

MEMSIC Inc
Form S-1/A
December 03, 2007
Table of Contents

As filed with the Securities and Exchange Commission on December 3, 2007

Registration No. 333-146377

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

Amendment No. 4
to
FORM S-1
REGISTRATION STATEMENT

Under
The Securities Act of 1933

MEMSIC, Inc.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

3674
(Primary Standard Industrial
Classification Code Number)
One Tech Drive, Suite 325,

04-3457049
(I.R.S. Employer
Identification Number)

Andover, MA 01810

Telephone: (978)738-0900

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Dr. Yang Zhao

MEMSIC, Inc.

One Tech Drive, Suite 325,

Andover, MA 01810

Telephone: (978)738-0900

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Gregory G. H. Miao

Skadden, Arps, Slate, Meagher & Flom

42/F, Edinburgh Tower

The Landmark

15 Queen s Road Central

Hong Kong

(852) 3740-4700

Peter X. Huang

**Skadden, Arps, Slate, Meagher & Flom
LLP**

East Wing Office, Level 4

China World Trade Center

No. 1 Jian Guo Men Wai Avenue

Beijing 100004, P.R. China

(8610) 6535-5500

John D. Young, Jr.

Sullivan & Cromwell LLP

28th Floor

Nine Queen s Road Central

Hong Kong

(852) 2826-8688

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box: "

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: "

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: "

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: "

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the

Commission, acting pursuant to said Section 8(a), shall determine.

Table of Contents

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and we are not soliciting an offer to buy these securities, in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED DECEMBER 3, 2007

6,000,000 Shares

MEMSIC, Inc.

Common Stock

\$ per share

We are selling 6,000,000 shares of our common stock. We have granted the underwriters an option to purchase up to 900,000 additional shares of common stock.

This is the initial public offering of our common stock. Prior to this offering, there has been no public market for our common stock. We currently expect the initial public offering price of our common stock to be between \$11.00 and \$13.00 per share. We have applied to have our common stock listed on the Nasdaq Global Market under the symbol MEMS .

Investing in our common stock involves risks. See Risk Factors beginning on page 10. Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

	Per share	Total
Initial public offering price	\$	\$
Underwriting discount	\$	\$
Proceeds to us (before expenses)	\$	\$

Citi, on behalf of the underwriters, expects to deliver the common stock to purchasers on or about , 2007.

Citi

Jefferies & Company

Needham & Company, LLC

Thomas Weisel Partners LLC

Prospectus dated , 2007.

Table of Contents

Table of Contents**TABLE OF CONTENTS**

	Page
<u>Prospectus Summary</u>	1
<u>The Offering</u>	6
<u>Summary Consolidated Financial Data</u>	8
<u>Risk Factors</u>	10
<u>Cautionary Note Regarding Forward-looking Statements</u>	32
<u>Use of Proceeds</u>	33
<u>Dividend Policy</u>	34
<u>Capitalization</u>	35
<u>Dilution</u>	36
<u>Selected Consolidated Financial Information</u>	38
<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	40
<u>Business</u>	67
<u>Regulations</u>	84
<u>Management</u>	90
<u>Compensation Discussion and Analysis</u>	96
<u>Certain Relationships and Related Party Transactions</u>	110
<u>Principal Stockholders</u>	114
<u>Description of Capital Stock</u>	117
<u>Shares Eligible for Future Sale</u>	123
<u>United States Federal Income Tax Consequences to Non-U.S. Holders</u>	125
<u>Underwriting</u>	127
<u>Legal Matters</u>	132
<u>Experts</u>	132
<u>Where You Can Find More Information</u>	132
<u>Index to Consolidated Financial Statements</u>	F-1

Through and including _____, 2007 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Table of Contents

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. You should read the following summary together with the more detailed information appearing in this prospectus, including our consolidated financial statements and related notes, and our risk factors beginning on page 10, before deciding whether to purchase our common stock.

Overview

We provide advanced semiconductor sensor and system solutions based on integrated micro electro-mechanical systems, or MEMS, technology and mixed signal circuit design. Our accelerometer products are used to measure tilt, shock, vibration and acceleration, and have a wide range of applications such as mobile phones, automotive safety systems and video projectors. We combine proprietary thermal-based MEMS technology and advanced analog mixed signal processing circuitry design into a single chip using a standard complementary metal-oxide semiconductor, or CMOS, process. This approach allows us to provide sensor solutions at a lower cost, with higher performance and greater functionality than our competitors. In addition, our technology platform allows us to easily integrate additional functions or create new sensors to expand into magnetic, touch and flow sensors and related applications.

Any product that requires the control or measurement of motion is a potential application for accelerometers. For example, in mobile phones, accelerometers enable a variety of value-added functions such as image orientation, gaming control and text scrolling. In automotive applications, accelerometers are being deployed in airbag, electronic stability control, rollover protection, and navigation systems. In consumer applications, accelerometers are used in global positioning systems, video gaming systems and interactive toys. Industrial and medical applications include inclination sensing, earthquake detection and cardiac pacemakers.

We have shipped more than 25 million units from 2004 through September 30, 2007. Our products have been used by leading international and China-based manufacturers. We are a pioneer in providing accelerometers to China's fast-growing mobile phone market and are among the leading providers of accelerometers for image projectors, supplying to several Japanese OEMs. Our largest automotive customer is Autoliv Inc., a leading European automotive safety systems supplier.

We manufacture our products utilizing a semi-fabless model by outsourcing the production of CMOS wafers and completing the post-CMOS MEMS process in-house. By outsourcing the standard CMOS manufacturing process, we are able to leverage mature semiconductor infrastructure and standard wafer fabrication processes and, in turn, more efficiently manage our capital expenditures. Moreover, we believe that retaining the key MEMS manufacturing process in-house enables us to protect and retain control over our key proprietary technology more effectively and to create a higher barrier to entry.

Founded in March 1999, we are headquartered in Andover, Massachusetts and have engineering and manufacturing facilities in Wuxi, Jiangsu Province, China. We conduct research and development at our facilities in Andover, Wuxi and Chicago, Illinois. Our research and development teams work closely with each other in our product and technology research and development activities. This enables us to access experienced and creative design talent in the United States, while benefiting from competitive engineering and manufacturing costs in China. In addition, our presence in China places us in close proximity to the supply chain for the rapidly growing Chinese markets for mobile phones and consumer electronics.

We have experienced significant growth since our products were first commercialized in 2001. In 2004, 2005 and 2006, and for the nine months ended September 30, 2007, our net sales totaled \$6.9 million, \$9.1 million, \$13.1 million and \$18.8 million, respectively. We have been profitable since 2004. In 2004, 2005 and

Table of Contents

2006, and for the nine months ended September 30, 2007, our income from operations totaled \$1.6 million, \$1.7 million, \$2.7 million and \$5.2 million, respectively. During the same periods, our net income totaled \$1.6 million, \$55,494, \$0.5 million and \$4.7 million, respectively. Our net income in 2005 was affected by the cumulative effect of accounting change in the valuation of Series A preferred stock warrants of \$2.7 million and the change in fair value of Series A convertible preferred stock warrants of \$0.1 million. Our net income in 2006 was affected by change in fair market value of Series A convertible preferred stock warrants of \$3.0 million. These warrants were repurchased by us in 2006. See

Management's Discussion and Analysis of Financial Condition and Results of Operations Description of Certain Line Items Other Income (Expense) .

Industry Overview

Sensors are a category of analog semiconductors that measure the strength or presence of a physical property such as voltage, current, temperature, pressure, weight, light, sound or speed. MEMS based sensors incorporate a micro electro-mechanical system as the active sensing function while the integrated analog circuitry provides an electronic interface. As digital semiconductors become more technologically advanced, analog and mixed-signal semiconductors such as sensors, that interface with them must also operate with greater speed, accuracy and efficiency.

