	14	18	22
Total lease cost	$2,856	$1,966	$2,076

The above table does not include an immaterial cost of short-term leases for the years ended December 31, 2021, 2020 and 2019.

Other lease information is as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Cash paid for amounts included in the measurement of lease liabilities			
Operating cash flows from operating leases	$2,777	$1,885	$1,990
Operating cash flows from finance leases	14	18	22
Financing cash flows from finance leases	65	76	55

Non-cash transaction amounts of lease liabilities arising from obtaining right-of-use assets were $2,768 thousand, $4,702 thousand and $169 thousand for the years ended December 31, 2021, 2020 and 2019, respectively.

The aggregate future lease payments for operating and finance leases as of December 31, 2021 are as follows (in thousands):

	Operating Leases	Finance Leases
2022	$ 2,228	$ 76
2023	1,136	76
2024	687	—
2025	445	—
2026	22	—
Total future lease payments	4,518	152
Less: Imputed interest	(243)	(11)
Present value of future payments	$ 4,275	$ 141

9. Accrued Expenses

Accrued expenses as of December 31, 2021 and 2020 are comprised of the following (in thousands):

	December 31, 2021	December 31, 2020
Payroll, benefits and related taxes, excluding severance benefits	$ 9,548	$ 10,296
Withholding tax attributable to intercompany interest income	1,950	28
Interest on Exchangeable Notes	—	1,396
Outside service fees	1,088	755
Restructuring and others	—	2,658
Merger-related costs	7,035	393
Others	450	715
Accrued expenses	$ 20,071	$ 16,241

10. Derivative Financial Instruments

The Company’s Korean subsidiary from time to time has entered into zero cost collar contracts to hedge the risk of changes in the functional-currency-equivalent cash flows attributable to currency rate changes on U.S. dollar denominated revenues.

Details of derivative contracts as of December 31, 2021 are as follows (in thousands):

Date of transaction	Type of derivative	Total notional amount	Month of settlement
May 13, 2021	Zero cost collar	$ 39,000	January 2022 to September 2022
August 13, 2021	Zero cost collar	$ 48,000	January 2022 to December 2022

Details of derivative contracts as of December 31, 2020 are as follows (in thousands):

Date of transaction	Type of derivative	Total notional amount	Month of settlement
July 13, 2020	Zero cost collar	$ 30,000	January 2021 to June 2021
December 15, 2020	Zero cost collar	$ 30,000	July 2021 to December 2021
December 18, 2020	Zero cost collar	$ 18,000	March 2021 to June 2021

The zero cost collar contracts qualify as cash flow hedges under ASC 815, “Derivatives and Hedging,” since at both the inception of the contracts and on an ongoing basis, the hedging relationship was and is expected to be highly effective in achieving offsetting cash flows attributable to the hedged risk during the term of the contracts.

The fair values of the Company’s outstanding zero cost collar contracts recorded as assets and liabilities as of December 31, 2021 and 2020 are as follows (in thousands):

Derivatives designated as hedging instruments:		December 31, 2021	December 31, 2020
Asset Derivatives:			
Zero cost collars	Other current assets	$ —	$ 2,036
Liability Derivatives:			
Zero cost collars	Other current liabilities	$ 2,020	$ 195

Offsetting of derivative liabilities as of December 31, 2021 is as follows (in thousands):

As of December 31, 2021	Gross amounts of recognized liabilities	Gross amounts offset in the balance sheets	Net amounts of liabilities presented in the balance sheets	Gross amounts not offset in the balance sheets: Financial instruments	Gross amounts not offset in the balance sheets: Cash collateral pledged	Net amount
Liability Derivatives:						
Zero cost collars	$ 2,020	$ —	$ 2,020	$ —	$ (2,060)	$ (40)

Offsetting of derivative assets and liabilities as of December 31, 2020 is as follows (in thousands):

As of December 31, 2020	Gross amounts of recognized assets/liabilities	Gross amounts offset in the balance sheets	Net amounts of assets/liabilities presented in the balance sheets	Gross amounts not offset in the balance sheets: Financial instruments	Gross amounts not offset in the balance sheets: Cash collateral pledged	Net amount
Asset Derivatives:						
Zero cost collars	$ 2,036	$ —	$ 2,036	$ —	$ —	$ 2,036
Liability Derivatives:						
Zero cost collars	$ 195	$ —	$ 195	$ —	$ —	$ 195

For derivative instruments that are designated and qualify as cash flow hedges, gains or losses on the derivative aside from components excluded from the assessment of effectiveness are reported as a component of accumulated other comprehensive income (“AOCI”) and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivative, representing hedge components excluded from the assessment of effectiveness, are recognized in current earnings.

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The following table summarizes the impact of derivative instruments on the consolidated statements of operations for the years ended December 31, 2021 and 2020. Net sales of discontinued operations for the year ended December 31, 2020 are included in the below table (in thousands):

Derivatives in ASC 815 Cash Flow Hedging Relationships	Amount of Gain (Loss) Recognized in AOCI on Derivatives		Location/Amount of Gain (Loss) Reclassified from AOCI Into Statement of Operations			Location/Amount of Gain Recognized in Statement of Operations on Derivatives		
	2021	2020		2021	2020		2021	2020
Zero cost collars	$ (4,665)	$ 1,769	Net sales	$(819)	$ 1,363	Other income, net	$123	$148

As of December 31, 2021, the amount expected to be reclassified from accumulated other comprehensive loss into loss within the next twelve months is $1,460 thousand.

The Company set aside cash deposits to the counterparties, Nomura Financial Investment (Korea) Co., Ltd. (“NFIK”), Deutsche Bank AG, Seoul Branch (“DB”) and Standard Chartered Bank Korea Limited (“SC”), as required for the zero cost collar contracts. These cash deposits are recorded as hedge collateral on the consolidated balance sheets. Cash deposits as of December 31, 2021 and 2020 are as follows (in thousands):

Counterparties	December 31, 2021	December 31, 2020
NFIK	$ —	$3,250
DB	—	1,000
SC	1,000	1,000
Total	$1,000	$5,250

The Company is required to deposit additional cash collateral with NFIK and SC for any exposure in excess of $500 thousand. As of December 31, 2021, $760 thousand and $1,300 thousand of additional cash collateral were required by NFIK and SC, respectively, and recorded as hedge collateral on the consolidated balance sheet. There was no such cash collateral required as of December 31, 2020.

These zero cost collar contracts may be terminated by the counterparties in a number of circumstances, including if the Company’s borrowing rating falls below B-/B3 or if the Company’s total cash and cash equivalents is less than $30,000 thousand at the end of a fiscal quarter, unless a waiver is obtained.

11. Product Warranties

Changes in accrued warranty liabilities for the years ended December 31, 2021, 2020 and 2019 are as follows (in thousands):

	Year Ended December 31, 2021	2020	2019
Beginning balance	$ 48	$ 735	$ 115
Provision (reversal)	(14)	(606)	932
Usage	(19)	(61)	(314)
Translation adjustments	(3)	(20)	2
Ending balance	$ 12	$ 48	$ 735

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12. Borrowings

Borrowings as of December 31, 2020 is as follows (in thousands):

	December 31, 2020
5.0% Exchangeable Senior Notes due March 2021	$ 83,740
Less: unamortized discount and debt issuance costs	(261)
Current portion of long-term borrowings, net	$ 83,479

5.0% Exchangeable Senior Notes

On January 17, 2017, MagnaChip Semiconductor S.A. closed the Exchangeable Notes Offering of $86,250 thousand aggregate principal amount of 5.0% Exchangeable Notes. Interest on the Exchangeable Notes accrued at a rate of 5.0% per annum, payable semi-annually on March 1 and September 1 of each year, beginning on March 1, 2017. The Exchangeable Notes matured on March 1, 2021, unless they were earlier repurchased or converted. Holders had the right to convert their notes at their option at any time prior to the close of business on the business day immediately preceding the stated maturity date.

The Company incurred debt issuance costs of $5,902 thousand related to the issuance of the Exchangeable Notes. The debt issuance costs are recorded as a direct deduction from the long-term borrowings in the consolidated balance sheets and amortized to interest expense using the effective interest method over the term of the Exchangeable Notes. Interest expense related to the Exchangeable Notes for the years ended December 31, 2021 and 2020 were $958 thousand and 5,708 thousand, respectively.

In February 2019, the Company repurchased a principal amount equal to $920 thousand of the Exchangeable Notes in the open market, resulting in a loss of $63 thousand, which was recorded as loss on early extinguishment of borrowings, net in the consolidated statements of operations for the year ended December 31, 2019. In December 2018, the Company repurchased a principal amount equal to $1,590 thousand of the Exchangeable Notes in the open market, resulting in a loss of $234 thousand, which was recorded as loss on early extinguishment of borrowings, net in the consolidated statements of operations for the year ended December 31, 2018.

Prior to the March 1, 2021 maturity of the Exchangeable Notes, holders elected to exchange all outstanding Exchangeable Notes for an aggregate of 10,144,131 shares of the Company's common stock in satisfaction in full of the outstanding obligations under the Exchangeable Notes. Upon exchange, the Company delivered for each $1,000 principal amount of exchanged Exchangeable Notes a number of shares equal to the exchange rate of 121.1387 shares of common stock per $1,000 principal amount of Exchangeable Notes, which was equivalent to an exchange price of approximately $8.26 per share of common stock. In connection with the exchanges, the fractional shares were paid in cash. Following March 1, 2021, the Company does not have any Exchangeable Notes outstanding.

6.625% Senior Notes

On July 18, 2013, the Company issued a $225,000 thousand aggregate principal amount of the 2021 Notes at a price of 99.5%. Interest on the 2021 Notes accrued at a rate of 6.625% per annum, payable semi-annually on January 15 and July 15 of each year, beginning on January 15, 2014. Interest expense related to the 2021 Notes for the year ended December 31, 2020 was $11,926 thousand.

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The Company completed the full redemption of the remaining outstanding 2021 Notes on October 2, 2020. The Company paid approximately $227,428 thousand to fully redeem all of the outstanding $224,250 thousand aggregate principal amount of the 2021 Notes at a redemption price equal to the sum of 100% of the principal amount of the 2021 Notes, plus accrued and unpaid interest thereon through, but excluding, the Redemption Date. In connection with the redemption of the 2021 Notes, the Company recorded a $766 thousand as loss on early extinguishment of borrowings, net related to the remaining unamortized debt discount and debt issuance costs.

13. Accrued Severance Benefits

The majority of accrued severance benefits are for employees in the Company's Korean subsidiary. Pursuant to the Employee Retirement Benefit Security Act of Korea, eligible employees and executive officers with one or more years of service are entitled to severance benefits upon the termination of their employment based on their length of service and rate of pay. As of December 31, 2021, 98% of all employees of the Company were eligible for severance benefits.

Changes in accrued severance benefits are as follows (in thousands):

	Year Ended December 31,	
	2021	2020
Beginning balance	$ 54,452	$ 53,344
Provisions	8,282	8,534
Severance payments	(6,679)	(10,937)
Translation adjustments	(4,488)	3,511
	51,567	54,452
Less: Cumulative contributions to severance insurance deposit accounts	(18,250)	(13,704)
The National Pension Fund	(53)	(66)
Group severance insurance plan	(200)	(220)
Accrued severance benefits, net	$ 33,064	$ 40,462

The severance benefits funded through the Company's National Pension Fund and group severance insurance plan will be used exclusively for payment of severance benefits to eligible employees. These amounts have been deducted from the accrued severance benefit balance.

Beginning in July 2018, the Company contributes to certain severance insurance deposit accounts a certain percentage of severance benefits that are accrued for eligible employees for their services from January 1, 2018. These accounts consist of time deposits and other guaranteed principal and interest, and are maintained at insurance companies, banks or security companies for the benefit of employees. The Company deducts the contributions made to these severance insurance deposit accounts from its accrued severance benefits.

The Company is liable to pay the following future benefits to its non-executive employees upon their normal retirement age (in thousands):

	Severance Benefit
2022	$ 264
2023	646
2024	908
2025	1,610
2026	2,290
2027 – 2031	18,565

The above amounts were determined based on the non-executive employees' current salary rates and the number of service years that will be accumulated upon their retirement dates. These amounts do not include amounts that might be paid to non-executive employees that will cease working with the Company before their normal retirement ages.

Korea's mandatory retirement age is 60 under the Employment Promotion for the Aged Act.

14. Stockholders' Equity and Stock-Based Compensation

Accelerated Stock Repurchase Program

On December 21, 2021, the Board of Directors authorized the Company to repurchase up to $75,000 thousand of the Company's outstanding common stock and the Company entered into an accelerated stock repurchase agreement (the "ASR Agreement") with JPMorgan Chase Bank, National Association ("JPM") to repurchase an aggregate of $37,500 thousand of the Company's common stock.

Pursuant to the terms of the ASR Agreement dated December 21, 2021, the Company paid to JPM $37,500 thousand in cash and received an initial delivery of 994,695 shares of its common stock in the open market for an aggregate purchase price of $20,073 thousand and a price per share of $20.18 on December 22, 2021.

As of December 31, 2021, the Company accounted for the remaining portion of the ASR Agreement as a forward contract indexed to its own common stock and recorded $17,427 thousand in additional paid-in capital in stockholders' equity in its consolidated balance sheets. The final number of shares to be delivered will be based on the Company's volume-weighted average stock price under the terms of the ASR Agreement less an agreed upon discount.

The ASR Agreement contains provisions customary for agreements of this type, including provisions for adjustments to the transaction terms, the circumstances under which the ASR Agreement may be accelerated, extended or terminated early by JPM and various acknowledgments, representations and warranties made by the parties to one another. Upon final settlement of the ASR Agreement, which is expected to occur during the fiscal quarter ending March 31, 2022, the Company may be entitled to receive additional shares of common stock from JPM or, under certain circumstances specified in the ASR Agreement, the Company may be required to deliver shares of common stock or make a cash payment, at its option, to JPM.

Equity Incentive Plans

The Company adopted its 2009 Common Unit Plan, or the 2009 Plan, effective December 8, 2009, which is administered by the Compensation Committee of the Company's Board of Directors (the "Compensation Committee"). The 2009 Plan terminated in connection with the Company's initial public offering in March 2011, and no additional options or other equity awards may be granted under the 2009 Plan. The Company adopted its 2011 Equity Incentive Plan, or the 2011 Plan, in March 2010. The Company amended and restated the 2011 Plan in February 2011, and the Company's stockholders approved the amendment in March 2011 to reflect that it became effective in 2011 in connection with the Company's initial public offering in March 2011. The 2011 Plan was amended on October 23, 2017, to revise the clawback policy of the 2011 Plan. The 2011 Plan was amended on April 26, 2018 to amend the tax withholding provisions as they relate to directed sales of shares. At the 2020 Annual Meeting of Stockholders, the Company's stockholders approved its 2020 Equity and Incentive Compensation Plan, or the 2020 Plan, which is administered by the Compensation Committee. Following the adoption of the 2020 Plan, no further awards may be issued under the 2011 Plan.

Awards may be granted under the 2020 Plan to the Company's employees, officers, directors, or certain consultants or those of any subsidiary of the Company. While the Company may grant incentive stock options only to employees, the Company may grant non-statutory stock options, stock appreciation rights, restricted stock, restricted stock units, performance shares, performance units, dividend equivalents and cash-based awards or other stock-based awards to any eligible participant, subject to terms and conditions determined by the Compensation Committee. The term of any options granted under the 2020 Plan shall not exceed ten years from the date of grant. As of December 31, 2021 an aggregate maximum of 11,352,919 shares were authorized and 2,116,324 shares were reserved for all future grants.

Stock options and stock appreciation rights must have exercise prices at least equal to the fair market value of the stock at the time of their grant pursuant to the 2011 Plan and 2020 Plan. Stock options typically vest over one to three years following grant, subject to the participant's continued service through the applicable vesting dates. As of December 31, 2020, no stock options or stock appreciation rights had been granted under 2020 Plan.

Restricted stock units granted under the 2011 Plan and 2020 Plan represent a right to receive shares of the Company's common stock when the restricted stock unit vests. No monetary payment (other than applicable tax withholding) shall be required as a condition of receiving shares pursuant to a restricted stock unit, the consideration for which shall be services actually rendered to a participating company or for its benefit. Stock issued pursuant to any restricted stock unit may (but need not) be made subject to vesting conditions based upon the satisfaction of such service requirements, conditions, restrictions or performance criteria as shall be established by the Compensation Committee and set forth in the award agreement evidencing such award. Restricted stock units typically vest over one to three years following grant, subject to the participant's continued service through the applicable vesting dates.

Restricted stock constitutes an immediate transfer of the ownership of shares of the Company's common stock to the participant in consideration of the performance of services, entitling such participant to voting, dividend and other ownership rights, subject to the substantial risk of forfeiture and restrictions on transfer determined by the Compensation Committee for a period of time determined by the Compensation Committee or until certain management objectives specified by the Compensation Committee are achieved. Each grant of restricted stock may be made without additional consideration or in consideration of a payment by the participant that is less than the fair market value per share of common stock on the grant date. Stock issued pursuant to any restricted stock award may (but need not) be made subject to vesting conditions based upon the satisfaction of such service requirements, conditions, restrictions or performance criteria as shall be established by the

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Compensation Committee and set forth in the award agreement evidencing such award. A grant of restricted stock may require that any and all dividends and distributions paid on restricted stock that remains subject to a substantial risk of forfeiture be automatically deferred and/or reinvested in additional restricted stock, which will be subject to the same restrictions as the underlying restricted stock, but any such dividends or other distributions on restricted stock must be deferred until, and paid contingent upon, the vesting of such restricted stock.

The following summarizes restricted stock unit activities for the year ended December 31, 2021.

