

MAGNACHIP SEMICONDUCTOR Corp  
Form 10-K  
February 21, 2017  
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**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, 2016

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 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	Name of each exchange on which registered
Common Stock, par value \$0.01 per share	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 and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted 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 and post such files. Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

# Edgar Filing: MAGNACHIP SEMICONDUCTOR Corp - Form 10-K

Large Accelerated Filer

Accelerated Filer

Non-Accelerated Filer (Do not check if a smaller reporting company)

Smaller Reporting Company

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. \$122,983,293.

As of January 31, 2017, the registrant had 33,252,894 shares of common stock outstanding.

## DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement relating to its 2017 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.

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**MAGNACHIP SEMICONDUCTOR CORPORATION AND SUBSIDIARIES**

**FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2016**

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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, 2016 (this 2016 Form 10-K or 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 refer to MagnaChip Semiconductor Corporation and its consolidated subsidiaries. The term Korea refers to the Republic of Korea or South Korea.

**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 or phrases 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.

MagnaChip is a registered trademark of us and our subsidiaries and MagnaChip Everywhere is our registered trademark and service mark. All other product, service and company names mentioned in this Report are the service marks or trademarks of their respective owners.

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### **Item 1. Business**

#### **General**

We are a Korea-based designer and manufacturer of analog and mixed-signal semiconductor products for consumer, computing, communication, industrial, automotive and Internet of Things ( IoT ) applications. We provide technology platforms for analog, mixed-signal, power, high voltage, non-volatile memory, and Radio Frequency ( RF ) applications. We have a proven record of a 30-year operating history, large portfolio of approximately 2,198 registered novel patents and 166 pending novel patent applications and extensive engineering and manufacturing process expertise. Our business is comprised of two operating segments: Foundry Services Group and Standard Products Group. Our Foundry Services Group provides specialty analog and mixed-signal foundry services mainly for fabless and Integrated Device Manufacturer ( IDM ) semiconductor companies that primarily serve the consumer, computing, communication, industrial, automotive and IoT applications. Our Standard Products Group is comprised of two business lines: Display Solutions and Power Solutions. Our Display Solutions products provide flat panel display solutions to major suppliers of large and small flat panel displays. Our Power Solutions products include discrete and integrated circuit solutions for power management in consumer, communication and industrial applications.

Our wide variety of analog and mixed-signal semiconductor products and manufacturing services combined with our matured technology platform allow us to address multiple high-growth end markets and to 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.

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 platform and develop products and services that are in high demand by our customers and end consumers. We sold over 2,000 distinct products in each of the years ended December 31, 2016 and December 31, 2015, with a substantial portion of our revenues derived from a concentrated number of customers. Our largest Foundry Services Group customers include some of the leading semiconductor companies that design analog and mixed-signal products for the consumer, computing, communication, industrial, automotive and IoT applications.

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 television 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 management semiconductors that increase power efficiency, thereby improving heat dissipation and extending battery life.

For the year ended December 31, 2016, we generated net sales of \$668.0 million, a net loss of \$29.6 million, Adjusted EBITDA of \$40.7 million and Adjusted Net Loss of \$4.5 million. See Item 6. Selected Financial Data and 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 and Adjusted Net Loss and a reconciliation to net income (loss) prepared in accordance with United States generally accepted accounting principles ( US 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. We refer to this acquisition as the Original Acquisition.

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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.

### **Our Products and Services**

Our Display Solutions line of products provide flat panel display solutions to major suppliers of large and small flat panel displays, and include MagnaChip sensor products for mobile applications, industrial applications and home appliances. These products include source and gate drivers and timing controllers that cover a wide range of flat panel displays used in ultra high definition (UHD), high definition (HD), full high definition (FHD), light emitting diode (LED), 3D and organic light emitting diodes (OLED) televisions and displays, notebooks and mobile communications and entertainment devices. Our Display Solutions line of products support the industry's most advanced display technologies, such as active matrix organic light emitting diodes (AMOLEDs), and low temperature polysilicon thin film transistor (LTPS TFT), as well as high-volume display technologies such as thin film transistors (a-Si TFTs). MagnaChip provides a range of intelligent sensor product families featuring 0.18 micron analog and mixed-signal technology with low power consumption. The MagnaChip sensor families target the growing market for applications ranging from smartphone, tablet PC and other consumer electronics to industrial devices. The MagnaChip sensor families include e-Compass sensors, digital Hall sensors and temperature and humidity sensors. Our Display Solutions products represented 41.0%, 32.7% and 28.6% of our net sales for the fiscal years ended December 31, 2016, 2015 and 2014, respectively.

We expanded our business and market opportunity by establishing our Power Solutions product line in late 2007. We have introduced a number of products for power management applications, including metal oxide semiconductor field effect transistors (MOSFETs), insulated gate bipolar mode transistor (IGBTs), power modules, AC-DC converters, DC-DC converters, LED driver, Solid State Drive (SSD) PMIC, switching regulators and linear regulators for a range of devices, including liquid crystal display (LCD), LED, 3D and UHD televisions, smartphones, mobile phones, desktop PCs, notebooks, tablet PCs, other consumer electronics, consumer appliance and industrial applications such as power suppliers, LED lighting and motor control. Our Power Solutions products represented 19.1%, 21.3% and 19.7% of our net sales for the fiscal years ended December 31, 2016, 2015 and 2014, respectively.

We also offer foundry services to fabless analog and mixed-signal semiconductor companies and IDMs that require differentiated, specialty analog and mixed-signal process technologies. Our process technologies are optimized for analog and mixed-signal devices and include standard complementary metal-oxide semiconductor (CMOS), high voltage CMOS, ultra-low leakage high voltage CMOS and bipolar complementary double-diffused metal oxide semiconductor (BCDMOS) and electronically erasable programmable read only memory (EEPROM). Our Foundry Services Group customers use us to manufacture a wide range of products, including display drivers, LED drivers, audio encoding and decoding devices, microcontrollers, touch screen controllers, RF switches, park distance control sensors for automotive, electronic tag memories and power management semiconductors. Our Foundry Services Group business represented 39.8%, 45.9% and 51.6% of our net sales for the fiscal years ended December 31, 2016, 2015 and 2014, respectively.

We manufacture the majority of our products at our three fabrication facilities located in Korea. We have approximately 466 proprietary process flows we can utilize for our products and offer to our Foundry Services Group customers. Our manufacturing base serves both our display driver and power management businesses and Foundry Services Group customers, allowing us to optimize our asset utilization and leverage our investments across our product and service offerings. Analog and mixed-signal manufacturing facilities and processes are typically distinguished by design and process implementation expertise rather than the use of the most advanced equipment. 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, allowing us to utilize our facilities and equipment over an extended period of time with moderate required capital investments.

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In December 2014, we announced that our Board of Directors had adopted a plan to close our six-inch fabrication facility in Cheongju, South Korea (the 6-inch fab ). According to this plan, the 6-inch fab was closed on February 29, 2016. On April 4, 2016, we commenced a voluntary resignation program (the Program ), which was available to certain manufacturing employees, including our 6-inch fab employees, through April 29, 2016.

### **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 television and games. 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 management 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 management 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 and manufacturing service providers:

***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, technologies, and manufacturing processes 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 can leverage a substantial intellectual property and technology base to accelerate product design and manufacturing when needed.

***Nimble, Stable and Reliable Manufacturing Services.*** Fabless semiconductor providers who rely on external manufacturing services often face rapidly changing product cycles. If these fabless companies are unable to meet the demand for their products due to issues with their manufacturing services providers, their profitability and market share can be significantly impacted. As a result, they prefer foundry service providers that can increase production quickly and meet demand consistently through periods of constrained industry capacity. Furthermore, many fabless semiconductor providers serving the consumer electronics and industrial sectors need specialty analog and mixed-signal manufacturing capabilities to address their product performance and cost requirements.



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***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 increasing regulatory focus on reducing energy consumption of consumer electronic products. As a result of 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 is 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 and Intellectual Property Platform.*** We believe we have one of the broadest and deepest analog and mixed-signal semiconductor technology platforms in the industry. Our long operating history, large patent portfolio, extensive engineering and manufacturing process expertise and wide selection of analog and mixed-signal intellectual property libraries allow us to leverage our technology and develop new products across multiple end markets. Our product development efforts are supported by a team of approximately 439 engineers. Our platform allows us to develop and introduce new products quickly as well as to integrate numerous functions into a single product. For example, we were one of the first companies to introduce a commercial AMOLED 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 platform in areas of strategic interest for our customers and focus on those products and services 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 and Service 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 and service offerings allow us to provide

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additional products to new and existing customers and to cross-sell our products and services 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 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.

***Distinctive Analog and Mixed-Signal Process Technology Expertise and Manufacturing Capabilities.*** We have developed specialty analog and mixed-signal manufacturing processes such as high voltage CMOS, power and embedded memory. These processes enable us to flexibly ramp mass production of display, power and mixed-signal products, and shorten the duration from design to delivery of highly integrated, high-performance analog and mixed-signal semiconductors.

***Highly Efficient Manufacturing Capabilities.*** Our manufacturing strategy is focused on optimizing our asset utilization across our display driver and power management products as well as our foundry services, which enables us to maintain the price competitiveness of our products and services 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. We offer specialty analog process technologies that do not require substantial investment in leading edge, smaller geometry process equipment. We are able to utilize our manufacturing base over an extended period of time and thereby minimize our capital expenditure requirements.

### **Our Strategy**

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

***Leverage Our Advanced Analog and Mixed-Signal Technology Platform to Innovate and Deliver New Products and Services.*** We intend to continue to utilize our extensive patent and technology portfolio, analog and mixed-signal design and manufacturing expertise and specific end-market applications and system-level design expertise to deliver products with high levels of performance by utilizing our systems expertise and leveraging our deep knowledge of our customers' needs.

***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. For example, two of our largest display driver customers have display modules in production using our power management products. These power management products have been purchased and evaluated via their key subcontractors for LCD backlight units and LCD integrated power supplies.

***Broaden Our Customer Base.*** We expect to continue to expand our global design centers, local application engineering support and sales presence, particularly in China, Hong Kong, Taiwan and Macau, or collectively, 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, especially to aid 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

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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.

***Optimize Asset Utilization, Return on Capital Investments and 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. By utilizing our manufacturing facilities for both our Display Solutions and Power Solutions products and our Foundry Services Group customers, we seek to maximize return on our capital investments and our cash flow generation.

### **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. We seek to further build our technology platform through proprietary processes and selective licensing and acquisition of complementary technologies, as well as disciplined process improvements in our manufacturing operations. 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.

For example, in 2013, we introduced a range of intelligent sensor product families featuring 0.18 micron analog and mixed-signal technology with low power consumption. The MagnaChip sensor families include e-Compass and digital Hall sensors. MagnaChip's intelligent sensors provide cost-effective features such as small form-factor, multi-function integration and low power consumption as a result of its use of 0.18 micron analog and mixed-signal technology and advanced design capabilities.

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), which enables the manufacture of thinner displays. Our advanced display drivers incorporate LTPS TFT and AMOLED panel technologies that enable the highest resolution displays. Furthermore, we are developing a broad intellectual property portfolio to improve the power efficiency of displays, including the development of our contents-based automatic brightness control (CABC) and automatic current limit (ACL).

We have a long history of specialized process technology development and have a number of distinctive process implementations. We have approximately 466 process flows we can utilize for our products and offer to our Foundry Services Group customers. Our process technologies include standard CMOS, high voltage CMOS, ultra-low leakage high voltage CMOS, low noise CMOS with embedded BCD and BCDMOS and radio frequency silicon on insulator (RFSOI). Our manufacturing processes incorporate embedded memory solutions, such as static random access memory (SRAM), one-time programmable (OTP) memory, multiple-time programmable (MTP) memory, electrical fuse, EEPROM and single-transistor random access memory (1TRAM). More broadly, we focus extensively on processes that reduce die size across all of the products we manufacture, in order to deliver cost-effective solutions to our customers.

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 converters, DC-DC converters, linear regulators, regulators and analog switches and power MOSFETs. We believe our system-level understanding of applications such as LCD televisions and mobile phones will allow us to more quickly develop and customize power management solutions for our customers in these markets.

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### **Products and Services by Business Line**

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

### **Foundry Services**

We provide foundry services to analog and mixed-signal semiconductor companies. We have approximately 466 process flows we offer to our Foundry Services Group customers. We also partner with key customers to jointly develop or customize specialized processes that enable our customers to improve their products and allow us to develop unique manufacturing expertise.

Our Foundry Services Group targets customers who require differentiated, specialty analog and mixed-signal process technologies such as high voltage CMOS, non-volatile memory and power. We refer to our approach of delivering specialized services to our customers as our application-specific technology strategy. We differentiate ourselves through the depth of our intellectual property portfolio, ability to customize process technology to meet the customers' requirements effectively, long history in this business and reputation for excellence.

Our Foundry Services Group customers vary from small fabless companies to large IDMs who serve consumer, computing, communication, industrial, automotive and IoT applications.

### ***Process Technology Overview***

***Mixed-Signal.*** Mixed-signal process technology is used in devices that require conversion of light and sound into electrical signals for processing and display. Our mixed-signal processes include advanced technologies such as low-noise process using triple gate, which uses less power at any given performance level.

***Power.*** Power process technology, such as BCD, includes high-voltage capabilities as well as the ability to integrate functionalities, such as self-regulation, internal protection and other intelligent features. Unique process features, such as deep trench isolation, are suited for chip shrink and device performance enhancement.

***High Voltage CMOS.*** High-voltage CMOS process technology facilitates the use of high-voltage levels in conjunction with smaller transistor sizes. This process technology includes several variations, such as bipolar processes, which use transistors with qualities well suited for amplifying and switching applications, mixed-mode processes, which incorporate denser, more power efficient FETs, and thick metal processes.

***Non-Volatile Memory.*** Non-volatile memory (NVM), process technology enables the integration of non-volatile memory cells that allow retention of the stored information even when power is removed from the circuit. This type of memory is typically used for long-term persistent storage.

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The table below sets forth the key process technologies in Foundry Services Group that we currently offer to customers:

<b>Process</b>	<b>Technology</b>	<b>Device</b>	<b>Application</b>
Mixed-Signal	0.13-0.5 $\mu$ m	Analog to digital converter	Smartphones
	Low noise	Digital to analog converter	Tablet PCs
	Ultra low power	Audio codec	Notebooks
	Triple gate	Chipset	PC peripherals
	RF SOI	RF switch	DVD players
Power		Digital tunable capacitor	
		Fingerprint sensor	
	0.13*-0.35 $\mu$ m	Power management	Smartphones
	BCD 40V-100V	LED driver	Tablet PCs
	Deep trench isolation	High power audio amp	Notebooks
	MOSFET	Power Over Ethernet	LCD TVs
	Schottky diode	DC/DC converter	LED lighting
	Zener diode		LCD monitors
High-Voltage CMOS	Ultra high voltage		Automotive
	Thick metal		
	0.11-2.0 $\mu$ m	Display driver	Smartphones
	5V-200V	CSTN driver	Tablet PCs
	Bipolar		LCD TVs
NVM			Desktop PCs
			LCD monitors
	0.13-0.5 $\mu$ m	Microcontroller	Smartphones
	EEPROM, Ultra low leakage	Touch screen controller	Tablet PCs
	Slim flash*	Electronic tag memory	Industrial applications
	eFlash	Hearing aid controller	Medical equipment
	OTP	Fingerprint sensor	Automotive

\* In customer qualification stage

**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).

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**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), advanced intra panel interface (AIPI), mini-low voltage differential signaling (m-LVDS), unified standard interface for notebook and monitor (USI-GF), unified standard interface (USI), unified standard interface for TV (USI-T) and mobile industry processor interface (MIPI).

**Package Type.** The assembly of display drivers typically uses chip-on-film (COF) and COG package types.

**Large Display Solutions.** We provide display solutions for a wide range of flat panel display sizes used in LCD televisions, including ultra-high definition televisions, or UHD TVs, FHD TVs, HD TVs, LED TVs, 3D TVs, OLED TVs, LCD monitors, notebooks, tablet PCs, public information displays and automotive.

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 1,440 channels. Our large display solutions are designed to allow customers to cost-effectively meet the increasing demand for high resolution displays. We focus 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 have recently introduced a number of new large display drivers with reduced die size.

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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:

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

**Mobile Display Solutions.** Our mobile display solutions incorporate the industry's most advanced display technologies, such as AMOLED and LTPS, as well as high-volume technologies such as a-Si (amorphous silicon) 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 without having to migrate to smaller geometries. 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.