Sensors based on MEMS are used for motion, direction and pressure sensing applications. Examples include accelerometers which are used to measure acceleration or gravitational forces, and gyroscopes which are used for sensing rotational motion. The market for MEMS sensors is expected to expand as functions and products enabled by MEMS sensor solutions achieve broader penetration in the mobile phone, consumer, automotive, aerospace, medical and industrial markets. As MEMS technology advances, it will enable electronic systems to be smaller, faster, more energy-efficient and less expensive. Frost & Sullivan, an independent market research firm, expects the MEMS sensor market will grow at a compound annual rate of 14.8% from \$1.8 billion in 2006 to \$4.2 billion in 2012.

The automotive segment comprises the largest market segment in terms of sales for MEMS sensor systems. MEMS sensors have become essential in a variety of automotive applications for improving passenger safety and comfort. They have been employed in airbag deployment systems, which were the first high-volume application for MEMS sensors, rollover detection, electronic stability control, navigation, vehicle security and tire pressure monitoring systems. In rollover detection systems, accelerometers can measure the roll axis of a vehicle, and upon determining that a rollover is imminent, deploy passenger safety devices before the tire is lifted from the ground. Accelerometers are also used to sense under-steer or over-steer in electronic stability control, or ESC, systems which can then apply braking force to wheels and/or reduce excess engine power. Key factors contributing to the increasing use of MEMS sensors in the automotive market include the adoption of heightened safety standards in developing countries such as China and India, increased demand for electronic stability control and rollover safety systems, and growth in the use of navigation systems.

MEMS sensors are also increasingly employed in consumer applications. Accelerometers have a wide range of applications for consumer electronics, including projectors, laptop computers, personal navigation systems, audio players, digital cameras and gaming controls. Future growth areas in consumer applications for accelerometers may include video game controls and children's toys, where increasingly sophisticated and interactive applications are being incorporated. The mobile phone market is also expected to exhibit potentially high growth for MEMS sensors. As technology advances, manufacturers have introduced products integrating accelerometers that enable applications such as picture orientation, gaming control and navigation. Other potential growth markets for MEMS sensors include aerospace, medical and industrial applications.

To promote continuous growth of the MEMS sensor market, manufacturers are required to provide more integrated system-level solutions; reduce costs to enable mass-market adoption for consumer applications,

Table of Contents

generally a more price-sensitive market; deliver products with increased portability for increasingly smaller devices; and develop products with greater functionality.

Our Competitive Strengths

Our key competitive strengths include the following:

Proprietary technology enabling superior reliability, functionality and pricing. We have proprietary rights to produce MEMS accelerometers based on a unique thermal technology which has higher shock tolerance, lower failure rate and lower cost relative to alternative mechanical solutions. Our accelerometers can be manufactured on a standard CMOS process with on-chip mixed signal processing, which enables us to enhance reliability and reduces our production cost. This standardized process enables us to easily integrate additional functions or create new sensors for MEMS applications beyond accelerometers and expand into the magnetic, touch and flow sensor markets.

Comprehensive system solutions offering. Our solutions involve the development of a fully-integrated sensor system on chip together with the reference designs, algorithms, source code and, at times, the application content to facilitate rapid commercial introduction. These solutions enable our customers to shorten their product development cycle and allow for rapid adoption of our products in new applications.

Leading market position and established customer relationships. We are a pioneer in providing accelerometers to China's fast-growing mobile phone market. We are also among the leading sensor providers in a diverse range of other applications such as key-stone screen adjustment sensors for image projectors, supplying to several Japanese OEMs. In addition, our accelerometers are incorporated in rollover protection devices for the automotive market where Autoliv Inc. is a major customer. We have developed close working relationships with our customers and regularly work together with them on new applications development.

Efficient semi-fabless manufacturing model creating higher entry barrier. Our semi-fabless model reduces capital expenditures while retaining manufacturing control over key MEMS-based process steps. We outsource the production of standard CMOS wafers, which we consider to be a commodity segment, to our foundry service provider, and perform in-house the proprietary post-CMOS MEMS process of building MEMS on top of the standard CMOS wafer. We believe that by performing proprietary manufacturing processes in-house, we create a higher barrier to entry.

Strong technology-driven management team. Our management team has extensive experience in the MEMS and integrated circuit design industry. Our founder and CEO, Dr. Yang Zhao, has been dedicated to the research and development of MEMS sensors since the early 1990's while he was doctoral student at Princeton University, and is named as an inventor on the three patents we own and six of our pending patent applications in the United States. Furthermore, our management team has successfully guided us through our rapid business expansion while maintaining focus on the development and expansion of our core technological capabilities.

Our Strategy

Key elements of our strategy for growth include the following:

Increase penetration of existing markets and customers. We are actively seeking design wins by capitalizing on existing relationships with major OEM customers in the automotive, industrial and business tools markets in China, Taiwan, Japan, Europe and the United States. While we currently provide a limited range of products to our existing customers, we are focused on expanding these relationships to broaden the adoption of our solutions across additional product lines and applications.

Diversify into new sensor and integrated products. We have a strong foundation and the capabilities to diversify into new sensor products, including magnetic, temperature, pressure, gyroscopes and flow sensors.

Table of Contents

Emerging applications for sensors typically lack incumbent competitors, thereby providing an opportunity for a first-mover to define the dominant application technology. We also believe that there is an opportunity in integrated sensor products, which combine multiple sensing devices onto one chip.

Maintain cost leadership. We intend to maintain our cost advantage by developing new innovative proprietary technologies, focusing on designing products on readily available foundry processes, and leveraging our low-cost manufacturing capabilities in China.

Leverage cross-continental research and development model to strengthen technology platform. We have research and development teams in Andover, Chicago and Wuxi that work closely with each other in our product and technology research and development activities. Our U.S. team is responsible for original research and development activities while our China team focuses on implementing the technology developed by our U.S. team. This cross-continental research and development model keeps us at the forefront of MEMS accelerometer research while maintaining a competitive cost base.

Engage in selective acquisitions to build new MEMS capabilities. We intend to evaluate and potentially make acquisitions of technologies and businesses that are complementary to our product portfolio. We believe that there is a large market potential for integrated system-on-chip sensor products which incorporate multiple types of sensors. While we develop our technologies in-house, we are also actively seeking opportunities to acquire or license key technologies from third parties as well. We believe our strong core technology platform will also provide us an advantage in integrating the acquired technologies to create a broader range of sensor solutions products in the market.

Our Risks and Challenges

Our business is subject to numerous risks, which are highlighted in the section entitled *Risk Factors* immediately following this prospectus summary. These risks represent challenges to the successful implementation of our strategy and to the growth and future profitability of our business. Some of these risks include the following:

our limited operating history makes it difficult to evaluate our business and prospects;

our quarterly and annual operating results have fluctuated and may continue to fluctuate and are difficult to predict and if we do not meet financial expectations of securities analysts or investors, the price of our common stock will likely decline;

we do not have long-term purchase commitments from our customers, including ODMs and OEMs, and our ability to accurately forecast demand for and sales of our products is limited, which may result in excess or insufficient inventory and significant uncertainty and volatility with respect to our revenue from period to period;

we depend, and expect to continue to depend, on a limited number of customers for a high percentage of our revenues. As a result, the loss of, or a significant reduction in orders from, any of these customers would significantly reduce our revenues and harm our results of operations;

our products are complex and defects in our products could result in a loss of customers, damage to our reputation, decreased revenue, unexpected expenses, loss of market share and warranty and product liability claims;

we may not be able to manage our business growth effectively, and failure to do so could strain our management, operating and other resources, which could materially and adversely affect our business and growth potential; and

the average selling prices of products in our markets have historically decreased rapidly and will likely do so in the future, which could harm our gross margins and results.