	Number of Restricted Stock Units	Weighted Average Grant-Date Fair Value of Restricted Stock Units
Outstanding at December 31, 2020	999,756	$ 10.68
Granted	431,308	19.82
Vested	(480,465)	12.05
Forfeited	(116,638)	12.77
Outstanding at December 31, 2021	833,961	$ 14.33

Total compensation expenses recorded for the restricted stock units were $7,704 thousand, $6,311 thousand and $6,042 thousand for the years ended December 31, 2021, 2020 and 2019, respectively. As of December 31, 2021, there was $3,676 thousand of total unrecognized compensation cost related to unvested restricted stock units, which is expected to be recognized over a weighted average future period of 0.5 year. Total fair value of restricted stock units vested were $5,788 thousand, $3,839 thousand and $5,817 thousand for the years ended December 31, 2021, 2020 and 2019, respectively.

The following summarizes stock option activities for the year ended December 31, 2021. At the date of grant, all options had an exercise price not less than the fair value of common stock (aggregate intrinsic value in thousands):

	Number of Options	Weighted Average Exercise Price of Stock Options	Aggregate Intrinsic Value of Stock Options	Weighted Average Remaining Contractual Life of Stock Options
Outstanding at January 1, 2021	1,647,181	$ 11.24	$ 6,112	3.8 years
Exercised	(349,304)	12.94	2,965	—
Outstanding at December 31, 2021	1,297,877	$ 10.78	$ 13,262	3.1 years
Vested and Exercisable at December 31, 2021	1,297,877	$ 10.78	$ 13,262	3.1 years

Total compensation expenses recorded for the stock options were nil, nil and $11 thousand for the years ended December 31, 2021, 2020 and 2019, respectively. There were no unrecognized compensation cost related to stock options expected to vest as of December 31, 2021 and 2020.

Total weighted average grant-date fair value of vested options of continuing operations and discontinued operations were nil, nil and $165 thousand for the years ended December 31, 2021, 2020 and 2019, respectively.

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The Company utilizes the Black-Scholes option-pricing model to measure the fair value of each option grant. There were no grants of stock options during the years ended December 31, 2021, 2020 and 2019.

The number and weighted average grant-date fair value of the unvested stock options are as follows:

	Year Ended December 31,					
	2021		2020		2019	
	Number	Weighted Average Grant-Date Fair Value	Number	Weighted Average Grant-Date Fair Value	Number	Weighted Average Grant-Date Fair Value
Unvested options at the beginning of the period	—	—	—	—	130,191	$ 1.54
Vested options during the period	—	—	—	—	(107,100)	1.54
Forfeited options during the period	—	—	—	—	(345)	1.54
Exercised options during the period	—	—	—	—	(22,746)	1.54
Unvested options at the end of the period	—	—	—	—	0	$ —

15. Early termination and other charges, net

For the year ended December 31, 2021, the Company recorded in its consolidated statement of operations $3,430 thousand of non-recurring professional service fees and expenses incurred in connection with the regulatory requests, and recorded $1,419 thousand gain on sale of certain legacy equipment of the closed back-end line in the Company’s fabrication facility in Gumi (which was closed during the year ended December 31, 2018).

For the year ended December 31, 2020, the Company recorded in its consolidated statement of operations $4,422 thousand of early termination and other charges, net in connection with the headcount reduction program offered and paid to the employees during the fourth quarter of 2020. During the same period, the Company also recorded $554 thousand of non-recurring professional service fees and expenses incurred in connection with certain treasury and finance initiatives.

16. Foreign Currency Loss, Net

Net foreign currency gain or loss includes non-cash translation gain or loss associated with intercompany balances. A substantial portion of the Company’s net foreign currency gain or loss is non-cash translation gain or loss associated with intercompany long-term loans to the Company’s Korean subsidiary. The loans are denominated in U.S. dollars and are affected by changes in the exchange rate between the Korean won and the U.S. dollar. As of December 31, 2021, 2020 and 2019, the outstanding intercompany loan balances including accrued interest between the Korean subsidiary and the Dutch subsidiary were $344,411 thousand, $378,852 thousand and $686,485 thousand, respectively. The Korean won to U.S. dollar exchange rates were 1,185.5:1, 1,088.0:1 and 1,157.8:1 using the first base rate as of December 31, 2021, 2020 and 2019, respectively, as quoted by the KEB Hana Bank.

17. Income Taxes

The Company’s income tax expense (benefit) is composed of domestic and foreign income taxes depending on the relevant tax jurisdictions. Domestic income (loss) from continuing operations before income tax expense and income tax expense (benefit) are generated or incurred in the U.S, where the parent company resides.

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The components of income tax expense (benefit) attributable to income (loss) from continuing operations are as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Income (loss) from continuing operations before income tax expense			
Domestic	$41,566	$(12,305)	$(24,752)
Foreign	32,403	23,136	6,539
	73,969	10,831	(18,213)
Current income tax expense (benefit)			
Domestic	6,876	1	20
Foreign	9,415	(2,264)	3,771
Uncertain tax position liability (domestic)	—	—	(1)
Uncertain tax position liability (foreign)	(35)	(20)	2
	16,256	(2,283)	3,792
Deferred income tax benefit			
Domestic	1,314	(4,461)	—
Foreign	(309)	(39,484)	63
	1,005	(43,945)	63
Benefits from intra-period allocation	—	—	(1,655)
Total income tax expense (benefit)	$17,261	$(46,228)	$ 2,200
Effective tax rate	23.3%	—	—

The Company’s effective tax rate for the year ended December 31, 2021 was 23.3% as compared to negative effective tax rates for the years ended December 31, 2020 and 2019. The Company’s effective tax rate in 2021 was higher than the U.S. federal statutory rate of 21.0%, primarily due to the earnings from its operating subsidiary in Korea at a higher statutory tax rate. The increase in the effective tax rate in 2021 was primarily due to the higher taxable income from the Korean subsidiary and the reverse termination fee income recognized by the parent entity in the U.S. in relation to the Merger. The negative effective tax rate in 2020 as compared to the U.S. federal statutory rate of 21.0%, was primarily attributable to the reversal of the valuation allowances established against the deferred tax assets in connection with the Company’s operating subsidiary in Korea and parent entity in the U.S. The difference between the annual effective income tax rate and the U.S. federal statutory rate of 21.0% in 2019 primarily related to the non-income based withholding tax attributable to intercompany interest income of the Company’s Dutch subsidiary, application of different tax rates associated with certain earnings from the Company’s operations outside the U.S., the U.S. parent entity’s interest income, which is non-taxable for U.S. tax purposes, and the change of deferred tax assets and valuation allowances.

The Company’s Korean subsidiary recorded $1,655 thousand income tax benefits for the year ended December 31, 2019, primarily attributable to the application of the exception rule under ASC 740, in connection with the intra-period allocation, which resulted in the tax benefit in its continuing operations and tax expense in the discontinued operations for an equal and offsetting amount for the presentation purposes only.

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The provision for domestic and foreign income taxes incurred is different from the amount calculated by applying the statutory tax rates to the income (loss) from continuing operations before income tax expense. The significant items causing this difference are as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Provision computed at statutory rates	$ 15,533	$ 2,274	$ (3,825)
State income taxes, net of federal effect	—	730	(1,139)
Change in statutory tax rates	(259)	5,735	2,329
Difference in foreign tax rates	2,820	1,077	3,002
Permanent differences			
Derivative assets adjustment	(23)	56	315
TPECs, hybrid and other interest	(3,400)	(2,722)	7,812
Thin capitalization	—	339	988
Equity-based compensation	(802)	(73)	(14)
Permanent foreign currency gain (loss)	1,888	(1,813)	(1,734)
Penalty	427	176	151
GILTI	6,156	24,224	5,112
Intercompany debt restructuring	971	11,137	(18,435)
Other permanent differences	(767)	1,335	408
Withholding tax	2,060	2,291	3,043
State net operating loss write-off	9,844	—	—
Change in valuation allowance	(13,803)	(75,452)	7,817
Benefits from intra-period allocation	—	—	(1,655)
Tax credits claimed	(5,508)	(12,397)	(651)
Tax credits expired	—	—	170
Uncertain tax positions liability	(35)	(20)	1
Change in net operating loss carry-forwards	621	(3,314)	—
Foreign local taxes	723	43	152
Others	815	146	(1,647)
Income tax expense (benefit)	$ 17,261	$(46,228)	$ 2,200

Of the income tax benefit of $13,803 thousand attributable to the change in valuation allowances during the year ended December 31, 2021, $9,844 thousand is related to the release of the valuation allowance established against the deferred tax assets associated in the U.S. entity due to the dissolution of the Company's domestic subsidiary in 2021 subsequent to the sale of the Foundry Services Group business and Fab 4. The offsetting expense of $9,844 thousand was included in the state net operating loss write-off in 2021, resulting in no income tax effect in the year. The Company's parent entity in the U.S. will no longer be subject to state income taxes in 2022 and thereafter. The remaining $3,959 thousand represented the release of valuation allowances based on the assessment of the realizability of the related deferred tax assets in future tax years.

For the year ended December 31, 2020, a permanent difference of $24,224 thousand was included as Global intangible low-taxed income ("GILTI") in the U.S., and was primarily attributable to the income earned by certain foreign subsidiaries of the Company, including its Korean subsidiary, from the sale of the Foundry Services Group business and Fab 4.

The income tax benefit of $75,452 thousand was due to the changes in valuation allowances during the year ended December 31, 2020, of which $31,578 thousand related to the release of valuation allowances related to the Company’s current year earnings, which were mainly driven by GILTI inclusion at the U.S. parent company. The remaining $43,874 thousand represented the release of valuation allowances based on the realizability of the related deferred tax assets in future years. The Company’s operating subsidiary in Korea had generated three years of cumulative profits adjusted for permanent differences and is anticipated to generate taxable basis for the subsequent years. As a result, $39,413 thousand of valuation allowances, established against the Korean subsidiary’s deferred tax assets, were released as of December 31, 2020. In addition, management believes it is more likely than not that the Company’s parent in the U.S. would be able to utilize its net operating loss in future tax years, which would provide incremental tax savings of approximately $4,461 thousand. Therefore, the Company released its valuation allowances established against the U.S. parent’s deferred tax assets up to these anticipated tax savings as of December 31, 2020.

Of the permanent tax expense of $11,137 thousand related to intercompany debt restructuring recorded for the year ended December 31, 2020, $11,890 thousand related to the waiver and release of unpaid interests of the intercompany loans granted to the Korean subsidiary by the Dutch subsidiary. This transaction created taxable income for the Korean subsidiary, but did not result in a liability because of the utilization of loss carryforwards, which were used against income from cancellation of intercompany loans.

During 2019, the Company completed a restructuring of its intercompany borrowings between the Company and the other entities within the group of the Company. The main purpose of this restructuring was to simplify the intercompany debt structure of the group in order to align with the anti-hybrid mismatch provision mandated by the Organization for Economic Co-operation and Development (OECD). A portion of hybrid instruments issued by the Company’s Luxembourg subsidiary to its parent in the U.S. were subject to this restructuring. The Company recorded a net deferred tax asset of $18,435 thousand related to the unrealized foreign exchange translation loss, which was attributable to the changes in the balances of hybrid instruments that are denominated in Euros. However, there was no impact on the provision for income taxes due to a full valuation allowance against the deferred tax assets of the Company’s Luxembourg subsidiary.

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A summary of the composition of net deferred income tax assets (liabilities) as of December 31, 2021 and 2020 are as follows (in thousands):

	Year Ended December 31,	
	2021	2020
Deferred tax assets		
Inventory reserves	$ 1,313	$ 1,338
Accrued expenses	3,084	2,493
Property, plant and equipment	3,119	3,391
Accumulated severance benefits	11,842	12,343
Operating lease right-of-use liabilities	899	1,025
Foreign currency translation loss	17,280	9,129
NOL carry-forwards	87,636	121,389
Tax credit carry-forwards	14,164	15,395
Other long-term payable	2,457	944
Interest expense deduction limitation	4,731	—
Derivative liabilities	463	—
Others	1,610	1,629
Total deferred tax assets	148,598	169,076
Less: Valuation allowance	(94,212)	(115,636)
	54,386	53,440
Deferred tax liabilities		
Derivative assets	—	417
Prepaid expense	2,300	1,071
Severance benefit deposits	4,227	3,156
Operating lease right-of-use assets	899	1,025
Foreign currency translation gain	5,139	2,431
Others	726	799
Total deferred tax liabilities	13,291	8,899
Net deferred tax assets	$ 41,095	$ 44,541

The Company has not recognized a deferred tax liability related to outside basis differences inherent in its foreign subsidiaries because the investments in those foreign subsidiaries within the group are essentially permanent in duration or earnings in foreign subsidiaries are intended to be indefinitely reinvested. It is not practicable to estimate the amount of deferred income taxes not recorded that are associated with those outside basis differences. If circumstances change and it becomes apparent that the undistributed earnings from foreign subsidiaries will be remitted or the parent entity will dispose of its interest in the subsidiaries in the foreseeable future, and related income taxes have not been recognized by the parent entity, the parent entity will accrue as an expense of the current period income taxes attributable to that remittance or disposition.

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Changes in valuation allowance for deferred tax assets of continuing operations and discontinued operations for the years ended December 31, 2021, 2020 and 2019 are as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Beginning balance	$115,636	$246,224	$248,633
Additions	—	—	7,912
Reductions	(13,803)	(75,452)	—
Changes relating to the discontinued operations	—	(67,484)	—
NOL/tax credit claimed/expired	—	3,686	(3,529)
Translation adjustments	(7,621)	8,662	(6,792)
Ending balance	$ 94,212	$115,636	$246,224

As of December 31, 2021, 2020 and 2019, respectively, the Company recorded a valuation allowance of $94,212 thousand, $115,636 thousand and $246,224 thousand on its deferred tax assets related to temporary differences, net operating loss carry-forwards and tax credits of domestic and foreign subsidiaries.

The Company has recorded a full valuation allowance against certain foreign subsidiaries' deferred tax assets pertaining to its related tax loss carry-forwards that are not anticipated to generate a tax benefit. The valuation allowances at December 31, 2021, 2020 and 2019 were primarily attributable to its Luxembourg subsidiary.

	Year Ended December 31,		
	2021	2020	2019
NOL carry-forwards	$502,511	$604,977	$708,885

As of December 31, 2021, the Company had $502,511 thousand of net operating loss carry-forwards available to offset future taxable income, of which $288,548 thousand is associated with the Company's Luxembourg subsidiary, mainly attributable to certain expenses incurred in connection with its shareholding in the Company's Dutch subsidiary. Of the $288,548 thousand net operating loss carry-forwards, $279,848 thousand is carried forward indefinitely and the remaining $8,700 thousand expires from 2034 through 2037. The net operating loss carry-forwards retained by the Company's U.S. parent and its domestic subsidiary (which was closed in 2021 subsequent to the sale of the Foundry Services Group business and Fab 4) amounts to $198,813 thousand, which expires at various dates through 2040. The amount associated with the Company's Korean subsidiary of $11,499 thousand expires in 2026.

The Company utilized net operating loss of $70,672 thousand, $169,600 thousand and $30,945 thousand for the years ended December 31, 2021, 2020 and 2019, respectively. The Company also has Dutch tax credit carry-forwards of approximately $14,164 thousand as of December 31, 2021. The Dutch tax credits are carried forward to be used for an indefinite period of time.

Uncertainty in Income Taxes

The Company and its subsidiaries file income tax returns in Korea, Japan, Taiwan, and the U.S. and in various other jurisdictions. The Company is subject to income- or non-income tax examinations by tax authorities of these jurisdictions for all open tax years.

As of December 31, 2021, 2020 and 2019, the Company recorded $386 thousand, $414 thousand and $445 thousand of unrecognized tax benefits of continuing operations and discontinued operations, respectively.

A tabular reconciliation of the total amounts of unrecognized tax benefits at the beginning and end of each period is as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Unrecognized tax benefits, balance at the beginning	$414	$445	$ 426
Additions based on tax positions related to the current year	44	48	13
Reductions for tax positions of prior years	—	(34)	(1)
Lapse of statute of limitations	(79)	(76)	—
Translation adjustments	7	31	7
Unrecognized tax benefits, balance at the ending	$386	$414	$ 445

No interest and penalties related to unrecognized tax benefits were recognized as of December 31, 2021, 2020 and 2019.

The Company is currently unaware of any uncertain tax positions that could result in significant additional payments, accruals, or other material deviations from this estimate over the next 12 months.

18. Geographic and Other Information

The following sets forth information relating to the single continuing operating segment (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Revenues			
Standard products business			
Display Solutions	$ 205,322	$ 299,057	$ 308,531
Power Solutions	227,777	166,462	176,316
Total standard products business	433,099	465,519	484,847
Transitional Fab 3 foundry services	41,131	41,540	35,824
Total revenues	$ 474,230	$ 507,059	$ 520,671

	Year Ended December 31,		
	2021	2020	2019
Gross Profit			
Standard products business	$ 149,596	$ 127,099	$ 116,397
Transitional Fab 3 foundry services	3,947	1,218	—
Total gross profit	$ 153,543	$ 128,317	$ 116,397

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The following is a summary of net sales—standard products business (which does not include the Transitional Fab 3 Foundry Services) by geographic region, based on the location to which the products are billed (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Korea	$113,776	$106,415	$132,622
Asia Pacific (other than Korea)	306,333	347,597	343,652
United States	6,052	5,147	2,399
Europe	5,698	4,317	4,801
Others	1,240	2,043	1,373
Total	$433,099	$465,519	$484,847

For the years ended December 31, 2021, 2020 and 2019, of the Company's net sales—standard products business in Asia Pacific (other than Korea), net sales—standard products business in Greater China (China and Hong Kong) represented 65.8%, 82.0% and 95.8%, respectively, and net sales—standard products business in Vietnam represented 26.4%, 14.4% and 0.7%, respectively.