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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:

<b>Product</b>	<b>Key Features</b>	<b>Applications</b>
AMOLED	Resolutions of QHD, HD720, WXGA, FHD and WQHD*	Smartphones
	Color depth of 16 million	Game consoles
	MIPI, eRVDS interface	Digital still cameras
	Logic-based OTP	Tablet PCs
	ABC, ACL	Virtual reality headsets
LTPS	Resolutions of VGA, WSVGA, WVGA and DVGA	Smartphones
	Color depth of 16 million	Digital still cameras
	MDDI, MIPI interface	
	Logic-based OTP	
	Separated gamma control	
a-Si TFT	Resolutions of WQVGA and HVGA	Mobile phones
	Color depth of 16 million	Digital still cameras
	RSDS, MDDI, MIPI interface	Automotive
	CABC	
	Separated gamma control	

\* In customer qualification stage

We also provide a range of intelligent sensor product families featuring 0.18 micron analog and mixed-signal technology with low power consumption.

**Power Solutions**

We develop, manufacture and market power management solutions for a wide range of end-market customers. The products include MOSFETs, IGBTs, power modules, AC-DC converters, DC-DC converters, LED drivers, switching regulators and linear regulators, for a range of devices, including LCD, LED, 3D and UHD televisions, smartphones, mobile phones, desktop PCs, notebooks, tablet PCs, other consumer electronics, consumer appliances and industrial applications such as power suppliers, LED lighting and motor control.

**MOSFETs.** Our MOSFETs include low-voltage Trench MOSFETs, 20V to 150V, high-voltage Planar MOSFETs, 200V through 700V, and super junction MOSFETs, 500V through 800V. MOSFETs are used in applications to switch, shape or transfer electricity under varying power requirements. The key application segments are smartphones, mobile phones, LCD, LED, 3D and UHD televisions, desktop

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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 high power industrial applications, such as UPSs, power supplies, motor drives, solar inverters, welding machines and consumer appliances.

**Power Modules.** Power modules are used in broad range of medium-to-high power industrial and consumer applications such as UPSs, power supplies, motor drives, solar inverters, welding machines and consumer appliances.

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**AC-DC Converters and DC-DC Converters.** We offer AC-DC and DC-DC converters targeting mobile applications and high power applications like LCD, LED, 3D and UHD televisions, notebooks, smartphones, mobile phones set-top boxes and display modules. We expect our AC-DC and DC-DC converters will meet customer green power requirements by featuring wide input voltage ranges, high efficiency and small size.

**LED Drivers.** LED backlighting drivers serve the fast-growing LCD panel backlighting market for LCD, LED and 3D televisions, LCD monitors, 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.

**Switching Regulators and Linear Regulators.** We also provide analog switching and linear regulators for mobile and consumer applications. Our products are designed for high efficiency and low power consumption in mobile applications.

**SSD PMIC.** We also provide SSD PMIC for notebooks. Our product is designed for high frequency switching, high efficiency and pulse frequency modulation (PFM) function to reduce consumption power in low load of converters.

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:

<b>Product</b>	<b>Key Features</b>	<b>Applications</b>
Low Voltage MOSFET	Voltage options of 12V-150V	Smartphones and mobile phones
	Advanced Trench MOSFET Process	Tablet PCs
	High cell density	Notebooks
	Advanced packages to enable reduction of PCB mounting area	LCD/LED/3D/UHD TVs
		Desktop PCs
High Voltage MOSFET	Voltage options of 200V-700V	Servers, Industrial applications
		Adaptors for tablet PC/mobile phone/smartphone
	R2FET (rapid recovery) option to shorten reverse diode recovery time	Power supplies
	Zenor FET option for MOSFET protection for abnormal input	Lighting (ballast, HID, LED)
	Advanced Planar MOSFET Process	Industrial applications
	Advanced packages to enable reduction of PCB mounting area	LCD/LED/3D/UHD TVs
Super Junction MOSFET	Voltage options of 500V-800V	LCD/LED/3D/UHD TVs

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Low  $R_{DS(ON)}$

Lightings applications (ballast, HID, LED)

Epi stack process

Smartphones

Power supplies

Servers

Industrial applications

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<b>Product</b>	<b>Key Features</b>	<b>Applications</b>
IGBTs	Voltage options of 650V/1200V	Industrial applications
	Field Stop Trench IGBT	Consumer appliances
	Current options from 25A to 60A	
Power Modules	Voltage options of 400V/600V/ 1200V	Industrial applications
	IGBT modules/FRD modules	Consumer appliances
	Current options from 50A to 300A	
LED Backlighting Drivers	High efficiency, wide input voltage range	Tablet PCs
	Advanced BCDMOS process	Notebooks
	OCP, SCP, OVP and UVLO protections	Smartphones
	Accurate LED current control and multi-channel matching	LED/3D/UHD TVs
	Programmable current limit, boost up frequency	LED monitors
LED Lighting Drivers	High efficiency, wide input voltage range	AC and DC LED lighting
	Simple solutions with external components fully integrated	
	Advanced high voltage BCDMOS process	
	Accurate LED current control and high power factor and low THB	
AC-DC Converter	Wide control range for high power application (>150W)	LCD/LED/3D/UHD TVs
	Advanced BCDMOS process	Power supplies
	High Precision Voltage Reference	
	Very low startup current consumption	
DC-DC Converters	High efficiency, wide input voltage range	LCD/LED/3D/UHD TVs
	Advanced BCDMOS process	Smartphones
	Fast load and line regulation	Mobile phones
	Accurate output voltage	Notebooks
	OCP, SCP and thermal protections	Set-top boxes
Switching Regulators and Linear Regulators	Single and multi-regulators	Mobile phones

Low Noise Output regulators

Notebooks

Wide range of input voltage and various  
output current

CMOS and BCDMOS processes

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<b>Product</b>	<b>Key Features</b>	<b>Applications</b>
SSD PMIC	High current buck PFM function High frequency switching High efficiency High integration technology Small QFN package	Notebooks

**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. For Foundry Services Group, we focus on analog and mixed-signal semiconductor companies who see the benefit of our innovative technology and cost structure. We believe our close collaboration with customers allows us to align our product and process 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. Our Foundry Services Group sales teams focus on marketing our services to analog and mixed-signal semiconductor companies that require specialty manufacturing processes.

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 in the United States, Japan, Greater China and Europe. We have a network of agents and distributors in Korea, the United States, Japan, Greater China and Europe. For the years ended December 31, 2016, 2015 and 2014, we derived 77%, 69% and 76% of net sales through our direct sales force, respectively, and 23%, 31% and 24% of net sales through our network of authorized agents and distributors, respectively.

**Research and Development**

Our research and development efforts focus on intellectual property, design methodology and process technology for our complex analog and mixed-signal semiconductor products and services. Research and development expenses for the years ended December 31, 2016, 2015 and 2014, were \$72.2 million, \$83.4 million and \$92.8 million, respectively, representing 10.5%, 13.2% and 13.3% of net sales, respectively.

**Customers**

We sell our Display Solutions and Power Solutions products and Sensor solutions to consumer, computing and industrial electronics OEMs, original design manufacturers and electronics manufacturing services companies, as well as subsystem designers. We sell our foundry services to analog and mixed-signal semiconductor companies. For the years ended December 31, 2016, 2015 and 2014, our ten largest customers accounted for 64%, 64% and 61% of our net sales, respectively. For the year ended December 31, 2016, sales to Samsung Display Corporation represented 23.5% of our net sales and 57.3% of our Display Solutions division's net sales, and sales to LG Display represented 11.4% of our net sales and 27.9% of our Display Solutions division's net sales. For the year ended December 31, 2015, sales to LG Display represented 15.2% of our net sales and 46.4% of our Display Solutions division's net sales, and sales to Samsung Display Corporation represented 11.0% of our net sales and 33.6% of our Display Solutions division's net sales. For the year ended December 31, 2014, sales to Samsung Display Corporation represented 11.4% of our net sales and 39.9% of our Display Solutions division's net sales, and sales to LG Display represented 10.7% of our net sales and 37.5% of our Display Solutions division's net sales. For the year ended December 31, 2016, we recorded revenues of \$33.2 million from customers in the United States and \$654.8 million from all foreign countries, of which 33.5%



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was from Korea, 16.5% from Taiwan, 5.0% from the United Kingdom and 37.3% from Greater China. For the year ended December 31, 2015, we recorded revenues of \$51.2 million from customers in the United States and \$582.5 million from all foreign countries, of which 41.5% was from Korea, 18.5% from Taiwan, 6.4% from Japan and 28.0% from Greater China. For the year ended December 31, 2014, we recorded revenues of \$91.3 million from customers in the United States and \$606.9 million from all foreign countries, of which 43.9% was from Korea, 19.2% from Taiwan, 4.3% from Japan and 22.7% from Greater China.

## **Intellectual Property**

As of December 31, 2016, our portfolio of intellectual property assets included approximately 3,020 registered patents and 414 pending patent applications. Approximately 2,198 and 166 of our patents and pending patents 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 1,070 registered and pending patents that relate to identical technical claims in our base patent portfolio. Our patents expire at various times approximately over the next 18 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.

We have entered into exclusive and non-exclusive licenses and development agreements with third parties relating to the use of intellectual property of the third parties in our products and design processes, including licenses related to embedded memory technology, design tools, process simulation tools, circuit designs and processor cores. Some of these licenses, including our agreements with Silicon Works Co., Ltd. and ARM Limited, are material to our business and may be terminated by the licensors prior to the expiration of these licenses should we fail to cure any breach under such licenses. Our license with Silicon Works Co., Ltd. relates to our large display drivers, and our license from ARM Limited primarily relates to product lines in our Foundry Services Group business. The loss of either license could have a material adverse impact on our results of operations. Additionally, in connection with the Original Acquisition, SK Hynix retained a perpetual license to use the intellectual property that we acquired from SK Hynix in the Original Acquisition. Under this license, SK Hynix and its subsidiaries are free to develop products that may incorporate or embody intellectual property developed by us prior to October 2004.

## **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, as well as companies providing specialty manufacturing services.

We compete based on design experience, manufacturing capabilities, the ability to service 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.

## **Employees**

Our worldwide workforce consisted of 2,864 employees (full- and part-time) as of December 31, 2016, of which 418 were involved in sales, marketing, general and administrative, 439 in research and development (including 234 with advanced degrees), 116 in quality, reliability and assurance and 1,891 in manufacturing (comprised of 279 in engineering and 1,612 in operations). As of December 31, 2016, our workforce consisted of 2,864 employees, of which 1,743 employees, or approximately 61% of our workforce, were represented by the MagnaChip Semiconductor Labor Union.

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### **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, adopted new 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 new 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 new regulations regarding the use of conflict minerals could limit the supply and increase the cost of certain raw materials used in manufacturing our products.

### **Geographic Financial Information**

For a description of the distribution of our net sales by geographic region, see Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations Results of Operations Comparison of Years Ended December 31, 2016 and 2015 Net Sales by Geographic Region, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations Results of Operations Comparison of Years Ended December 31, 2015 and December 31, 2014 Net Sales by Geographic Region and Note 17. Geographic and Segment Information to our consolidated financial statements under Item 8. Financial Statements and Supplementary Data included elsewhere in this Report.

### **Available Information**

Our principal executive offices are 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](http://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

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SEC. In addition, our Corporate Governance Guidelines, Code of Business Conduct and Ethics, 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.

You may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an internet site, [www.sec.gov](http://www.sec.gov), from which you can access our annual, quarterly and current reports on Forms 10-K, 10-Q and 8-K, respectively, and all amendments to these materials after such reports and amendments are filed with the SEC. In addition, you may request a copy of any of these filings, at no cost, by writing or telephoning us at the following address or phone number: c/o MagnaChip Semiconductor, Inc., 60 South Market Street, Suite 750, San Jose, CA 95113, Attention: General Counsel and Secretary; the telephone number at that address is (408) 625-5999.

**Executive Officers of the Company**

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

Name	Age	Position
Young-Joon (YJ) Kim	52	Chief Executive Officer and Director
Jonathan Kim	42	Chief Financial Officer, Executive Vice President and Chief Accounting Officer
Theodore Kim	47	Chief Compliance Officer, Executive Vice President, General Counsel and Secretary
Tae Jong Lee	54	Executive Vice President and General Manager, Foundry Services Group
Woung Moo Lee	54	Executive Vice President and General Manager, Standard Products Group

**Young-Joon (YJ) Kim, Chief Executive Officer and Director.** Mr. YJ Kim became our director and Chief Executive Officer in May 2015, after serving as Interim Chief Executive Officer since May 2014. Mr. YJ Kim served as our General Manager, Semiconductor Manufacturing Services, from May 2015 to November 2015 and previously served as our General Manager, Display Solutions Division and Executive Vice President from May 2013 to May 2015. Prior to joining our Company, Mr. YJ Kim served at Cavium, Inc., a leading provider of semiconductor products that enable secure and intelligent processing for enterprise, datacenter, cloud, wired and wireless networking, from June 2006 to April 2013, most recently as Vice President, Infrastructure Processor Division, and General Manager at the Multi-Core Processor Group. Prior to Cavium, Mr. YJ Kim served as Core Team Lead and General Manager of Tolapai Program at Intel Corporation from August 2004 to June 2006. YJ Kim also served as Director of Marketing at Samsung Semiconductor, Inc. from June 1996 to May 1998. In 1988, Mr. YJ Kim began his career as a product engineer at Intel Corporation. In 1998, Mr. Kim cofounded API Networks, a joint venture between Samsung and Compaq specializing in alpha processors, where he served as the head of product management, worldwide sales and business development. Mr. YJ Kim has over 27 years of experience in the semiconductor industry, covering engineering, marketing, product development, strategic planning and general management for microprocessors, network processors, FLASH, EPROM, analog, mixed-signal, sensors, workstations and servers. Mr. YJ Kim holds B.S. and M.Eng degrees in Electrical Engineering from Cornell University.

**Jonathan Kim (J. Kim), Chief Financial Officer, Executive Vice President and Chief Accounting Officer.** Mr. J. Kim was appointed our Chief Financial Officer and Executive Vice President in May 2015, after serving as our Interim Chief Financial Officer, Chief Accounting Officer and Senior Vice President since March 2014. Prior to joining our company, Mr. J. Kim served since July 2010 as the Chief Financial Officer of StartForce,

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Inc., a VC backed desktop virtualization company, which was acquired in February 2011 by ZeroDesktop, Inc., a leading developer of next-generation desktop virtualization and cloud computing solutions. Mr. J. Kim continued to serve as the Chief Financial Officer at ZeroDesktop through March 2014. Mr. J. Kim also served as a principal at a Silicon Valley based investment and advisory firm where he led investments in startup companies in the U.S. and Korea. Mr. J. Kim began his career in public accounting and held various positions with Deloitte for nearly 10 years, serving Global Fortune 500 and U.S. multinational publicly traded clients in the Technology, Media & Telecommunication sectors. Mr. J. Kim holds a B.A. degree in Business Administration from the Foster School of Business at the University of Washington and is a Certified Public Accountant.

**Theodore Kim (T. Kim), Chief Compliance Officer, Executive Vice President, General Counsel and Secretary.** Mr. T. Kim became our Chief Compliance Officer and Executive Vice President 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 our Company, 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. 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.

**Tae Jong Lee, Executive Vice President and General Manager, Foundry Services Group.** Mr. Tea Jong Lee became our General Manager, Foundry Services Group, in November 2015 and became our Executive Vice President in December 2011, after serving successively as Senior Vice President and Vice President and General Manager, Corporate Engineering, since September 2007. Prior to joining our Company, Mr. Lee served as Director of the Technology Development Division, Chartered Semiconductor Manufacturing, in Singapore from 1999 to August 2007. Mr. Lee holds B.S. and M.S. degrees from Seoul National University, and a Ph.D in Physics from the University of Texas at Dallas.

**Woung Moo Lee, Executive Vice President and General Manager, Standard Products Group.** Mr. Woung Moo Lee became our Executive Vice President and General Manager, Standard Products Group in November 2015. Mr. Lee previously served as our Senior Vice President, Korea Sales from 2013. Prior to joining our Company, Mr. Lee was one of the founding executives and served as Vice President, 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 Proud Samsung Employee Award in 2005 and holds a B.S. degree in Electronic Engineering from Inha University.

## **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.*

### **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

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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.

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.

***We have experienced recent net losses and have relied on our cash reserves to fund our operations and implement our business plans and strategy. If we are unable to improve cash flows from operating activities or obtain additional capital to meet our liquidity and capital resource requirements to pursue our turnaround and growth strategies, our business and results of operations may be adversely affected.***

In the past several quarters, we have experienced net losses from operations as we have begun to shift our business and operations to respond to changes in consumer and customer demands. As a result of these trends, as well as the extraordinary costs we have incurred and will continue to incur associated with our restatement of prior period financial data and related legal proceedings, we have experienced a deterioration of our cash reserves over the same period. If we continue to experience negative cash flows from operating activities, we will need to rely further on our cash reserves to fund our operations or seek additional capital. 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.