Table of Contents

Corporate Information

We are a Delaware corporation incorporated in February 1999. Our headquarters are located in Andover, Massachusetts. We have a wholly-owned subsidiary located in Wuxi, Jiangsu Province of China, which was organized as a wholly foreign-owned enterprise under PRC law. Our Andover headquarters are primarily responsible for sales and marketing, finance, and research and development. Our Wuxi subsidiary is primarily responsible for various aspects of manufacturing, including product and manufacturing engineering and quality assurance, as well as application engineering, product development and sales to support the Asia market. In addition, we operate research and development activities in Chicago, Illinois.

Our registered office is located at One Tech Drive, Suite 325, Andover, Massachusetts 01810. Our telephone number is (978) 738-0900 and our website is www.memsic.com. Information contained on our website is not part of this prospectus.

Conventions that Apply in this Prospectus

Unless otherwise indicated, references in this prospectus to:

U.S. dollars, \$, and dollars are to the legal currency of the United States;

China or the PRC are to the People's Republic of China, excluding, for the purpose of this prospectus only, Hong Kong, Macau and Taiwan; and

RMB and Renminbi are to the legal currency of the People's Republic of China.

Unless the context indicates otherwise, we, us, our company, the Company, our, and MEMSIC refer to MEMSIC, Inc. and its subsidiary.

This prospectus contains translations of certain RMB amounts into U.S. dollar amounts at specified rates. Unless otherwise stated, the translations from RMB to U.S. dollars were made at the noon buying rate in effect on September 28, 2007 in The City of New York for cable transfers of RMB as certified for customs purposes by the Federal Reserve Bank of New York, which was RMB7.4928 to \$1.00. We make no representation that the RMB or U.S. dollar amounts referred to in this prospectus could have been or could be converted into U.S. dollars or RMB, as the case may be, at any particular rate or at all. See Risk Factors Risks Related to Doing Business in China Fluctuations in the value of RMB could negatively impact our result of operations and Restrictions on currency exchange may limit our ability to receive and use our revenue effectively for discussions of the effects of fluctuating exchange rates and currency control on the value of our common stock. On November 30, 2007, the noon buying rate was RMB7.398 to \$1.00.

Market and Industry Data

This prospectus includes market and industry data derived from independent consultant reports, publicly available information, various industry publications and other published industry sources. Independent consultant reports, industry publications and other published industry sources generally indicate that the information contained therein was obtained from sources believed to be reliable, but do not guarantee the accuracy and completeness of such information. Although we believe that the publications and reports are reliable, neither we nor the underwriters have independently verified the data.

Table of Contents

THE OFFERING

Common stock offered by us	6,000,000 shares
Over-allotment option	We have granted a 30-day option (commencing from the date of this prospectus) to the underwriters to purchase up to an additional 900,000 shares to cover over-allotments of shares.
Price per share	We currently estimate that the initial public offering price will be between \$11.00 and \$13.00 per share.
Common stock to be outstanding immediately after this offering	22,615,714 shares.
Use of proceeds	We intend to use the net proceeds received by us from this offering for the expansion of our existing manufacturing facility in Wuxi, the construction of our new manufacturing facility in Wuxi, strategic acquisitions, research and development, capital expenditures, working capital and other general corporate purposes. However, at this time, we do not have any commitment to any specific acquisition. See Use of Proceeds .
Risk factors	See Risk Factors and other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in our common stock.
Listing	We have applied for approval to have our shares included for listing on the Nasdaq Global Market. Our shares will not be listed on any other exchange or quoted for trading on any over-the-counter trading system.
Proposed Nasdaq Global Market symbol	MEMS
Lock-up	We, our officers and directors, stockholders and optionholders have agreed that, for a period of 180 days from the date of this prospectus, we and they will not, without the prior written consent of Citigroup Global Markets Inc., offer, sell, contract to sell, transfer, pledge, dispose of or hedge, directly or indirectly, any shares of our common stock or any securities convertible into or exchangeable for our common stock. See Underwriting .
The number of shares of our common stock to be outstanding following this offering is based on 16,615,714 shares outstanding as of September 30, 2007, including 14,060,819 shares of common stock to be issued upon the automatic conversion of all of our outstanding shares of preferred stock upon the closing of this offering, and excludes:	

1,752,180 shares issuable upon exercise of options outstanding as of September 30, 2007, at a weighted average exercise price of \$3.96 per share;

Table of Contents

1,876,425 shares reserved for future issuance under our share-based compensation plans, including shares reserved for issuance under our 2000 Omnibus Stock Plan and 2007 Stock Incentive Plan, together the Stock Option Plans.

Unless otherwise indicated, this prospectus reflects and assumes the following:

the automatic conversion of all outstanding Series A, B, C and D preferred stock into 14,060,819 shares of common stock upon the closing of the offering;

the one-for-two reverse stock split of the shares of our common stock effected on November 20, 2007;

the adoption of our amended and restated memorandum and articles of association immediately prior to the effectiveness of this offering; and

no exercise by the underwriters of their over-allotment option.

Table of Contents**SUMMARY CONSOLIDATED FINANCIAL DATA**

The following summary consolidated financial data should be read in conjunction with, and are qualified in their entirety by reference to, our consolidated financial statements and related notes and Management's Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this prospectus. The following summary consolidated statements of operations data for the years ended December 31, 2004, 2005 and 2006 and summary consolidated balance sheet data as of December 31, 2005 and 2006 have been derived from our audited consolidated financial statements included elsewhere in this prospectus. The summary consolidated statement of operations data for the nine months ended September 30, 2006 and 2007 and summary balance sheet data as of September 30, 2007 have been derived from our unaudited interim consolidated financial statements included elsewhere in this prospectus. We have prepared the unaudited interim consolidated financial statements on the same basis as our audited consolidated financial statements. The unaudited interim consolidated financial statements include all adjustments, consisting only of normal and recurring adjustments, that we consider necessary to fairly present our financial position and results of operation for the periods presented. Our historical results do not necessarily indicate results expected for any future periods. In addition, our unaudited results as of and for the nine months ended September 30, 2007 may not be indicative of our results as of and for the full year ending December 31, 2007.

	2004	For the year ended December 31, 2005	2006	For the nine months ended September 30, 2006	2007 (unaudited)
	(in thousands, except percentages, share and per share data)				
Net sales	\$ 6,895	\$ 9,053	\$ 13,118	\$ 9,169	\$ 18,769
Cost of goods sold	1,998	2,891	4,332	3,079	6,449
Gross profit	4,897	6,162	8,786	6,090	12,320
Gross margin	71.0%	68.1%	67.0%	66.4%	65.6%
Operating expenses:					
Research and development	400	1,004	1,874	1,281	2,411
Sales and marketing	1,194	1,466	1,705	1,195	2,100
General and administrative	1,686	2,004	2,544	1,727	2,641
Total operating expenses	3,280	4,474	6,123	4,203	7,152
Operating income	1,617	1,688	2,663	1,887	5,168
Other income (expense):					
Change in value of warrant to purchase Series A convertible preferred stock		(143)	(2,992)	(1,928)	
Interest and dividend income	108	202	485	332	484
Interest expense	(49)	(20)			(23)
Other, net	(19)	37	39	17	32
Total other income (expense)	40	76	(2,468)	(1,579)	493
Income (loss) before income taxes and accounting change	1,657	1,764	195	308	5,661
Provision (benefit) for income taxes	29	(1,005)	(303)	(498)	958
Income (loss) before cumulative effect of accounting change	1,628	2,769	498	806	4,703
Cumulative effect on periods prior to July 1, 2005 of change in the valuation of the warrant to purchase Series A convertible preferred stock		(2,714)			
Net income	\$ 1,628	\$ 55	\$ 498	\$ 806	\$ 4,703