Net sales from the Company's top ten largest customers in the standard products business (which does not include the Transitional Fab 3 Foundry Services) accounted for 80%, 88% and 90% for the years ended December 31, 2021, 2020 and 2019, respectively.

For the year ended December 31, 2021, the Company had two customers that represented 42.5% and 10.4% of its net sales—standard products business, and for the year ended December 31, 2020, the Company had one customer that represented 56.2% of its net sales—standard products business, and for the year ended December 31, 2019, the Company had one customer that represented 53.8% of its net sales—standard products business.

As of December 31, 2021 and 2020, one customer accounted for 25.6% and 45.1% of accounts receivable, respectively.

98% of the Company’s property, plant and equipment are located in Korea as of December 31, 2021.

19. Merger Agreement

On March 25, 2021, the Company, South Dearborn Limited, an exempted company incorporated in the Cayman Islands with limited liability (“Parent”), formed by an affiliate of Wise Road Capital LTD, and Michigan Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Parent (“Merger Sub”), entered into an Agreement and Plan of Merger (as amended, the “Merger Agreement”), providing for, among other things and subject to the terms and conditions thereof, the merger of Merger Sub with and into the Company (the “Merger”), with the Company surviving the Merger as a wholly owned subsidiary of Parent.

The closing of the Merger was subject to certain conditions, including clearance by the Committee on Foreign Investment in the United States (“CFIUS”) under the Defense Production Act of 1950, as amended. The Company and Parent were advised that CFIUS clearance of the Merger would not be forthcoming and received permission from CFIUS to withdraw their joint filing. In connection therewith, the Company and Parent entered into a Termination and Settlement Agreement, dated December 13, 2021 (the “Termination Agreement”).

On December 20, 2021, the Merger Agreement was terminated pursuant to the Termination Agreement after the Company's receipt of a fee of $51,000 thousand from Parent and a new standby letter of credit, which secures a deferred fee of $19,200 thousand from Parent due on or before March 31, 2022. The Company recorded in its consolidated statement of operations $70,200 thousand income as part of merger-related costs (income), net for the year ended December 31, 2021, and in its consolidated balance sheet $19,200 thousand deferred fee as other receivables at December 31, 2021.

For the years ended December 31, 2021 and 2020, the Company incurred $34,673 thousand and $653 thousand, respectively, of professional fees and certain transaction related-expenses incurred in connection with the Merger, which were recognized in merger-related costs (income), net in the consolidated statements of operations.

20. Commitments and Contingencies

COVID-19 Pandemic

In December 2019, a strain of coronavirus causing a disease known as COVID-19 surfaced in Wuhan, China, resulting in significant disruptions among Chinese manufacturing and other facilities and travel throughout China. In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. Governmental authorities throughout the world have implemented numerous containment measures, including travel bans and restrictions, quarantines, shelter-in-place orders, and business restrictions and shutdowns, resulting in rapidly changing market and economic conditions. Although some of these restrictions and other containment measures have since been lifted or scaled back, ongoing surges of COVID-19 have in some cases resulted in the re-imposition of certain restrictions and containment measures, and may continue to lead to other restrictions being re-implemented in the foreseeable future in response to efforts to reduce the rapid spread of COVID-19.

The Company experienced some minor disruption in its Power Solutions business from assembly and test subcontractors located in China in the first quarter of 2020 as a result of the COVID-19 pandemic. To date, its external Display Solutions business contractors and sub-contractors have not been materially impacted by the COVID-19 pandemic. The Company is, however, unable to accurately predict the full impact that the COVID-19 pandemic will have on its future results of operations due to numerous uncertainties. The extent to which the COVID-19 pandemic impacts the Company's business, results of operations and financial condition will depend on future developments, which, despite progress in vaccination efforts, are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak, new information that may emerge concerning the severity of the COVID-19 pandemic, such as new strains of the virus, including the Delta and Omicron variants and any future variants that may emerge, which may impact rates of infection and vaccination efforts, developments or perceptions regarding the safety of vaccines and the extent and effectiveness of actions to contain the COVID-19 pandemic or treat its impact, including vaccination campaigns and lockdown measures, among others. In addition, recurrences or additional waves of COVID-19 cases could cause other widespread or more severe impacts depending on where infection rates are highest. The Company cannot presently predict the scope and severity of any potential business shutdowns or disruptions, but if the Company or any of its customers and suppliers were to experience prolonged business shutdowns or other disruptions, its ability to conduct its business could be materially and negatively affected, which could have a material adverse impact on its business, results of operations and financial condition.

The Company continues to closely monitor and evaluate the nature and scope of the impact of the COVID-19 pandemic to its business, consolidated results of operations, and financial condition, and may take further actions altering its business operations and managing its costs and liquidity that the Company deems necessary or appropriate to respond to this ongoing and uncertain global health crisis and the resulting global economic consequences.

Merger-related Complaints

Since April 22, 2021, eleven complaints (each, a “Shareholder Complaint,” and together, the “Shareholder Complaints”) were filed seeking to enjoin the Merger, or, if the Merger is consummated, rescind the Merger or recover damages, as well as an award of each plaintiff’s fees and litigation expenses. The Shareholder Complaints, each filed as an individual action by a purported stockholder of the Company, were captioned as Schulthess v. Magnachip Semiconductor Corporation, et al., Case No. 1:21-cv-03587 (S.D.N.Y.) (the “Schulthess Complaint”), Pittman v. Magnachip Semiconductor Corporation, et al., Case No. 1:21-cv-02306 (E.D.N.Y.) (the “Pittman Complaint”), Flanagan v. Magnachip Semiconductor Corporation, et al., Case No. 1:21-cv-03743 (S.D.N.Y.) (the “Flanagan Complaint”), Castelli v. Magnachip Semiconductor Corporation, et al., Case No. 1:21-cv-03769 (S.D.N.Y.) (the “Castelli Complaint”), Doolittle v. Magnachip Semiconductor Corporation, et al., Case No. 1:21-cv-03801 (S.D.N.Y.) (the “Doolittle Complaint”), Thomas v. Magnachip Semiconductor Corporation, et al., Case No. 1:21-cv-03860 (S.D.N.Y.) (the “Thomas Complaint”), Finger v. Magnachip Semiconductor Corporation, et al., Case No. 1:21-cv-03927 (S.D.N.Y.), Kent v. Magnachip Semiconductor Corporation, et al., Case No. 1:21-cv-00657 (D. Del.) (the “Kent Complaint”), Kennedy v. Magnachip Semiconductor Corporation, et al., Case No. 2:21-cv-02110 (E.D. Pa.) (the “Kennedy Complaint”), Monroy v. Magnachip Semiconductor Corporation, et al., Case No. 1:21-cv-04921 (S.D.N.Y.) (the “Monroy Complaint”), and Jones v. Magnachip Semiconductor Corporation, et al., Case No. 1:21-cv-04966 (S.D.N.Y.). Each Shareholder Complaint alleged either that the preliminary proxy statement filed by the Company with the Securities and Exchange Commission (“SEC”) on April 19, 2021 or the definitive proxy statement filed by the Company with the SEC on May 7, 2021, is false and/or misleading and asserts claims for violations of Section 14(a) and 20(a) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and SEC Rule 14a-9 against the Company and certain current or former members of the Company’s board of directors (the “Board”). The Schulthess Complaint, Castelli Complaint and Monroy Complaint also alleged breaches of fiduciary duties by certain current or former members of the Board. The Schulthess Complaint further alleged that the Company aided and abetted purported breaches of fiduciary duties by certain current or former members of the Board.

On June 8, 2021, the Company voluntarily made supplemental disclosures related to the Merger in response to certain allegations raised in the Shareholder Complaints described above in order to avoid the risk that the Shareholder Complaints may delay or otherwise adversely affect the consummation of the Merger and to minimize the expense of defending such actions. Since June 8, 2021, the plaintiffs who filed the Pittman Complaint, the Doolittle Complaint, the Flanagan Complaint, the Kennedy Complaint, the Kent Complaint, and the Thomas Complaint voluntarily dismissed their respective complaints.

On August 11, 2021, certain of the complaints filed in the U.S. District Court for the Southern District of New York were consolidated and interim co-lead plaintiffs’ counsel were appointed.

By January 5, 2022, all Shareholder Complaints were voluntarily dismissed.

21. Accumulated Other Comprehensive Income (Loss)

Accumulated other comprehensive income (loss) consists of the following at December 31, 2021 and 2020, respectively (in thousands):

	Year Ended December 31, 2021	Year Ended December 31, 2020
Foreign currency translation adjustments	$ (770)	$2,069
Derivative adjustments	(1,460)	1,634
Total	$(2,230)	$3,703

Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2021, 2020 and 2019 are as follows (in thousands):

Year Ended December 31, 2021	Foreign currency translation adjustments	Derivative adjustments	Total
Beginning balance	$ 2,069	$ 1,634	$ 3,703
Other comprehensive loss before reclassifications	(2,839)	(3,913)	(6,752)
Amounts reclassified from accumulated other comprehensive loss	—	819	819
Net current-period other comprehensive loss	(2,839)	(3,094)	(5,933)
Ending balance	$ (770)	$ (1,460)	$(2,230)

Year Ended December 31, 2020	Foreign currency translation adjustments	Derivative adjustments	Total
Beginning balance	$ (4,205)	$ 1,545	$(2,660)
Other comprehensive income before reclassifications	6,274	1,452	7,726
Amounts reclassified from accumulated other comprehensive income	—	(1,363)	(1,363)
Net current-period other comprehensive income	6,274	89	6,363
Ending balance	$ 2,069	$ 1,634	$ 3,703

Year Ended December 31, 2019	Foreign currency translation adjustments	Derivative adjustments	Total
Beginning balance	$ (20,061)	$ (49)	$(20,110)
Other comprehensive income (loss) before reclassifications	15,856	(2,894)	12,962
Amounts reclassified from accumulated other comprehensive loss	—	4,488	4,488
Net current-period other comprehensive income	15,856	1,594	17,450
Ending balance	$ (4,205)	$ 1,545	$ (2,660)

MAGNACHIP SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(CONTINUED)
(TABULAR DOLLARS IN THOUSANDS, EXCEPT SHARE DATA)

There was an income tax benefit of $752 thousand related to changes in accumulated other comprehensive loss for the year ended December 31, 2021. There was an income tax expense of $316 thousand related to changes in accumulated other comprehensive income for the year ended December 31, 2020.

22. Earnings (Loss) Per Share

The following table illustrates the computation of basic and diluted earnings (loss) per common share for the years ended December 31, 2021, 2020 and 2019:

	Year Ended December 31,		
	2021	2020	2019
	(In thousands of U.S. dollars, except share data)		
Basic earnings (loss) per share			
Income (loss) from continuing operations	$ 56,708	$ 57,059	$ (20,413)
Income (loss) from discontinued operations, net of tax	—	287,906	(1,413)
Net income (loss)	$ 56,708	$ 344,965	$ (21,826)
Basic weighted average common stock outstanding	44,879,412	35,213,525	34,321,888
Basic earnings (loss) per common share			
Continuing operations	$ 1.26	$ 1.62	$ (0.59)
Discontinued operations	—	8.18	(0.05)
Total	$ 1.26	$ 9.80	$ (0.64)
Diluted earnings (loss) per share			
Income (loss) from continuing operations	$ 56,708	$ 57,059	$ (20,413)
Add back: Interest expense on Exchangeable Notes	959	5,708	—
Income (loss) from continuing operations allocated to common stockholders	$ 57,667	$ 62,767	$ (20,413)
Income (loss) from discontinued operations, net of tax	—	287,906	(1,413)
Net income (loss) allocated to common stockholders	$ 57,667	$ 350,673	$ (21,826)
Basic weighted average common stock outstanding	44,879,412	35,213,525	34,321,888
Net effect of dilutive equity awards	1,403,789	1,145,906	—
Net effect of assumed conversion of 5.0% Exchangeable Notes to common stock	1,426,172	10,144,155	—
Diluted weighted average common stock outstanding	47,709,373	46,503,586	34,321,888
Diluted earnings (loss) per common share			
Continuing operations	$ 1.21	$ 1.35	$ (0.59)
Discontinued operations	—	6.19	(0.05)
Total	$ 1.21	$ 7.54	$ (0.64)

The following outstanding instruments were excluded from the computation of diluted loss per share, as they have an anti-dilutive effect on the calculation:

	Year Ended December 31,		
	2021	2020	2019
Options	50,000	651,417	2,177,045
Restricted Stock Units	—	—	1,043,303

For the year ended December 31, 2019, 10,153,620 shares of potential common stock from the assumed conversion of Exchangeable Notes were excluded from the computation of diluted loss per share as the effect were anti-dilutive for the period.

Rights Plan

The Company entered into a Rights Agreement, dated as of December 13, 2021, between the Company and American Stock Transfer & Trust Company, LLC, as rights agent (the "Rights Agreement"), and the Board of Directors of the Company authorized and declared a dividend of one preferred stock purchase right (a "Right" and collectively, the "Rights") for each share of the Company's common stock, par value $0.01 per share, outstanding at the close of business on December 23, 2021. Each Right, once exercisable, will entitle the registered holder to purchase from the Company one one-thousandth of a share of Series A-1 Junior Participating Preferred Stock, par value $0.01 per share, at a purchase price of $80, subject to adjustment (the "Purchase Price"). The Rights are not presently exercisable and remain attached to the shares of common stock unless and until the occurrence of the earlier of the following (the "Distribution Date"): (i) the tenth day after the public announcement or disclosure by the Company or any person or group of affiliated or associated persons that any person or group of affiliated or associated persons has become an "Acquiring Person" by obtaining beneficial ownership of 12.5% (or 20% in the case of a "passive institutional investor," which is defined generally as any person who has reported beneficial ownership of shares of common stock on Schedule 13G under the Securities Exchange Act of 1934) or more of the Company's outstanding common stock, subject to certain exceptions; or (ii) the tenth business day (or such later date as the Company's Board of Directors may designate before a person or group of affiliated or associated persons becomes an Acquiring Person) after (and not including) the commencement of, or first public announcement of the intent of any person to commence, a tender or exchange offer by any person or group of affiliated or associated persons, which would, if consummated, result in such person or group becoming an Acquiring Person. The Board of Directors may redeem all of the Rights for $0.001 per Right at any time before any person or group of affiliated or associated persons becomes an Acquiring Person. In addition, at any time on or after any person or group of affiliated or associated persons becomes an Acquiring Person (but before any person or group of affiliated or associated persons becomes the owner of 50% or more of the Company's outstanding common stock), the Board of Directors may exchange all or part of the Rights (other than the Rights beneficially owned by the Acquiring Person and certain affiliated persons) for shares of common stock at an exchange ratio of one share of common stock per Right. The Rights will expire at the close of business on December 12, 2022, unless redeemed or exchanged prior to that time.

If any person or group of affiliated or associated persons becomes an Acquiring Person, then, after the Distribution Date, each Right (other than Rights beneficially owned by the Acquiring Person and certain affiliated persons or transferees thereof) will entitle the holder to purchase, for the Purchase Price, a number of shares of common stock having a market value of twice the Purchase Price. Alternatively, if, after any person or group of affiliated or associated persons becomes an Acquiring Person, (1) the Company is involved in a merger or other business combination in which the Company is not the surviving corporation or its common stock is changed into or exchanged for other securities or assets; or (2) the Company or one or more of its subsidiaries sell or otherwise transfer assets or earning power aggregating more than 50% of the assets or earning power of the Company and its subsidiaries, taken as a whole, then each Right (other than Rights beneficially owned by the Acquiring Person and certain affiliated persons) will entitle the holder to purchase, for the Purchase Price, a number of shares of common stock of the other party to such business combination or sale (or in certain circumstances, an affiliate) having a market value of twice the Purchase Price.

23. Subsequent Events

Derivative contracts

In January 2022, the Company and NFIK entered into derivative contracts of zero cost collars for the period from January 2023 to June 2023. The total notional amounts are $30,000 thousand.

In January 2022, the Company and SC entered into derivative contracts of zero cost collars for the period from October 2022 to December 2022. The total notional amounts are $9,000 thousand.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer ("Principal Executive Officer") and Chief Financial Officer ("Principal Financial Officer"), as appropriate, to allow for timely decisions regarding required disclosure.

Management of the Company, with the participation of our Principal Executive Officer and our Principal Financial Officer, conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as such term is defined under Rules 13a-15(e) and 15d-15(e) promulgated under the Exchange Act, as of December 31, 2021. Based on this evaluation, our Principal Executive Officer and our Principal Financial Officer have concluded that our disclosure controls and procedures were effective as of December 31, 2021.

(b) Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is a process designed under the supervision of our Principal Executive Officer and our Principal Financial Officer, and effected by our Board, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

Under the supervision and with the participation of our Principal Executive Officer and our Principal Financial Officer, we conducted an evaluation of the effectiveness of the Company's internal control over financial reporting as of December 31, 2021, based on the criteria set forth in *Internal Control—Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on our assessment, we concluded that our internal control over financial reporting was effective as of December 31, 2021.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2021 has been audited by Samil PricewaterhouseCoopers, an independent registered public accounting firm, as stated in their report which appears in Item 8 of this Report.

(c) Changes in Internal Control Over Financial Reporting

There were no changes in internal control over financial reporting during the quarter ended December 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(e)

Effective as of February 23, 2022, Ms. Shin Young Park, the Company’s Chief Financial Officer, entered into an Executive Service Agreement (the “Executive Service Agreement”) with the Company and its Korean subsidiary, Magnachip Semiconductor, Ltd. (“MSK”). In exchange for her services as Chief Financial Officer of the Company and MSK, Ms. Park will be entitled under the Executive Service Agreement to an annual base salary at a rate of $310,000 per annum and shall be eligible to receive and annual cash bonus under the terms of the Company’s cash bonus plan then in effect, with an initial anticipated targeted annual bonus of 50% of Ms. Park’s annual base salary, subject to increase at the discretion of the Board. In addition, Ms. Park will be eligible to participate in the equity incentive program applicable to the Company’s executives, subject, in all cases, as shall be determined and approved by the Board in its sole discretion. Ms. Park will also be entitled to participate in the Company’s standard benefit plans, programs and arrangements in the same manner as the Company’s similarly situated executives.