***If we fail to develop new products and process technologies or enhance our existing products and services 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

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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 services and enhance our existing products and services to meet rapidly evolving customer requirements. We design products for customers who 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. If we do not continue to develop and maintain process technologies that are in demand by our Foundry Services Group customers, we may be unable to maintain existing customers or attract new customers.

Customer and market requirements can change during the development process. 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 or services 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 or service enhancements, may not be accepted in new or existing markets. Our business will suffer if we fail to develop and introduce new products and services or product and service enhancements on a timely and cost-effective basis.

***Poor global economic conditions may negatively affect our future business, results of operations and financial condition. .***

Recent macroeconomic news and global financial markets instability related to concerns over economic slowdown in China and other regions, as well as the global effects of falling crude oil prices, have created uncertainty which may negatively affect the demand for our products and services. Further deterioration in economic conditions in the markets in which we or our customers operate could lead to reduced consumer spending in the semiconductor market generally and our target markets specifically, which could cause U.S. and foreign businesses to slow spending on our products, lead to the distress or insolvency of key suppliers or customers, or impact the ability of our customers to obtain credit for purposes of purchasing our products. Any such sustained or worsening global economic conditions could materially and adversely affect our future business, results of operations and financial conditions.

***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

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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.

***We depend 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 facilities. 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, low levels of customer orders, operating inefficiencies, 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 steps 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 would 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 or services, our financial results would be adversely affected. For the years ended December 31, 2016, 2015 and 2014, our ten largest customers accounted for 64%, 64% and 61% of our net sales, respectively. For the year ended December 31, 2016, sales to Samsung Display Corporation represented 23.5% of the Company's net sales and 57.3% of our Display Solutions division's net sales, and sales to LG Display represented 11.4% of the Company's net sales and 27.9% of our Display Solutions division's net sales. For the year ended December 31, 2015, sales to LG Display represented 15.2% of the Company's net sales and 46.4% of our Display Solutions division's net sales, and sales to Samsung Display Corporation represented 11.0% of the Company's net sales and 33.6% of our Display Solutions division's net sales. For the year ended December 31, 2014, sales to Samsung Display Corporation represented 11.4% of the Company's net sales and 39.9% of our Display Solutions division's net sales, and sales to LG Display represented 10.7% of the Company's net sales and 37.5% of our Display Solutions division's net sales. For the year ended December 31, 2016, we recorded revenues of \$33.2 million from customers in the United States and \$654.8 million from all foreign countries, of which 33.5% was from Korea, 16.5% from Taiwan, 5.0% from the United Kingdom and 37.3% from Greater China. 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 or services within a short period of time would 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.

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*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;

our ability to enter the highly competitive power management market; and

our ability to continue to offer in demand foundry services at competitive prices.

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.*



## Edgar Filing: MAGNACHIP SEMICONDUCTOR Corp - Form 10-K

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

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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.

In addition, we collaborate and jointly develop certain process technologies and manufacturing process flows customized for certain of our Foundry Services Groups customers. To the extent that our Foundry Services Group customers fail to achieve market acceptance for their products, we may be unable to recoup our engineering resources commitment and our investment in process technology development, which would harm our business.

***Research and development investments may not yield profitable and commercially viable product and service offerings 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 commercially viable products or enhance our foundry services offerings. During each stage of research and development, there is a substantial risk that we will have to abandon a potential product or service offering that is no longer marketable and in which we have invested significant resources. In the event we are able to develop viable new products or service offerings, 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 and services, increase business with existing customers, broaden our customer base, aggressively grow our power business, drive execution excellence and focus on specialty process technologies. 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.

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***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 years ended December 31, 2016 and 2015. 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, 2016, the outstanding intercompany loan balance including accrued interests between our Korean subsidiary and our Dutch subsidiary was \$598 million. Our Dutch subsidiary uses 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 stock or the price of the Exchangeable Notes (defined below) or the 2021 Notes 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 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.

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***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, 2016, 1,743 employees, or approximately 61% of our employees, were represented by the MagnaChip Semiconductor Labor Union. 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 manufacture 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 manufacture of our products or those of our Foundry Services Group customers, 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 skill and specialized equipment. For the portion of packaging and testing that we outsource, we use subcontractors located in Korea, China, Philippines, Singapore, Thailand and Austria. We rely on these subcontractors to package and test our devices with acceptable quality and yield levels. We could be adversely affected by political disorders, labor disruptions and natural disasters where our subcontractors are located. If our semiconductor packagers and test service providers experience problems in packaging and testing our semiconductor devices, experience prolonged quality or yield problems or decrease the capacity 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 AMOLED Display Solutions products that require more advanced technology than is available in our fabrication facilities. Silicon wafer production at these facilities is allocated solely by our vendors and beyond our direct control. Therefore, any disruption in wafer supply from these vendors could have a material impact on our revenue and results of operations.

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***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. We do not have long-term agreements providing for all of these materials; thus, 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, were constrained in recent years due to an increased demand for silicon. Silicon is also a key raw material for solar cells, the demand for which has increased in recent years. Although supplies of silicon have recently improved due to the entrance of additional suppliers and capacity expansion by existing suppliers, we cannot assure that such 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. 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.

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*We could suffer adverse tax and other financial consequences as a result of changes in, or differences in the interpretation of, applicable tax laws.*

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. The 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 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 United States 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 United States. 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 United States. 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 in the United States 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

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could result in substantial costs to us and divert our resources. 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 us, 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, such as our agreements with Silicon Works Co., Ltd. and ARM Limited, would materially and adversely affect our business.

***Our expenses could increase if SK Hynix were unwilling or unable to provide certain services related to our shared facilities with SK Hynix, and if SK Hynix were to become insolvent, we could lose certain of our leases.***

We are party to a land lease and easement agreement with SK Hynix pursuant to which we lease the land for our facilities in Cheongju, Korea. If this agreement were terminated for any reason, including the insolvency of SK Hynix, we would have to renegotiate new lease terms with SK Hynix or the new owner of the land. We cannot assure that we will be able to negotiate new lease terms on favorable terms or at all. Because we share certain facilities with SK Hynix, several services that are essential to our business are provided to us by or through SK Hynix under our general service supply agreement with SK Hynix. These services include electricity, bulk gases and de-ionized water, campus facilities and housing, wastewater and sewage management, environmental safety and certain utilities and infrastructure support services. If any of our agreements with SK Hynix were terminated or if SK Hynix were unwilling or unable to fulfill its obligations to us under the terms of these agreements, we would have to procure these services on our own and as a result may experience an increase in our expenses.

***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 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. 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





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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 regulation, 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. 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.

***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. Also, additional capital may not be available when needed or, if available, may not be available on favorable terms. In addition, our indebtedness limits our ability to incur additional indebtedness under certain circumstances. If we are unable to obtain capital on favorable terms, or if we are unable to obtain capital at all, we may have to reduce our operations or forego opportunities, and this may have a material adverse effect on our business, financial condition and results of operations.

***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, 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. 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, such as an outbreak of military hostilities, would adversely affect our business, financial condition and results of operations.

***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, since the death of Kim Jong-il, the former North Korean ruler, in mid-December 2011, there has been increased uncertainty with respect to the future of North Korea's political leadership and concern regarding its implications for political and economic stability in the region. Although Kim Jong-il's third son,

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Kim Jong-eun, has assumed power as his father's designated successor, the long-term outcome of such leadership transition remains uncertain. In addition, 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. Some of the significant incidents in recent years include the following:

- In August 2015, two Korean soldiers were injured in a landmine explosion near the Korean demilitarized zone. Claiming the landmines were set by North Koreans, the Korean army re-initiated its propaganda program toward North Korea utilizing loudspeakers near the demilitarized zone.
  
- In January 2016, North Korea claimed that it had successfully conducted a nuclear bomb test. In February 2016, North Korea launched what it claimed was a satellite rocket, but what is viewed by others as a front for a ballistic missile test that could ultimately be used to carry nuclear bomb. In response to the launch, it has been reported that Korea and the United States are discussing the deployment of the Terminal High Altitude Area Defense (THAAD) missile defense system to United States forces stationed in Korea. It has been reported that the United Nations Security Council adopted a unanimous resolution condemning the missile launch.
  
- Following North Korea's nuclear bomb test and rocket launch, in February 2016, the Korean government announced that it will shut down Kaesong Industrial Complex, a joint venture area with North Korea where over 100 South Korean companies run manufacturing facilities. North Korea responded by declaring Kaesong Industrial Complex a military control zone, ordering South Koreans to leave the complex, and forbidding them to take assets other than personal belongings. The shutdown is the second one since operations commenced at Kaesong Industrial Complex in 2005; the complex had been shut down once before, for five months in 2013. In addition, North Korea cut off all 48 telephone lines between North Korean and South Korean agencies.

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.

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

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*Our level of indebtedness is substantial, and we may not be able to generate sufficient cash to service all of our indebtedness and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful. A decline in the ratings of our existing or future indebtedness may make the terms of any new indebtedness we choose to incur more costly.*

As of December 31, 2016, our total indebtedness was \$224.3 million, which represents the principal amount outstanding under our 6.625% Senior Notes due 2021, excluding \$3.2 million of unamortized discount and debt issuance costs. In January 2017, we incurred \$86.25 million of additional indebtedness, which represents the aggregate principal amount of 5.00% Exchangeable Senior Notes due 2021 ( Exchangeable Notes ) issued by MagnaChip Semiconductor S.A. We are permitted under the indentures governing our outstanding Exchangeable Notes and 2021 Notes to incur additional debt under certain conditions, including additional secured debt. If new debt were to be incurred in the future, the related risks that we now face could intensify. Our substantial debt could have important consequences, including:

resulting in an event of default if we fail to satisfy our obligations under our outstanding debt or fail to comply with the financial or other restrictive covenants contained in the indentures governing our outstanding Exchangeable Notes and 2021 Notes or agreements governing our other indebtedness, which event of default could result in all of our debt becoming immediately due and payable and could permit our lenders to foreclose on the assets securing any such debt;

increasing our vulnerability to general economic and industry conditions;

requiring a substantial portion of our cash flow from operations to be dedicated to the payment of principal and interest on our indebtedness, therefore reducing our ability to use our cash flow to fund our operations, capital expenditures and future business opportunities;

limiting our ability to obtain additional financing for working capital, capital expenditures, debt service requirements, acquisitions and general corporate or other purposes;

limiting our ability to adjust to changing market conditions and placing us at a competitive disadvantage compared to our competitors who have less debt; and

negatively affecting our ability to fund a change of control offer.

Our ability to make scheduled payments on or to refinance our debt obligations depends on our financial condition and operating performance, which is subject to prevailing economic and competitive conditions and to certain financial, business and other factors beyond our control. We cannot assure that we will generate a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our indebtedness.

The credit ratings assigned to our debt reflect each rating agency's opinion of our ability to make payments on the debt obligations when such payments are due. A rating may be subject to revision or withdrawal at any time by the assigning rating agency. We may experience downgrades in our debt ratings in the future. Any lowering of our debt ratings would adversely impact our ability to raise additional debt financing and increase the cost of any such financing that is obtained. In the event any ratings downgrades are significant, we may choose not to incur new debt or refinance existing debt if we are unable to incur or refinance such debt at favorable interest rates or on favorable terms.

If our cash flows and capital resources are insufficient to fund our debt service obligations or if we are unable to refinance existing indebtedness on favorable terms, we may be forced to reduce or delay capital expenditures, sell assets, seek additional capital or restructure or refinance our indebtedness. These alternative measures may not be successful and thus render us unable to meet our scheduled debt service obligations. In the absence of such operating results and resources, we could face substantial liquidity problems and might be required to dispose of material assets or operations to meet our debt service and other obligations. The indentures governing our outstanding Exchangeable Notes and 2021 Notes restrict our ability to dispose of assets and use



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the proceeds from the disposition. We may not be able to consummate those dispositions or be able to obtain the proceeds which we could realize from them and these proceeds may not be adequate to meet any debt service obligations then due.

***We are a holding company and will depend on the business of our subsidiaries to satisfy our obligations under our outstanding Exchangeable Notes and 2021 Notes and other obligations.***

We are a holding company with no independent operations of our own. Our subsidiaries conduct substantially all of the operations necessary to fund payments on our outstanding Exchangeable Notes and 2021 Notes, other debt and any other obligations. Our ability to make payments on our outstanding Exchangeable Notes and 2021 Notes and our other 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 our debt agreements (including the indentures governing our outstanding Exchangeable Notes and 2021 Notes) and the 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 or that any distributions or payments will be adequate to pay principal and interest, and any other payments, on our outstanding Exchangeable Notes and 2021 Notes, other debt or any other obligations when due, and the failure to make such payments could have a material adverse effect on our business, financial condition and results of operations.

***Restrictions on MagnaChip Korea's ability to make payments on its intercompany loans from MagnaChip Semiconductor B.V., or on its ability to pay dividends in excess of statutory limitations, could hinder our ability to make payments on our outstanding Exchangeable Notes and 2021 Notes.***

We anticipate that payments under the notes and our outstanding Exchangeable Notes and 2021 Notes will be funded in part by MagnaChip Korea's repayment of its existing loans from MagnaChip Semiconductor B.V., with MagnaChip Semiconductor B.V. using such repayments in turn to repay the loans owed to MagnaChip Semiconductor S.A., which will repay loans owed to us. Under the Korean Foreign Exchange Transaction Act, the minister of the Ministry of Strategy and Finance is authorized to temporarily suspend payments in foreign currencies in the event of natural calamities, wars, conflicts of arms, grave and sudden changes in domestic or foreign economic conditions, or other similar situations. In addition, under the Korean Commercial Code, a Korean company is permitted to make a dividend payment in accordance with the provisions in its articles of incorporation out of retained earnings (as determined in accordance with the Korean Commercial Code and the generally accepted accounting principles in Korea), but no more than twice a year. If MagnaChip Korea is prevented from making payments under its intercompany loans due to restrictions on payments of foreign currency or if it has an insufficient amount of retained earnings under the Korean Commercial Code to make dividend payments to MagnaChip Semiconductor B.V., we and MagnaChip Semiconductor S.A. may not have sufficient funds to make payments on the notes or our outstanding Exchangeable Notes and 2021 Notes.

***The indentures governing the notes, our outstanding Exchangeable Notes and 2021 Notes contains, and our future debt agreements will likely contain, covenants that significantly restrict our operations.***

The indentures governing the notes and our outstanding Exchangeable Notes and 2021 Notes contain, and our future debt agreements will likely contain, numerous covenants imposing financial and operating restrictions



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on our business. These restrictions may affect our ability to operate our business, may limit our ability to take advantage of potential business opportunities as they arise and may adversely affect the conduct of our current business, including by restricting our ability to finance future operations and capital needs and by limiting our ability to engage in other business activities. These covenants will place restrictions on our ability and the ability of our operating subsidiaries to, among other things:

pay dividends, redeem shares or make other distributions with respect to equity interests, make payments with respect to subordinated indebtedness or other restricted payments;

incur debt or issue preferred stock;

create liens;

make certain investments;

consolidate, merge or dispose of all or substantially all of our assets, taken as a whole;

sell or otherwise transfer or dispose of assets, including equity interests of our subsidiaries;

enter into sale-leaseback transactions;

enter into transactions with our affiliates; and

designate our subsidiaries as unrestricted subsidiaries.

In addition, our future debt agreements will likely contain financial ratios and other financial conditions tests. Our ability to meet those financial ratios and tests could be affected by events beyond our control, and we cannot assure that we will meet those ratios and tests. A breach of any of these covenants could result in a default under such debt agreements. Upon the occurrence of an event of default under such debt agreements, our lenders under such agreements could elect to declare all amounts outstanding under such debt agreements to be immediately due and payable and terminate all commitments to extend further credit.

***We may not have the ability to raise the funds necessary to repurchase the Exchangeable Notes upon a fundamental change, and our future debt may contain limitations on our ability to repurchase the Exchangeable Notes.***

Holders of the Exchangeable Notes have the right to require us to repurchase their notes upon the occurrence of a fundamental change at a fundamental change repurchase price equal to 100% of the principal amount of the Exchangeable Notes to be repurchased, plus accrued and unpaid interest, if any. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of Exchangeable Notes surrendered therefor. In addition, our ability to repurchase the Exchangeable Notes may be limited by law, by regulatory authority or by agreements governing our future indebtedness. Our failure to repurchase Exchangeable Notes at a time when the repurchase is required by the indenture would constitute a default under the indenture. A default under the indenture or the fundamental change itself could also lead to a default under agreements governing our future indebtedness. If the repayment of our then-existing indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase the Exchangeable Notes.

***A fundamental change may adversely affect us.***

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A fundamental change could have a negative effect on us and the trading price of the common stock and Exchangeable Notes. Furthermore, the fundamental change provisions, including the provisions requiring the increase in the exchange rate for exchanges in connection with a fundamental change prior to the maturity date, may in certain circumstances make it more difficult or discourage a takeover of our company and the removal of incumbent management.



