MAGNACHIP SEMICONDUCTOR Corp
Form 10-K
March 08, 2012
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2011

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

c/o MagnaChip Semiconductor S.A.

74, rue de Merl, B.P. 709 L-2146 Luxembourg R.C.S.

Luxembourg B97483

(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

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 x 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 x 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. x 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. x 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. (Check one):

Large Accelerated Filer ¨	Accelerated Filer ¨
Non-Accelerated Filer x	Smaller Reporting Company ¨

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

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. x 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. $213,236,847

As of February 29, 2012, the registrant had 37,274,232 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None.

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MAGNACHIP SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2011

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PART I

INDUSTRY AND MARKET DATA

In this Report, we rely on and refer to information regarding the semiconductor market from iSuppli Corporation, or iSuppli, and Gartner, Inc., or Gartner. Market data attributed to iSuppli is from Display Driver ICs Q4 2011 Market Tracker and Power Management Q4 2011 Market Tracker and market data attributed to Gartner is from Forecast: Semiconductor Consumption by Electronic Equipment Type, 4Q11 Update. Although we believe that this information is reliable, we have not independently verified it. We do not have any obligation to announce or otherwise make publicly available updates or revisions to forecasts contained in these documents. In addition, in many cases, we have made statements in this Report regarding our industry and our position in the industry based on our experience in the industry and our own investigation of market conditions.

Statements made in this Annual Report on Form 10-K (the Report), unless the context otherwise requires, include the use of the terms we, us, our 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 under the protection of the safe harbor of forward-looking statements within the meaning of the Private Securities Litigation Act. Information concerning us is subject to 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. These statements can be identified by the fact that they do not relate strictly to historical or current facts. These statements may include words such as anticipate, estimate, expect, project, intend, plan, believe and other words and terms of similar meaning in connection w 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.

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Item 1. Business

General

We are a Korea-based designer and manufacturer of analog and mixed-signal semiconductor products for high-volume consumer applications. We believe we have one of the broadest and deepest analog and mixed-signal semiconductor technology platforms in the industry, supported by our 30-year operating history, large portfolio of approximately 2,975 registered novel patents and 425 pending novel patent applications, and extensive engineering and manufacturing process expertise. Our business is comprised of three key segments: Display Solutions, Power Solutions and Semiconductor Manufacturing Services. Our Display Solutions products include display drivers that cover a wide range of flat panel displays and mobile multimedia devices. Our Power Solutions products include discrete and integrated circuit solutions for power management in high-volume consumer applications. Our Semiconductor Manufacturing Services segment provides specialty analog and mixed-signal foundry services for fabless semiconductor companies that serve the consumer, computing and wireless end markets.

Our wide variety of analog and mixed-signal semiconductor products and manufacturing services combined with our deep technology platform allows us to address multiple high-growth end markets and to rapidly develop and introduce new products and services in response to market demands. Our substantial manufacturing operations and design center in Korea place us at the core of the global consumer electronics supply chain. We believe this enables us to quickly and efficiently respond to our customers needs and allows us to better service 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 2,200 and 2,400 distinct products in the years ended December 31, 2011 and December 31, 2010, respectively, with a substantial portion of our revenues derived from a concentrated number of customers. Our largest Semiconductor Manufacturing Services customers include some of the fastest growing and leading semiconductor companies that design analog and mixed-signal products for the consumer, computing and wireless end markets.

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 available rich media content, such as high definition audio and video, mobile television and games on advanced consumer electronic devices. According to Gartner, production of liquid crystal display, or LCD televisions, smartphones, notebooks, and tablet PCs is expected to grow from 2011 to 2014 by a compound annual growth rate of 3%, 27%, 20%, and 54%, respectively. 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 reducing heat dissipation and extending battery life. According to iSuppli Corporation, in 2010, the display driver semiconductor market was $7.1 billion and the power management semiconductor market was $31.3 billion.

For the year ended December 31, 2011, we generated net sales of $772.8 million, income from continuing operations of $21.8 million, Adjusted EBITDA of $142.5 million and Adjusted Net Income of $66.4 million. For the year ended December 31, 2010, we generated net sales of $770.4 million, income from continuing operations of $74.1 million, Adjusted EBITDA of $157.9 million and Adjusted Net Income of $89.2 million. For the year ended December 31, 2009 (on a combined basis), we generated net sales of $560.1 million, income from continuing operations of $832.0 million, Adjusted EBITDA of $98.7 million and Adjusted Net Income of $22.6 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 Income.