Under the Executive Service Agreement, Ms. Park’s engagement may be terminated with or without cause, with or without good reason, or upon Ms. Park’s death or disability. To the extent that Ms. Park is terminated without cause or Ms. Park resigns for good reason, the Company is obligated under the Executive Service Agreement to (i) (x) pay Ms. Park’s then effective base salary for a period of up to twelve months after the date of termination and (y) if such termination date occurs after June 30 of the calendar year, pay Ms. Park’s pro rated annual bonus with respect to the calendar year in which such termination occurs; provided that the severance payment shall instead equal one and one-half (1.5) times Ms. Park’s then effective base salary to the extent that such termination without cause or resignation for good reason takes place while the Company is party to a definitive corporate transaction, the consummation of which would result in a change of control, or within 18 months following a change of control, and (ii) provide for vesting of any outstanding unvested equity awards as set forth in the 2011 Plan or the 2020 Plan, as applicable and the applicable award agreements. The amounts payable pursuant to the immediately preceding sentence are contingent on Ms. Park’s execution and non-revocation of a general waiver and release of claims agreement and compliance of non-competition, non-disclosure and other covenants contained in the Executive Service Agreement.

(e)

On February 22, 2022, the Company’s Board of Directors approved the allocation of a discretionary cash retention bonus award pool to certain executive officers and other key employees of the Company, including named executive officers Young-Joon (YJ) Kim, the Company’s Chief Executive Officer, Theodore Kim, the Company’s Chief Compliance Officer and General Counsel, Shin Young Park, the Company’s Chief Financial Officer, Woung Moo Lee, the Company’s General Manager of Worldwide Sales, and Chan Ho Park, the Company’s General Manager of Power Solutions. The purpose of the retention bonus awards is to ensure continued retention of key executive officers and employees, as well as to reward such employees for their substantial contributions in connection with the previously contemplated and terminated merger agreement with an affiliate of Wise Road Capital LTD. The retention bonus awards are expected to be paid in December 2022, subject to the employee’s continued service (unless such employee is terminated without cause or resigns for good reason). The cash retention bonus awards allocated to each named executive officer are: Young-Joon (YJ) Kim ($600,001); Theodore Kim ($529,400); Shin Young Park ($330,875); Woung Moo Lee ($185,290); and Chan Ho Park ($132,350).

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not Applicable.

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PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item relating to our executive officers is included in "Item 1. Business—Executive Officers of the Company." The other information required by this item is incorporated by reference to our definitive proxy statement relating to our 2022 annual meeting of stockholders or will be included by amendment to this Report within 120 days after the end of the fiscal year to which this Report relates.

Item 11. Executive Compensation

The information required by this item is incorporated by reference to our definitive proxy statement relating to our 2022 annual meeting of stockholders or will be included by amendment to this Report within 120 days after the end of the fiscal year to which this Report relates.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this item is incorporated by reference to our definitive proxy statement relating to our 2022 annual meeting of stockholders or will be included by amendment to this Report within 120 days after the end of the fiscal year to which this Report relates.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated by reference to our definitive proxy statement relating to our 2022 annual meeting of stockholders or will be included by amendment to this Report within 120 days after the end of the fiscal year to which this Report relates.

Item 14. Principal Accounting Fees and Services.

The information required by this item is incorporated by reference to our definitive proxy statement relating to our 2022 annual meeting of stockholders or will be included by amendment to this Report within 120 days after the end of the fiscal year to which this Report relates.

PART IV

Item 15. Exhibits and Financial Statement Schedules

1. Financial Statements

The information required by this item is included in Item 8 of Part II of this Report.

2. Financial Statement Schedules

Financial Statement Schedules are omitted because of the absence of the conditions under which they are required or because the information required by such omitted schedules is set forth in the financial statements or the notes thereto.

3. Exhibits

Exhibit No.	Exhibit Description
2.1	Business Transfer Agreement, dated as of March 31, 2020 among by and among Magnus Semiconductor, LLC, MagnaChip Semiconductor S.A. and MagnaChip Semiconductor, Ltd. (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K filed on March 31, 2020)
2.2-1	Agreement and Plan of Merger, dated as of March 25, 2021, by and among South Dearborn Limited, Michigan Merger Sub, Inc., and Magnachip Semiconductor Corporation (incorporated by reference to Exhibit 2.1 to our Current Report on Form 8-K filed on March 29, 2021).
2.2-2	Letter Agreement, dated as of June 11, 2021, by and among Magnachip Semiconductor Corporation, South Dearborn Limited and Michigan Merger Sub, Inc. (incorporated by reference to Exhibit 2.1 to our Current Report on Form 8-K filed on June 14, 2021).
2.2-3	Letter Agreement, dated as of August 23, 2021, by and among Magnachip Semiconductor Corporation, South Dearborn Limited and Michigan Merger Sub, Inc. (incorporated by reference to Exhibit 2.1 to our Current Report on Form 8-K filed on August 23, 2021)
2.2-4	Termination and Settlement Agreement, dated December 13, 2021 by and between Magnachip Semiconductor Corporation and South Dearborn Limited (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K on December 13, 2021)
3.1	Certificate of Conversion of MagnaChip Semiconductor LLC (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed on March 11, 2011).
3.2	Certificate of Incorporation of MagnaChip Semiconductor Corporation (incorporated by reference to Exhibit 3.2 to our Current Report on Form 8-K filed on March 11, 2011).
3.3	Certificate of Amendment to the Certificate of Incorporation of Magnachip Semiconductor Corporation (incorporated by reference to Exhibit 3.1 to our Current report on Form 8-K filed on December 30, 2020)
3.4	Amended and Restated Bylaws of MagnaChip Semiconductor Corporation (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed on May 6, 2016).
3.5	Form of Plan of Conversion of MagnaChip Semiconductor LLC (incorporated by reference to Exhibit 3.6 to our Amendment No. 2 to Registration Statement on Form S-1 filed on May 11, 2010 (Registration No. 333-165467)).
3.6	Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock of MagnaChip Semiconductor Corporation, as filed with the Secretary of the State of Delaware on March 6, 2015 (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed on March 6, 2015).

Exhibit No.	Exhibit Description
3.7	Certificate of Designation of Series A-1, Junior Participating Preferred Stock of Magnachip Semiconductor Corporation, as filed with the Secretary of State of Delaware on December 13, 2021.
4.1#	Description of Securities
4.2	Rights Agreement, dated December 13, 2021 by and between Magnachip Semiconductor Corporation and American Stock Transfer & Trust Company, LLC (incorporated by reference to Exhibit 4.1 to our Current Report on Form 8-K on December 13, 2021)
10.1	Intellectual Property License Agreement, dated as of October 6, 2004, by and between Hynix Semiconductor Inc. and MagnaChip Semiconductor, Ltd. (Korea) (incorporated by reference to Exhibit 10.2 to our Amendment No. 1 to Registration Statement on Form S-1 filed on April 20, 2010 (Registration No. 333-165467)).
10.2	Amended & Restated License Agreement (TrenchDMOS), dated as of September 19, 2007, by and between Advanced Analogic Technologies, Inc. and MagnaChip Semiconductor, Ltd. (Korea) (incorporated by reference to Exhibit 10.8 to Amendment No. 2 to MagnaChip Semiconductor S.A.'s and MagnaChip Semiconductor Finance Company's Registration Statement on Form S-4 (Registration No. 333-168516) filed on October 14, 2010).
10.3*	MagnaChip Semiconductor Corporation 2011 Equity Incentive Plan (as amended on April 26, 2018) (incorporated by reference to Exhibit 10.24 to our Annual Report on Form 10-K filed on February 22, 2019).
10.4*	MagnaChip Semiconductor Corporation 2020 Equity and Incentive Compensation Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on June 17, 2020).
10.5*	MagnaChip Semiconductor Corporation 2011 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.26 to our Amendment No 9 to the Registration Statement on Form S-1 filed on February 18, 2011 (Registration No. 333-165467)).
10.6*	MagnaChip Semiconductor Corporation Form of Indemnification Agreement with Directors and Officers (incorporated by reference to Exhibit 10.49 to our Registration Statement on Form S-1 filed on March 15, 2010 (Registration No. 333-165467)).
10.7*	Offer Letter, dated as of April 15, 2013, by and between MagnaChip Semiconductor, Ltd. (Korea) and Young-Joon Kim (incorporated by reference to Exhibit 10.36 to our Annual Report on Form 10-K filed on February 12, 2015).
10.7-1*	Amendment of Offer Letter, dated July 27, 2015, from MagnaChip Semiconductor, Ltd. (Korea) to Young-Joon Kim (incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q filed on November 6, 2015).
10.7-2*	Severance Agreement, dated November 3, 2015, from MagnaChip Semiconductor, Ltd. (Korea) and MagnaChip Semiconductor Corporation to Young-Joon Kim (incorporated by reference to Exhibit 10.2 to our Quarterly Report on Form 10-Q filed on November 6, 2015).
10.7-3*	Employment Agreement, dated as of April 26, 2018, by and between MagnaChip Semiconductor Corporation and Young Joon Kim (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K filed on April 27, 2018).
10.7-4*	Amendment to Employment Agreement by and between MagnaChip Semiconductor Corporation and Young Joon Kim, dated as of September 3, 2018 (incorporated by reference to Exhibit 10.29-4 to our Annual Report on Form 10-K filed on February 22, 2019).
10.7-5*	Form of Restricted Stock Units Agreement for Chief Executive Officer (incorporated by reference to Exhibit 10.2 to our Current Report on Form 8-K filed on April 27, 2018).

Exhibit No.	Exhibit Description
10.7-6*	Form of Restricted Stock Units Agreement (TSR Performance) for Chief Executive Officer (incorporated by reference to Exhibit 10.3 to our Current Report on Form 8-K filed on April 27, 2018).
10.7-7*	Form of Restricted Stock Units Agreement (AOP Performance) for Chief Executive Officer (incorporated by reference to Exhibit 10.4 to our Current Report on Form 8-K filed on April 27, 2018).
10.8*	Offer Letter, dated as of September 27, 2013, by and between MagnaChip Semiconductor, Ltd. (Korea) and Theodore Kim (incorporated by reference to Exhibit 10.37 to our Annual Report on Form 10-K filed on February 12, 2015).
10.8-1*	Severance Agreement, dated November 3, 2015, from MagnaChip Semiconductor, Ltd. (Korea) and MagnaChip Semiconductor Corporation to Theodore S. Kim (incorporated by reference to Exhibit 10.4 to our Quarterly Report on Form 10-Q filed on November 6, 2015).
10.8-2*	Employment Agreement, dated as of October 22, 2018, by and between MagnaChip Semiconductor Corporation and Theodore Kim (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K filed on October 26, 2018).
10.9*	Offer Letter, dated as of October 16, 2013, by and between MagnaChip Semiconductor, Ltd. (Korea) and Woung Moo Lee (incorporated by reference to Exhibit 10.36 to our Annual Report on Form 10-K filed on February 22, 2016).
10.9-1*	Severance Agreement, dated November 3, 2015, from MagnaChip Semiconductor, Ltd. (Korea) and MagnaChip Semiconductor Corporation to Woung Moo Lee (incorporated by reference to Exhibit 10.6 to our Quarterly Report on Form 10-Q filed on November 6, 2015).
10.9-2*	Employment Agreement, dated as of October 22, 2018, by and between MagnaChip Semiconductor Corporation and Woung Moo Lee (incorporated by reference to Exhibit 10.2 to our Current Report on Form 8-K filed on October 26, 2018).
10.9-3*	Separation Agreement, dated as of December 29, 2021 among Magnachip Semiconductor, Ltd. (Korea), Magnachip Semiconductor Corporation and Young Soo Woo (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K filed on January 3, 2022).
10.10*	Executive Service Agreement, dated as of May 25, 2020, by and between Young Soo Woo, MagnaChip Semiconductor Corporation and MagnaChip Semiconductor, Ltd. (incorporated by reference to Exhibit 10.8 to our Quarterly Report on Form 10-Q filed on August 7, 2020)
10.11*	Executive Service Agreement, dated as of June 1, 2020, by and between Chan Ho Park, MagnaChip Semiconductor Corporation and MagnaChip Semiconductor, Ltd. (incorporated by reference to Exhibit 10.9 to our Quarterly Report on Form 10-Q filed on August 7, 2020)
10.12*	MagnaChip Semiconductor LLC Profit Sharing Plan as adopted on December 31, 2009 and amended on February 15, 2010 (incorporated by reference to Exhibit 10.54 to our Quarterly Report on Form 10-Q filed on August 5, 2011).
10.13*	MagnaChip Semiconductor Corporation 2011 Form of Stock Option Agreement (U.S. Participants) (incorporated by reference to Exhibit 10.55 to our Amendment No 9 to the Registration Statement on Form S-1 filed on February 18, 2011 (Registration No. 333-165467)).
10.14*	MagnaChip Semiconductor Corporation 2011 Form of Stock Option Agreement (Non-U.S. Participants) (incorporated by reference to Exhibit 10.56 to our Amendment No 9 to the Registration Statement on Form S-1 filed on February 18, 2011 (Registration No. 333-165467)).

Exhibit No.	Exhibit Description
10.15*	MagnaChip Semiconductor Corporation 2011 Form of Restricted Stock Units Agreement (U.S. Participants) (incorporated by reference to Exhibit 10.57 to our Amendment No 9 to the Registration Statement on Form S-1 filed on February 18, 2011 (Registration No. 333-165467)).
10.16*	MagnaChip Semiconductor Corporation 2011 Form of Restricted Stock Units Agreement (Non-U.S. Participants) (incorporated by reference to Exhibit 10.58 to our Amendment No 9 to the Registration Statement on Form S-1 filed on February 18, 2011 (Registration No. 333-165467)).
10.17*	MagnaChip Semiconductor Corporation 2011 Form of Restricted Stock Agreement (U.S. Participants) (incorporated by reference to Exhibit 10.59 to our Amendment No 9 to the Registration Statement on Form S-1 filed on February 18, 2011 (Registration No. 333-165467)).
10.18*	MagnaChip Semiconductor Corporation 2011 Form of Restricted Stock Agreement (Non-U.S. Participants) (incorporated by reference to Exhibit 10.60 to our Amendment No 9 to the Registration Statement on Form S-1 filed on February 18, 2011 (Registration No. 333-165467)).
10.19*	MagnaChip Semiconductor Corporation 2011 Form of Restricted Stock Units Agreement (Nonemployee Director) (incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q filed on May 6, 2016).
10.20*	Form of Restricted Stock Units Agreement (incorporated by reference to Exhibit 10.3 to our Current Report on Form 8-K filed on October 26, 2018).
10.21*	Form of Restricted Stock Units Agreement (TSR Performance) (incorporated by reference to Exhibit 10.4 to our Current Report on Form 8-K filed on October 26, 2018).
10.22*	Form of Restricted Stock Units Agreement (AOP Performance) (incorporated by reference to Exhibit 10.5 to our Current Report on Form 8-K filed on October 26, 2018).
10.23*	MagnaChip Semiconductor Corporation 2020 Form of Restricted Stock Units Agreement (Non-employee Directors) (incorporated by reference to Exhibit 99.2 to our Registration Statement on Form S-8 filed on July 15, 2020)
10.24*	MagnaChip Semiconductor Corporation 2020 Form of Restricted Stock Units Agreement (Section 16 Officers) (incorporated by reference to Exhibit 99.3 to our Registration Statement on Form S-8 filed on July 15, 2020).
10.25*	MagnaChip Semiconductor Corporation 2020 Form of Restricted Stock Units Agreement—Financial Performance (CEO) (incorporated by reference to Exhibit 99.4 to our Registration Statement on Form S-8 filed on July 15, 2020).
10.26*	MagnaChip Semiconductor Corporation 2020 Form of Restricted Stock Units Agreement—Financial Performance (Non-CEO Section 16 Officers) (incorporated by reference to Exhibit 99.5 to our Registration Statement on Form S-8 filed on July 15, 2020).
10.27*	MagnaChip Semiconductor Corporation 2020 Form of Restricted Stock Units Agreement—TSR Performance (CEO) (incorporated by reference to Exhibit 99.6 to our Registration Statement on Form S-8 filed on July 15, 2020).
10.28*	MagnaChip Semiconductor Corporation 2020 Form of Restricted Stock Units Agreement—TSR Performance (Non-CEO Section 16 Officers) (incorporated by reference to Exhibit 99.7 to our Registration Statement on Form S-8 filed on July 15, 2020).
10.29	ASR Agreement, dated December 21, 2021 by and between Magnachip Semiconductor Corporation and JPMorgan Chase Bank, National Association (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K filed on December 23, 2021)

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Exhibit No.	Exhibit Description
10.30#	Executive Service Agreement, effective as of February 23, 2022, by and between Shin Young Park, Magnachip Semiconductor Corporation and Magnachip Semiconductor, Ltd.
21.1#	Subsidiaries of the Registrant
23.1#	Consent of Samil PricewaterhouseCoopers
31.1#	Certification of Chief Executive Officer required by Rule 13(a)-14(a), as adopted pursuant to § 302 of the Sarbanes-Oxley Act of 2002
31.2#	Certification of Chief Financial Officer required by Rule 13(a)-14(a), as adopted pursuant to § 302 of the Sarbanes-Oxley Act of 2002
32.1†	Certification of Chief Executive Officer required by 18 U.S.C § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002
32.2†	Certification of Chief Financial Officer required by 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002
101.INS#	Inline XBRL Instance Document
101.SCH#	Inline XBRL Taxonomy Extension Schema Document
101.CAL#	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF#	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB#	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE#	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

Footnotes:

(1) Certain portions of this document have been omitted pursuant to a grant of confidential treatment by the SEC.
* Management contract, compensatory plan or arrangement
# Filed herewith
† Furnished herewith

Item 16. Form 10-K Summary

None.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

MAGNACHIP SEMICONDUCTOR CORPORATION

By:	/s/ Young-Joon Kim
Name:	Young-Joon Kim
Title:	Chief Executive Officer and Director
Date:	February 23, 2022

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

	Date
/s/ Young-Joon Kim Young-Joon Kim, *Chief Executive Officer and Director (Principal Executive Officer)*	February 23, 2022
/s/ Shin Young Park Shin Young Park, *Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)*	February 23, 2022
/s/ Melvin Keating Melvin Keating, *Director*	February 23, 2022
/s/ Ilbok Lee Ilbok Lee, *Director*	February 23, 2022
/s/ Camillo Martino Camillo Martino, *Non-Executive Chairman of the Board of Directors*	February 23, 2022
/s/ Gary Tanner Gary Tanner, *Director*	February 23, 2022
/s/ Liz Chung Liz Chung, *Director*	February 23, 2022

Exhibit 4.1

DESCRIPTION OF REGISTRANT'S SECURITIES

The following brief description of the capital stock of Magnachip Semiconductor Corporation ("us", "our", "we", or the "Company") is a summary. This summary is not complete and is subject to and qualified in its entirety by reference to the complete text of our Certificate of Incorporation ("Certificate of Incorporation"), and our Amended and Restated Bylaws ("Bylaws") previously filed with the U.S. Securities and Exchange Commission and incorporated by reference as an exhibit to this Annual Report on Form 10-K of which this Exhibit 4.1 forms a part. We encourage you to read the Certificate of Incorporation and Bylaws carefully.