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***Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flow from our business to pay our substantial debt.***

Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

***We have a history of losses and may not achieve or sustain profitability in the future.***

From the time we began operations as a separate entity in 2004 until we emerged from our 2009 reorganization proceedings under Chapter 11 of the United States Bankruptcy Code, which we refer to as our reorganization proceedings, we generated significant net losses and did not generate a profit for a full fiscal year. In addition, since 2013, we have again had substantial net losses despite some improvements made in 2016. We may increase spending to support increased research and development and sales and marketing efforts. These expenditures may not result in increased revenue or an increase in the number of customers immediately or at all. Because many of our expenses are fixed in the short term, or are incurred in advance of anticipated sales, we may not be able to decrease our expenses in a timely manner to offset any shortfall of sales. If we cannot maintain profitability, the value of the enterprise may decline.

***Despite our current debt levels, we may still incur substantially more debt or take other actions which would intensify the risks discussed above.***

Despite our current consolidated debt levels, we and our subsidiaries, including the Issuer, may be able to incur substantial additional debt in the future, some of which may be secured debt, subject to the restrictions contained in our debt instruments. We will not be restricted under the terms of the indenture governing the notes from incurring additional debt, securing existing or future debt, recapitalizing our debt or taking a number of other actions that are not limited by the terms of the indenture governing the notes that could have the effect of diminishing our ability to make payments on the notes when due.

***We may need to incur impairment and other restructuring 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 or restructuring charges. From November 9, 2009, the date we emerged from Chapter 11 reorganization proceedings, through December 31, 2016, we recognized aggregate restructuring and impairment charges of \$24.1 million, which consisted of \$21.2 million of impairment charges and \$2.9 million of restructuring 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

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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.

*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, our 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 March 5, 2015, our Board of Directors adopted a stockholder rights plan (the Rights Plan ) and declared a dividend of one preferred stock purchase right on each share of the Company s common stock

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outstanding at the close of business on March 16, 2015. The Company amended the Rights Plan on March 2, 2016 and September 2, 2016. As amended, each right will entitle the holder to purchase one one-thousandth of a share of our Series A Junior Participating Preferred Stock. 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, holders of the rights (other than the person or group triggering their exercise) will be able to purchase for each share of common stock owned, \$12 worth of shares of the Company's common stock having a market value of twice such price. The rights expire in March 2017 unless extended by our Board of Directors. 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.

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;

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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

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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 do not intend to pay dividends for the foreseeable future, and therefore, investors should rely on sales of their common stock as the only way to realize any future gains on their investments.*

We do not intend to pay any cash dividends in the foreseeable future. The payment of cash dividends on common stock is restricted under the terms of the indentures for our outstanding Exchangeable Notes and 2021 Notes. Any determination to pay dividends in the future will be at the discretion of our Board of Directors. Accordingly, 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 consist of three fabrication facilities located in Korea at two sites in Cheongju and one in Gumi. Our facilities have a combined capacity of approximately 115,000 eight-inch equivalent wafers per month. We manufacture wafers utilizing geometries ranging from 0.11 to 0.50 microns. The Cheongju facilities have three main buildings totaling 164,058 square meters devoted to manufacturing and development. The Gumi facility has one main building with 41,022 square meters devoted to manufacturing, testing and packaging.

In addition to our fabrication facilities, we lease facilities in Seoul, Korea, and San Jose, California. 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. Our independent providers of these services are located in Korea, China, Philippines, Singapore, Thailand and Austria. 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.

Although we own our manufacturing facilities, we are party to a land lease and easement agreement with SK Hynix pursuant to which we lease the land for our facilities in Cheongju, Korea from SK Hynix for an

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indefinite term. Because we share certain facilities with SK Hynix, several services that are essential to our business are provided to us by or through SK Hynix under our general service supply agreement with SK Hynix. These services include electricity, bulk gases and de-ionized water, campus facilities and housing, wastewater and sewage management, environmental safety and certain utilities and infrastructure support services. The services agreement continues for an indefinite term subject to each party having a right to terminate in the event of an uncured breach by the other party.

**Item 3. Legal Proceedings**

*Securities Class Action Complaints*

On March 12, 2014, a purported class action was filed against the Company and certain of the Company's now-former officers. On April 21, 2015, a related purported class action lawsuit (Okla. Police Pension & Retirement Sys. v. MagnaChip Semiconductor Corp., et al., No. 3:15-cv-01797) was filed against the Company, certain of the Company's current directors and former and now-former officers, a shareholder of the Company, and certain financial firms that acted as underwriters of the Company's public stock offerings. On June 15, 2015, these two class action lawsuits were consolidated. On June 26, 2015, an amended complaint was filed in the consolidated action, against the Company, certain of the Company's current directors and former officers, a shareholder of the Company, and certain financial firms that acted as underwriters of the Company's public stock offerings on behalf of a putative class consisting of all persons other than the defendants who purchased or acquired the Company's securities between February 1, 2012 and February 12, 2015 and a putative subclass consisting of all purchasers of the Company's common stock pursuant to or traceable to a shelf registration statement and prospectus issued in connection with the Company's February 6, 2013 public stock offering. The consolidated amended complaint asserted claims on behalf of the putative class for (i) alleged violations of Section 10(b) of the Exchange Act and Rule 10b-5 promulgated thereunder by the Company and certain of the Company's current directors and former officers, (ii) alleged violations of Section 20(a) of the Exchange Act by certain of the Company's current directors and former officers, and (iii) alleged violations of Sections 20(a) and 20(A) of the Exchange Act by a shareholder. The consolidated amended complaint also asserted claims on behalf of the subclass for (i) alleged violations of Section 11 of the Securities Act by the Company, certain of the Company's current directors and former officers, and certain financial firms that acted as underwriters of the Company's public stock offerings, (ii) alleged violations of Section 12 of the Securities Act by the Company, certain of the Company's current directors and former officers, a shareholder of the Company, and certain financial firms that acted as underwriters of the Company's public stock offerings, (iii) alleged violations of Section 15 of the Securities Act by the Company, certain of the Company's former officers, and a shareholder of the Company.

On December 10, 2015, the Company and certain of its current and former officers and directors entered into a Memorandum of Understanding with the plaintiffs' representatives to memorialize an agreement in principle to settle the consolidated securities class action lawsuit, Thomas, et al. v. MagnaChip Semiconductor Corp. et al., Civil Action No. 3:14-CV-01160-JST, pending in the United States District Court for the Northern District of California (the "Class Action Litigation"). On February 5, 2016, the plaintiffs in the consolidated securities class action filed a motion for preliminary approval of the settlement, as well as the stipulation and agreement of settlement and related exhibits. The stipulation and agreement of settlement provided that all claims asserted against all defendants in the Class Action Litigation except for Avenue Capital Management II, L.P. would be released. The stipulation and agreement of settlement also provided for an aggregate settlement payment by the Company of \$23.5 million, which would include all attorneys' fees, costs of administration and plaintiffs' out-of-pocket expenses, lead plaintiff compensatory awards and disbursements. The settlement also included the dismissal of all claims against the Company and the named individuals in the Class Action Litigation without any liability or wrongdoing attributed to them.

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On April 13, 2016, the plaintiffs filed a renewed motion for preliminary approval of the settlement. On July 18, 2016, the court granted plaintiffs renewed motion for preliminary approval of the settlement. On October 17, 2016, plaintiffs filed their motions for final approval of the settlement and plan of allocation of the settlement and for an award of attorneys' fees, reimbursement of litigation expenses, and reimbursement of the costs and expenses of Lead Plaintiff Keith Thomas. On December 1, 2016, following a hearing on November 21, 2016 and an order dated November 21, 2016, the court entered a supplemental order and final judgment (the "Judgment") granting final approval of the settlement. The Judgment was not appealed within the applicable appeals period (on or before January 3, 2017). The settlement therefore became effective after the expiration of the appeals period. The settlement was fully funded by insurance proceeds.

### *SEC Enforcement Staff Review*

In addition, in March 2014, the Company voluntarily reported to the SEC that the Company's Audit Committee had determined that the Company incorrectly recognized revenue on certain transactions and as a result would restate its financial statements, and that the Audit Committee had commenced the independent investigation. Over the course of 2014 and in the first two quarters of 2015, the Company voluntarily produced documents to the SEC regarding the various accounting issues identified during the independent investigation, and whether the Company's hiring of an accountant from the Company's independent registered public accounting firm impacted that accounting firm's independence. On July 22, 2014, the Staff of the SEC's Division of Enforcement obtained a Formal Order of Investigation. On March 12, 2015, the SEC issued a subpoena for documents to the Company in connection with this investigation. The Company will continue to cooperate with the SEC in this investigation, and has produced documents in response to the subpoena. At this time, the Company is unable to estimate any reasonably possible loss, or range of reasonably possible losses, with respect to the matters described above. This is primarily because these matters involve complex legal and factual issues subject to uncertainty. There can be no assurance that these matters will be resolved in a manner that is not adverse to the Company.

### *Shareholder Derivative Complaints*

A shareholder derivative action, styled *Hemmingson et al. v. Elkins et al.*, Case No. 1-15-cv-278614, was filed in the Superior Court of the State of California in and for Santa Clara County on March 25, 2015, naming as defendants certain of the Company's current directors and former and now-former officers, as well as a shareholder of the Company, and naming the Company as a nominal defendant. The complaint in this action asserted claims for (i) alleged breaches of fiduciary duty by certain of the Company's current directors and former and now-former officers for purportedly knowingly failing to maintain adequate internal controls over its accounting and reporting functions and disseminating to shareholders certain alleged materially false and misleading statements, (ii) alleged breaches of fiduciary duty by certain of the Company's current directors and a current shareholder of the Company for purported insider trading, and (iii) alleged unjust enrichment by a shareholder of the Company for purported insider trading.

On June 1, 2015, a shareholder derivative action was filed in the Superior Court of the State of California, Santa Clara County styled *Bushansky v. Norby, et al.*, No. 1-15-CV-281284 (PHK) (Cal. Super. Ct. Santa Clara Cnty.). The complaint names as defendants certain of the Company's current directors and former officers, and a shareholder of the Company, with the Company being named as a nominal defendant. The complaint asserted claims for (i) alleged breaches of fiduciary duties by certain of the Company's current directors and former officers for knowingly failing to maintain adequate internal controls over the Company's accounting and reporting functions and disseminating to shareholders certain alleged materially false and misleading statements; and (ii) alleged aiding and abetting of such breaches of fiduciary duties by all defendants.

On January 22, 2016, the Company and the plaintiffs in the *Hemmingson* and *Bushansky* actions entered into and filed a stipulation of settlement with the Superior Court of the State of California, Santa Clara County. The settlement provided for the resolution of all of the pending claims in both shareholder derivative actions against



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the Company and the individual defendants, without any liability or wrongdoing attributed to them. The settlement also provided for an aggregate payment from the Company defendants' directors and officers' insurance policies of \$3 million to be made to an escrow account, which would be remitted to the Company once the settlement becomes final, less (i) any applicable costs of such escrow account, (ii) any amount awarded by the court to the plaintiff's counsel for attorney's fees and litigation expenses and (iii) the cost of providing notice of the settlement to the Company's stockholders. The proposed settlement also required that the Company implement certain corporate governance measures.

On February 22, 2016, the plaintiffs filed an unopposed motion for preliminary approval of the proposed derivative settlement. On June 10, 2016, the court granted plaintiffs' motion for preliminary approval of the proposed settlement. On October 18, 2016, after a hearing held on October 14, 2016, the court entered its order and final judgment (the Judgment) granting final approval of the proposed settlement and awarding plaintiffs' counsel \$750,000 for attorneys' fees and litigation expenses. The Judgment was not appealed within the applicable appeals period (on or before December 19, 2016). The settlement therefore became effective after the expiration of the appeals period. As of December 29, 2016, \$2,250,000 plus applicable interest was paid to the Company in connection with the settlement.

### *Other 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 ordinary-course legal proceedings that we believe would have a material adverse effect on our business, financial condition or results of operations.

### **Item 4. Mine Safety Disclosures**

Not applicable.

**Table of Contents****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. On February 17, 2017, the last reported sales price of our common stock on the NYSE was \$7.70 per share. The table below sets forth the reported high and low sales prices for our common stock during the quarterly periods for the two most recent fiscal years described below.

**Price Range of Common Stock**

	<b>High</b>	<b>Low</b>
<b>Fiscal 2015</b>		
First Quarter	\$ 15.72	\$ 4.89
Second Quarter	\$ 8.04	\$ 5.00
Third Quarter	\$ 9.88	\$ 6.40
Fourth Quarter	\$ 7.48	\$ 4.14
<b>Fiscal 2016</b>		
First Quarter	\$ 5.81	\$ 3.10
Second Quarter	\$ 6.10	\$ 4.71
Third Quarter	\$ 9.17	\$ 5.35
Fourth Quarter	\$ 8.83	\$ 5.20

**Table of Contents****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, 2011 (the last trading day before the beginning of our fifth preceding fiscal year) through December 31, 2016. The graph assumes that \$100 was invested on December 30, 2011 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, 2016.

**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					
	12/30/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/30/2016
<b>MagnaChip Semiconductor Corporation</b>	100	212.83	260.70	173.66	70.72	82.89
<b>S&amp;P 500 Index</b>	100	113.41	146.98	163.72	162.53	178.02
<b>Philadelphia Semiconductor Index</b>	100	105.38	146.81	188.47	182.05	248.73

 **Holders**

The approximate number of record holders of our outstanding common stock as of January 31, 2017 was 71. This number does not include beneficial owners for whom shares are held by nominees in street name.

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**Dividends**

We do not intend to pay any cash dividends on our common stock in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the development of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our Board of Directors. The payment of cash dividends on our common stock is restricted under the terms of the indentures governing our Exchangeable Notes and 2021 Notes.

**Issuer Purchases of Equity Securities**

The Company did not repurchase any shares of its outstanding common stock during the fiscal quarter ended December 31, 2016.

**Table of Contents****Item 6. Selected Financial Data**

The following tables set forth selected historical consolidated financial data of MagnaChip Semiconductor Corporation on or as of the dates and for the periods indicated. The selected historical consolidated financial data presented below should be read together with Item 7. Management Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements contained in Item 8. Financial Statements and Supplementary Data, including the notes to those consolidated financial statements, appearing elsewhere in this Report.

We have derived the selected consolidated financial data as of December 31, 2016 and 2015 and for the years ended December 31, 2016, 2015 and 2014 from the historical audited consolidated financial statements of the Company included in this Report. We have derived the selected consolidated financial data as of December 31, 2014, 2013 and 2012 and for the years ended December 31, 2013 and 2012 from the audited consolidated financial statements of MagnaChip Semiconductor Corporation not included in this Report. The historical financial data of MagnaChip Semiconductor Corporation for any period are not necessarily indicative of the results to be expected in any future period.