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Our History

Our business was named MagnaChip Semiconductor when it was acquired from Hynix Semiconductor, Inc., or Hynix, in October 2004. We refer to this acquisition as the Original Acquisition.

On June 12, 2009, MagnaChip Semiconductor LLC, along with certain of its subsidiaries, including MagnaChip Semiconductor S.A., filed a voluntary petition for relief in the United States Bankruptcy Court for the District of Delaware under Chapter 11 of the United States Bankruptcy Code, which we refer to as the reorganization proceedings. On November 9, 2009, our plan of reorganization became effective and we emerged from the reorganization proceedings with our management team remaining in place. Our Chapter 11 plan of reorganization implemented a comprehensive financial reorganization that significantly reduced our outstanding indebtedness. Additionally, on that date, a new board of directors of MagnaChip Semiconductor LLC was appointed, MagnaChip Semiconductor LLC s previously outstanding common and preferred units, and options were cancelled, MagnaChip Semiconductor LLC issued approximately 300 million common units (approximately 37.5 million shares of common stock following the corporate conversion) and warrants to purchase 15 million common units (approximately 1.9 million shares of common stock following the corporate conversion) to two classes of creditors and affiliated funds of Avenue Capital Management II, L.P. became the majority unitholder of MagnaChip Semiconductor LLC.

Avenue Capital Management II, L.P. is a global investment management firm, and it and its affiliated funds specialize in investing in high yield debt, debt of insolvent or financially distressed companies and equity of companies undergoing financial or operational turnarounds or reorganizations. In this Report, we refer to funds affiliated with Avenue Capital Management II, L.P. collectively as Avenue. Avenue generally does not manage or operate the companies in which it invests; however, in connection with some of its equity investments, Avenue will appoint one or more representatives to serve on the board of directors. Avenue was a holder of a significant portion of our indebtedness which was outstanding prior to our reorganization proceedings. In connection with our emergence from our reorganization proceedings, Avenue became our majority unitholder as a result of its participation in our rights offering and continued as a lender under our new term loan. In connection with our offering (the senior notes offering) of $250 million aggregate principal amount of 10.5% senior notes due April 15, 2018 (the notes or senior notes), Avenue purchased notes in the aggregate principal amount of $35.0 million, was repaid $42.8 million in connection with the repayment of our new term loan and received $91.2 million in connection with our distribution to unitholders. On May 16, 2011, two of our wholly-owned subsidiaries, MagnaChip Semiconductor S.A. and MagnaChip Semiconductor Finance Company, repurchased $35.0 million out of $250.0 million aggregate principal amount of our senior notes at a price of 109.0% from Avenue. Avenue will continue to be able to elect a majority of our board as long as Avenue continues to hold or control a majority of our outstanding shares.

On March 10, 2011, we completed our initial public offering, which we refer to as the MagnaChip Corporation IPO. Prior to the MagnaChip Corporation IPO, our board of directors and the holders of a majority of our outstanding common units converted MagnaChip Semiconductor LLC from a Delaware limited liability company to MagnaChip Semiconductor Corporation, a Delaware corporation. In order to consummate such a conversion, a certificate of conversion was filed with the Secretary of State of the State of Delaware prior to the effectiveness of the registration statement. In connection with the corporate conversion, the outstanding common units of MagnaChip Semiconductor LLC were automatically converted into shares of common stock of MagnaChip Semiconductor Corporation, outstanding options to purchase common units of MagnaChip Semiconductor LLC were automatically converted into options to purchase shares of common stock of MagnaChip Semiconductor Corporation and outstanding warrants to purchase common units of MagnaChip Semiconductor LLC were automatically converted into warrants to purchase shares of common stock of MagnaChip Semiconductor Corporation, all at a ratio of one share of common stock for eight common units. We refer to such transactions as the corporate conversion.

As of December 31, 2011, Avenue beneficially owned approximately 20,789,539 shares, or 54.0%, of our outstanding common stock, including shares of common stock issuable upon exercise of outstanding options and warrants that are exercisable within sixty days of December 31, 2011. We are considered a controlled company

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for purposes of the NYSE listing requirements. As such, we are exempt from the NYSE corporate governance requirements that our board of directors meet the standards of independence established by those corporate governance requirements and exempt from the requirements that we have separate Compensation and Nominating and Corporate Governance Committees made up entirely of directors who meet such independence standards. We have chosen to utilize the exemption available for controlled companies.