General

The Certificate of Incorporation provides that the Company may issue 155,000,000 shares of capital stock, of which 150,000,000 shares are designated as common stock, par value $0.01 per share, and 5,000,000 shares are designated as of preferred stock, par value $0.01 per share.

Common Stock

Voting Rights

Holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. Our stockholders do not have cumulative voting rights in the election of directors. Except as required by law or our Certificate of Incorporation and Bylaws, the vote of a majority of the shares represented in person or by proxy at any meeting at which a quorum is present will be sufficient for the transaction of any business at a meeting.

Dividends

Subject to preferences held by, or that may be granted to, any outstanding shares of preferred stock, holders of our common stock will be entitled to receive ratably those dividends as may be declared by our board of directors out of funds legally available for such distributions, as well as any other distributions made to our stockholders.

Other Rights

In the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in all of our assets remaining after we pay our liabilities and any liquidation preferences granted to the holders of outstanding shares of preferred stock.

Holders of our common stock have no preemptive or other subscription or conversion rights.

There are no redemption or sinking fund provisions applicable to our common stock.

Preferred Stock

The Certificate of Incorporation authorizes the issuance of 5,000,000 shares of blank check preferred stock with such designation, rights and preferences as may be determined from time to time by our board of directors. Accordingly, our board of directors is empowered, without stockholder approval, to issue preferred stock with dividend, liquidation, conversion, voting or other rights which could adversely affect the voting power or other rights of the holders of common stock. The preferred stock could be utilized as a method of discouraging, delaying or preventing a change in control of us.

Rights Agreement

On December 12, 2021, our Board of Directors authorized and declared a dividend of one preferred stock purchase right (a "Right" and collectively, the "Rights") for each share of the Company's common stock, par value $0.01 per share (the "Common Stock"), outstanding at the close of business on December 23, 2021 (the "Record Date"). Each Right, once exercisable, will entitle the registered holder to purchase from the Company one one-thousandth of a share of Series A-1 Junior Participating Preferred Stock, par value $0.01 per share (the "Preferred Stock"), at a purchase price of $80, subject to adjustment (the "Purchase Price"). The specific terms of the Rights are contained in the Rights Agreement, dated as of December 13, 2021 by and between the Company and American Stock Transfer & Trust Company, LLC, as Rights Agent (the "Rights Agreement").

The following summary of the principal terms of the Rights Agreement is a general description only and is qualified in its entirety by the full text of the Rights Agreement which is attached as Exhibit 4.2 to this Annual Report on Form 10-K and incorporated by reference herein. Capitalized terms used but not otherwise defined herein will have meanings given to such terms in the Rights Agreement.

The Rights

Initially, the Rights will trade with, and will be inseparable from, the Common Stock. The Rights will be evidenced (unless earlier expired, redeemed or terminated) by the certificates for the Common Stock (or, in the case of uncertificated shares of Common Stock, by the book-entry account that evidences record ownership of such shares) and not by separate Right Certificates. The registered holders of the Common Stock will be deemed to be the registered holders of the associated Rights. Rights are issued to all shares of Common Stock outstanding as of the Record Date or issued (on original issuance or out of treasury) after the Record Date but before the earlier of the Distribution Date described below and the Expiration Date. Before the exercise of the Rights, the Rights do not give their holders any rights as stockholders of the Company, including the right to vote or to receive dividends.

Exercisability

The Rights become exercisable and separate from the Common Stock on the Distribution Date. The "Distribution Date" means the earlier of:

- The tenth day after the public announcement or disclosure by the Company or any person or group of affiliated or associated persons that any person or group of affiliated or associated persons has become an "Acquiring Person" by obtaining beneficial ownership of 12.5% (or 20% in the case of a Passive Institutional Investor) or more of the Company's outstanding Common Stock (the "Stock Acquisition Date") (or, if the Board determines on or before such tenth day to effect an exchange in accordance with the terms of the Rights Agreement and determines that a later date is advisable, such later date that is not more than twenty days after the Stock Acquisition Date); or

- The tenth business day (or such later date as the Board of Directors may designate before a person or group of affiliated or associated persons becomes an Acquiring Person) after the commencement of, or first public announcement of the intent of any person to commence, a tender or exchange offer by any person or group of affiliated or associated persons, which would, if consummated, result in such person or group becoming an Acquiring Person;

The Distribution Date shall in no event be prior to the Record Date.

"Passive Institutional Investor" is defined generally as any person who has reported beneficial ownership of shares of Common Stock on Schedule 13G under the Securities Exchange Act of 1934 (the "Exchange Act").

A person beneficially owns securities that such person or any of its affiliates or associates, directly or indirectly, beneficially owns (as determined pursuant to Rule 13d-3 and Rule 13d-5 under the Exchange Act as in effect on the date hereof), or, subject to certain exceptions, has the right or obligation to acquire or to vote pursuant to any agreement, arrangement or understanding or upon the exercise of conversion rights, exchange rights, rights, warrants or options or otherwise. A person shall also be deemed to beneficially own any securities that are beneficially owned, directly or indirectly, by any other person (or any of its affiliates or associates) and with respect to such person (or its affiliates or associates) has any agreement, arrangement or understanding for the purpose of acquiring, holding voting or disposing any such securities or are in respect of any Synthetic Long Positions held by such person or its affiliates or associates that (1) are disclosed pursuant to a Schedule 13D or Schedule 13G under the Exchange Act or (2) if not disclosed on a Schedule 13D or Schedule 13G, if and only if the Board determines that such person shall be deemed to be the beneficial owner of, and to beneficially own, the Common Stock in respect of such Synthetic Long Positions. A "<u>Synthetic Long Position</u>" is any option, warrant, swap, participation, convertible security, stock appreciation right or other right or derivative transaction (in each case other than the Rights), whether or not presently exercisable, that has an exercise or conversion privilege or a settlement payment or mechanism at a price related to Common Stock or a value determined in whole or in part with reference to, or derived in whole or in part from, the market price or value of Common Stock (without regard to whether (a) such right or derivative transaction conveys any voting rights in such Common Stock to such Person, (b) such right or derivative transaction is subject to settlement in whole or in part in cash, Common Stock or other property or (c) such Person may have entered into other transactions that hedge or offset the economic effect of such right or derivative transaction) and that increases in value as the value of Common Stock increases or that provides to the holder of such right an opportunity, directly or indirectly, to profit or share in any profit derived from any increase in the value of Common Stock.

The Rights will not become exercisable due solely to the ownership of Common Stock by existing stockholders who own 12.5% (or 20% in the case of a Passive Institutional Investor) or more of the Company's outstanding Common Stock as of the date of the Rights Agreement unless any such stockholder increases its Beneficial Ownership of the Common Stock to an amount equal to or greater than the greater of (i) 12.5% (or 20% in the case of a Passive Institutional Investor) and (ii) the sum of (x) the lowest Beneficial Ownership of such stockholder as a percentage of the outstanding Common Stock as of any time from and after the date of the Rights Agreement plus (y) 1.0%. Furthermore, the Rights will not be exercisable if the Company's Board of Directors determines in good faith that a person or group of affiliated or associated persons has become an Acquiring Person inadvertently and such person or group reduces its holdings below 12.5% (or 20% in the case of a Passive Institutional Investor) of the Company's outstanding Common Stock as promptly as practicable. Finally, the Rights will not be exercisable if the Company repurchases some of its own Common Stock and, as a result, a person's or group's holdings constitute 12.5% (or 20% in the case of a Passive Institutional Investor) or more of the remaining outstanding Common Stock so long as such person or group does not make any further acquisitions of the Common Stock after the repurchase.

Issuance of Right Certificates

Before the Distribution Date, the Rights will be evidenced by the Common Stock certificates (or, if the Common Stock is uncertificated, by the book-entry account that evidences record ownership of such Common Stock) and will be transferred with and only with such Common Stock certificates. After the Distribution Date, the Rights Agent will mail separate certificates evidencing the Rights to each record holder of the Common Stock (or, if so agreed by the Company and Rights Agent in the case of uncertificated Common Stock, by appropriate changes to the book-entry account that evidences record ownership of such Common Stock) at the close of business on the Distribution Date. Thereafter, the Rights will be transferable separately from the Common Stock. Any Rights held by an Acquiring Person are null and void and may not be exercised.

Consequences of a Person or Group Becoming an Acquiring Person

- *Flip-In*. If any person or group of affiliated or associated persons becomes an Acquiring Person, then, after the Distribution Date, each Right (other than Rights beneficially owned by the Acquiring Person and certain affiliated persons or transferees thereof) will entitle the holder to purchase, for the Purchase Price, a number of shares of Common Stock having a market value of twice the Purchase Price.
- *Flip-Over*. Alternatively, if, after any person or group of affiliated or associated persons becomes an Acquiring Person, (1) the Company is involved in a merger or other business combination in which the Company is not the surviving corporation or its Common Stock is changed into or exchanged for other securities or assets; or (2) the Company or one or more of its subsidiaries sell or otherwise transfer assets or earning power aggregating more than 50% of the assets or earning power of the Company and its subsidiaries, taken as a whole, then each Right will entitle the holder to purchase, for the Purchase Price, a number of shares of common stock of the other party to such business combination or sale (or in certain circumstances, an affiliate) having a market value of twice the Purchase Price.

Expiration

The Rights will expire at the close of business on December 12, 2022 unless earlier redeemed or exchanged by the Company, as discussed below.

Redemption

The Board of Directors may redeem all of the Rights for $0.001 per Right at any time before any person or group of affiliated or associated persons becomes an Acquiring Person. If the Board redeems any Right, it must redeem all of the Rights. Once the Rights are redeemed, the right to exercise the Right will terminate and, thereafter, the only right of the Rights holders will be to receive the redemption price of $0.001 per Right. The redemption price may be adjusted to reflect any stock split, stock dividend or similar transaction occurring after the date of the Rights Agreement.

Exchange

At any time on or after any person or group of affiliated or associated persons becomes an Acquiring Person (but before any person or group of affiliated or associated persons becomes the owner of 50% or more of the Company's outstanding Common Stock), the Board of Directors may exchange all or part of the Rights (other than the Rights beneficially owned by the Acquiring Person and certain affiliated persons) for shares of Common Stock at an exchange ratio of one share of Common Stock per Right.

Anti-Dilution Provisions

The Board of Directors may adjust the Purchase Price of the Preferred Stock, the number and kind of shares of Preferred Stock issuable and the number of outstanding Rights to prevent dilution that may occur from a stock dividend, stock split or reclassification of the Preferred Stock. No adjustments to the Purchase Price of less than 1% will be made.

Amendments

For so long as the Rights are redeemable, the Rights Agreement may be amended in any respect without the approval of any holders of shares of Common Stock. At any time when the Rights are no longer redeemable, the Company may amend the Rights Agreement without the approval of any Rights holders if the amendment does not (i) adversely affect the interests of the Rights holders as such (other than any Acquiring Person and certain affiliated persons); (ii) cause the Rights Agreement again to become amendable other than in accordance with the Rights Agreement; or (iii) cause the Rights again to become redeemable.

Preferred Stock Provisions

Each share of Preferred Stock, if issued:

- will not be redeemable;
- will entitle holders to receive, when, as and if declared by the Board of Directors, quarterly dividend payments in an amount per share equal to 1,000 times the aggregate per share amount of all cash dividends, and 1,000 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock since the immediately preceding Quarterly Dividend Payment Date, or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series A-1 Junior Participating Preferred Stock;
- will entitle holders upon liquidation to $1,000 per share of the Preferred Stock, plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment;
- will entitle holders to the same voting power as one thousand shares of Common Stock on all matters submitted to a vote of the stockholders of the Company, and each fractional share of the Preferred Stock will entitle the holder thereof to a pro rata fractional vote; and
- will entitle holders to a per share payment equal to one thousand times the aggregate amount of stock, securities, cash and any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged via merger, consolidation, or a similar transaction.

Each authorized fractional share of Preferred Stock will entitle the holder thereof to a pro rata fraction of the foregoing. The value of one one-thousandth of a share of Preferred Stock should approximate the value of one share of Common Stock.

Certain Anti-Takeover Effects of Delaware Law

We are subject to the provisions of Section 203 of the Delaware General Corporation Law (the "DGCL"), regulating corporate takeovers and which has an anti-takeover effect with respect to transactions not approved in advance by our board of directors, including discouraging takeover attempts that might result in a premium over the market price for shares of our common stock. In general, those provisions prohibit a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder, unless:

- the transaction is approved by the board of directors before the date the interested stockholder attained that status;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or
- on or after such date, the business combination is approved by the board of directors and authorized at a meeting of stockholders, and not by written consent, by at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

In general, DGCL Section 203 defines a business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, DGCL Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by any such entity or person.

A Delaware corporation may opt out of this provision by express provision in its original certificate of incorporation or by amendment to its certificate of incorporation or bylaws approved by its stockholders. However, we have not opted out of this provision.

Certain Provisions of the Certificate of Incorporation and Bylaws

Provisions in the Certificate of Incorporation and Bylaws may have the effect of delaying or preventing a change of control or changes in our management. Among other things, the Certificate of Incorporation and Bylaws:

- authorize our board of directors to issue, without stockholder approval, preferred stock with such terms as our board of directors may determine;
- prohibit action by written consent of our stockholders;
- prohibit any person other than our board of directors, the chairman of our board of directors, our Chief Executive Officer or holders of at least 25% of the voting power of all then outstanding shares of capital stock of the corporation entitled to vote generally in the election of directors to call a special meeting of our stockholders; and
- specify advance notice requirements for stockholder proposals and director nominations.

Our common stock is listed on The New York Stock Exchange under the symbol “MX.”

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC.

EXECUTIVE SERVICE AGREEMENT

This Executive Service Agreement (this "Agreement"), effective as of February 23, 2022 (the "Effective Date"), is made by and between Shin Young Park (the "Executive"), on the one hand, and Magnachip Semiconductor Corporation, a Delaware corporation ("Parent"), and Magnachip Semiconductor, Ltd., a wholly owned subsidiary of Parent ("MSK" and together with Parent and each of its Affiliates that may engage the Executive from time to time, including any and all successors thereto, the "Company"), on the other hand.

RECITALS

A. The Company and the Executive desire to enter into this Agreement to assure the Company of the continued exclusive services of the Executive and to set forth the rights and duties of the parties hereto.

B. Except as otherwise set forth herein, this Agreement is intended to supersede any prior agreements or understandings, whether formal or informal, between the Executive and the Company, including the offer letter dated as of January 4, 2019 , by and between the Executive and MSK (the "Prior Agreement").

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and of the respective covenants and agreements set forth below, the parties hereto agree as follows:

1. Certain Definitions.

(a) "Affiliate" shall mean, with respect to any Person, any other Person directly or indirectly controlling, controlled by or under common control with such Person, where "control" shall have the meaning given such term under Rule 405 of the Securities Act of 1933, as amended.

(b) "Agreement" shall have the meaning set forth in the preamble hereto.

(c) "Annual Base Salary" shall have the meaning set forth in Section 3(a). For the avoidance of doubt, no other compensation (including the Annual Bonus and the Equity Awards) or benefit shall be included in, or be a part of, the Annual Base Salary.

(d) "Annual Bonus" shall have the meaning set forth in Section 3(b).

(e) "Award Agreements" shall have the meaning set forth in Section 1(o).

(f) "Board" shall mean the Board of Directors of the Company.