	Year Ended December 31, 2016	Year Ended December 31, 2015	Year Ended December 31, 2014	Year Ended December 31, 2013	Year Ended December 31, 2012
(In millions, except per share data)					
<b>Statements of Operations Data:</b>					
Net sales	\$ 688.0	\$ 633.7	\$ 698.2	\$ 734.2	\$ 807.3
Cost of sales	531.7	498.8	545.4	579.1	564.1
Gross profit	156.2	134.9	152.9	155.1	243.2
Selling, general and administrative expenses	89.1	94.4	127.0	85.8	82.7
Research and development expenses	72.2	83.4	92.8	87.9	76.3
Restructuring and impairment charges (gain)	(7.8)		10.3	8.2	
Operating income (loss) from continuing operations	2.7	(42.9)	(77.1)	(26.8)	84.3
Interest expense	(16.2)	(16.3)	(16.8)	(21.1)	(23.2)
Foreign currency gain (loss), net	(15.4)	(42.5)	(24.7)	16.8	57.3
Loss on early extinguishment of senior notes				(32.8)	
Others, net	3.0	1.8	2.9	3.6	4.5
	(28.6)	(57.0)	(38.6)	(33.5)	38.6
Income (loss) from operations before income taxes	(25.9)	(100.0)	(115.7)	(60.2)	122.9
Income tax expenses (benefits)	3.7	(15.1)	1.5	4.0	12.8
Net income (loss)	\$ (29.6)	\$ (84.9)	\$ (117.2)	\$ (64.2)	\$ 110.0
Net income (loss) attributable to common share	\$ (29.6)	\$ (84.9)	\$ (117.2)	\$ (64.2)	\$ 110.0

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	Year Ended December 31, 2016	Year Ended December 31, 2015	Year Ended December 31, 2014	Year Ended December 31, 2013	Year Ended December 31, 2012
(In millions, except per share data)					
Per share data:					
Earnings (loss) per share					
Basic	\$ (0.85)	\$ (2.47)	\$ (3.44)	\$ (1.82)	\$ 3.01
Diluted	\$ (0.85)	\$ (2.47)	\$ (3.44)	\$ (1.82)	\$ 2.93
Weighted average number of shares					
Basic	34.834	34.381	34.056	35.232	36.568
Diluted	34.834	34.381	34.056	35.232	37.533
<b>Balance Sheet Data (at period end):</b>					
Cash and cash equivalents	\$ 83.4	\$ 90.9	\$ 102.4	\$ 153.6	\$ 182.2
Total assets(4)	442.0	474.1	523.4	620.4	675.0
Total indebtedness(1)(4)	221.1	220.4	219.7	219.2	195.9
Stockholders' equity (deficit)	(72.1)	(62.3)	(18.5)	81.5	191.5
<b>Supplemental Data:</b>					
Adjusted EBITDA(2)	\$ 40.7	\$ 0.8	\$ 8.5		
Adjusted Net Loss(3)	\$ (4.5)	\$ (26.7)	\$ (38.1)		

- (1) Total indebtedness represents long-term borrowings.
- (2) We define Adjusted EBITDA for the periods indicated as EBITDA (as defined below), adjusted to exclude (i) restructuring and impairment charges, (ii) equity-based compensation expense, (iii) foreign currency loss (gain), net, (iv) derivative valuation loss, net and (v) restatement related expenses. EBITDA for the periods indicated is defined as net income (loss) before interest expense, net, income tax expenses and depreciation and amortization. This is a non-US GAAP financial measure and is discussed under Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations Explanation and Reconciliation of Non-US GAAP measures Adjusted EBITDA and Adjusted Net Loss.
- (3) We define Adjusted Net Loss for the periods indicated as net income (loss), adjusted to exclude (i) restructuring and impairment charges, (ii) equity-based compensation expense, (iii) amortization of intangibles, (iv) foreign currency loss (gain), net, (v) derivative valuation loss, net, and (vi) restatement related expenses. This is a non-US GAAP financial measure and is discussed under Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations Explanation and Reconciliation of Non-US GAAP measures Adjusted EBITDA and Adjusted Net Loss.
- (4) In April 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2015-03, Interest Imputation of Interest, which requires that debt issuance costs are presented in the balance sheet as a direct deduction from the carrying amount of debt liability, consistent with debt discounts or premiums. We adopted ASU 2015-03 in 2016 and reclassified all prior periods presented in the table above to conform to the current period presentation. As of December 31, 2015, December 31, 2014, December 31, 2013 and December 31, 2012, \$3.8 million, \$4.3 million, \$4.8 million and \$5.8 million of debt issuance costs were reclassified from total assets to a reduction of total indebtedness. The adoption of ASU 2015-03 did not impact our consolidated statements of operations.

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### **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 and unaudited consolidated interim 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 Korea-based designer and manufacturer of analog and mixed-signal semiconductor products for consumer, computing, communication, industrial, automotive and IoT applications. We provide technology platforms for analog, mixed-signal, power, high voltage, non-volatile memory, and RF applications. We have a proven record with a 30-year operating history, large portfolio of 2,198 registered novel patents and 166 pending novel patent applications and extensive engineering and manufacturing process expertise.

We had previously reported our results of operations under one operating segment. During the second quarter of 2015, organizational changes were made to (i) realign our businesses and organizational structure and (ii) streamline and consolidate certain business processes to achieve greater operating efficiencies. In furtherance of these objectives, we combined our Display Solutions and Power Solutions business lines into a new segment called Standard Products Group. Beginning in the second quarter of 2015, we report our financial results in two operating segments: Semiconductor Manufacturing Services and Standard Products Group. All prior period amounts related to the segment change have been retrospectively reclassified to conform to the new presentation.

Beginning in the third quarter of 2015, we changed the name of our Semiconductor Manufacturing Services segment to Foundry Services Group. We believe that this new name provides greater clarity on the identity of this segment. There is no change to the composition of this reportable segment from what we previously reported for the Semiconductor Manufacturing Services segment.

Our Foundry Services Group provides specialty analog and mixed-signal foundry services mainly for fabless and IDM semiconductor companies that primarily serve consumer, computing, communication, industrial, automotive and IoT applications. Our Standard Products Group includes our Display Solutions and Power Solutions business lines. Our Display Solutions products provide flat panel display solutions to major suppliers of large and small flat panel displays and include our sensor products for mobile applications, industrial applications and home appliances. Our Power Solutions products include discrete and integrated circuit solutions for power management in consumer, computing, communication and industrial applications.

Our wide variety of analog and mixed-signal semiconductor products and manufacturing services combined with our mature technology platform allow us to address multiple high-growth end markets and to 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.

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 balance the likely manufacturing utilization demand of our product businesses and foundry business to optimize our capacity utilization. We must also invest in relevant research and development activities and manufacturing capacity and purchase necessary materials on a timely basis to meet our customers' demand while maintaining our target margins and cash flow.

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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 consumer, computing, communication, industrial, automotive and IoT 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 are diversifying 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 Korea-based operations, if we are not effective in competing in these markets our operating results may be adversely affected.

Within our Foundry Services Group, net sales are driven by customers' decisions on which manufacturing services provider to use for a particular product. Most of our Foundry Services Group customers are fabless, while some are IDM customers. A customer will often have more than one supplier of manufacturing services. In any given period, our net sales depend heavily upon the end-market demand for the goods in which the products we manufacture for customers are used, the inventory levels maintained by our customers and in some cases, allocation of demand for manufacturing services among selected qualified suppliers.

Within our Standard Products Group, net sales 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 in to 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 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 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 products and services require 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



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extended period of time. In addition, we outsource manufacturing of those products which do require advanced technology and 12-inch wafer capacity. We believe this capital investment strategy enables us to optimize our capital investments and facilitates more diversified product and service offerings.

Since 2007, we have designed and manufactured active matrix organic light emitting diodes (AMOLED) display driver ICs in our internal manufacturing facilities. Recently, as we expanded our design capabilities to products that require lower geometries unavailable at our existing manufacturing facilities, we began outsourcing manufacturing of certain AMOLED display driver ICs to an external foundry. This additional source of manufacturing is an increasingly important part of our supply chain management, accounting for a growing portion of our revenue. By outsourcing manufacturing of advanced AMOLED products to external foundries, we are able to dynamically adapt to the changing customer requirements and address growing markets without substantial capital investments by us. Both at the internal and external foundries, we apply our unique AMOLED process patents as well as other intellectual property, proprietary process design kits and custom design-flow methodologies.

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. In our Foundry Services Group, we strive to maintain competitiveness by offering high-value added processes, high-flexibility and excellent service by tailoring existing standard processes to meet customers' design needs and porting customers' own process technologies into our fabrication facilities.

## ***Recent Developments***

In December 2014, we announced that our Board of Directors had adopted a plan to close our 6-inch fab. During the fourth quarter of 2015, we received an \$8.2 million deposit for sale of machinery in conjunction with the planned closure of our 6-inch fab. According to this plan, the 6-inch fab was closed on February 29, 2016. During the first quarter of 2016, we completed all procedures necessary to sell all machineries in our closed 6-inch fab and recognized a \$7.8 million restructuring gain from this related deposit of \$8.2 million, net of certain direct selling costs. On April 4, 2016, we commenced the Program, which was available to certain manufacturing employees, including our 6-inch fab employees, through April 29, 2016.

As of April 29, 2016, 169 employees elected to resign under the terms of the Program, from which we expect to save approximately \$8 million in spending per year. We paid approximately \$8 million for severance benefits, which are required by law and had already been fully accrued in our financial statements, in a lump sum during the second quarter of 2016. Beginning in May 2016, we also began to pay a portion of the \$4.2 million in aggregate other termination benefits under the Program, which are being paid in equal monthly installments over twelve months. We recorded the \$4.2 million charge related to the full amount of these other termination benefits payable under the Program during the second quarter of 2016.

As of December 21, 2016, we entered into a purchase and sale agreement to sell a building located in Cheongju, South Korea. The building has historically been used to house the 6-inch fab and became vacant upon the closure of the fabrication facility. As of December 31, 2015, the building was fully impaired. We received proceeds of \$18.2 million, including a \$1.7 million value-added tax, for the sale of the building on December 26, 2016. We are obligated to perform certain removal construction work that is expected to be completed by the end of March 2017. Accordingly, we recorded \$18.2 million as restricted cash in our consolidated balance sheets as of December 31, 2016.

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### ***Restatement***

In January 2014, our Audit Committee commenced an independent investigation that resulted in the restatement of certain financial statements for prior periods. As a result of the restatement, we have incurred substantial external accounting, legal and other related costs associated with the restatement and certain litigation and other regulatory investigations and actions related thereto. We incurred restatement related costs of \$7.0 million, primarily attributable to certain litigation, for the year ended December 31, 2016, compared to \$12.4 million and \$40.9 million for the years ended December 31, 2015 and 2014, respectively.

On December 10, 2015, we entered into a Memorandum of Understanding with the plaintiffs' representatives to settle the Class Action Litigation, as defined and detailed in Item 3. Legal Proceedings in this Report, for an aggregate settlement payment of \$23.5 million. This settlement payment was fully funded by insurance proceeds that were received in the first quarter of 2016 and disbursed from the escrow account, previously recorded as restricted cash, in the third quarter of 2016.

On January 22, 2016, we entered into a stipulation of settlement with the plaintiffs in the shareholder derivative actions, as described in Item 3. Legal Proceedings in this Report, for an aggregate payment of \$3.0 million from our insurance proceeds that were received in the first quarter of 2016 and recorded in the escrow account. In October 2016, the court approved the settlement of the shareholder derivative actions for \$3.0 million, which included \$0.75 million awarded to plaintiffs' counsel. Upon the expiration of the appeals period, \$2.25 million was disbursed from the escrow account, previously recorded as restricted cash, in December 2016. The remaining restricted cash related to insurance proceeds of \$3.1 million was also released in December 2016.

### ***Segments***

We report our financial results in two operating segments: Foundry Services Group and Standard Products Group. We identified these segments based on how we allocate resources and assess our performance.

***Foundry Services Group:*** Our Foundry Services Group provides specialty analog and mixed-signal foundry services to fabless semiconductor companies and IDMs that serve consumer, computing, communication, industrial, automotive and IoT applications. We manufacture wafers based on our customers' product designs. We do not market these products directly to end customers but rather supply manufactured wafers and products to our customers to market to their end customers. We offer approximately 466 process flows to our foundry services customers. We also often partner with key customers to jointly develop or customize specialized processes that enable our customers to improve their products and allow us to develop unique manufacturing expertise. Our foundry services target customers who require differentiated, specialty analog and mixed-signal process technologies such as high voltage complementary metal-oxide-semiconductor (CMOS), non-volatile memory or bipolar-CMOS-DMOS (BCD). These customers typically serve the consumer, computing, communication, industrial, automotive and IoT applications. Our Foundry Services Group business represented 39.8%, 45.9% and 51.6% of our net sales for the fiscal years ended December 31, 2016, 2015 and 2014, respectively. Gross profit from our Foundry Services Group business was \$69.4 million, \$66.2 million and \$75.7 million for the fiscal years ended December 31, 2016, 2015 and 2014, respectively.

***Standard Products Group:*** Our Standard Products Group includes our Display Solutions and Power Solutions business lines. Our Display Solutions products include source and gate drivers and timing controllers that cover a wide range of flat panel displays used in ultra high definition (UHD), high definition (HD), light emitting diode (LED), 3D and OLED televisions and displays, notebooks and mobile communications and entertainment devices. Our Display Solutions products support the industry's most advanced display technologies, such as active matrix organic light emitting diodes (AMOLEDs), and low temperature polysilicons (LTPS), as well as high-volume display technologies such as thin film transistors (TFT). Since 2007, we have designed and manufactured AMOLED display driver IC products. Our current portfolio of AMOLED solutions address a wide range of resolutions ranging from HD to Wide Quad High

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Definition (WQHD) for applications including smartphones, TVs, and other mobile devices. We believe we have a unique intellectual property portfolio and mixed-signal design and manufacturing expertise in the AMOLED industry. We provide a full range of intelligent sensor product families featuring 0.18 micron analog and mixed-signal technology with low power consumption. Our sensor families target the growing market for applications ranging from smartphone, tablet PC and other consumer electronics to industrial devices. Our Power Solutions business line produces 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), power modules, AC-DC converters, DC-DC converters, LED drivers, switching regulators and linear regulators for a range of devices, including televisions, smartphones, mobile phones, desktop PCs, notebooks, tablet PCs, other consumer electronics, and industrial applications such as power suppliers, LED lighting, motor control and home appliances. Our Standard Products Group, which includes our Display Solutions and Power Solutions business lines, represented 60.1%, 54.0% and 48.3% of our net sales for the fiscal years ended December 31, 2016, 2015 and 2014, respectively. Gross profit from our Standard Products Group was \$87.2 million, \$68.1 million and \$76.6 million for the fiscal years ended December 31, 2016, 2015 and 2014, respectively.

### **Explanation and Reconciliation of Non-US GAAP Measures**

#### ***Adjusted EBITDA and Adjusted Net Loss***

We use the terms Adjusted EBITDA and Adjusted Net Loss throughout this Report. Adjusted EBITDA, as we define it, is a non-US GAAP measure. We define Adjusted EBITDA for the periods indicated as EBITDA (as defined below), adjusted to exclude (i) restructuring, impairment and other (gain), (ii) equity-based compensation expense, (iii) foreign currency loss (gain), net, (iv) derivative valuation loss (gain), net and (v) restatement related expenses. EBITDA for the periods indicated is defined as net loss before interest expense, net, income tax expenses (benefits), 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 the 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 the 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.



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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 US GAAP and should not be construed as an alternative to income from continuing operations, cash flows from operating activities or net loss, as determined in accordance with US GAAP. A reconciliation of net loss to Adjusted EBITDA is as follows:

	Year Ended December 31, 2016	Year Ended December 31, 2015 (In millions)	Year Ended December 31, 2014
Net Loss	\$ (29.6)	\$ (84.9)	\$ (117.2)
Interest expense, net	16.0	16.0	16.2
Income tax expenses (benefits)	3.7	(15.1)	1.5
Depreciation and amortization	25.4	26.5	30.0
EBITDA	\$ 15.5	\$ (57.4)	\$ (69.4)
Adjustments:			
Restructuring, impairment and other (gain)(a)	(1.3)		10.3
Equity-based compensation expense(b)	3.8	2.8	2.1
Foreign currency loss (gain), net(c)	15.4	42.5	24.6
Derivative valuation loss (gain), net(d)	0.3	0.5	
Restatement related expenses(e)	7.0	12.4	40.9
Adjusted EBITDA	\$ 40.7	\$ 0.8	\$ 8.5

- (a) This adjustment eliminates the impact associated with the closure of our 6-inch fab. For the year ended December 31, 2016, the adjustment eliminates the \$7.8 million restructuring gain on sale of machinery in connection with the closure of our 6-inch fab, net of the \$4.2 million other termination benefits payable under the voluntary resignation program and \$2.3 million training and transition costs related to our 6-inch fab employees. For the year ended December 31, 2014, the adjustment eliminates the impact of impairment charges of \$10.3 million related to the asset impairment in connection with the closure of our 6-inch fab. We believe that the exclusion of these impacts provides investors with a more consistent basis for which to compare results in future periods now that the closure of our 6-inch fab has been completed.
- (b) 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.
- (c) 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.
- (d) This adjustment eliminates the impact of gain or loss recognized in income on derivatives, which represents hedge ineffectiveness or 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.
- (e) This adjustment eliminates expenses in connection with the Audit Committee's independent investigation and related restatement and litigation, primarily comprised of legal, audit and consulting fees. Partially

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offsetting the restatement related expenses for the year ended December 31, 2015 was the proceeds of \$2.4 million from an insurance claim for defense costs. This amount does not include any allocation of internal costs related to the restatement. As these restatement related expenses meaningfully impacted our operating results and are not expected to represent an ongoing operating expense to us, we believe our operating performance results are more usefully compared if these expenses are excluded.

There was no tax impact from the adjustments to net loss to calculate our Adjusted EBITDA for the years ended December 31, 2016, 2015 and 2014 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 net loss used to calculate Adjusted EBITDA were applied consistently to the periods presented.

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 US 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 US GAAP results and using Adjusted EBITDA only supplementally.

We present Adjusted Net Loss as a further supplemental measure of our performance. We prepare Adjusted Net Loss by adjusting net loss 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 Loss is particularly useful because it reflects the impact of our asset base and capital structure on our operating performance. We present Adjusted Net Loss for a number of reasons, including:

we use Adjusted Net Loss 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

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we believe that reporting Adjusted Net Loss 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.