Our Products and Services

Our Display Solutions products include source and gate drivers and timing controllers that cover a wide range of flat panel displays used in LCD, light emitting diode, or LED, and 3D televisions and displays, notebooks and mobile communications and entertainment devices. Our Display Solutions support the industry s most advanced display technologies, such as active matrix organic light emitting diodes, or AMOLEDs, and low temperature polysilicons, or LTPS, as well as high-volume display technologies such as thin film transistors, or TFTs. Our Display Solutions business represented 43.9%, 39.7% and 50.5% of our net sales for the fiscal years ended December 31, 2011, 2010 and 2009 (on a combined basis), respectively.

We expanded our business and market opportunity by establishing our Power Solutions business in late 2007. We have introduced a number of products for power management applications, including metal oxide semiconductor field effect transistors, or MOSFETs, insulated gate bipolar transistors, or IGBTs, analog switches, LED drivers, DC-DC converters, voice coil motor drivers and linear regulators for a range of devices, including LCD, LED, 3D televisions, smartphones, mobile phones, desktop PCs, notebooks, tablet PCs, other consumer electronics, and industrial applications such as power suppliers, LED lighting and home appliances. Our Power Solutions business represented 12.0%, 7.4% and 2.2% of our net sales for the fiscal years ended December 31, 2011, 2010 and 2009 (on a combined basis), respectively.

We offer semiconductor manufacturing services to fabless analog and mixed-signal semiconductor companies that require differentiated, specialty analog and mixed-signal process technologies. We believe the majority of our top twenty Semiconductor Manufacturing Services customers use us as their primary manufacturing source for the products that we manufacture for them. Our process technologies are optimized for analog and mixed-signal devices and include standard complementary metal-oxide semiconductor, or CMOS, high voltage CMOS, ultra-low leakage high voltage CMOS and bipolar complementary double-diffused metal oxide semiconductor, or BCDMOS, and electronically erasable programmable read only memory, or EEPROM. Our Semiconductor Manufacturing Services 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. During 2011, the number of design wins we booked for smartphones and tablet PCs increased three times compared to 2010. Our customer base for these applications increased from five to ten customers from Q1 2011 to Q4 2011. Our Semiconductor Manufacturing Services business represented 43.8%, 52.6% and 46.7% of our net sales for the fiscal years ended December 31, 2011, 2010 and 2009 (on a combined basis), respectively.

We manufacture all of our products at our three fabrication facilities located in Korea. We have approximately 278 proprietary process flows we can utilize for our products and offer to our Semiconductor Manufacturing Services customers. Our manufacturing base serves both our display driver and power management businesses and Semiconductor Manufacturing Services 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 does 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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Market Opportunity

The consumer electronics market is large and growing rapidly. Growth in this market is being driven by consumers seeking to enjoy a wide variety of available rich media content, such as high definition audio and video, mobile television and games. Consumer electronics 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 reducing heat dissipation and extending battery life. These advanced generations of consumer devices are growing faster than the overall consumer electronics market. For example, according to Gartner, production of LCD televisions, smartphones, notebooks, and tablet PCs is expected to grow from 2011 to 2014 by a compound annual growth rate of 3%, 27%, 20%, and 54%, respectively.

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. According to iSuppli, in 2010, the display driver semiconductor market was $7.1 billion and the power management semiconductor market was $31.3 billion.

Requirements of Leading Consumer Electronics 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 consumer electronics 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 semiconductor manufacturing services providers who 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 specialized analog and mixed-signal manufacturing capabilities to address their product performance and cost requirements.

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, 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.

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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. For instance, the California Energy Commission has adopted standards that require televisions sold in California since 2011 to consume 33% less energy, increasing to 49% less energy by 2013. 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 consumer 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 419 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 Consumer Electronics Supply Chain. Our presence in Asia facilitates close contact with our customers, fast response to their needs and enhances our visibility into new product opportunities, markets and technology trends. According to Gartner, semiconductor consumption in Asia, excluding Japan, is projected to grow to 66% of global consumption by 2014. 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 consumer electronics 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 consumer electronics end markets. We believe our expanding product and service offerings allow us to provide 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 a new business offering power management solutions to customers. Our power

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management solutions enable our customers to increase system stability and reduce 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. As a result of the depth of our process technology, captive manufacturing facilities and customer support capabilities, we believe the majority of our top twenty manufacturing services customers by revenue currently use us as their primary manufacturing source for the products that we manufacture for them.