(g) The Company shall have "Cause" to terminate the Executive's engagement pursuant to Section 4(a)(iii) hereunder upon (i) the Executive's conviction of, or a plea of *nolo contendere* to, a felony or other crime involving moral turpitude (or, in each case, equivalent crimes in a jurisdiction other than the United States), but excluding minor traffic violations; (ii) the Executive's commission of fraud, embezzlement or misappropriation of funds; (iii) a breach by the Executive of her fiduciary duty to the Company; (iv) the Executive's refusal to fulfill the Executive's duties and responsibilities (other than by reason of death or Disability) to the Company; (v) the Executive's material violation of any established lawful policy of the Company; (vi) the Executive's material breach of any of the terms of any agreement the Executive has with the Company; (vii) the Executive's habitual use of illicit drugs or habitual abuse of alcohol that affects her job performance; or (viii) any gross negligence, material misconduct or material wrongful act or omission on the Executive's part in connection with the Executive's duties and responsibilities to the Company. The Company may terminate the Executive's engagement for Cause under this Agreement, following issuance to the Executive of written notice of the circumstances the Company believes constitute Cause, at any time within 90 days after it becomes aware of such circumstances; provided, however, that, if the basis for termination is curable, then the Executive shall have 15 days after receipt of such written notice to cure such basis, and if not cured, the Company may terminate the Executive's engagement for Cause at any time within 90 days after the expiration of such cure period. If, within 90 days subsequent to termination of Executive's engagement for any reason (other than by the Company for Cause), the Company determines that the Executive's engagement could have been terminated for Cause, the Executive's engagement will be deemed to have been terminated for Cause for all purposes, and the Executive will be required to disgorge to the Company all amounts received pursuant to this Agreement or otherwise on account of such termination that would not have been payable to the Executive had such termination been by the Company for Cause; provided, however, that the Company's ability to retroactively determine that the Executive's engagement could have been terminated for Cause under this sentence will cease upon the occurrence of a Change in Control.

(h) "CEO" shall mean the Chief Executive Officer of Parent.

(i) "Change in Control" has the meaning given to such term in the Equity Incentive Plan.

(j) "Code" shall mean the Internal Revenue Code of 1986, as amended.

(k) "Date of Termination" shall mean the effective date of termination of Executive's engagement, as set forth in Section 4.

(l) "Disability" shall mean a finding by the Company of the Executive's incapacitation through any illness, injury, accident or condition of either a physical or psychological nature that has resulted in her inability to perform the essential functions of her position, even with reasonable accommodations, for 180 calendar days during any period of 365 consecutive calendar days, and such incapacity is expected to continue.

(m) "Effective Date" shall have the meaning set forth in the preamble hereto.

(n) "Executive" shall have the meaning set forth in the preamble hereto.

(o) "Equity Awards" means the equity awards that the Executive may receive subject to the Board's approval and under the terms of the Equity Incentive Plan and standard forms of award agreements under the Equity Incentive Plan (the "Award Agreements").

(p) "Equity Incentive Plan" means, as applicable, the Magnachip Semiconductor Corporation 2020 Equity and Incentive Compensation Plan or any predecessor or successor equity incentive plan of Parent, as amended or amended and restated from time to time.

(q) "Final Base Salary" means the Executive's Annual Base Salary as in effect immediately prior to the termination of the Executive's engagement (or, if clause (i) or (ii) of the definition of "Good Reason" is implicated, immediately before any relevant diminution of the Executive's Annual Base Salary).

(r) The Executive shall have "Good Reason" to resign or otherwise terminate her engagement with the Company pursuant to Section 4(a)(v) in the event that any of the following actions are taken by the Company without her consent: (i) if upon or following a Change in Control, a diminution in the Executive's Annual Base Salary or Target Annual Bonus opportunity; (ii) if prior to a Change in Control, a diminution in (A) the Executive's Annual Base Salary, other than an across the board cumulative reduction of no more than 15% that applies in a similar manner to all similarly-situated members of the senior management of the Company or (B) the Executive's Target Annual Bonus opportunity (other than a reduction that occurs as a result of a reduction described in the foregoing clause (A)); (iii) the Company's material breach of any of the material terms of any material agreement between the Executive and the Company; or (iv) a non-temporary relocation of the Executive's primary work location by the Company to a location that is more than 35 miles from the Executive's principal place of service as of the date hereof (which the parties acknowledge is Seoul, South Korea and/or Cheongju, South Korea) and that increases the Executive's one-way commute to work by more than 35 miles. The Executive will not have Good Reason to terminate her engagement and receive payments or benefits under Section 5(b) unless the Executive provides the Board and the CEO with written notice of the circumstances the Executive believes constitute Good Reason within 30 days after the occurrence of such circumstances. If the Company does not cure within 15 days after receipt of such written notice, then the Executive may terminate her engagement for Good Reason at any time within 90 days after the expiration of such cure period. If the Executive terminates her engagement prior to the expiration of the 15-day cure period or more than 90 days after the expiration of the cure period, the Executive will not be treated as having terminated her engagement for Good Reason.

(s) "Inventions" shall have the meaning set forth in Section 7(c)(i).

(t) "Notice of Termination" shall have the meaning set forth in Section 4(b).

(u) "Parent" shall have the meaning set forth in the preamble hereto.

(v) "Person" shall mean an individual, partnership, corporation, limited liability company, business trust, joint stock company, trust, unincorporated association, joint venture, governmental authority or other entity of whatever nature.

(w) "Prior Agreement" shall have the meaning set forth in the Recitals.

(x) "Proprietary Rights" shall have the meaning set forth in Section 7(c)(i).

(y) "Target Annual Bonus" means the Executive's target Annual Bonus, expressed as a percentage of the Annual Base Salary, under the terms of the Company's cash bonus plan as is then in effect.

(z) "Term" shall have the meaning set forth in Section 2(b).

2. Executive's Service.

(a) In General. The Company shall engage the Executive, and the Executive shall provide services to the Company, for the period set forth in Section 2(b), in the position(s) set forth in Section 2(c), and upon the other terms and conditions herein provided.

(b) Term. The term of this Agreement (the "Term") shall begin on the Effective Date and remain in effect, until terminated as provided in Section 4. Notwithstanding anything herein to the contrary, the Executive's engagement with the Company shall be "at-will", and the Executive or the Company may terminate the Executive's engagement for any reason or no reason at any time, in either case subject to Section 4.

(c) Position and Duties.

(i) During the Term, the Executive shall serve as Chief Financial Officer of Parent and MSK, with responsibilities, duties and authority customary for such position; provided, however, that the Company may alter such responsibilities, duties and authority from time to time. The Executive shall also serve as an officer of other Affiliates of the Company as requested by the Company. Except as otherwise provided herein, the Executive shall not be entitled to any additional compensation for service as a member of the Board or other positions or titles she may hold with any Affiliate of the Company to the extent she is so appointed. The Executive shall report to the CEO or any other officer of the Company as may be designated by the Board or the CEO. The Executive agrees to observe and comply with the Company's rules and policies as adopted from time to time by the Company. The Executive shall devote her full business time, skill, attention and best efforts to the performance of her duties hereunder; provided, however, that the Executive shall be entitled to (A) serve on civic, charitable and religious boards and (B) manage the Executive's personal and family investments, in each case, to the extent that such activities do not materially interfere with the performance of the Executive's duties and responsibilities hereunder, are not in conflict with the business interests of the Company or its Affiliates, and do not otherwise compete with the business of the Company or its Affiliates.

(ii) The Executive shall be principally based at the Company's offices in Seoul, South Korea or Cheongju, South Korea. The Executive shall perform her duties and responsibilities to the Company at such principal place of service and at such other location(s) to which the Company may reasonably require the Executive to travel for Company business purposes.

3. Compensation and Related Matters.

(a) Annual Base Salary. During the Term, the Executive shall receive a base salary at a rate of Three Hundred Ten Thousand U.S. Dollars (USD 310,000.00) per annum, which shall be paid in accordance with the customary payroll practices of the Company (the "Annual Base Salary").

(b) Annual Bonus. With respect to each calendar year that ends during the Term, the Executive shall be eligible to receive an annual cash bonus (the "Annual Bonus") under the terms of the Company's cash bonus plan as is then in effect. It is currently intended that the Board will set the Executive's target Annual Bonus at 50% of the Executive's Annual Base Salary, which target Annual Bonus may be increased by the Board in its discretion.

(c) Equity Compensation. While the Executive is engaged to provide services to the Company, the Executive will be eligible to participate in the equity incentive program applicable to the Company's executives. All grants of Equity Awards shall, in all cases, be determined and approved by the Board in its sole discretion. Prior to receiving any Equity Award, the Executive must execute the Award Agreement(s) in the form(s) approved by the Board. Accordingly, the actual terms of any Equity Award will be governed by the Equity Incentive Plan and the actual Award Agreement and documents evidencing the grant of such Equity Award, and not by any other terms set forth herein or otherwise.

(d) Benefits. During the Term, the Executive shall be entitled to participate in the benefit plans, programs and arrangements of the Company now (or, to the extent determined by the Board, hereafter) in effect, in accordance with their terms, including medical and welfare benefits and company automobile, all on the terms applicable to other similarly situated executives of the Company.

(e) Annual Vacation. During the Term, the Executive shall be entitled to paid-time-off (including vacation days) on an annual basis in accordance with the Company's applicable policies and practices. Under the policies applicable to other similarly situated executives of the Company, any unused paid-time-off (including vacation days) shall neither be carried over to the following year nor be compensated for. Any paid-time-off (including vacation days) shall be taken at the reasonable and mutual convenience of the Company and the Executive.

(f) Business Expenses. During the Term, the Company shall reimburse the Executive for all reasonable travel and other business expenses incurred by her in the performance of her duties to the Company, in accordance with the Company's expense reimbursement policies and procedures.

4. Termination. The Executive's engagement hereunder may be terminated without any breach of this Agreement only under the following circumstances:

(a) Circumstances.

(i) Death. The Executive's engagement hereunder shall terminate upon her death.

(ii) Disability. If the Executive has incurred a Disability, the Company may give the Executive written notice of its intention to terminate the Executive's engagement. In that event, the Executive's engagement with the Company shall terminate effective on the later of the 30th day after receipt of such notice by the Executive and the date specified in such notice; provided, however, that, if the Executive shall have returned to full-time performance of her duties hereunder within the 30-day period following receipt of such notice and shall have reasonably demonstrated that the Executive is not subject to a Disability, then the Executive's engagement shall not be terminated pursuant to this clause (ii).

(iii) Termination with Cause. The Company may terminate the Executive's engagement with Cause.

(iv) Termination without Cause. The Company may terminate the Executive's engagement without Cause.

(v) Resignation with Good Reason. The Executive may resign from her engagement with Good Reason.

(vi) Resignation without Good Reason. The Executive may resign from her engagement without Good Reason upon not less than thirty (30) days' advance written notice to the Board and the CEO.

(b) Notice of Termination. Any termination of the Executive's engagement with the Company, whether by the Company or the Executive under this Section 4 (other than termination pursuant to Section 4(a)(i)), shall be communicated by written notice to the other party hereto (i) indicating the specific termination provision in this Agreement relied upon, (ii) except with respect to a termination pursuant to Section 4(a)(iv) or (vi), setting forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's engagement under the provision so indicated, and (iii) specifying a Date of Termination as provided herein (a "Notice of Termination"). If the Company delivers a Notice of Termination under Section 4(a)(ii), the Date of Termination shall be at least thirty (30) days following the date of such notice; provided, however, that such notice need not specify a Date of Termination, in which case the Date of Termination shall be determined pursuant to Section 4(a)(ii). If the Company delivers a Notice of Termination under Section 4(a)(iii) or 4(a)(iv), the Date of Termination shall be, in the Company's sole discretion, the date on which the Executive receives such notice or any subsequent date selected by the Company. If the Executive delivers a Notice of Termination under Section 4(a)(v) or 4(a)(vi), the Date of Termination shall be at least thirty (30) days following the date of such notice; provided, however, that the Company may, in its sole discretion, accelerate the Date of Termination to any date that occurs following the Company's receipt of such notice, without changing the characterization of such termination as voluntary, even if such date is prior to the date specified in such notice. The failure by the Company or the Executive to set forth in the Notice of Termination any fact or circumstance that contributes to a showing of Cause or Good Reason shall not waive any right of the Company or the Executive hereunder or preclude the Company or the Executive from asserting such fact or circumstance in enforcing the Company's or the Executive's rights hereunder.

(c) Termination and Resignation of All Positions. Upon termination of the Executive's engagement for any reason, the Executive agrees to resign, as of the Date of Termination or such other date requested by the Company, from all positions and offices that the Executive then holds with the Company and its Affiliates. In addition, as applicable, if the Executive fails to resign from any such positions or offices, the Company shall be relieved of its obligations under Section 5(b).

5. Company Obligations upon Termination of the Executive's Engagement.

(a) In General. Subject to Section 11(a), upon termination of the Executive's engagement for any reason, the Executive (or the Executive's estate) shall be entitled to receive (i) any amount of the Executive's Annual Base Salary earned through the Date of Termination not theretofore paid, (ii) any Annual Bonus for the year prior to the year in which the Date of Termination occurred that was earned but not yet paid, (iii) any expenses owed to the Executive under Section 3(f), and (iv) any vested payment or benefit arising from the Executive's participation in, or benefits under, any qualified benefit plans, programs or arrangements under Section 3(d) (other than severance plans, programs or arrangements), which amounts shall be payable in accordance with the terms and conditions of such benefit plans, programs or arrangements including, where applicable, any death and disability benefits (the "Accrued Obligations"). Notwithstanding anything herein to the contrary, upon a Termination with Cause, and only in the case of such a termination, the Accrued Obligations shall not include the amount set forth in clause (ii) of the preceding sentence or any other amounts or benefits not payable in accordance with the terms and conditions of any benefit plan, program or arrangement.

(b) Termination without Cause or Resignation with Good Reason. Subject to Section 11(a) and subject to the Executive's continued compliance with the covenants contained in Sections 6, 7 and 10, if the Company terminates the Executive's engagement without Cause pursuant to Section 4(a)(iv) or the Executive resigns from her engagement with Good Reason pursuant to Section 4(a)(v), the Company shall, in addition to the Accrued Obligations:

(i) continue to pay the Final Base Salary in accordance with the Company's customary payroll practices during the period beginning on the Date of Termination and ending on the earlier to occur of (A) the first anniversary of the Date of Termination and (B) the first date that the Executive violates any covenant contained in Section 6 or 7 (the "Salary Payment"), and if the Date of Termination occurs after June 30 of the calendar year in which the Date of Termination occurs, pay the Executive a prorated portion of the Annual Bonus payable with respect to the calendar year in which such termination occurs (which prorated amount shall equal the amount of the Annual Bonus multiplied by a fraction, (x) the numerator of which equals the number of days that have elapsed between January 1 of such calendar year and the Date of Termination and (y) the denominator of which equals 365), based on actual performance achievement for such year, and payable if and when annual bonuses are paid to other senior executives of the Company with respect to such year (the "Pro Rata Bonus", together with the Salary Payment, the "Severance Payment"); provided, however, that, if the Company terminates the Executive's engagement without Cause pursuant to Section 4(a)(iv) or the Executive resigns from her engagement with Good Reason pursuant to Section 4(a)(v), in each case, either (x) during a period of time when the Company is party to a definitive corporate transaction agreement, the consummation of which would result in a Change in Control, or (y) within 18 months following a Change in Control (such a termination a "CIC Qualified Termination"), then the Severance Payment shall instead equal one and one-half (1.5) times the Final Base Salary, payable over 12 months, in each case so long as the Release (as defined below) has become effective and the Executive has not violated any covenant contained in Section 6 or 7, in which case the Severance Payment shall be forfeited; and

(ii) provide for vesting of any outstanding unvested Equity Awards, as set forth in the Equity Incentive Plan and the applicable Award Agreement(s);

provided, however, that all payments and benefits to be paid or provided pursuant to this Section 5(b) shall commence on the 60th day following the Date of Termination, and, only with respect to any cash payments, the initial installment of such payments shall include a lump-sum payment of all amounts accrued under this Section 5(b) from the Date of Termination through the date of such initial payment.

Notwithstanding anything herein to the contrary, if the Executive breaches any of the covenants contained in Sections 6 and 7, the Company shall have the right to cease providing any payments or benefits under this Section 5(b) and, if requested, the Executive shall repay to the Company within 60 days of such request any previously paid payments or benefits under this Section 5(b); provided that the foregoing shall not apply unless the Company provides the Executive with written notice of the circumstances it believes constitutes a breach of such covenants within 90 days after it becomes aware of such circumstances; provided further that, if the basis for the alleged breach is curable, then the Executive shall have 15 days after receipt of such written notice to cure such basis.

Payment of the amounts and benefits under this Section 5(b) is in lieu of any other severance or separation pay payable to the Executive whether under any previous agreement, offer letter or severance program, plan or policy, applicable law (including the laws of the Republic of Korea) or other statute, or otherwise.

(c) Release. Notwithstanding anything herein to the contrary, the amounts payable and benefits to be provided to the Executive under Section 5(b), other than the Accrued Obligations, shall be contingent upon and subject to the Executive's (or the Executive's estate's, if applicable) execution and non-revocation of a general waiver and release of claims agreement generally consistent with the form attached as Exhibit A hereto (as appropriately modified to comply with applicable law, the "Release") (and the expiration of any applicable revocation period), on or prior to the 60th day following the Date of Termination.

(d) Survival. The obligations of any of the parties under this Agreement which by their nature may require either partial or total performance after the termination of the Term or this Agreement (including those under Sections 6, 7, 8, 9 and 10) and Sections 11, 12, 14, 15, 22, 23, 24 and 25 will survive any termination of this Agreement.

6. Non-Competition; Non-Solicitation; Non-Hire.

(a) To the fullest extent permitted by applicable law, the Executive agrees that during the Executive's engagement with the Company, and for the 12-month period following termination of the Executive's engagement for any reason, the Executive will not, directly or indirectly, have any equity or equity-based interest, or work or otherwise provide services as an employee, contractor, officer, owner, consultant, partner, director or otherwise, in any business anywhere in the world that competes with any of the businesses of the Company. Notwithstanding the foregoing, the Executive shall be permitted to acquire a passive stock or equity interest in such a business, provided that the stock or other equity interest acquired is not more than five percent (5%) of the outstanding interest in such business. Notwithstanding anything herein to the contrary, if prior to the expiration of the aforementioned 12-month period the Executive enters into any agreement that obligates the Executive to provide any form of services to the Company, then such 12-month period shall commence on the date that the Executives ceases to provide services under such agreement.