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Adjusted Net Loss is not a measure defined in accordance with US GAAP and should not be construed as an alternative to income from continuing operations, cash flows from operating activities or net loss, as determined in accordance with US GAAP. We encourage you to evaluate each adjustment and the reasons we consider them appropriate. Other companies in our industry may calculate Adjusted Net Loss differently than we do, limiting its usefulness as a comparative measure. In addition, in evaluating Adjusted Net Loss, you should be aware that in the future we may incur expenses similar to the adjustments in this presentation. We define Adjusted Net Loss for the periods indicated as net loss, adjusted to exclude (i) restructuring, impairment and other (gain), (ii) equity-based compensation expense, (iii) amortization of intangibles, (iv) foreign currency loss, net, (v) derivative valuation loss, net and (vi) restatement related expenses.

The following table summarizes the adjustments to net loss that we make in order to calculate Adjusted Net Loss for the periods indicated:

	Year Ended December 31, 2016	Year Ended December 31, 2015 (In millions)	Year Ended December 31, 2014
Net Loss	\$ (29.6)	\$ (84.9)	\$ (117.2)
Adjustments:			
Restructuring, impairment and other (gain)(a)	(1.3)		10.3
Equity-based compensation expense(b)	3.8	2.8	2.1
Amortization of intangibles(c)			1.2
Foreign currency loss, net(d)	15.4	42.5	24.6
Derivative valuation loss, net(e)	0.3	0.5	
Restatement related expenses(f)	7.0	12.4	40.9
Adjusted Net Loss	\$ (4.5)	\$ (26.7)	\$ (38.1)

- (a) This adjustment eliminates the impact associated with the closure of our 6-inch fab. For the year ended December 31, 2016, the adjustment eliminates the \$7.8 million restructuring gain on sale of machinery in connection with the closure of our 6-inch fab, net of the \$4.2 million other termination benefits payable under the voluntary resignation program and \$2.3 million training and transition costs related to our 6-inch fab employees. For the year ended December 31, 2014, the adjustment eliminates the impact of impairment charges of \$10.3 million related to the asset impairment in connection with the closure of our 6-inch fab. We believe that the exclusion of these impacts provides investors with a more consistent basis for which to compare results in future periods now that the closure of our 6-inch fab has been completed.
- (b) 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.
- (c) This adjustment eliminates the non-cash impact of amortization expense for intangible assets created as a result of the purchase accounting treatment of the Original Acquisition and other subsequent acquisitions, and from the application of fresh-start accounting in connection with the reorganization proceedings. We do not believe these non-cash amortization expenses for intangibles are indicative of our core ongoing operating performance because the assets would not have been capitalized on our balance sheet but for the application of purchase accounting or fresh-start accounting, as applicable.
- (d) 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



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isolation of this adjustment provides investors with enhanced comparability to prior and future periods of our operating performance results.

- (e) This adjustment eliminates the impact of gain or loss recognized in income on derivatives, which represents hedge ineffectiveness or 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.
- (f) This adjustment eliminates expenses in connection with the Audit Committee's independent investigation and related restatement and litigation, primarily comprised of legal, audit and consulting fees. Partially offsetting the restatement related expenses for the year ended December 31, 2015 was the proceeds of \$2.4 million from an insurance claim for defense costs. This amount does not include any allocation of internal costs related to the restatement. As these restatement related expenses meaningfully impacted our operating results and are not expected to represent an ongoing operating expense to us, we believe our operating performance results are more usefully compared if these expenses are excluded.

There was no tax impact from the adjustments to net loss to calculate our Adjusted Net Loss for the years ended December 31, 2016, 2015 and 2014 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 net loss used to calculate Adjusted Net Loss were applied consistently to the periods presented.

Adjusted Net Loss 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 US GAAP. Some of these limitations are:

Adjusted Net Loss does not reflect changes in, or cash requirements for, our working capital needs;

Adjusted Net Loss does not consider the potentially dilutive impact of issuing equity-based compensation to our management team and employees;

Adjusted Net Loss does not reflect the costs of holding certain assets and liabilities in foreign currencies; and

other companies in our industry may calculate Adjusted Net Loss differently than we do, limiting its usefulness as a comparative measure.

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

Our Adjusted EBITDA and Adjusted Net Loss for the year ended December 31, 2016 were \$40.7 million and \$4.5 million, respectively. Our Adjusted EBITDA and Adjusted Net Loss for the year ended December 31, 2015 were \$0.8 million and \$26.7 million, respectively. Our Adjusted EBITDA and Adjusted Net Loss for the year ended December 31, 2014 were \$8.5 million and \$38.1 million, respectively.

## **Factors Affecting Our Results of Operations**

**Net Sales.** We derive virtually all of our sales (net of sales returns and allowances) from two segments: Foundry Services Group and Standard Products Group. 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 and technical support offices near concentrations of major customers. Our sales offices are located in Korea, the United States, Japan and Greater China. Our network of authorized agents and distributors consists of agents in the United States and Europe and distributors and agents in the Asia Pacific region. Our net sales from All other consist principally of the disposal of waste materials.

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We recognize revenue when risk and reward of ownership pass to the customer either upon shipment, upon product delivery at the customer's location or upon customer acceptance, depending on the terms of the arrangement. For the years ended December 31, 2016 and 2015, we sold products to 357 and 316 customers, respectively, and our net sales to our ten largest customers represented 64% and 64% of our net sales, respectively. We have a combined production capacity of approximately 115,000 semiconductor wafers per month. We believe our large-scale, cost-effective fabrication facilities enable us to rapidly adjust our production levels to meet shifts in demand by our end customers.

**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 facilities 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 cost of material consists 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 significantly increase.

**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, 2016, 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.

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**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 are for process development that serves as a common technology platform for all of our product lines.

**Interest Expense.** Our interest expense was incurred primarily under the 2021 Notes.

**Impact of Foreign Currency Exchange Rates on Reported 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 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 (loss) 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, 2016, the outstanding intercompany loan balance including accrued interests between our Korean subsidiary and our Dutch subsidiary was \$598 million. Our Dutch subsidiary uses U.S. dollar as their functional currency. 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 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. 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 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.

**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 our statements of operations as a component of other income (expense). 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

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differences in the financial reporting bases and tax bases 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.

Our operations are subject to income and transaction taxes in the United States and in multiple foreign jurisdictions, including Korea. Significant estimates and judgments are required in determining our worldwide provision for income 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.

**Capital Expenditures.** We invest in manufacturing equipment, software design tools and other tangible and intangible assets for 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 include our payments for the purchase of property, plant and equipment as well as payments for the registration of intellectual property rights.

**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.

**Table of Contents****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 net sales:

	Year Ended December 31, 2016		Year Ended December 31, 2015		Year Ended December 31, 2014	
	Amount	% of net sales	Amount	% of net sales	Amount	% of net sales
(In millions)						
Consolidated statements of operations data:						
Net sales	\$ 688.0	100.0%	\$ 633.7	100.0%	\$ 698.2	100.0%
Cost of sales	531.7	77.3	498.8	78.7	545.4	78.1
Gross profit	156.2	22.7	134.9	21.3	152.9	21.9
Selling, general and administrative expenses	89.1	13.0	94.4	14.9	127.0	18.2
Research and development expenses	72.2	10.5	83.4	13.2	92.8	13.3
Restructuring and impairment charges (gain)	(7.8)	(1.1)			10.3	1.5
Operating income (loss)	2.7	0.4	(42.9)	(6.8)	(77.1)	(11.0)
Interest expense	(16.2)	(2.4)	(16.3)	(2.6)	(16.8)	(2.4)
Foreign currency loss, net	(15.4)	(2.2)	(42.5)	(6.7)	(24.7)	(3.5)
Others, net	3.0	0.4	1.8	0.3	2.9	0.4
	(28.6)	(4.2)	(57.0)	(9.0)	(38.6)	(5.5)
Loss before income taxes	(25.9)	(3.8)	(100.0)	(15.8)	(115.7)	(16.6)
Income tax expenses (benefits)	3.7	0.5	(15.1)	(2.4)	1.5	0.2
Net loss	\$ (29.6)	(4.3)%	\$ (84.9)	(13.4)%	\$ (117.2)	(16.8)%
Net Sales:						
Foundry Services Group	\$ 274.0	39.8%	\$ 290.8	45.9%	\$ 360.5	51.6%
Standard Products Group						
Display Solutions	282.0	41.0	207.5	32.7	199.9	28.6
Power Solutions	131.5	19.1	134.8	21.3	137.2	19.7
Total Standard Products Group	413.4	60.1	342.3	54.0	337.1	48.3
All other	0.6	0.1	0.6	0.1	0.6	0.1
Total net sales	\$ 688.0	100.0%	\$ 633.7	100.0%	\$ 698.2	100.0%

**Table of Contents****Results of Operations Comparison of Years Ended December 31, 2016 and 2015**

The following table sets forth consolidated results of operations for the years ended December 31, 2016 and 2015:

	Year Ended December 31, 2016		Year Ended December 31, 2015		Change Amount
	Amount	% of Net Sales	Amount (In millions)	% of Net Sales	
Net sales	\$ 688.0	100.0%	\$ 633.7	100.0%	\$ 54.3
Cost of sales	531.7	77.3	498.8	78.7	32.9
Gross profit	156.2	22.7	134.9	21.3	21.4
Selling, general and administrative expenses	89.1	13.0	94.4	14.9	(5.3)
Research and development expenses	72.2	10.5	83.4	13.2	(11.2)
Restructuring gain	(7.8)	(1.1)			(7.8)
Operating income (loss)	2.7	0.4	(42.9)	(6.8)	45.7
Interest expense	(16.2)	(2.4)	(16.3)	(2.6)	0.0
Foreign currency loss, net	(15.4)	(2.2)	(42.5)	(6.7)	27.2
Others, net	3.0	0.4	1.8	0.3	1.2
	(28.6)	(4.2)	(57.0)	(9.0)	28.4
Loss before income taxes	(25.9)	(3.8)	(100.0)	(15.8)	74.1
Income tax expenses (benefits)	3.7	0.5	(15.1)	(2.4)	18.8
Net loss	\$ (29.6)	(4.3)	\$ (84.9)	(13.4)	\$ 55.3

**Results by segment**

	Year Ended December 31, 2016		Year Ended December 31, 2015		Change Amount
	Amount	% of Net Sales	Amount (In millions)	% of Net Sales	
<b>Net Sales</b>					
Foundry Services Group	\$ 274.0	39.8%	\$ 290.8	45.9%	\$ (16.8)
Standard Products Group					
Display Solutions	282.0	41.0	207.5	32.7	74.5
Power Solutions	131.5	19.1	134.8	21.3	(3.3)
Total Standard Products Group	413.4	60.1	342.3	54.0	71.1
All other	0.6	0.1	0.6	0.1	
Total net sales	\$ 688.0	100.0%	\$ 633.7	100.0%	\$ 54.3

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	Year Ended December 31, 2016		Year Ended December 31, 2015		Change Amount
	Amount	% of Net Sales	Amount (In millions)	% of Net Sales	
<b>Gross Profit</b>					
Foundry Services Group	\$ 69.4	25.3%	\$ 66.2	22.8%	\$ 3.2
Standard Products Group	87.2	21.1	68.1	19.9	19.1
All other	(0.4)	(66.3)	0.6	92.5	(1.0)
<b>Total gross profit</b>	<b>\$ 156.2</b>	<b>22.7%</b>	<b>\$ 134.9</b>	<b>21.3%</b>	<b>\$ 21.4</b>

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**Table of Contents****Net Sales**

Net sales were \$688.0 million for the year ended December 31, 2016, a \$54.3 million, or 8.6%, increase compared to \$633.7 million for the year ended December 31, 2015. This increase was primarily attributable to an increase in revenue related to mobile AMOLED display products from our Standard Products Group, which was offset in part by a net decrease in revenue from our Foundry Services Group as described below.

**Foundry Services Group.** Net sales from our Foundry Services Group segment were \$274.0 million for the year ended December 31, 2016, a \$16.8 million, or 5.8%, decrease compared to net sales of \$290.8 million for the year ended December 31, 2015. The decrease was primarily attributable to a net decline in sales due to the closure of our 6-inch fab in February 2016 and a decrease caused by reduced levels of demand of our foundry services from certain customers serving the high-end and mid-range smartphone markets. These decreases were partially offset by an increase in sales of certain products from new global power management IC foundry customers and an increase in sales of certain products from fingerprint IC and micro controller unit customers.

**Standard Products Group.** Net sales from our Standard Products Group segment were \$413.4 million for the year ended December 31, 2016, a \$71.1 million, or 20.8%, increase compared to \$342.3 million for the year ended December 31, 2015. This substantial increase was primarily due to a significant increase in revenue related to our Display Solutions business line, partially offset by decrease in revenue related to our Power Solutions business line as described below.

Net sales from our Display Solutions business line were \$282.0 million for the year ended December 31, 2016, a \$74.5 million, or 35.9%, increase from \$207.5 million for the year ended December 31, 2015. The increase in sales was primarily attributable to higher sales of mobile AMOLED display driver IC; partially offset by revenue decrease in large display products mainly due to reduced demand for source drivers. Net sales from our Power Solutions business line were \$131.5 million for the year ended December 31, 2016, a \$3.3 million, or 2.5%, decrease from \$134.8 million for the year ended December 31, 2015. The decrease in sales was primarily due to the reduction of low contribution margin MOSFET products as part of our product portfolio optimization process.

**All Other.** All other net sales were \$0.6 million for the year ended December 31, 2016 and December 31, 2015, respectively.

**Gross Profit**

Total gross profit was \$156.2 million for the year ended December 31, 2016 compared to \$134.9 million for the year ended December 31, 2015, a \$21.4 million, or 15.8%, increase. Gross profit as a percentage of net sales for the year ended December 31, 2016 increased to 22.7% compared to 21.3% for the year ended December 31, 2015. The increase in gross profit as a percentage of net sales was due to both our Foundry Services Group and Standard Products Group segments as described below.

**Foundry Services Group.** Gross profit from our Foundry Services Group segment was \$69.4 million for the year ended December 31, 2016, a \$3.2 million, or 4.9%, increase compared to \$66.2 million for the year ended December 31, 2015. Gross profit as a percentage of net sales for the year ended December 31, 2016 increased to 25.3% compared to 22.8% for the year ended December 31, 2015. The increase in gross profit as a percentage of net sales was mainly attributable to a better product mix as we ended the production and sale of legacy low margin products that were manufactured in our 6-inch fab, which was closed during the first quarter of 2016. The increase in 8-inch utilization rate throughout 2016 had a positive impact to gross profit as a percentage of net sales; offset by absorbed labor costs from the remaining headcount from our legacy 6-inch fab.

**Standard Products Group.** Gross profit from our Standard Products Group segment was \$87.2 million for the year ended December 31, 2016, a \$19.1 million, or 28.0%, increase from \$68.1 million for the year ended



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December 31, 2015. Gross profit as a percentage of net sales for the year ended December 31, 2016 increased to 21.1% compared to 19.9% for the year ended December 31, 2015. Gross profit as a percentage of net sales slightly increased due to the increase in our 8-inch utilization rate throughout 2016, offset by absorbed labor costs from the remaining employees from our legacy 6-inch fab closure in February 2016. In addition, we strategically increased the volume of certain lower margin products during 2016 to increase our utilization rate and maximize cash flows.

*All Other.* All other gross profit for the year ended December 31, 2016 was negative \$0.4 million mainly attributable to the \$0.9 million training and transition costs recorded in the first quarter of 2016 related to our remaining 6-inch fab employees, which was partially offset by revenue from the disposal of waste materials. All other gross profit for the year ended December 31, 2015 was \$0.6 million related to the disposal of waste materials.

**Net Sales by Geographic Region**

We report net sales by geographic region based on the location to which the products are billed. The following table sets forth our net sales by geographic region and the percentage of total net sales represented by each geographic region for the years ended December 31, 2016 and 2015:

	Year Ended December 31, 2016		Year Ended December 31, 2015		Change Amount
	Amount	% of Net Sales	Amount (In millions)	% of Net Sales	
Korea	\$ 219.6	31.9%	\$ 241.7	38.1%	\$ (22.1)
Asia Pacific (other than Korea)	391.9	57.0	316.6	50.0	75.3
U.S.A.	33.2	4.8	51.2	8.1	(18.0)
Europe	42.3	6.1	23.5	3.7	18.8
Others	1.0	0.1	0.8	0.1	0.2
	\$ 688.0	100.0%	\$ 633.7	100.0%	\$ 54.3

Net sales in Korea for the year ended December 31, 2016 decreased from \$241.7 million to \$219.6 million compared to the year ended December 31, 2015, or by \$22.1 million, or 9.1%, primarily due to reduced demand of large display applications and a decrease in sales in connection with the closure of our 6-inch fab in the first quarter of 2016, which was partially offset by increased sales of certain MOSFET products mainly for battery protection.