Edgar Filing: MEMSIC Inc - Form S-1/A

Net income (loss) available to common stockholders:

Basic	\$ 30	\$ (1,480)	\$ (1,378)	\$ (306)	\$ 506
Diluted	\$ 30	\$ (1,480)	\$ (1,378)	\$ (306)	\$ 578

Table of Contents

	For the year ended			For the nine months ended September 30, 2007	
	2004	December 31, 2005	2006	2006 (unaudited)	2007
Basic and diluted income (loss) per common share before cumulative effect of accounting change	\$ 0.02	\$ (0.53)	\$ (0.66)	\$ (0.15)	\$ 0.21
Net income (loss) per common shares:					
Basic	\$ 0.02	\$ (0.72)	\$ (0.66)	\$ (0.15)	\$ 0.21
Diluted	\$ 0.02	\$ (0.72)	\$ (0.66)	\$ (0.15)	\$ 0.20
Weighted average shares outstanding used in calculating net income (loss) per common share:					
Basic	2,025,816	2,069,020	2,085,051	2,076,006	2,413,645
Diluted	2,025,816	2,069,020	2,085,051	2,076,006	2,830,894
Unaudited:					
Pro forma net income per common share:					
Basic			\$ 0.03		\$ 0.29
Diluted			\$ 0.03		\$ 0.28
Pro forma weighted average common shares outstanding:					
Basic			16,009,507		16,474,464
Diluted			16,788,276		16,891,712

The pro forma consolidated balance sheet data as of September 30, 2007 in the table below give effect to the automatic conversion of all outstanding shares of our convertible preferred stock to 14,060,819 shares of our common stock as if such conversion had occurred at September 30, 2007.

	As of December 31,		As of September 30,	
	2005	2006	Actual (unaudited)	Pro forma (unaudited)
Consolidated Balance Sheet Data:				
Cash and cash equivalents	\$ 4,461	\$ 7,142	\$ 5,465	\$ 5,465
Short-term investments	6,100	6,900	7,550	7,550
Total current assets	15,193	21,873	24,777	24,777
Total assets	18,792	25,769	33,404	33,404
Total current liabilities	5,227	3,426	4,748	4,748
Series A through D convertible preferred stock	30,345	32,929	33,529	
Total stockholders' equity (deficit)	\$ (16,780)	\$ (10,585)	\$ (4,873)	\$ 28,656

Table of Contents

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider and evaluate all the information in this prospectus, including the risks and uncertainties described below, before purchasing our common stock. If any of the following risks occur, our business, financial condition, results of operations or prospects could be materially and adversely affected and you may lose all or part of your investment in our common stock.

Risks Relating to Our Business and Industry

Our limited operating history makes it difficult to evaluate our business and prospects.

We commenced operations in 1999, began to generate revenue in 2001, and first became profitable in 2004. Our limited operating history may not provide a meaningful basis for evaluating our business and prospects. Our net sales and net income have grown significantly since 2001. Our net sales increased by 31.3% from \$6.9 million in 2004 to \$9.1 million in 2005 and further increased by 44.9% to \$13.1 million in 2006. Our net sales for the nine months ended September 30, 2007 was \$18.8 million, an increase of 104.7% from \$9.2 million for the nine months ended September 30, 2006. Our net income decreased from \$1.6 million in 2004 to \$55,494 in 2005 and increased to \$0.5 million in 2006. Our net income increased from \$0.8 million for the nine months ended September 30, 2006 to \$4.7 million for the nine months ended September 30, 2007. We do not expect similar growth rates in our net sales and net income in future periods. Accordingly, you should not rely on the results of any prior periods as indicative of our future revenue or net income growth or financial results. In addition, our product offerings may continue to evolve over time as we focus more efforts on the development and sale of new products. You should consider our business and prospects in light of the risks and uncertainties experienced by early stage companies seeking to develop products in a rapidly-changing market. Some of these risks and uncertainties relate to our ability to:

maintain our sales growth and profit margin;

preserve our position in the MEMS sensor market;

manage our expanding operations and product offerings;

expand manufacturing capacity in time to meet surges in market demand;

manage our relationships with our service providers and suppliers, including our ability to obtain manufacturing capacity from semiconductor foundries during surges in market demand;

develop and deliver new products successfully; and

successfully integrate any future acquisitions.

If we are unsuccessful in addressing any of these risks and uncertainties, our business, financial condition and results of operations may be materially and adversely affected.

Our quarterly and annual operating results have fluctuated and may continue to fluctuate and are difficult to predict and if we do not meet financial expectations of securities analysts or investors, the price of our common stock will likely decline.

Our quarterly and annual operating results have fluctuated and may continue to fluctuate as a result of a number of factors, many of which are beyond our control. Comparing our operating results on a period-to-period basis may not be meaningful, and you should not rely on our past results as an indication of our future performance. Our quarterly and annual net sales and profit margin may be significantly different from our

historical amounts, and in future periods may fall below expectations. Any of these events will likely cause the market price of our common stock to decline. Any of the risks described in this Risk Factors section, and in

Table of Contents

particular, the following factors, could cause our quarterly and annual operating results to fluctuate from period to period:

the loss of one or more of our key customers;

the cancellation or deferral of customer orders in anticipation of our new products or product enhancements, or due to a reduction in our customers' end demand;

changes in the price we charge for our products or our pricing strategies, which may be impacted by the pricing strategies of our competitors;

the cyclicity of the semiconductor industry and seasonality in sales of products into which our products are incorporated;

seasonal fluctuations of some of our product application markets as well as geographical markets; and

the length of the product development cycle for our new products.

Also, under our revenue recognition policy, we may defer revenue and cost of goods sold related to products sold to a distributor based on certain criteria, including the nature of the contractual arrangement with the distributor and our length of experience with such class of customer and products. As the facts and circumstances change and our relationship with the distributor develops over time, we evaluate whether we can recognize revenue as units are shipped to the distributor. Any such change in revenue and cost recognition can cause fluctuations in our quarterly and annual operating results.

In addition, we plan our operating expenses, including research and development expenses, hiring of additional personnel and investments in inventory, in part on our expectations of future revenue, and our expenses are relatively fixed in the short term. If revenue for a particular quarter is lower than we expect, we may be unable to proportionately reduce our operating expenses for that quarter, which would harm our operating results for that quarter. If our operating results in future quarters fall below the expectations of securities analysts or investors, the market price of our common stock will likely decline.

We may not be able to compete effectively and increase or maintain revenue and market share.

We may not be able to compete successfully against current or future competitors. If we do not compete successfully, our market share and revenue may decline. We and our distributors currently sell substantially all of our accelerometer products to original equipment manufacturers, or OEMs, and original design manufacturers, or ODMs. We face competition primarily from traditional capacitive/piezoresistive-based accelerometer manufacturers. Most of our current competitors have longer operating histories, significantly greater resources, brand recognition and a larger base of customers than we do. In addition, these competitors may have greater credibility with our existing or potential customers. Moreover, many of our competitors have been doing business with customers for a longer period of time and have established relationships, which may provide them with information regarding future market trends and requirements that may not be available to us. Additionally, some of our larger competitors may be able to provide greater incentives to customers through rebates and similar programs. Some of our competitors with multiple product lines may bundle their products to offer a broader product portfolio or integrate accelerometer functionality into other products that we do not sell. These factors may make it difficult for us to gain or maintain market share.

Our ability to grow depends on our ability to secure and maintain relationships with OEM and ODM customers. If we cannot continue to achieve design wins, if our design wins do not result in large volume orders, or if we fail to meet an OEM's development and service demands, our ability to grow will be limited.

Our ability to grow depends on our ability to continue to achieve design wins with OEMs and ODMs to whom we sell either directly or through our distributors. In order to achieve a design win, where our product is incorporated into an OEM's or ODM's product design, we may often need to make modifications to our products or develop new products that involve significant technological challenges. We may also incur significant

product development costs by participating in lengthy field trials and extensive qualification programs. We cannot assure you that these efforts would result in a design win.