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 semiconductor manufacturing 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 relatively low required 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.

Strong Financial Model with a Low-Cost Structure. Over the past two years we implemented significant structural improvements to our operating and financial model that lowered our capital investment requirements and improved our cash flow and profitability. The long lifecycles of our manufacturing processes, equipment and facilities allow us to keep our new capital requirements relatively low. We believe that our low-cost but highly skilled design and support engineers and manufacturing base position us favorably to compete in the marketplace and provide operating leverage in our operating model.

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. For example, we have recently utilized our extensive patent portfolio, process technologies and analog and mixed-signal technology platform to develop cost-effective IGBTs as well as low power integrated power solutions for AC-DC offline switchers to address more of our customers needs. In Display Solutions, we continue to invest in research and development to introduce new technologies to support our customers technology roadmaps such as their transition to 240Hz 3D LED televisions. In Semiconductor Manufacturing Services, we are developing cost-effective processes that substantially reduce die size using deep trench isolation.

Increase Business with Existing Customers. We have a global customer base consisting of leading consumer electronics OEMs who 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 will seek to increase our customer penetration by more closely aligning our product roadmap with those of our key customers and by taking advantage of our broad product portfolio, our deep knowledge of customer needs and existing relationships to sell more existing and new

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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 expanded base of distributors, especially to aid the growth of our power management business. We expect to continue to expand our distribution channels as we broaden our power management penetration beyond existing customers.

Aggressively Grow the Power Business. We have utilized our extensive patent portfolio, process technologies, captive manufacturing facilities and analog and mixed-signal technology platform to develop power management solutions that expand our market opportunity and address more of our customers needs. We intend to increase the pace of our new power product introductions by continuing to collaborate closely with our industry-leading customers. For example, we began mass production of our first integrated power solution for LCD televisions at one of our major Korean customers in early 2010, and became a major supplier of the product within two years. We also intend to capitalize on the market needs and regulatory requirements for power management products that reduce energy consumption of consumer electronic products by introducing products that are more energy efficient than those of competitors. We believe our integrated designs, unique low-cost process technologies and deep customer relationships will enable us to increase sales of our power solutions to our current Power Solutions customers, and as an extension of our other product offerings, to our other customers.

Drive Execution Excellence. We have significantly improved our execution through a number of management initiatives implemented under the direction of our Chief Executive Officer and Chairman, Sang Park. As an example, we have introduced new processes for product development, customer service and personnel development. We expect these ongoing initiatives will continue to improve our new product development and customer service as well as enhance our commitment to a culture of quick action and execution by our workforce. In addition, we have focused on and continually improved 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. We also believe our power management business should increase our utilization and return on capital as the manufacturing of these products primarily relies on our 0.35μm geometry and low-cost equipment. By utilizing our manufacturing facilities for both our Display Solutions and Power Solutions products and our Semiconductor Manufacturing Services customers, we will 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 consumer electronics products through brighter, thinner displays, enhanced image quality, smaller form factor and longer battery life. We seek to further build our technology platform through proprietary research and development 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.

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, or COG, which enables the manufacture of thinner displays. Our advanced display drivers incorporate LTPS and

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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 smart mobile luminance control, or SMLC, algorithm.

We have a long history of specialized process technology development and have a number of distinctive process implementations. We have approximately 278 process flows we can utilize for our products and offer to our Semiconductor Manufacturing Services customers. Our process technologies include standard CMOS, high voltage CMOS, ultra-low leakage high voltage CMOS and BCDMOS. Our manufacturing processes incorporate embedded memory solutions such as static random access memory, or SRAM, one-time programmable, or OTP, memory, multiple-time programmable, or MTP, memory, EEPROM, and single-transistor random access memory, or 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 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, including LDO, 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.

Products and Services by Division

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.

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 WQVGA (240RGB x 432) to DVGA (960RGB x 1,280).

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 1.8 to 3.6 volts and output voltages between 9 and 18 volts. Gate drivers typically operate at input voltages from 2.0 to 3.6 volts and output voltages from 30 to 40 volts. Lower input voltage results in lower power consumption and electromagnetic interference, or 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.