Net sales in Asia Pacific for the year ended December 31, 2016 increased from \$316.6 million to \$391.9 million compared to the year ended December 31, 2015, or by \$75.3 million, or 23.8%, primarily due to higher sales of mobile AMOLED display products, which was partially offset by reduced sales of MOSFET products and our foundry services due to the closure of our 6-inch fab in the first quarter of 2016.

Net sales in the United States for the year ended December 31, 2016 decreased from \$51.2 million to \$33.2 million compared to the year ended December 31, 2015, or by \$18.0 million, or 35.1%, primarily due to the change in billing location from the United States to Europe by a foundry customer serving the high-end smartphone market, which was partially offset by an increase in sales of certain products from a new global power management IC foundry customer.

Net sales in Europe for the year ended December 31, 2016 increased from \$23.5 million to \$42.3 million compared to the year ended December 31, 2015, or by \$18.8 million, or 80.2%, primarily due to the change in billing location from the United States to Europe by a foundry customer serving the high-end smartphone market.

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***Operating Expenses***

***Selling, General and Administrative Expenses.*** Selling, general and administrative expenses were \$89.1 million, or 13.0% of net sales for the year ended December 31, 2016, compared to \$94.4 million, or 14.9% of net sales for the year ended December 31, 2015. The decrease of \$5.3 million, or 5.6%, was attributable to an \$8.8 million decrease in professional fees mainly comprised of legal and consulting fees and a \$2.5 million decrease related to a reversal of a non-income-based tax accrual. These decreases were partially offset by a \$4.2 million increase in other termination benefit expenses under our voluntary resignation program and a \$2.4 million increase due to proceeds from an insurance claim for certain restatement related legal costs received in 2015. The remaining decrease in various general and administrative expenses was primarily a result of our cost reduction efforts.

***Research and Development Expenses.*** Research and development expenses were \$72.2 million, or 10.5% of net sales for the year ended December 31, 2016, compared to \$83.4 million, or 13.2% of net sales for the year ended December 31, 2015. The decrease of \$11.2 million, or 13.5%, was comprised of an \$8.8 million decrease in R&D related material and processing costs, a \$1.2 million decrease in personnel costs, and a \$1.2 million reduction in outside service fees and various overhead expenses.

***Restructuring Gain.*** Restructuring gain of \$7.8 million recorded for the year ended December 31, 2016 resulted from the sale of machinery related to the closure of our 6-inch fab.

***Operating Income (Loss)***

As a result of the foregoing, operating income increased by \$45.7 million in the year ended December 31, 2016 compared to the year ended December 31, 2015. As discussed above, the increase in operating income resulted from a \$21.4 million increase in gross profit, a \$5.3 million decrease in selling, general and administrative expenses, an \$11.2 million decrease in research and development expenses and a \$7.8 million increase in restructuring gain.

***Other Income (Expense)***

***Interest Expense.*** Interest expense was \$16.2 million for the year ended December 31, 2016 and \$16.3 million for the year ended December 31, 2015, respectively.

***Foreign Currency Loss, Net.*** Net foreign currency loss for the year ended December 31, 2016 was \$15.4 million compared to net foreign currency loss of \$42.5 million for the year ended December 31, 2015. The net foreign currency loss for the years ended December 31, 2016 and 2015 was due to the depreciation in value of the Korean won relative to the U.S. dollar during the 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, 2016, the outstanding intercompany loan balance including accrued interest between our Korean subsidiary and our Dutch subsidiary was \$598,212 thousand. Foreign currency translation gain or loss from intercompany balances was 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.

***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 year ended December 31, 2016 and December 31, 2015 were \$3.0 million and \$1.8 million, respectively.

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### ***Income Tax Expenses (Benefits)***

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. Our primary foreign operations are in Korea where the statutory tax rate applicable to us was approximately 24.2% in 2016 and 2015. Statutory tax rates for all foreign subsidiaries were less than the U.S. federal statutory rate of 35.0%.

We recorded income tax expenses of \$3.7 million for the year ended December 31, 2016 and income tax benefits of \$15.1 million for the year ended December 31, 2015. The effective tax rate was negative for the year ended December 31, 2016, as compared to 15.1% for the year ended December 31, 2015.

The significant increase in income tax expenses in 2016 is related to the reversal of withholding tax payable with respect to the waiver of the accrued interest on the loans granted to our Korean subsidiary by our Dutch subsidiary in 2015. Korean and Dutch subsidiaries agreed that our Dutch subsidiary waives and releases a partial amount of unpaid interest of \$174 million on its intercompany loans granted to our Korean subsidiary in order to decrease the cumulative losses of our Korean subsidiary to enhance the subsidiary's credit standing under the local banking rules. This transaction created a taxable income for our Korean subsidiary but did not result in a liability because of the utilization of expired loss carryforwards, which is deductible only against gains from cancellation of debt. The loss was not tax deductible for our Dutch subsidiary. This transaction also resulted in taxable loss for our Luxemburg subsidiary and this tax benefit was offset by an increase in the change in valuation allowance. In connection with the waiver of unpaid interest, the related withholding tax was reversed, resulting in the recognition of income tax benefit of \$17.8 million as of December 31, 2015.

We make an ongoing assessment regarding the realization of U.S. and non-U.S. deferred tax assets. The valuation allowances at December 31, 2016 and 2015 are primarily attributable to deferred tax assets for the uncertainty in taxable income at our Korean subsidiary for which we have recorded a full valuation allowance against the deferred tax assets, net of its deferred tax liabilities, and against certain of our foreign subsidiaries deferred tax assets pertaining to their related tax loss carry-forwards and tax credits that are not anticipated to generate a tax benefit.

### ***Net Loss***

As a result of the foregoing, net loss decreased by \$55.3 million in the year ended December 31, 2016 compared to the year ended December 31, 2015. As discussed above, the decrease primarily resulted from a \$45.7 million decrease in operating loss and a \$27.2 million decrease in foreign currency loss, partially offset by an \$18.8 million increase in income tax expenses.

**Table of Contents****Results of Operations Comparison of Years Ended December 31, 2015 and 2014**

The following table sets forth consolidated results of operations for the years ended December 31, 2015 and 2014:

	Year Ended December 31, 2015		Year Ended December 31, 2014		Change Amount
	Amount	% of Net Sales	Amount (In millions)	% of Net Sales	
Net sales	\$ 633.7	100.0%	\$ 698.2	100.0%	\$ (64.5)
Cost of sales	498.8	78.7	545.4	78.1	(46.5)
Gross profit	134.9	21.3	152.9	21.9	(18.0)
Selling, general and administrative expenses	94.4	14.9	127.0	18.2	(32.6)
Research and development expenses	83.4	13.2	92.8	13.3	(9.3)
Restructuring and impairment charges			10.3	1.5	(10.3)
Operating loss	(42.9)	(6.8)	(77.1)	(11.0)	34.2
Interest expense	(16.3)	(2.6)	(16.8)	(2.4)	0.6
Foreign currency loss, net	(42.5)	(6.7)	(24.7)	(3.5)	(17.9)
Others, net	1.8	0.3	2.9	0.4	(1.1)
	(57.0)	(9.0)	(38.6)	(5.5)	(18.4)
Loss before income taxes	(100.0)	(15.8)	(115.7)	(16.6)	15.7
Income tax expenses (benefits)	(15.1)	(2.4)	1.5	0.2	(16.6)
Net loss	\$ (84.9)	(13.4)	\$ (117.2)	(16.8)	\$ 32.3

**Results by segment**

	Year Ended December 31, 2015		Year Ended December 31, 2014		Change Amount
	Amount	% of Net Sales	Amount (In millions)	% of Net Sales	
<b>Net Sales</b>					
Foundry Services Group	\$ 290.8	45.9%	\$ 360.5	51.6%	\$ (69.8)
Standard Products Group					
Display Solutions	207.5	32.7	199.9	28.6	7.6
Power Solutions	134.8	21.3	137.2	19.7	(2.4)
Total Standard Products Group	342.3	54.0	337.1	48.3	5.2
All other	0.6	0.1	0.6	0.1	0.1
Total net sales	\$ 633.7	100.0%	\$ 698.2	100.0%	\$ (64.5)

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	Year Ended December 31, 2015		Year Ended December 31, 2014		Change Amount
	Amount	% of Net Sales	Amount (In millions)	% of Net Sales	
<b>Gross Profit</b>					
Foundry Services Group	\$ 66.2	22.8%	\$ 75.7	21.0%	\$ (9.5)
Standard Products Group	68.1	19.9	76.6	22.7	(8.5)
All other	0.6	91.7	0.6	96.1	
<b>Total gross profit</b>	<b>\$ 134.9</b>	<b>21.3%</b>	<b>\$ 152.9</b>	<b>21.9%</b>	<b>\$ (18.0)</b>

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Net sales were \$633.7 million for the year ended December 31, 2015, a \$64.5 million, or 9.2%, decrease compared to \$698.2 million for the year ended December 31, 2014. Net sales declined in 2015 compared to fiscal year 2014 primarily as a result of significant decrease in revenue related to our Foundry Services Group segment as described below.

**Foundry Services Group.** Net sales from our Foundry Services Group segment were \$290.8 million for the year ended December 31, 2015, a \$69.8 million, or 19.4%, decrease compared to \$360.5 million for the year ended December 31, 2014. The decrease was primarily attributable to reduced levels of demand of our foundry services and discontinuation of certain products by customers serving the smartphone market.

**Standard Products Group.** Net sales from our Standard Products Group segment were \$342.3 million for the year ended December 31, 2015, a \$5.2 million, or 1.5%, increase compared to \$337.1 million for the year ended December 31, 2014. This increase was due to increase in revenue related to our Display Solutions business line, which was partially offset by the decrease in revenue related to our Power Solutions business line as described below.

Net sales from our Display Solutions business line were \$207.5 million for the year ended December 31, 2015, a \$7.6 million, or 3.8%, increase from \$199.9 million for the year ended December 31, 2014. The increase in sales was primarily attributable to higher sales of Source Drivers among large display products, primarily for monitors, notebooks and TVs, which was partially offset by reduced sales of mobile display products.

Net sales from our Power Solutions business line were \$134.8 million for the year ended December 31, 2015, a \$2.4 million, or 1.7%, decrease from \$137.2 million for the year ended December 31, 2014. The decrease in sales was primarily attributable to reduced production of low gross margin Power Modules as part of our product portfolio optimization process, which was partially offset by increased demand for premium products such as high end MOSFETs and IGBTs primarily for mobile and industrial applications.

**All Other.** All other net sales were \$0.6 million for the year ended December 31, 2015 and December 31, 2014, respectively.

## ***Gross Profit***

Total gross profit was \$134.9 million for the year ended December 31, 2015 compared to \$152.9 million for the year ended December 31, 2014, an \$18.0 million, or 11.8%, decrease. Gross profit as a percentage of net sales for the year ended December 31, 2015 decreased slightly to 21.3% compared to 21.9% for the year ended December 31, 2014. The decrease in gross profit as a percentage of net sales was primarily attributable to the negative impact of unfavorable product mix and a lower utilization rate, partially offset by the positive impact of lower unit costs due to our cost reduction efforts from our Standard Products Group segment as further described below.

**Foundry Services Group.** Gross profit from our Foundry Services Group segment was \$66.2 million for the year ended December 31, 2015, a \$9.5 million, or 12.5%, decrease compared to \$75.7 million for the year ended December 31, 2014. Gross profit as a percentage of net sales for the year ended December 31, 2015 increased to 22.8% compared to 21.0% for the year ended December 31, 2014. The increase in gross profit as a percentage of net sales was mainly attributable to the positive impact of lower unit costs resulting from decrease in labor and utilities spending due to our continuing cost reduction efforts. This increase was partially offset by the negative impact of unfavorable product mix and a lower utilization rate mainly caused by reduced levels of demand from certain customers.

**Standard Products Group.** Gross profit from our Standard Products Group segment was \$68.1 million for the year ended December 31, 2015, a \$8.5 million, or 11.1%, decrease from \$76.6 million for the year ended December 31, 2014. Gross profit as a percentage of net sales for the year ended December 31, 2015 decreased to

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19.9% compared to 22.7% for the year ended December 31, 2014. The decrease in gross profit as a percentage of net sales was primarily attributable to the negative impact of a lower utilization rate mainly caused by reduced levels of demand from certain customers, and unfavorable product mix due to decrease in mobile display product sales and increase in large display products sales. This decrease was partially offset by lower unit costs resulting from decrease in spending related to labor and utilities due to our continuing cost reduction efforts.

*All Other.* All other gross profit was \$0.6 million for the year ended December 31, 2015 and December 31, 2014, respectively.

**Net Sales by Geographic Region**

We report net sales by geographic region based on the location to which the products are billed. The following table sets forth our net sales by geographic region and the percentage of total net sales represented by each geographic region for the years ended December 31, 2015 and 2014:

	Year Ended December 31, 2015		Year Ended December 31, 2014		Change Amount
	Amount	% of Net Sales	Amount (In millions)	% of Net Sales	
Korea	\$ 241.7	38.1%	\$ 260.1	37.3%	\$ (18.4)
Asia Pacific (other than Korea)	316.6	50.0	324.2	46.4	(7.7)
U.S.A.	51.2	8.1	91.3	13.1	(40.1)
Europe	23.5	3.7	21.2	3.0	2.3
Others	0.8	0.1	1.4	0.2	(0.6)
	\$ 633.7	100.0%	\$ 698.2	100.0%	\$ (64.5)

Net sales in the U.S. for the year ended December 31, 2015 decreased from \$91.3 million to \$51.2 million compared to the year ended December 31, 2014, or by \$40.1 million, or 43.9%, primarily due to the decrease in demand of our foundry services from customers serving the high end smartphone market.

Net sales in Korea for the year ended December 31, 2015 decreased from \$260.1 million to \$241.7 million compared to the year ended December 31, 2014, or by \$18.4 million, or 7.1%, primarily due to discontinued use of a distributor in Korea and selling direct to OEM subsidiaries in Asia Pacific. This decrease was partially offset by higher sales of large display products such as Source Drivers primarily for monitors, notebooks and TVs.

Net sales in Asia Pacific for the year ended December 31, 2015 decreased from \$324.2 million to \$316.6 million compared to the year ended December 31, 2014, or by \$7.7 million, or 2.4%. The decrease was primarily attributable to the negative impact of decrease in demand due to discontinuation of a certain product by a customer serving the smartphone market, and reduced demand for mobile display products primarily for table PCs and feature phones. This decrease was partially offset by the positive impact of discontinued use of a distributor in Korea and selling direct to OEM subsidiaries in Asia Pacific.

**Operating Expenses**

**Selling, General and Administrative Expenses.** Selling, general and administrative expenses were \$94.4 million, or 14.9% of net sales for the year ended December 31, 2015, compared to \$127.0 million, or 18.2% of net sales for the year ended December 31, 2014. The decrease of \$32.6 million, or 25.7%, was primarily attributable to a \$28.5 million decrease in restatement related professional service fees and a \$2.6 million decrease in personnel costs due to our continuing cost reduction efforts.

**Research and Development Expenses.** Research and development expenses were \$83.4 million, or 13.2% of net sales for the year ended December 31, 2015, compared to \$92.8 million, or 13.3% of net sales for the year

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ended December 31, 2014. The decrease of \$9.3 million, or 10.0%, was primarily due to the decrease in material and personnel costs mainly due to our continuing cost reduction efforts.

**Restructuring and Impairment Charges.** Restructuring and impairment charges of \$10.3 million recorded for the year ended December 31, 2014 were related to the planned closure of our six-inch fabrication facilities.

**Operating Loss**

As a result of the foregoing, operating loss decreased by \$34.2 million in the year ended December 31, 2015 compared to the year ended December 31, 2014. As discussed above, the decrease in operating loss resulted from a \$32.6 million decrease in selling, general and administrative expenses, which were mainly driven by decreased professional service fees related to the restatement and certain litigation, a \$10.3 million decrease in restructuring and impairment charges and a \$9.3 million decrease in research and development expenses, which was partially offset by a \$18.0 million decrease in gross profit.

**Other Income (Expense)**

**Interest Expense.** Interest expense was \$16.3 million for the year ended December 31, 2015 and \$16.8 million for the year ended December 31, 2014, respectively.

**Foreign Currency Loss, Net.** Net foreign currency loss for the year ended December 31, 2015 was \$42.5 million, compared to net foreign currency loss of \$24.7 million for the year ended December 31, 2014. A substantial portion of our net foreign currency gain or loss is non-cash translation gain or loss associated with intercompany balances at our Korean subsidiary and is affected by changes in the exchange rate between the Korean won and the U.S. dollar. Foreign currency translation gain or loss from intercompany balances was 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.