Table of Contents

Furthermore, a design win is not a binding commitment to purchase our products and may not result in large volume orders of our products. Rather, it is a decision by an OEM or ODM to use our products in the design process of that OEM's or ODM's products. OEMs and ODMs can choose at any time to stop using our products in their designs or product development efforts. Moreover, even if our products were chosen to be incorporated into an OEM's or ODM's products, our ability to generate significant revenues from that OEM or ODM will depend on the commercial success of their products. Thus, a design win may not necessarily generate significant revenues if our customers' products are not commercially successful.

In addition, OEMs and ODMs place considerable pressure on us to meet their tight development schedules. These customers also often require extensive and localized customer support. As a result, we may be required to significantly expand our customer support organization. Devoting a substantial amount of our limited resources to these customer relationships could result in opportunity costs which detract or delay us from completing other important product development projects for our other existing customers, which could in turn impair our relationships with existing customers and negatively impact sales of the products under development.

We do not have long-term purchase commitments from our customers, including OEMs and ODMs, and our ability to accurately forecast demand for and sales of our products is limited, which may result in excess or insufficient inventory and significant uncertainty and volatility with respect to our revenue from period to period.

We do not have long-term purchase commitments from our customers, including OEMs and ODMs. Our customers may cancel or reschedule purchase orders. Our customers' purchase orders may vary significantly from period to period, and it is difficult to forecast future order quantities. The lead time required by our foundry providers for wafer production is typically longer than the lead time that our customers provide to us for delivery of our products to them. Therefore, to ensure availability of our products for our customers, we typically ask our foundry providers to start wafer production based on forecasts provided by our customers in advance of receiving purchase orders. However, these forecasts are not binding purchase commitments, and we do not recognize revenue until our products are shipped to customers. Accordingly, we incur inventory and manufacturing costs in advance of anticipated sales. We cannot assure you that any of our customers will continue to place purchase orders with us in the future at the same level as in prior periods or that the volume of our customers' purchase orders will be consistent with our expectations when we plan our expenditures in advance of receiving purchase orders. Our anticipated demand for our products may not materialize. In addition, manufacturing based on customer forecasts exposes us to risks of high inventory carrying costs and increased product obsolescence, which may increase our costs. If we overestimate demand for our products, or if purchase orders are cancelled or shipments are delayed, we may be left with excess inventory that we cannot sell. Conversely, if we underestimate demand, we may not have sufficient inventory and may lose market share and damage our customer relationships. Obtaining additional supply in the face of product shortages may be costly or impossible, particularly in the short term, which could prevent us from fulfilling orders. As a result, our results of operations may fluctuate significantly from period to period in the future.

The length of our sales cycle is unpredictable, which makes it difficult for us to forecast revenue and may increase the volatility of our operating results.

We have a lengthy sales cycle that typically begins with our receipt of an initial request from a customer and ends when our customer executes a purchase order for production quantities. We typically need to obtain a design win to receive purchase orders. In some cases, due to the rapid growth of new product applications and technologies, this process can be time-consuming and requires substantial investment of our time and resources. In addition, our OEM and ODM customers may require significant time to test, evaluate and design our products into their products. Following a design win, OEMs and ODMs may need several months to begin large-volume production of the products that incorporate our products. Many factors beyond our control could affect the length of the sales cycle of our products. The uncertainties on the sales cycle length makes it difficult for us to forecast our revenue and may increase the volatility of our operating results.

Table of Contents

We depend and expect to continue to depend on a limited number of customers for a high percentage of our revenues. As a result, the loss of, or a significant reduction in orders from, any of these customers would significantly reduce our revenues and harm our results of operations.

For the nine months ended September 30, 2007, two customers accounted for 10% or more of our net sales, consisting of a distributor as to 53.6%, and an OEM as to 16.8%. In 2006, three customers accounted for 10% or more of our net sales, consisting of a distributor as to 34.6%, another distributor as to 16.0% and an OEM as to 15.0%. In 2005, three customers accounted for 10% or more of our net sales, consisting of an OEM as to 30.0%, and two distributors as to 19.3% and 11.0%, respectively. In 2004, three customers accounted for 10% or more of our net sales, consisting of two distributors as to 35.3% and 13.4%, respectively, and an OEM as to 13.0%. If a large customer purchases fewer of our products, defers orders or fails to place additional orders with us, our revenue could decline, and our operating results may not meet market expectations. In addition, we face credit risks on some of our significant customers that are smaller companies. If those customers order our products, but fail to pay on time or at all, our liquidity and operating results could be materially and adversely affected.

Our success depends upon our customers' ability to successfully sell their products.

The success of our products depends, in significant part, on the success of our customers' products that incorporate our products. Most of our net sales in 2006 and the nine months ended September 30, 2007 were attributable to accelerometer products that were incorporated into products such as mobile phones, projectors and automobile parts. If any of our customers are unsuccessful in their sales, whether due to lack of market acceptance of their products, general industry slowdown, changes in the product supply chain or otherwise, our sales could be adversely affected. We are not certain whether these customers will be able to achieve success in their business or whether they will remain competitive in their business even if initially successful.

We rely principally on one third-party foundry to manufacture wafers, which are significant components to our manufacturing process. If we are unable to secure sufficient supply of wafers, or if the wafers supplied to us do not meet our quality standards, we may be unable to ship finished products and our customer relationships may be damaged.

We currently rely on one foundry service provider to manufacture wafers used in our accelerometer products. We have also entered into agreements in 2006 with two additional foundry service providers to supply wafers used for magnetic sensors.

Because we outsource our wafer production, which is a critical part of our manufacturing process, we face several significant risks, including:

lack of manufacturing capacity at these foundries;

limited control over delivery schedules, quality assurance and control, manufacturing yields and production costs; and

the unavailability of, or potential delays in obtaining access to, key process technologies.

The ability of these foundries to provide us with wafers is limited by their available capacity. We do not have a guaranteed level of production capacity with our principal foundry and it is difficult to accurately forecast our capacity needs. Furthermore, we do not have a long-term agreement with this foundry and we place our orders on a purchase order basis. As a result, if it raises its prices or is not able to meet our required capacity for any reason, including shortages or delays in shipment of semiconductor equipment or materials it uses to manufacture our wafers, or if our business relationship with our principal foundry deteriorates, we may not be able to obtain the required capacity from it and would have to seek alternative foundries, which may not be available on commercially reasonable terms, or at all. Using foundries with which we have no established relationships could expose us to potentially unfavorable pricing, unsatisfactory quality or insufficient capacity allocation.

Furthermore, our principal foundry can allocate capacity to the production of other companies' products and reduce deliveries to us on short notice. Many of its customers are larger than we are and may have long-term

Table of Contents

agreements with the foundry and may receive preferential treatment from it in terms of capacity allocation. Reallocation of capacity by the foundry to its other customers could impair our ability to secure the supply of wafers that we need, which could significantly delay our ability to ship our products, causing a loss of revenue and damage to our customer relationships. In addition, if we underestimate our needs for foundry capacity, it may not have available capacity to meet our immediate needs or we may be required to pay higher costs to fulfill those needs, either of which could materially and adversely affect our business, operating results or financial condition.

Our key foundry service provider maintains facilities that are located in a region that is subject to earthquakes, typhoons and other natural disasters, as well as geopolitical risks and social upheaval.