(b) To the fullest extent permitted by applicable law, the Executive agrees that during the Executive's engagement with the Company, and for the 12-month period following termination of the Executive's engagement for any reason, the Executive will not, directly or indirectly, on the Executive's own behalf or on behalf of another (i) solicit, induce or attempt to solicit or induce any officer, director, employee or consultant of the Company to terminate their relationship with or leave the Company, or in any way interfere with the relationship between the Company, on the one hand, and any officer, director, employee or consultant thereof, on the other hand, (ii) hire (or other similar arrangement) any Person (in any capacity whether as an officer, director, employee or consultant) who is, or at any time in the 12 months preceding the Date of Termination was, an officer, director, employee or consultant of the Company or (iii) induce or attempt to induce any customer, supplier, prospect, licensee or other business relation of the Company to cease doing business with the Company, or in any way interfere with the relationship between any such customer, supplier, prospect, licensee or business relation, on the one hand, and the Company, on the other hand.

(c) In the event that the terms of this Section 6 shall be determined by any court of competent jurisdiction to be unenforceable by reason of its extending for too great a period of time or over too great a geographical area or by reason of its being too extensive in any other respect, it will be interpreted to extend only over the maximum period of time for which it may be enforceable, over the maximum geographical area as to which it may be enforceable, or to the maximum extent in all other respects as to which it may be enforceable, all as determined by such court in such action. The Executive hereby acknowledges that the terms of this Section 6 are reasonable in terms of duration, scope and area restrictions and are necessary to protect the goodwill of the Company. The Executive hereby authorizes the Company to inform any future employer or prospective employer of the existence and terms of Sections 6 and 7 without liability for interference with the Executive's employment or prospective employment.

7. Non-Disclosure of Confidential Information; Non-Disparagement; Intellectual Property.

(a) Non-Disclosure of Confidential Information; Return of Property. The Executive recognizes and acknowledges that she has access to confidential information and/or has had or will have material contact with the Company's customers, suppliers, licensees, representatives, agents, partners, licensors or business relations. The Executive agrees that during her engagement and in perpetuity thereafter, the Executive shall maintain in confidence and shall not directly, indirectly or otherwise, use, disseminate, disclose or publish, or use for the Executive's benefit or the benefit of any Person, any confidential or proprietary information or trade secrets of or relating to the Company, including information with respect to the Company's operations, processes, products, inventions, business practices, finances, principals, vendors, suppliers, customers, potential customers, marketing methods, costs, prices, contractual relationships, regulatory status, compensation paid to employees or other terms of employment, or deliver to any Person any document, record, notebook, computer program or similar repository of or containing any such confidential or proprietary information or trade secrets. Upon termination of the Executive's engagement for any reason, the Executive shall promptly deliver to the Company all correspondence, drawings, manuals, letters, notes, notebooks, reports, programs, plans, proposals, financial documents or any other documents concerning the Company's customers, business plans, marketing strategies, products or processes. The Executive may respond to a lawful and valid subpoena or other legal process but shall give the Company the earliest possible notice thereof, shall, as much in advance of the return date as possible, make available to the Company and its counsel the documents and other information sought and, if requested by the Company, shall reasonably assist such counsel in resisting or otherwise responding to such process.

(b) Non-Disparagement. The Executive shall not, at any time during her engagement and in perpetuity thereafter, directly or indirectly, knowingly disparage, criticize or otherwise make derogatory statements regarding the Company, or any of its successors, directors or officers. The foregoing shall not be violated by the Executive's truthful responses to legal process or inquiry by a governmental authority.

(c) Intellectual Property Rights.

(i) The Executive agrees that the results and proceeds of the Executive's services for the Company (including any trade secrets, products, services, processes, know-how, designs, developments, innovations, analyses, drawings, reports, techniques, formulas, methods, developmental or experimental work, improvements, discoveries, inventions, ideas, source and object codes, programs, matters of a literary, musical, dramatic or otherwise creative nature, writings and other works of authorship) resulting from services performed for the Company and any works in progress, whether or not patentable or registrable under copyright or similar statutes, that were made, developed, conceived or reduced to practice or learned by the Executive, either alone or jointly with others (collectively, "Inventions"), shall be works-made-for-hire and the Company (or, if applicable or as directed by the Company) shall be deemed the sole owner throughout the universe of any and all trade secret, patent, copyright and other intellectual property rights (collectively, "Proprietary Rights") of whatsoever nature therein, whether or not now or hereafter known, existing, contemplated, recognized or developed, with the right to use the same in perpetuity in any manner the Company determines in its sole discretion, without any further payment to the Executive whatsoever. If, for any reason, any of such results and proceeds shall not legally be a work-made-for-hire and/or there are any Proprietary Rights which do not accrue to the Company under the immediately preceding sentence, then the Executive hereby irrevocably assigns and agrees to assign any and all of the Executive's right, title and interest thereto, including any and all Proprietary Rights of whatsoever nature therein, whether or not now or hereafter known, existing, contemplated, recognized or developed, to the Company (or, if applicable or as directed by the Company), and the Company or such Affiliates shall have the right to use the same in perpetuity throughout the universe in any manner determined by the Company or such Affiliates without any further payment to the Executive whatsoever. As to any Invention that the Executive is required to assign, the Executive shall promptly and fully disclose to the Company all information known to the Executive concerning such Invention. The Executive hereby waives and quitclaims to the Company any and all claims, of any nature whatsoever, that the Executive now or may hereafter have for infringement of any Proprietary Rights assigned hereunder to the Company.

(ii) The Executive agrees that, from time to time, as may be requested by the Company and at the Company's sole cost and expense, the Executive shall do any and all things that the Company may reasonably deem useful or desirable to establish or document the Company's exclusive ownership throughout the United States of America or any other country of any and all Proprietary Rights in any such Inventions, including the execution of appropriate copyright and/or patent applications or assignments. To the extent the Executive has any Proprietary Rights in the Inventions that cannot be assigned in the manner described above, the Executive unconditionally and irrevocably waives the enforcement of such Proprietary Rights. This Section 7(c)(ii) is subject to and shall not be deemed to limit, restrict or constitute any waiver by the Company of any Proprietary Rights of ownership to which the Company may be entitled by operation of law by virtue of the Executive's engagement with the Company. The Executive further agrees that, from time to time, as may be requested by the Company and at the Company's sole cost and expense, the Executive shall assist the Company in every proper and lawful way to obtain and from time to time enforce Proprietary Rights relating to Inventions in any and all countries. To this end, the Executive shall execute, verify and deliver such documents and perform such other acts (including appearances as a witness) as the Company may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining and enforcing such Proprietary Rights and the assignment thereof. In addition, the Executive shall execute, verify and deliver assignments of such Proprietary Rights to the Company or its designees. The Executive's obligation to assist the Company with respect to Proprietary Rights relating to such Inventions in any and all countries shall continue beyond the termination of the Executive's engagement with the Company.

(d) Protected Disclosures.

(i) Nothing in this Agreement will preclude, prohibit or restrict the Executive from (A) communicating with, any federal, state or local administrative or regulatory agency or authority, including the Securities and Exchange Commission (the "SEC"); (B) participating or cooperating in any investigation conducted by any governmental agency or authority; or (C) filing a charge of discrimination with the United States Equal Employment Opportunity Commission or any other federal state or local administrative agency or regulatory authority.

(ii) Nothing in this Agreement, or any other agreement between the parties, prohibits or is intended in any manner to prohibit, the Executive from (A) reporting a possible violation of federal or other applicable law or regulation to any governmental agency or entity, including the Department of Justice, the SEC, the U.S. Congress and any governmental agency Inspector General, or (B) making other disclosures that are protected under whistleblower provisions of federal law or regulation. This Agreement does not limit the Executive's right to receive an award (including a monetary reward) for information provided to the SEC. The Executive does not need the prior authorization of anyone at the Company to make any such reports or disclosures, and the Executive is not required to notify the Company that the Executive has made such reports or disclosures.

(iii) Nothing in this Agreement or any other agreement or policy of the Company is intended to interfere with or restrain the immunity provided under 18 U.S.C. §1833(b). The Executive cannot be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that is made (A) (1) in confidence to federal, state or local government officials, directly or indirectly, or to an attorney, and (2) for the purpose of reporting or investigating a suspected violation of law; (B) in a complaint or other document filed in a lawsuit or other proceeding, if filed under seal; or (C) in connection with a lawsuit alleging retaliation for reporting a suspected violation of law, if filed under seal and does not disclose the trade secret, except pursuant to a court order.

(iv) The foregoing provisions regarding protected disclosures are intended to comply with all applicable laws. If any laws are adopted, amended or repealed after the execution of this Agreement, this Section 7(e) shall be deemed to be amended to reflect the same.

8. Injunctive Relief. The Executive recognizes and acknowledges that a breach of any of the covenants contained in Sections 6 and 7 will cause irreparable damage to the Company and its goodwill, the exact amount of which will be difficult or impossible to ascertain, and that the remedies at law for any such breach will be inadequate. Accordingly, the Executive agrees that in the event of a breach or threatened breach of any of the covenants contained in Sections 6 and 7, in addition to any other remedy that may be available at law or in equity, the Company will be entitled to specific performance and injunctive relief (without posting a bond). In the event of any breach or violation by the Executive of any of the covenants contained in Sections 6 and 7, the time period of such covenant with respect to the Executive shall, to the fullest extent permitted by law, be tolled until such breach or violation is resolved.

9. Indemnification. During the Executive's engagement as a director or officer (or both) of Parent, and at all times thereafter during which the Executive may be subject to liability in connection with the Executive's performance of her duties as a director or officer (or both) of Parent, the Executive shall be entitled to the protection set forth in the Indemnification Agreement between the Executive and the Company to be entered into on or about the date hereof, in addition to the protection of any insurance policies the Company may elect to maintain generally for the benefit of its directors and officers against all costs, charges, and expenses incurred or sustained by her in connection with any action, suit or proceeding to which she may be made a party by reason of her being or having been a director, officer or employee of the Company, as well as any rights the Executive may have under the Company's articles of incorporation and bylaws (in each case, other than any dispute, claim or controversy arising under or relating to this Agreement or otherwise arising under or relating to the Executive's engagement, equity ownership or compensation). Notwithstanding anything herein to the contrary, the Executive's rights under this Section 9 shall survive the termination or expiration of this Agreement for any reason.

10. Cooperation. The Executive agrees that, subject to the Executive's reasonable availability, during and after the Executive's engagement with the Company, and without the necessity of the Company obtaining a subpoena or court order, the Executive shall provide reasonable cooperation in connection with any suit, action or proceeding (or any appeal from any suit, action or proceeding), and any investigation and/or defense of any claims asserted against the Company Releasees (as defined in the Release), which relates to events occurring during the Executive's engagement (including furnishing relevant information and materials to the Company or its designee and/or providing testimony at depositions and at trial); provided that the Company shall reimburse the Executive for reasonable out-of-pocket expenses the Executive incurs that are associated with any such cooperation; provided further that any such cooperation occurring after the termination of the Executive's engagement shall be scheduled to the extent reasonably practicable so as not to unreasonably interfere with the Executive's business or personal affairs. Notwithstanding anything herein to the contrary, the preceding cooperation covenant shall not apply to any suit, action, proceeding, investigation, defense or claim that arises out of or relates to a dispute between the Executive and any of the Company Releasees.

11. Section 409A of the Code.

(a) General. The parties hereto acknowledge and agree that, to the extent applicable, this Agreement shall be interpreted in accordance with, and incorporate the terms and conditions required by, Section 409A of the Code and the Department of Treasury Regulations and other interpretive guidance issued thereunder, including any such regulations or other guidance that may be issued after the Effective Date ("Section 409A"). Notwithstanding anything herein to the contrary, in the event that the Company determines that any amounts payable hereunder will be taxable currently to the Executive under Section 409A(a)(1)(A) of the Code and related Department of Treasury guidance, the Company and the Executive shall cooperate in good faith to (i) adopt such amendments to this Agreement and appropriate policies and procedures, including amendments and policies with retroactive effect, that they mutually determine to be necessary or appropriate to preserve the intended tax treatment of the benefits provided by this Agreement, to preserve the economic benefits of this Agreement, and to avoid less-favorable accounting or tax consequences for the Company, and/or (ii) take such other actions as mutually determined to be necessary or appropriate to exempt the amounts payable hereunder from Section 409A or to comply with the requirements of Section 409A and thereby avoid the application of penalty taxes thereunder; provided, however, that this Section 11(a) does not create an obligation on the part of the Company to modify this Agreement and does not guarantee that the amounts payable hereunder will not be subject to interest or penalties under Section 409A, and in no event whatsoever shall the Company be liable for any additional tax, interest or penalties that may be imposed on the Executive as a result of Section 409A or any damages for failing to comply with Section 409A.

(b) Separation from Service under Section 409A. To the extent Section 409A is applicable, notwithstanding anything herein to the contrary: (i) no amount shall be payable pursuant to Section 5(a) or 5(b) unless the termination of the Executive's engagement constitutes a "separation from service" within the meaning of Section 1.409A-1(h) of the Department of Treasury Regulations; (ii) if the Executive is deemed at the time of her separation from service to be a "specified employee" for purposes of Section 409A(a)(2)(B)(i) of the Code, to the extent that delayed commencement of any portion of the termination benefits to which the Executive is entitled under this Agreement (after taking into account all exclusions applicable to such termination benefits under Section 409A), including any portion of the additional compensation awarded pursuant to Section 5(a) or 5(b), is required in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, such portion of the Executive's termination benefits shall not be provided to the Executive prior to the earlier of (A) the expiration of the six-month period measured from the date of the Executive's "separation from service" with the Company (as such term is defined in the Department of Treasury Regulations issued under Section 409A) and (B) the date of the Executive's death; provided that, upon the earlier of such dates, all payments deferred pursuant to this clause (ii) shall be paid to the Executive in a lump sum, and any remaining payments due under this Agreement shall be paid as otherwise provided herein; (iii) the determination of whether the Executive is a "specified employee" for purposes of Section 409A(a)(2)(B)(i) of the Code as of the time of her separation from service shall be made by the Company in accordance with the terms of Section 409A of the Code and applicable guidance thereunder (including Section 1.409A-1(i) of the Department of Treasury Regulations and any successor provision thereto); (iv) for purposes of Section 409A of the Code, the Executive's right to receive installment payments pursuant to Section 5 shall be treated as a right to receive a series of separate and distinct payments; (v) if the sixty day period following the Date of Termination ends in the calendar year following the year that includes the Date of Termination, then payment of any amount that is conditioned upon the execution of the Release and is subject to Section 409A shall not be paid until the first day of the calendar year following the year that includes the Date of Termination, regardless of when the Release is signed; and (vi) to the extent that any reimbursement of expenses or in-kind benefits constitutes "deferred compensation" under Section 409A, such reimbursement or benefit shall be provided no later than December 31 of the year following the year in which the expense was incurred. The amount of expenses reimbursed in one year shall not affect the amount eligible for reimbursement in any subsequent year. The amount of any in-kind benefits provided in one year shall not affect the amount of in-kind benefits provided in any other year.

12. Section 280G of the Code.

(a) If there is a change of ownership or effective control or change in the ownership of a substantial portion of the assets of a corporation (within the meaning of Section 280G of the Code) and any payment or benefit (including payments and benefits pursuant to this Agreement) that the Executive would receive from the Company or otherwise ("Transaction Payment") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Internal Revenue Code of 1986, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then the Company shall cause to be determined, before any amounts of the Transaction Payment are paid to the Executive, which of the following two alternative forms of payment would result in the Executive's receipt, on an after-tax basis, of the greater amount of the Transaction Payment notwithstanding that all or some portion of the Transaction Payment may be subject to the Excise Tax: (1) payment in full of the entire amount of the Transaction Payment (a "Full Payment") or (2) payment of only a part of the Transaction Payment so that the Executive receives the largest payment possible without the imposition of the Excise Tax (a "Reduced Payment"). For purposes of determining whether to make a Full Payment or a Reduced Payment, the Company shall cause to be taken into account all applicable federal, state and local income taxes and the Excise Tax (all computed at the highest applicable marginal rate, net of the maximum reduction in federal income taxes which could be obtained from a deduction of such state and local taxes). If a Reduced Payment is made, the reduction in payments and/or benefits will occur in the following order: (1) first, reduction of cash payments, in reverse order of scheduled payment date (or if necessary, to zero), (2) then, reduction of non-cash and non-equity benefits provided to the Executive, on a pro rata basis (or if necessary, to zero), and (3) then, cancellation of the acceleration of vesting of equity award compensation in the reverse order of the date of grant of the Executive's equity awards.

(b) Unless the Executive and the Company otherwise agree in writing, any determination required under this section shall be made in writing by the Company's independent public accountants (the "Accountants"), whose determination shall be conclusive and binding upon the Executive and the Company for all purposes. For purposes of making the calculations required by this section, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Accountants shall provide detailed supporting calculations to the Company and the Executive as requested by the Company or the Executive. The Executive and the Company shall furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this section. The Company shall bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this Section 12(b).

13. Assignment and Successors. The Company may assign its rights and obligations under this Agreement to any entity, including any successor to all or substantially all the assets of the Company, by merger or otherwise, and may assign or encumber this Agreement and its rights hereunder as security for indebtedness of the Company and its Affiliates. The Executive may not assign her rights or obligations under this Agreement to any individual or entity. This Agreement shall be binding upon and inure to the benefit of the Company and the Executive and their respective successors, assigns, personnel, legal representatives, executors, administrators, heirs, distributees, devisees and legatees, as applicable. In the event of the Executive's death following a termination of her engagement, all unpaid amounts otherwise due to the Executive (including under Section 5) shall be paid to her estate.