**Others, Net.** Others were comprised of gains and losses on valuation of derivatives which were designated as hedging instruments, rental income and interest income. Others for the year ended December 31, 2015 and December 31, 2014 was \$1.8 million and \$2.9 million, respectively. The decrease of \$1.1 million was primarily attributable to net loss on valuation of derivatives due to hedge ineffectiveness.

**Income Tax Expenses (Benefits)**

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. Our primary foreign operations are in Korea where the statutory tax rate applicable to us was approximately 24.2% in 2015 and 2014. Statutory tax rates for all foreign subsidiaries other than our Japanese subsidiary were less than the U.S. federal statutory rate of 35.0%.

We recorded income tax benefits of \$15.1 million for the year ended December 31, 2015 and income tax expenses of \$1.5 million for the year ended December 31, 2014. The effective tax rate was 15.1% for the year ended December 31, 2015, as compared to (1.3)% for the year ended December 31, 2014.

The income tax benefits computed at statutory tax rates for the years ended December 31, 2015 were substantially offset by changes in valuation allowance, the difference in foreign tax rates lower than the U.S. federal statutory rate and withholding taxes in our Dutch subsidiary. The significant increase in income tax benefits in 2015 is due to the reversal of withholding tax payable with respect to the waiver of the accrued interest on the loans granted to our Korean subsidiary by our Dutch subsidiary. On December 7, 2015, our Korean and Dutch subsidiaries agreed that our Dutch subsidiary waives and releases a partial amount of unpaid



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interest of \$174 million on its intercompany loans granted to our Korean subsidiary in order to decrease the cumulative losses of our Korean subsidiary to enhance the subsidiary's credit standing under the local banking rules. This transaction created a taxable income for our Korean subsidiary but did not result in a liability because of the utilization of expired loss carryforwards, which is deductible only against gains from cancellation of debt. The loss was not tax deductible for our Dutch subsidiary. This transaction also resulted in taxable loss for our Luxembourg subsidiary and this tax benefit was offset by an increase in the change in valuation allowance. In connection with the waiver of unpaid interest, the related withholding tax was reversed, resulting in the recognition of income tax benefit of \$17.8 million as of December 31, 2015.

We make an ongoing assessment regarding the realization of U.S. and non-U.S. deferred tax assets. The valuation allowances at December 31, 2015 and 2014 are primarily attributable to deferred tax assets for the uncertainty in taxable income at our Korean subsidiary for which we have recorded a full valuation allowance against the deferred tax assets, net of its deferred tax liabilities, and against certain of our foreign subsidiaries' deferred tax assets pertaining to their related tax loss carry-forwards and tax credits that are not anticipated to generate a tax benefit.

### ***Net Loss***

As a result of the foregoing, net loss decreased by \$32.3 million in the year ended December 31, 2015 compared to the year ended December 31, 2014. As discussed above, the decrease in net loss was primarily due to a \$34.2 million decrease in operating loss and a \$16.6 million decrease in income tax expenses, partially offset by a \$17.9 million increase in foreign currency loss.

### **Liquidity and Capital Resources**

Our principal capital requirements are to fund sales and marketing, invest in research and development and capital equipment, to make debt service payments 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 3. 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, 2016, we do not have any accounts payable on extended terms or payment deferral with our vendors.

On January 17, 2017, MagnaChip Semiconductor S.A., our Luxembourg subsidiary, closed an offering (the Notes Offering) of 5.00% Exchangeable Senior Notes due 2021 (the Exchangeable Notes) with \$86.25 million aggregate principal amount, reflecting the full exercise of the initial purchasers' option to purchase additional Exchangeable Notes. We used the net proceeds from the Notes Offering to repurchase approximately \$11.4 million of our common stock as part of our stock repurchase program and plan to use the remaining net proceeds from the Notes Offering (i) for our anticipated cost reduction program to be implemented during 2017 (approximately \$30-40 million), (ii) for capital expenditures (approximately \$15-20 million), (iii) to repurchase additional common stock as part of our stock repurchase program (up to \$15 million in the aggregate) and (iv) for general corporate purposes.

We currently believe that we will have sufficient cash reserves from cash on hand and expected cash from operations to fund our operations and planned cost reduction program as well as capital expenditures for the next twelve months and the foreseeable future.

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Many of the aspects of management's plan, growth strategies and cost reduction programs involve management's judgments and estimates that include factors that may be beyond our control, and actual results could differ materially from our current expectations. As a result, these and other factors could cause our business plans, strategies and cost reduction program to be unsuccessful, which could have a material adverse effect on our operating results, financial condition and liquidity.

As of December 31, 2016, cash and cash equivalents held by our Korean subsidiary were \$74.3 million, which represents 89% of our total cash and cash equivalents of \$83.4 million on a consolidated basis. We, as a holding company resident in the United States, issued our 2021 Notes. Payments under our outstanding 2021 Notes are currently funded in part by our Korean subsidiary's repayment of its existing loans from our Dutch subsidiary, with our Dutch subsidiary using such repayments in turn to repay the loans owed to our Luxembourg subsidiary, which repays loans owed to us. Repatriation of funds could have potentially adverse tax consequences. Our Exchangeable Notes were issued by our Luxembourg subsidiary and the proceeds from the Notes Offering, currently held by our Luxembourg subsidiary, are expected to be transferred to our Dutch and Korean subsidiaries through new intercompany loans. Therefore, we expect payments under the Exchangeable Notes to be funded in part by our Korean subsidiary's repayment of its existing or new loans from our Dutch subsidiary, with our Dutch subsidiary using such repayments in turn to repay loans owed to our Luxembourg subsidiary.

**Year ended December 31, 2016 compared to year ended December 31, 2015**

As of December 31, 2016, our cash and cash equivalents balance was \$83.4 million, a \$7.5 million decrease, compared to \$90.9 million as of December 31, 2015. The decrease resulted from \$15.9 million of cash outflow used in investing activities, which was partially offset by \$7.6 million of cash inflow provided by operating activities and \$1.7 million of cash inflow provided by financing activities.

Cash inflow provided by operating activities totaled \$7.6 million for the year ended December 31, 2016, compared to \$10.0 million of cash outflow used in operating activities for the year ended December 31, 2015. The net operating cash inflow for the year ended December 31, 2016 reflects our net loss of \$29.6 million and non-cash adjustments of \$55.6 million, which mainly consisted of depreciation and amortization, provision for severance benefits and foreign currency loss, and a net decrease in operating assets and liabilities of \$18.4 million.

Our working capital balance as of December 31, 2016 was \$89.3 million compared to \$93.7 million as of December 31, 2015. The \$4.4 million decrease was primarily attributable to a \$7.5 million decrease in cash and cash equivalents, a \$26.1 million decrease in other receivables and an \$8.4 million increase in deposits received, which were partially offset by an \$18.3 million increase in restricted cash, a \$16.4 million decrease in accrued expenses and a \$4.0 million decrease in account payables.

Cash flow used in investing activities totaled \$15.9 million for the year ended December 31, 2016, compared to \$3.4 million for the year ended December 31, 2015. The increase was primarily attributable to a \$12.7 million increase in capital expenditures (including payments for intellectual property registration).

Cash inflow generated by financing activities totaled \$1.7 million for the year ended December 31, 2016, compared to \$3.4 million for the year ended December 31, 2015. The decrease was primarily attributable to a \$1.7 million decrease in proceeds received from the issuance of common stock in connection with exercised options.

We routinely make capital expenditures to enhance our existing facilities and reinforce our global research and development capability. For the year ended December 31, 2016, capital expenditures (including payments for intellectual property registration) were \$19.8 million, a \$12.7 million, or 178.8%, increase from \$7.1 million for the year ended December 31, 2015. The increase was mainly due to supporting technology improvements at our fabrication facilities in anticipation of attaining manufacturing efficiency.

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*Year ended December 31, 2015 compared to year ended December 31, 2014*

As of December 31, 2015, our cash and cash equivalents balance was \$90.9 million, a \$11.6 million decrease, compared to \$102.4 million as of December 31, 2014. The decrease resulted from \$10.0 million of cash outflow used in operating activities and \$3.4 million of cash outflow used in investing activities, which was partially offset by \$3.4 million of cash inflow provided by financing activities.

Cash outflow used in operating activities totaled \$10.0 million for the year ended December 31, 2015, compared to \$37.5 million of cash outflow used in operating activities in the year ended December 31, 2014. The net operating cash outflow for the year ended December 31, 2015 reflects our net loss of \$84.9 million and non-cash adjustments of \$94.6 million, which mainly consisted of depreciation and amortization, provision for severance benefits, a loss on foreign currency translation and an increase in net operating assets of \$19.7 million.

Our working capital balance as of December 31, 2015 was \$93.7 million compared to \$106.8 million as of December 31, 2014. The \$13.0 million decrease was primarily attributable to a \$11.6 million decrease in cash and cash equivalents, a \$17.7 million decrease in inventories, a \$9.5 million decrease in accounts receivable and a \$10.1 million increase in deferred revenue. These factors were partially offset by a \$21.3 million increase in other receivables, a \$15.3 million decrease in accounts payable and a \$4.3 million decrease in accrued expenses.

The decrease in inventories is primarily due to our efforts to better manage inventory levels. The decrease in accounts receivable is primarily due to timing of cash collection and the upfront payments received from certain customers for the sale of products prior to risk of loss being transferred based on the terms of the arrangement, and the increase in deferred revenue is mainly attributable to such upfront payments.

The increase in other receivables is mainly attributable to proceeds from insurance payments in the amount of \$2.4 million and proceeds of \$29.6 million from insurers. The decrease in accounts payable is primarily due to timing of payment for material purchases and the decrease in accrued expenses is primarily attributable to a write-off of withholding tax accrual resulting from a partial release of unpaid interest on intercompany loans granted to the Korean subsidiary by the Dutch subsidiary. This decrease in accrued expenses is partially offset by the increase in settlement payments of \$23.5 million related to the Class Action Litigation.

Cash flow used in investing activities totaled \$3.4 million in the year ended December 31, 2015, compared to \$16.7 million of cash used in investing activities in the year ended December 31, 2014. The decrease was primarily due to a decrease in capital expenditures (including payments for intellectual property registration) of \$11.3 million, partially offset by a \$6.3 million net increase in hedge collateral.

Cash inflows generated by financing activities totaled \$3.4 million for the year ended December 31, 2015, compared to \$0.1 million of cash outflow used in financing activities for the year ended December 31, 2014. The financing cash inflow for the year ended December 31, 2015 consisted of proceeds received from the issuance of common stock in connection with exercised options.

For the year ended December 31, 2015, capital expenditures (including payments for intellectual property registration) were \$7.1 million, an \$11.3 million, or 61.4%, decrease from \$18.4 million for the year ended December 31, 2014, due to acquisition of a specialized Epi tool and maintenance of our fab that occurred for the year ended December 31, 2014.



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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.

### ***Revenue Recognition***

Revenue is recognized when there is persuasive evidence of an arrangement, the price to the buyer is fixed or determinable, delivery has occurred and collectability of the sales price is reasonably assured. Revenue from the sale of products is recognized when title and risk of loss transfers to the customer, which is generally when the product is shipped to or accepted by the customer depending on the terms of the arrangement.

A portion of our sales are made through distributors for which revenue recognition criteria are usually met when the product is shipped to or accepted by the distributor, consistent with the principles described above. However, the risk of loss may not pass upon shipment of products to the distributor due to a variety of reasons, including the nature of the business arrangement with the distributor. For example, the financial condition of a distributor may indicate that payments by the distributor to us are contingent on resale of products to an end customer. In this situation, we defer recognition of revenue and cost of revenue on transactions with such distributor until the product has been resold to the end customer.

In accordance with revenue recognition guidance, any tax assessed by a governmental authority that is directly imposed on a revenue-producing transaction between a seller and a customer is presented in the statements of operations on a net basis (excluded from revenues).

We provide a warranty, under which customers can return defective products. We estimate the costs related to those defective product returns and record them as a component of cost of sales.

In addition, we offer sales returns (other than those that relate to defective products under warranty), yield provisions, cash discounts for early payments and certain allowances to our customers, including distributors. We record reserves for those returns, discounts and allowances as a deduction from sales, based on historical experience and other quantitative and qualitative factors.

All amounts billed to a customer related to shipping and handling are classified as sales while all costs incurred by us for shipping and handling are classified as selling, general and administrative expenses.

### ***Sales of Accounts Receivable***

We account 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 our accounts with any realized gain or loss reflected in earnings during the period of sale.

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### ***Product Warranties***

We record, in other current liabilities, warranty liabilities for the estimated costs that may be incurred under our 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 our warranty liability include historical and anticipated rates of warranty claims and repair or replacement costs per claim to satisfy our warranty obligation. As these factors are impacted by actual experience and future expectations, we periodically assess the adequacy of our recorded warranty liabilities and adjust the amounts when necessary.

### ***Inventories***

Inventories are stated at the lower of cost or market, using the average cost method, which approximates 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. Reserves are also established for excess inventory based on inventory levels in excess of six months of projected demand for each specific product.

In addition, as prescribed in ASC 330, Inventory, 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.

### ***Vendor Rebates***

We, from time to time, entered into arrangements whereby rebates are obtained from vendors when we achieve certain levels of purchases. The vendor rebates are computed at an agreed upon amount or percentage of purchase levels. As these vendor rebates are impacted by actual and estimated purchases for the applicable agreed upon period, we periodically assess the progress of our purchase levels and revise the estimates when necessary. We account for such rebates as a reduction of inventory until we sell the product, at which time such rebates are reflected as a reduction of cost of sales in our consolidated statements of operations. Vendor rebates recorded as a reduction of inventory were \$0.4 million as of December 31, 2016 and as a reduction of cost of sales were \$4.0 million for the year ended December 31, 2016.

### ***Impairment of Long-Lived Assets***

We review 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.

### ***Intangible Assets***

Intangible assets other than intellectual property include technology and customer relationships which are amortized on a straight-line basis over periods ranging from one to five years. 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.

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### ***Income Taxes***

We account 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 bases 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. Income tax expense is the tax payable for the period and the change during the period in deferred tax assets and liabilities.

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.

### ***Derivative Financial Instruments***

We apply the provisions of 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, we 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 we determine 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. We assess hedge effectiveness at the end of each quarter.

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. Ineffective portions of a derivative instrument's change in fair value are immediately recognized in 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.

### ***Recent Accounting Pronouncement***

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 Annual Report on Form 10-K, for a full description of recent accounting pronouncements, including the expected dates of adoption, which is incorporated herein by reference.

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### **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 and interest rates. In the normal course of our business, we are subject to market risks associated with interest rate movements and 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, 2016 for our Korean subsidiary, a 10% devaluation of the Korean won against the U.S. dollar would have resulted in a decrease of \$1.2 million in our U.S. dollar financial instruments and cash balances.

See Note 8. 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.

#### **Interest Rate Exposures**

As of December 31, 2016, \$225.0 million aggregate principal amount of our 2021 Notes were outstanding. Interest on the 2021 Notes accrues at a fixed rate of 6.625% per annum and is paid semi-annually every January 15 and July 15 of each year until the 2021 Notes mature on July 15, 2021. Since the interest rate is fixed, we have no market risk related to the 2021 Notes.



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**Item 8. Financial Statements and Supplementary Data**

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**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of

MagnaChip Semiconductor Corporation

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, comprehensive income/(loss), changes in shareholders' equity and cash flows present fairly, in all material respects, the financial position of MagnaChip Semiconductor Corporation and its subsidiaries (the Company) at December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 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, 2016, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these 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 Management's Annual Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. 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.

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.

/s/ Samil PricewaterhouseCoopers

Seoul, Korea

February 21, 2017

**Table of Contents****MAGNACHIP SEMICONDUCTOR CORPORATION AND SUBSIDIARIES****CONSOLIDATED BALANCE SHEETS**

	December 31,	
	2016	2015
	(In thousands of US dollars, except share data)	
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 83,355	\$ 90,882
Restricted cash (Note 5)	18,251	
Accounts receivable, net	61,775	63,498
Inventories, net	57,048	57,619
Other receivables (Note 18)	5,864	31,932
Prepaid expenses	8,137	7,075
Current deferred income tax assets	37	34
Hedge collateral (Note 8)	3,150	6,000
Other current assets	5,076	3,194
Total current assets	242,693	260,234
Property, plant and equipment, net	179,793	191,985
Intangible assets, net	3,085	2,629
Long-term prepaid expenses	9,556	12,117
Deferred income tax assets	193	238
Other non-current assets	6,632	6,897
Total assets	\$ 441,952	\$ 474,100
<b>Liabilities and Stockholders Equity</b>		
Current liabilities		
Accounts payable	\$ 51,509	\$ 55,476
Other accounts payable	12,272	10,961
Accrued expenses	60,365	76,721
Deferred revenue	11,092	10,060
Deposits received (Note 5)	16,549	8,165
Other current liabilities	1,654	5,128