Currently, all of our wafers are manufactured by a foundry in Taiwan. Taiwan is susceptible to earthquakes, typhoons, flood and other natural disasters, and has experienced severe earthquakes and typhoons in recent years that caused significant property damage and loss of life. In addition, this foundry is subject to risks associated with uncertain political, economic and other conditions in Taiwan and elsewhere in Asia, such as political turmoil in the region and the outbreak of contagious diseases, such as Severe Acute Respiratory Syndrome, or SARS, or any other epidemic such as avian flu. The occurrence of any of the foregoing could disrupt their operations, resulting in significant disruption or delays in deliveries of raw materials for our operations. As a result, our business operations could be significantly disrupted and deliveries of our products could be delayed.

Our products are complex and defects in our products could result in a loss of customers, damage to our reputation, decreased revenue, unexpected expenses, loss of market share and warranty and product liability claims.

Our products are complex and must meet stringent quality requirements. Such complex products may contain undetected errors or defects, especially when first introduced or when new versions are released. For example, our products may contain errors that are not detected until after they are shipped because we cannot test for all possible scenarios. Errors or defects can arise due to design flaws, defects in materials or components or as a result of manufacturing difficulties, which can affect both the quality and yield of the product. As our products become more complex, we face significantly higher risk of undetected defects. Any errors or defects in our products, or the perception that there may be errors or defects in our products, could result in customer rejection of our products, damage to our reputation, lost revenue, diversion of development resources and increases in customer service and support costs and warranty claims.

Failure of suppliers to deliver on a timely basis sufficient quantities of components or materials or licensed software used in our products may result in delays or other disruptions in introducing or shipping our products, which could adversely affect our business and operating results.

Some of the components, materials and software used in our products are purchased or licensed from a limited number of suppliers and it is difficult for us to redesign our products to incorporate components, materials or software from alternative suppliers. For example, we obtain the ceramic packaging materials that we use on our accelerometer products from only two suppliers. In addition, we purchase rights to media content developed for our accelerometer products sold to our mobile phone end-customers. If any of our suppliers terminates its relationship with us, or is unable to deliver components, materials or software in accordance with our requirements, we may not be able to find alternative sources on favorable terms on short notice. Our inability to find or develop alternative sources of components, materials and software, if and as required, could result in delays or other disruptions in introducing or shipping our products. If any of these events occur, our business and operating results could be adversely affected.

Our success depends on the continuing efforts of our senior management team and other key personnel and on our ability to successfully attract, train and retain additional key personnel.

Our future success depends heavily upon the continuing services of the members of our senior management team and various engineering and other technical personnel. In particular, our founder, Chief Executive Officer

Table of Contents

and director, Dr. Yang Zhao, was and remains central to the development and advancement of thermal MEMS technology on which our accelerometer products have been designed and developed. In addition, our engineers and other technical personnel are critical to our future technological and product innovations. If one or more of our senior executives or other key personnel are unable or unwilling to continue in their present positions, we may not be able to replace them easily or at all, and our business may be disrupted and our financial condition and results of operations may be materially and adversely affected. In addition, if any member of our senior management team or any of our other key personnel joins a competitor or forms a competing company, we may lose customers, distributors, know-how and key professionals and staff members. Although we maintain a key person life insurance policy on Dr. Zhao, we do not maintain such insurance for any of our other employees. We may incur increased operating expenses and be required to divert the attention of other senior executives to recruit replacement for key personnel. Our industry is characterized by high demand and intense competition for talent and the pool of qualified candidates is very limited. We cannot assure you that we will be able to retain existing, or attract and retain new, qualified personnel, including senior executives and skilled engineers, whom we will need to achieve our strategic objectives. In addition, our ability to train and integrate new employees into our operations may not meet the growing demands of our business. The loss of any of our key personnel or our inability to attract or retain qualified personnel, including engineers and others, could delay the development and introduction of, and would have an adverse effect on our ability to sell, our products as well as our overall business and growth prospects.

We may not be able to manage our business growth effectively, and failure to do so could strain our management, operating and other resources, which could materially and adversely affect our business and growth potential.

The scope and complexity of our business have grown significantly since our inception. Our growth has placed and will continue to place a strain on our management, personnel, systems and other resources. If we are unable to manage our growth effectively, we may not be able to take advantage of market opportunities, execute our business plan or respond to competitive pressures. To successfully manage our growth, we believe we must effectively:

hire, train, integrate and manage additional qualified engineers, senior managers, sales and marketing personnel and information technology personnel;

implement additional, and improve existing, administrative and operational systems, procedures and controls;

expand our finance and accounting team, which includes hiring additional personnel with U.S. GAAP and internal control expertise;

continue to expand and upgrade our design and product development capabilities; and

manage our relationships with semiconductor manufacturing service providers, customers, suppliers and other third parties.

Moreover, if our allocation of resources does not correspond with future demand for particular products, we could miss market opportunities, and our business and financial results could be materially and adversely affected. We cannot assure you that we will be able to manage our growth effectively in the future.

Assertions by third parties of infringement by us of their intellectual property rights could disrupt our business, result in significant costs and cause our operating results to suffer.

The semiconductor industry is characterized by vigorous protection and pursuit of intellectual property rights, which has resulted in protracted and expensive litigation for many companies. We may receive claims from various industry participants alleging infringement of patents, trade secrets and/or other intellectual property rights in the future. Any lawsuit or administrative proceedings resulting from such allegations could

Table of Contents

subject us to significant liability for damages and invalidate our existing intellectual property rights. These lawsuits, regardless of their success, would likely be time-consuming and expensive to resolve and would divert management's time and attention. Any potential intellectual property litigation or administrative proceedings also could force us to do one or more of the following:

stop selling products that have used technology or manufacturing processes containing the allegedly infringing intellectual property;

pay damages to the party claiming infringement;

attempt to obtain a license for the relevant intellectual property, which may not be available on commercially reasonable terms or at all; and

attempt to redesign those products that contain the allegedly infringing intellectual property with non-infringing intellectual property, which may not be possible.

The outcome of a dispute may result in our need to develop non-infringing technology or enter into royalty or licensing agreements. We have agreed to defend certain of our distributors against any claims by third parties of infringement of intellectual property rights and to indemnify them for all costs and damages arising from such claims. Any intellectual property dispute could have a material adverse effect on our business, operating results or financial condition.

We may not be able to prevent others from unauthorized use of our intellectual property, which could harm our business and competitive position.

We design our accelerometer and non-accelerometer products in-house and rely on a combination of patents, trademarks and employee and third-party nondisclosure agreements to protect our intellectual property. As of September 30, 2007, we owned three patents and had thirteen pending patent applications in the United States, and owned two patents and had three pending patent applications and assignment in China. As of that date, we also had six pending patent applications in Japan, three pending patent applications in Germany and two pending patent applications filed with the European Patent Office. Policing any unauthorized use of our intellectual property is difficult and costly and the steps we have taken may be inadequate to prevent the misappropriation of our technology. Reverse engineering, unauthorized copying or other misappropriation of our technologies could enable third parties to benefit from our technologies without paying us. In addition, others may independently develop similar proprietary information and techniques, gain access to our intellectual property rights, disclose such technology or design around our patents. Additionally, we cannot assure you that any patent or registered trademark owned by us will be enforceable or will not be invalidated, circumvented or otherwise challenged in the PRC, the United States or other countries or that the rights granted thereunder will provide competitive advantages to us or that any of our pending or future patent applications will be issued with the scope of the claims sought by us, if at all. Furthermore, litigation may be necessary to enforce our patents and other intellectual property rights, protect our trade secrets, determine the validity of and scope of the proprietary rights of others, or defend against claims of infringement or invalidity. Litigation could result in substantial costs and diversion of resources which could harm our business, could ultimately be unsuccessful in protecting our intellectual property rights, and may result in our intellectual property rights being held invalid or unenforceable. Moreover, foreign intellectual property laws may not protect our intellectual property rights. Enforcement of PRC intellectual property-related laws has historically been ineffective, primarily because of ambiguities in PRC laws and difficulties in enforcement. Accordingly, intellectual property rights and confidentiality protections in China may not be as effective as in the United States or other countries. Our failure to protect our intellectual property effectively could harm our business, prospects and reputation.