14. Governing Law. This Agreement shall be governed, construed, interpreted, and enforced in accordance with the substantive laws of the State of Delaware, without reference to the principles of conflicts of law of Delaware or any other jurisdiction, and where applicable, the laws of the United States.

15. Validity. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

16. Notices. Any notice, request, claim, demand, document, and other communication hereunder to any party hereto shall be effective upon receipt (or refusal of receipt) and shall be in writing and delivered personally or sent by telex, telecopy, email or sent by nationally recognized overnight courier or certified or registered mail, postage prepaid, to the following address (or at any other address as any party hereto shall have specified by notice in writing to the other party hereto):

(a) If to the Company, to it at its current executive offices, Attn: Chief Executive Officer.

(b) If to the Executive, at her most recent address on the payroll records of the Company.

17. Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original, but all of which together will constitute one and the same Agreement.

18. Entire Agreement. The terms of this Agreement (together with the Indemnification Agreement between Parent and the Executive, any pre-invention assignment agreements with the Company and any other agreements and instruments contemplated hereby or referred to herein) are intended by the parties hereto to be the final expression of their agreement with respect to the Executive’s engagement with the Company and to supersede any and all prior agreements (including the Prior Agreement), communications expressing the Company’s offer to the Executive, severance agreements and similar agreements, plans, provisions, understandings or arrangements, whether written or oral, and all such prior agreements, plans, provisions, understandings or arrangements shall be null and void in their entirety and of no further force or effect as of the Effective Date. The parties hereto further intend that this Agreement shall constitute the complete and exclusive statement of its terms and that no extrinsic evidence whatsoever may be introduced in any judicial, administrative or other legal proceeding to vary the terms of this Agreement.

19. Amendments; Waivers. This Agreement may not be modified, amended or terminated except by an instrument in writing signed by the Executive and a duly authorized officer of the Company that expressly identifies the amended provision of this Agreement. By an instrument in writing similarly executed and similarly identifying the waived compliance, the Executive or a duly authorized officer of the Company may waive compliance by the other party or parties with any provision of this Agreement that such other party was or is obligated to comply with or perform; provided, however, that such waiver shall not operate as a waiver of, or estoppel with respect to, any other or subsequent failure to comply or perform. No failure to exercise and no delay in exercising any right, remedy or power hereunder shall preclude any other or further exercise of any other right, remedy or power provided herein or by law or in equity.

20. No Inconsistent Actions. The parties hereto shall not voluntarily undertake or fail to undertake any action or course of action inconsistent with the provisions or essential intent of this Agreement. Furthermore, it is the intent of the parties hereto to act in a fair and reasonable manner with respect to the interpretation and application of the provisions of this Agreement.

21. Construction. This Agreement shall be deemed drafted equally by both of the parties hereto. Its language shall be construed as a whole and according to its fair meaning. Any presumption or principle that the language is to be construed against any party shall not apply. The headings in this Agreement are only for convenience and are not intended to affect construction or interpretation. Any references to paragraphs, subparagraphs, sections or subsections are to those parts of this Agreement, unless the context clearly indicates to the contrary. Also, unless the context clearly indicates to the contrary: (a) the plural includes the singular, and the singular includes the plural; (b) "and" and "or" can each used both conjunctively and disjunctively; (c) "any," "all," "each," or "every" means "any and all," and "each and every"; (d) "includes" and "including" are each "without limitation"; and (e) "herein," "hereof," "hereunder," and other similar compounds of the word "here" refer to the entire Agreement and not to any particular paragraph, subparagraph, section or subsection.

22. Dispute Resolution. The parties agree that any suit, action or proceeding brought by or against such party in connection with this Agreement shall be brought exclusively in the United States District Court for the District of Delaware to the extent that federal jurisdiction exists, and in the Delaware Chancery Court to the extent that federal jurisdiction does not exist. Each party expressly and irrevocably consents and submits to the jurisdiction and venue of each such court in connection with any such legal proceeding, including to enforce any settlement, order or award, and such party agrees to accept service of process by the other party or any of its agents in connection with any such proceeding. EACH PARTY HEREBY IRREVOCABLY WAIVES ALL RIGHT TO A TRIAL BY JURY IN ANY SUIT, ACTION OR OTHER PROCEEDING INSTITUTED BY OR AGAINST SUCH PARTY IN RESPECT OF ITS RIGHTS OR OBLIGATIONS HEREUNDER.

23. Enforcement. If any provision of this Agreement is held to be illegal, invalid or unenforceable under present or future laws effective during the term of this Agreement, such provision shall be fully severable, this Agreement shall be construed and enforced as if such illegal, invalid or unenforceable provision were never a part of this Agreement, and the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid or unenforceable provision or by its severance from this Agreement. Furthermore, in lieu of such illegal, invalid or unenforceable provision, there shall be added automatically as part of this Agreement a provision as similar in terms to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable.

24. Withholding. The Company shall be entitled to withhold from any amounts payable under this Agreement any federal, state, local, and foreign withholding and other taxes and charges that the Company is required to withhold. The Company shall be entitled to rely on an opinion of counsel if any questions as to the amount or requirement of withholding shall arise.

25. Clawback. To the extent required by applicable law (including Section 304 of the Sarbanes-Oxley Act and Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act) and/or the rules and regulations of any securities exchange or inter-dealer quotation service on which equity of the Company or Parent is listed or quoted, or if so required pursuant to a written policy adopted by the Company or Parent, payments under this Agreement or in respect of Company or Parent equity incentive awards shall be subject (including on a retroactive basis) to clawback, forfeiture or similar requirements (and such requirements shall be deemed incorporated by reference into this Agreement and all agreements governing the terms of Company or Parent incentive equity compensation).

26. Other Benefit Plans. No payment under this Agreement shall be taken into account in determining any benefits under any pension, retirement, profit sharing, group insurance or other benefit plan of the Company except as expressly required otherwise by law or the terms of such plan.

27. Executive's Representations. The Executive represents, warrants and covenants that (i) that she has read and understands this Agreement, is fully aware of its legal effect, has not acted in reliance upon any representations or promises made by the Company other than those contained in writing herein, and has entered into this Agreement freely based on her own judgment, (ii) Executive has the full right, authority and capacity to enter into this Agreement and perform Executive's obligations hereunder, (iii) Executive is not bound by any agreement that conflicts with or prevents or restricts the full performance of Executive's duties and obligations to the Company hereunder during or after the Term, (iv) the execution and delivery of this Agreement shall not result in any breach or violation of, or a default under, any existing obligation, commitment or agreement to which Executive is subject, and (v) the Executive shall keep all terms of this Agreement confidential, except with respect to disclosure to the Executive's spouse, accountants or attorneys, each of whom shall agree to keep all terms of this Agreement confidential.

28. Equity Ownership. The Executive will be subject to such stock ownership guidelines and holding requirements as may be implemented by the Board from time to time.

[*signature page follows*]

The parties have executed this Agreement as of the date first written above.

MAGNACHIP SEMICONDUCTOR, LTD.

By: /s/ Young-Joon Kim
Name: Young-Joon Kim
Title: Representative Director

MAGNACHIP SEMICONDUCTOR CORPORATION

By: /s/ Young-Joon Kim
Name: Young-Joon Kim
Title: Chief Executive Officer

EXECUTIVE

/s/ Shin Young Park
Shin Young Park

EXHIBIT A

FORM OF RELEASE

As used in this Release of Claims (this "Release"), the term "claims" will include all claims, covenants, warranties, promises, undertakings, actions, suits, causes of action, proceedings, obligations, debts, accounts, attorneys' fees, judgments, losses, and liabilities, of whatsoever kind or nature, in law, in equity or otherwise. Capitalized terms used but not defined in this Release will have the meanings given to them in the Executive Service Agreement (the "Service Agreement"), effective as of February 23, 2022, by and between Magnachip Semiconductor Corporation, a Delaware corporation ("Parent"), and Magnachip Semiconductor, Ltd., a wholly owned subsidiary of Parent ("MSK"), on the one hand, and Shin Young Park.

For and in consideration of the payments and benefits under Section 5(b) of the Service Agreement, and other good and valuable consideration, I, for and on behalf of myself and my executors, heirs, administrators, representatives and assigns, hereby agree to release and forever discharge the Company, Parent and all of their respective predecessors, successors, and past, current, and future parent entities, affiliates, subsidiary entities, investors, directors, shareholders, members, officers, general or limited partners, employees, attorneys, agents, and representatives, and the benefit plans in which I am or have been a participant by virtue of my engagement with or service to the Company (collectively, the "Company Releasees"), from any and all claims that I have or may have had against the Company Releasees based on any events or circumstances arising or occurring on or prior to the date hereof and arising directly or indirectly out of, relating to, or in any other way involving in any manner whatsoever my engagement with or service to the Company or the termination thereof, including any and all claims arising under national, federal, provincial, state or local laws relating to employment, including claims of wrongful discharge, breach of express or implied contract, fraud, misrepresentation, defamation, intentional infliction of emotional distress or liability in tort, and claims of any kind that may be brought in any court or administrative agency, and any related claims for attorneys' fees and costs, including claims under Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. Section 2000, et seq.; the Americans with Disabilities Act, as amended, 42 U.S.C. § 12101 et seq.; the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 701 et seq.; the Civil Rights Act of 1866, and the Civil Rights Act of 1991; 42 U.S.C. Section 1981, et seq.; the Age Discrimination in Employment Act, as amended, 29 U.S.C. Section 621, et seq. (the "ADEA"); the Equal Pay Act, as amended, 29 U.S.C. Section 206(d); regulations of the Office of Federal Contract Compliance, 41 C.F.R. Section 60, et seq.; the Family and Medical Leave Act, as amended, 29 U.S.C. § 2601 et seq.; the Fair Labor Standards Act of 1938, as amended, 29 U.S.C. § 201 et seq.; the Employee Retirement Income Security Act, as amended, 29 U.S.C. § 1001 et seq.; and any similar national, provincial, state or local laws of the United States, the Republic of Korea or any other jurisdiction. I agree further that this Release may be pleaded as a full defense to any action, suit, arbitration or other proceeding covered by the terms hereof that is or may be initiated, prosecuted, or maintained by me or my descendants, dependents, heirs, executors, administrators or assigns. By signing this Release, I acknowledge that I intend to waive and release all rights known or unknown that I may have against the Company Releasees under these and any other laws.

I acknowledge and agree that, as of the date I execute this Release, I have no knowledge of any facts or circumstances that give rise or could give rise to any claims under any of the laws listed in the preceding paragraph and that I have not filed any claim against any of the Company Releasees before any local, state, federal or foreign agency, court, arbitrator, mediator, arbitration or mediation panel or other body (each individually, a "Proceeding"). I (i) acknowledge that I will not initiate or cause to be initiated on my behalf any Proceeding and will not participate in any Proceeding, in each case, except as required by law; and (ii) waive any right that I may have to benefit in any manner from any relief (whether monetary or otherwise) arising out of any Proceeding, except where otherwise provided by law, including any Proceeding conducted by the Equal Employment Opportunity Commission ("EEOC"). Further, I understand that, by executing this Release, I will be limiting the availability of certain remedies that I may have against the Company and limiting also my ability to pursue certain claims against the Company Releasees.

By executing this Release, I specifically release all claims relating to my engagement with and service to the Company, and its termination, under ADEA, a federal statute that, among other things, prohibits discrimination on the basis of age in engagement and benefit plans.

Notwithstanding the generality of the foregoing, I do not release (i) claims to receive payments and benefits under Section 5(b) of the Service Agreement in accordance with the terms of the Service Agreement, (ii) claims for indemnification arising under any applicable indemnification obligation of the Company, (iii) any vested rights I may have under any qualified benefit plans, programs or policies of the Company, or (iv) claims that cannot be waived by law. Further, nothing in this Release shall prevent me from (a) initiating or causing to be initiated on my behalf any claim against the Company before any local, state or federal agency, court or other body challenging the validity of the waiver of my claims under the ADEA (but no other portion of such waiver); or (b) initiating or participating in an investigation or proceeding conducted by the EEOC.

I understand that nothing in this Agreement will preclude, prohibit or restrict me from (i) communicating with, any federal, state or local administrative or regulatory agency or authority, including the Securities and Exchange Commission (the "SEC"); (ii) participating or cooperating in any investigation conducted by any governmental agency or authority; or (iii) filing a charge of discrimination with the EEOC or any other federal state or local administrative agency or regulatory authority.

Nothing in this Agreement, or any other agreement with the Company, prohibits or is intended in any manner to prohibit, me from (i) reporting a possible violation of federal or other applicable law or regulation to any governmental agency or entity, including the Department of Justice, the SEC, the U.S. Congress and any governmental agency Inspector General, or (ii) making other disclosures that are protected under whistleblower provisions of federal law or regulation. This Agreement does not limit my right to receive an award (including a monetary reward) for information provided to the SEC. I do not need the prior authorization of anyone at the Company to make any such reports or disclosures, and I am not required to notify the Company that I have made such reports or disclosures.

Nothing in this Agreement or any other agreement or policy of the Company is intended to interfere with or restrain the immunity provided under 18 U.S.C. §1833(b). I cannot be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that is made (i) (A) in confidence to federal, state or local government officials, directly or indirectly, or to an attorney, and (B) for the purpose of reporting or investigating a suspected violation of law; (ii) in a complaint or other document filed in a lawsuit or other proceeding, if filed under seal; or (iii) in connection with a lawsuit alleging retaliation for reporting a suspected violation of law, if filed under seal and does not disclose the trade secret, except pursuant to a court order.

I acknowledge that I have been given at least 21 days in which to consider this Release. I acknowledge further that the Company has advised me to consult with an attorney of my choice before signing this Release, and I have had sufficient time to consider the terms of this Release. I represent and acknowledge that if I execute this Release before 21 days have elapsed, I do so knowingly, voluntarily, and upon the advice and with the approval of my legal counsel (if any), and that I voluntarily waive any remaining consideration period.

I understand that after executing this Release, I have the right to revoke it within seven days after its execution. I understand that this Release will not become effective and enforceable unless the seven-day revocation period passes and I do not revoke the Release in writing. I understand that this Release may not be revoked after the seven-day revocation period has passed. I understand also that any revocation of this Release must be made in writing and delivered to the Company at its principal place of business within the seven-day period.

This Release will become effective, irrevocable, and binding on the eighth day after its execution, so long as I have not timely revoked it as set forth above. I understand and acknowledge that I will not be entitled to payments or benefits under Section 5(b) of the Service Agreement unless this Release is effective on or before the date that is 60 days following the Date of Termination (as defined in the Service Agreement).

I hereby agree to waive any and all claims to re-engagement with the Company and affirmatively agree not to seek further engagement with the Company.

The provisions of this Release will be binding upon my heirs, executors, administrators, legal representatives, and assigns. If any provision of this Release will be held by any court of competent jurisdiction to be illegal, void or unenforceable, such provision will be of no force or effect. The illegality or unenforceability of such provision, however, will have no effect upon and will not impair the enforceability of any other provision of this Release.

This Release will be governed in accordance with the laws of the State of Delaware, without reference to the principles of conflicts of law. Any dispute or claim arising out of or relating to this Release or claim of breach hereof will be brought exclusively in the United States District Court for the District of Delaware to the extent that federal jurisdiction exists, and in the Delaware Chancery Court to the extent that federal jurisdiction does not exist. By execution of this Release, I am waiving any right to trial by jury in connection with any suit, action or proceeding under or in connection with this Release.

Shin Young Park

Date

Exhibit 21.1

SUBSIDIARIES OF MAGNACHIP SEMICONDUCTOR CORPORATION

Subsidiary	Jurisdiction of Incorporation
MagnaChip Semiconductor S.A.	Luxembourg
MagnaChip Semiconductor B.V.	The Netherlands
Magnachip Semiconductor, Ltd.	Korea
MagnaChip Semiconductor SA Holdings LLC	Delaware
MagnaChip Semiconductor Limited	Taiwan
Magnachip Semiconductor Limited	Hong Kong SAR
Magnachip Semiconductor Inc.	Japan
MagnaChip Semiconductor Holding Company Limited	British Virgin Islands
Magnachip Semiconductor (Shanghai) Company Limited	China

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-172864, 333-180696, 333-186789, 333-202120, 333-209756, 333-216204, 333-223155, 333-229811, 333-236565 and 333-239872) of Magnachip Semiconductor Corporation of our report dated February 23, 2022 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ Samil PricewaterhouseCoopers

Seoul, Korea
February 23, 2022

Exhibit 31.1

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO
SECTION 302 OF THE
SARBANES-OXLEY ACT OF 2002**

I, Young-Joon Kim, certify that:

1. I have reviewed this annual report on Form 10-K of Magnachip Semiconductor Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: February 23, 2022

/s/ Young-Joon Kim
Young-Joon Kim
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO
SECTION 302 OF THE
SARBANES-OXLEY ACT OF 2002**

I, Shin Young Park, certify that:

1. I have reviewed this annual report on Form 10-K of Magnachip Semiconductor Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: February 23, 2022

/s/ Shin Young Park
Shin Young Park
Chief Financial Officer
(Principal Financial Officer and
Principal Accounting Officer)

Exhibit 32.1

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

Pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Magnachip Semiconductor Corporation (the “Company”) hereby certifies, to such officer’s knowledge, that:

(i) the Annual Report on Form 10-K of the Company for the year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the “Report”) fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

Dated: February 23, 2022

/s/ Young-Joon Kim
Young-Joon Kim
Chief Executive Officer
(Principal Executive Officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended or incorporated by reference in any registration statement of the Company filed under the Securities Act of 1933, as amended.

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

**CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

Pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Magnachip Semiconductor Corporation (the "Company") hereby certifies, to such officer's knowledge, that:

(i) the Annual Report on Form 10-K of the Company for the year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

Dated: February 23, 2022

/s/ Shin Young Park

Shin Young Park
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended or incorporated by reference in any registration statement of the Company filed under the Securities Act of 1933, as amended.

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.