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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 I/F, or EPI I/F, advance intra panel I/F, or AIPI, mini-low voltage differential signaling, or m-LVDS, and ultra slim I/F, or USI.

Package Type. The assembly of display drivers typically uses chip-on-film, or 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 high definition televisions, or HDTVs, LED TVs, 3D TVs, LCD monitors, notebooks, tablet PCs and ultrabooks.

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 1,026 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.

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

Product	Key Features	Applications
TFT-LCD Source Drivers	480 to 1026 output channels 6-bit (262 thousand colors), 8-bit (16 million colors), 10-bit (1 billion colors) Output voltage ranging from 9V to 18V Low power consumption and low EMI COF package types EPI, m-LVDS, AiPi, USI interface technologies Geometries of 0.15µm to 0.35µm	LCD/LED/3D TVs Ultrabooks*, notebooks LCD/LED monitors
TFT-LCD Gate Drivers	272 to 768 output channels Output voltage ranging from 30V to 40V COF and COG package types Geometry of 0.35µm	Tablet PCs LCD/LED/3D TVs Notebooks
Timing Controllers	Wide range of resolutions m-LVDS, AiPi interface technologies Input voltage ranging from 1.6V to 3.6V Geometry of 0.18µm	Tablet PCs Notebooks LCD/3D monitors

* In customer qualification stage

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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, or MDDI, and mobile industry processor interface, or MIPI, 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 automatic brightness control, or ABC, and automatic current limit, or ACL. This intellectual property portfolio will also support our power management product development initiatives, as we leverage our system level understanding of power efficiency.

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

Product	Key Features	Applications
AMOLED	Resolutions of WVGA and QHD Color depth 16 million Geometries of 0.11µm to 0.15µm MIPI interface Logic-based OTP ABC, ACL	Smartphones Tablet PCs* Game consoles Digital still cameras
LTPS	Resolutions of WQVGA, VGA, WSVGA, WVGA and DVGA Color depth 16 million MDDI, MIPI interface Logic-based OTP Separated gamma control	Smartphones Game consoles Digital still cameras
a-Si TFT	Resolutions of WQVGA, HVGA, WVGA, WSVGA and HD Color depth 16 million MDDI, MIPI interface CABC LVDS, I²C, DCDC Separated gamma control	Smartphones Mobile phones Notebooks Game consoles Digital still cameras

* In customer qualification stage

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Power Solutions

We develop, manufacture and market power management solutions for a wide range of end market customers. The products include MOSFETs, IGBTs, LED drivers, DC-DC converters, voice coil motor drivers, analog switches and linear regulators, such as LDOs.

MOSFETs. Our MOSFETs include low-voltage Trench MOSFETs, 20V to 100V, and high-voltage Planar MOSFETs, 200V through 700V. 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, and 3D televisions, desktop PCs, notebooks, tablet PCs 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. IGBTs are used in a broad range of medium to high-power commercial and industrial applications and in many consumer appliances such as uninterruptible power supplies, or UPS, solar inverters, motors, welding machines, refrigerators and air-conditioners. Reliable IGBTs are also an important enabler for electronic vehicles and hybrid cars.

LED Drivers. LED backlighting drivers serve the fast-growing LCD panel backlighting market for LCD, LED, and 3D televisions, LCD monitors, notebooks and tablet PCs. Our products are designed to provide high efficiency and wide input voltage range as well as PWM dimming for accurate white LED dimming control. LED lighting drivers have wide input voltage range applicable to incandescent bulb and fluorescent lamp replacement.

DC-DC Converters. We offer DC-DC converters targeting mobile applications and high power applications like LCD televisions, set-top boxes, DVD/Blu-ray players and display modules. We expect our DC-DC converters will meet customer green power requirements by featuring wide input voltage ranges, high efficiency and small size.

Voice Coil Motor Drivers. Voice coil motor drivers, or VCM drivers, are used for camera autofocusing and zooming in mobile phone camera modules. Our products features include high current accuracy, lower quiescent current and small form factors suitable for mobile phone applications.

Analog Switches and Linear Regulators. We also provide analog switches and linear regulators for mobile applications. Our products are designed for high efficiency and low power consumption in mobile applications.

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

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

Product	Key Features	Applications
Low Voltage MOSFET	V(ds)(V) options of 20V-100V Advanced Trench MOSFET Process	