Table of Contents

Some of our key technologies and know-how are licensed from third parties, including a competing company, and the termination of any of the licenses will materially and adversely affect our business.

Our business relies on our ability to use, develop and otherwise exploit our accelerometer-related technologies and know-how. Some of our key technologies and know-how were acquired by us from Analog Devices through licensing arrangements as part of its investment in our company in 1999. All these licensing arrangements may be terminated upon the occurrence of certain events. In particular,

Analog Devices assigned to us its license from Canada's Simon Fraser University, or SFU, on our core thermal accelerometer technology. SFU is entitled to terminate our license upon the occurrence of one of a number of events, including our failure to timely provide financial records. In addition, the license is terminated automatically upon the occurrence of insolvency, bankruptcy or other similar events.

Analog Devices granted us an exclusive, perpetual license to its thermal accelerometer technology rights to use, make, have made, import, offer to sell, sell, develop, modify, reproduce and distribute thermal accelerometer products and agreed not to use such technology rights to make or sell thermal accelerometer products itself. Analog Devices is entitled to terminate this license if our company is dissolved or liquidated or if we breach a material provision of the license agreement.

Analog Devices granted us a non-exclusive license to certain of its testing, wafer sawing and wafer level capping and chip-level packaging technology rights to use, make, have made, import, offer to sell, sell, develop, modify, reproduce and distribute thermal accelerometer products. Analog Devices may terminate this license if our company is dissolved or liquidated or if we breach a material provision of the license agreement.

Under our license with SFU, SFU is entitled to continue to use the licensed technology existing at the time of the license agreement, which was entered into in March 1999, as well as any related technology it develops thereafter without our support. Although we understand that SFU has not developed commercialized products based on its patented accelerometer technology to date, we cannot assure you that it will not do so in the future. If SFU seeks to develop commercialized products based on the accelerometer technology, it may deem us as a competitor and seek to terminate or limit the scope of our license, and as a result, our business, operations, financial condition and results of operation may be materially and adversely affected.

Our company has a significant relationship with Analog Devices. Dr. Yang Zhao, our founder and CEO, was a key member of Analog Devices MEMS division for a number of years and we received our initial funding and technologies from Analog Devices. However, we also consider Analog Devices a significant competitor in our industry. If Analog Devices seeks to terminate, limit the scope of, or increase the fees of, any of our licenses granted or assigned by them, our business, operations, financial condition and results of operation may be materially and adversely affected.

The loss of the services of our independent packaging service provider could disrupt our shipments, harm our customer relationships and reduce our sales.

We outsource a portion of our product packaging process to a third-party packaging service provider. As a result, we do not directly control our product delivery schedules, packaging costs or quality assurance and control for products subject to third-party packaging process. If our packaging service provider experiences capacity constraints or disruption or financial difficulties, raises its prices, suffers any damage to its facilities, or terminates its relationship with us, and we have insufficient capacity in-house, we may have to seek alternative packaging services which may not be available on commercially reasonable terms, or at all. Moreover, we may be exposed to risks associated with qualifying new service providers. Because it may take us an extended amount of time to qualify third-party packaging service providers, we could experience delays in product shipments if we are required to find alternative service providers for our products on short notice. Any problems that we may encounter with the delivery or quality of our products could damage our reputation and result in a loss of customers.

Table of Contents

We may be unable to obtain in a timely manner and at a reasonable cost the equipment necessary for us to remain competitive.

Our operations and expansion plans depend on our ability to obtain a significant amount of equipment from a limited number of suppliers and in a market that is characterized, from time to time, by intense demand, limited supply and long delivery cycles. During times of significant demand for this type of equipment, lead times for delivery can be significant. Shortages of equipment could result in an increase in their prices and longer delivery times. If we are unable to obtain equipment in a timely manner and at a reasonable cost, we may be unable to fulfill our customers' orders, which could negatively impact our financial condition and results of operations.

Our expansion plans require substantial capital expenditures and are subject to a number of uncertainties, and our failure to complete these plans would have a material adverse effect on our future growth.

Our future success depends on our ability to significantly increase our manufacturing capacity and research and development capabilities.

We are expanding our current manufacturing facility. Upon completion, our Wuxi facility is expected to have an additional 600 square meters of production area. Expansion on our current facility began in the fourth quarter of 2006, and is expected to be completed by the end of 2007. Total costs are estimated to be approximately \$7 million, of which \$4 million will be paid through a newly-established credit facility, with the remaining paid through our working capital. As of September 30, 2007, we have expended \$4.0 million on this project.

In addition, we are preparing for the construction of two new buildings adjacent to our current facility. Upon completion, the new facility is expected to comprise 20,800 square meters, consisting of 8,700 square meters for a new research and development institute and 12,100 square meters of new manufacturing facilities. Construction on our new facility will begin in the fourth quarter of 2007 and is expected to be completed in two phases. Phase one of our new facility is expected to be completed in the first quarter of 2008 and will house our new research and development institute and operations and management offices. Total costs of phase one, including construction and machinery, are estimated to be approximately \$6 million. Phase two of our new facility is expected to be completed within three years in a number of phases. Upon completion of phase two, we expect to have in place manufacturing capacity to meet our future production requirements for both accelerometer products and non-accelerator products. Total costs of phase two, including construction and machinery, are estimated to be approximately \$30 million. We intend to finance substantially all of the construction costs for our new facility with a portion of the net proceeds of this offering.

There are a number of events that could delay these expansion projects or increase the costs of building and equipping these or future facilities in accordance with our plans. These include:

failure to raise sufficient funds to build, and maintain adequate working capital to operate, new facilities;

failure to timely obtain environmental and other regulatory approvals, permits or licenses;

shortages and late delivery of building materials and manufacturing equipment;

seasonal factors, such as a long and intensive wet season that limits construction; and

technological, capacity or other changes to our plans for new facilities necessitated by changes in market conditions.

If we are unable to establish or successfully operate additional manufacturing capacity or increase our research and development capabilities, we may be unable to expand our business as planned. If we are unable to carry out our planned expansions, we may not be able to meet customer demand, which could result in lower profitability and a loss in market share.

Table of Contents

We may undertake acquisitions or investments to expand our business that may pose risks to our business and dilute the ownership of our existing stockholders, and we may not realize the anticipated benefits of these acquisitions or investments.

As part of our growth strategy, we will continue to evaluate opportunities to acquire or invest in other businesses, intellectual property or technologies that would complement our current offerings, expand the breadth of markets we can address or enhance our technical capabilities. Acquisitions or investments that we may potentially make in the future entail a number of risks that could materially and adversely affect our business, operating and financial results, including:

problems integrating the acquired operations, technologies or products into our existing business and products;

diversion of management's time and attention from our core business;

adverse effects on existing business relationships with customers;

need for financial resources above our planned investment levels;

failures in realizing anticipated synergies;

difficulties in retaining business relationships with suppliers and customers of the acquired company;

risks associated with entering markets in which we lack experience;

potential loss of key employees of the acquired company;

potential write-offs of acquired assets; and

potential expenses related to the amortization of intangible assets.

Our failure to address these risks may have a material adverse effect on our financial condition and results of operations. Any such acquisition or investment may require a significant amount of capital investment, which would decrease the amount of cash available for working capital or capital expenditures. In addition, if we issue new equity securities to pay for acquisitions, our stockholders may experience dilution. If we borrow funds to finance acquisitions, such debt instruments may contain restrictive covenants that can, among other things, restrict us from distributing dividends.

Our product liability and business disruption insurance may not be sufficient.

A significant portion of our sales derive from automotive safety applications which may expose us to significant product liability claims. We maintain business disruption insurance and general liability insurance which includes product liability coverage in amounts we believe to be appropriate for our operations. However, we cannot assure you that this amount is sufficient to cover all potential claims or losses and damages we may suffer. Any product liability or warranty claim, litigation, natural disaster or other forms of business disruption may result in our incurring substantial costs and in a diversion of resources.

Compliance with environmental regulations can be expensive, and noncompliance with these regulations may result in adverse publicity, potentially significant monetary damages and fines and suspension of our business operations.

Any failure by us to control the use of, or to restrict adequately the discharge of, hazardous substances could subject us to potentially significant monetary damages and fines or suspensions in our business operations. Our manufacturing processes generate noise, waste water, gases and other industrial wastes and we are required to comply with China's national and local regulations regarding environmental protection. We believe we are currently in compliance with present environmental protection requirements and have all necessary environmental permits to conduct our business as it is presently conducted. However, if more stringent

Table of Contents

regulations are adopted in the future, the costs of compliance with these new regulations could be substantial. If we fail to comply with any future environmental regulations, we may be required to pay substantial fines, suspend production or cease operations.

We may need additional capital, and the sale of additional common stock or other equity securities could result in dilution to you.

We believe that our current cash and cash equivalents, anticipated cash flow from operations and the net proceeds from this offering will be sufficient to meet our anticipated cash needs for the near future. However, we may require additional cash resources due to changed business conditions or other future developments, including any investments or acquisitions we may decide to pursue. If our resources are insufficient to satisfy our cash requirements, we may seek to sell additional equity or debt securities that may be convertible to equity securities. The sale of additional equity securities or debt securities that may be convertible to equity securities could result in dilution to you. Furthermore, the incurrence of indebtedness would result in increased debt service obligations and could result in operating and financing covenants that would restrict our operations or our ability to pay dividends to our stockholders.

If we grant employee share options and other share-based compensation in the future, our net income could be adversely affected.

Our equity incentive plans and other similar types of incentive plans are important to attract and retain qualified key personnel. We have granted share options in the past pursuant to our equity incentive plans for our employees adopted in 2000 and 2007. As a result of the issuance of options under these plans, we have in the past and expect in the future to incur stock-based compensation expenses. We currently account for compensation costs for all share options, including share options granted to our directors and employees, using the fair value method and recognize the expense in our consolidated statement of operations in accordance with Statement of Financial Accounting Standard No. 123(R), which may have a material adverse effect on our net income.

We may be adversely affected by the cyclicity of the semiconductor industry.

The semiconductor industry is highly cyclical and is characterized by constant and rapid technological change, product obsolescence and price erosion, evolving standards, short product life cycles and wide fluctuations in product supply and demand. The semiconductor industry has, from time to time, experienced significant downturns, often connected with, or in anticipation of, maturing product cycles of both semiconductor companies and their customers products and declines in general economic conditions. These downturns have been characterized by diminished product demand, production overcapacity, high inventory levels and accelerated erosion of average selling prices. Any future downturn may reduce our revenues and result in us having excess inventory. Furthermore, any upturn in the semiconductor industry could result in increased competition for access to limited third-party foundry, assembly and testing capacity. Failure to gain access to foundry, assembly and testing capacity could impair our ability to secure the supply of products that we need, which could significantly delay our ability to ship our products, cause a loss of revenues and damage our customer relationships.

The average selling prices of products in our markets have historically decreased rapidly and will likely do so in the future, which could harm our revenue and gross margins.

In the semiconductor industry, the average selling price of a product typically declines significantly over the life of the product. In the past, we have reduced the average selling prices of our products in anticipation of future competitive pricing pressures, new product introductions by us or our competitors and other factors. We expect that we will have to similarly reduce our products average selling prices over the life of any particular product in the future. Reductions in our average selling prices to one customer could also impact our average selling prices to other customers. A decline in average selling prices would harm our gross margins. Our financial results will suffer if we are unable to offset any reductions in our average selling prices by increasing

Table of Contents

our sales volumes, reducing our costs, adding new features to our existing products or developing new or enhanced products on a timely basis with higher selling prices or gross margins.

Risks Related to Doing Business in China

Adverse changes in economic and political policies of the PRC government or laws or regulations of the PRC could have a material adverse effect on the overall economic growth of China, which could materially and adversely affect our business.

All of our manufacturing operations are located in China and a significant portion of devices incorporating our products are ultimately sold to end users in China. Accordingly, our business, financial condition, results of operations and prospects are affected significantly by economic, political and legal developments in China. China's economy is in transition from a planned economy to a more market-oriented economy and differs from the economies of most developed countries in many respects, including the amount of government involvement, level of development, growth rate, level of capital reinvestment, access to financing, control of foreign exchange and allocation of resources. While the PRC economy has experienced significant growth in the past 30 years, the growth has been uneven across different regions and economic sectors of China. The PRC government has implemented various economic and political policies and laws and regulations to encourage economic development. Although we believe that such policies have had a positive effect on the economic development of China, we cannot predict the future direction of those policies or the effects those policies may have on our business or results of operations. In addition, since 2003, the PRC government has implemented a number of measures, such as raising surplus deposit reserve ratios and lending interest rates, in order to slow down the growth of certain sectors of China's economy. These actions, as well as future actions and policies of the Chinese government, could materially affect our liquidity and access to bank financing. Furthermore, changes to the policies of the PRC government or the laws and regulations of the PRC could have a material adverse effect on the overall economic growth of China, which could adversely affect our business.

Because our business depends in part on the continued growth of the Chinese economy, any slowdown of such growth could have a material adverse effect on our business and operating results.

Our business is significantly dependent upon the economy and the business environment in China. In particular, we expect to continue to rely significantly on the growing demand in China for devices incorporating our products, which in turn may be dependent on the continuing growth of the Chinese economy. The Chinese economy experienced some deflation a few years ago, and there can be no assurance that the growth of the Chinese economy will be steady or that any slowdown of the Chinese economy will not have a material adverse effect on our business and operating results.

China's legal system is characterized by uncertainty that could negatively impact our business and results of operations.

We conduct all of our manufacturing operations at our Wuxi subsidiary, which is subject to PRC laws and regulations applicable to foreign investment in China and, in particular, laws applicable to wholly-foreign owned companies. Since 1979, PRC legislation and regulations have significantly enhanced the protections afforded to various forms of foreign investments in China. However, China has not developed a fully integrated legal system and recently-enacted laws and regulations may not sufficiently cover all aspects of economic activities in China.

The PRC legal system is based on written statutes. The interpretation and enforcement of these laws and regulations involve uncertainties in that (i) the laws and regulations are relatively new, (ii) only limited volumes of court decisions are published, (iii) prior court decisions may be only cited for reference but have limited precedential value, and (iv) interpretation of statutes and regulations may also be subject to new government policies reflecting domestic political, economic or social changes. Such uncertainties may limit the legal protections available to us.

Table of Contents

The enforcement of existing laws, or contracts based on existing law, may be uncertain and sporadic as well. It may be difficult to obtain swift and equitable enforcement or to obtain enforcement of a judgment by a court of another jurisdiction.

The relative inexperience of China's judiciary in many types of cases creates additional uncertainty as to the outcome of any litigation. Any litigation in China may be protracted and result in substantial costs and diversion of resources and management attention.

The PRC legal system is based in part on government policies and internal rules (some of which are not published on a timely basis or at all) that may have a retroactive effect. As a result, we may not be aware of our violation of these policies and rules until some time after the violation.

Our activities in China may be subject to administrative review and approval by various national and local agencies of the PRC government. Because of the changes occurring in China's legal and regulatory structure, we may not be able to secure the requisite governmental approval for our activities. Failure to obtain the requisite governmental approval for any of our activities could adversely affect our business and results of operations.

The approval of the China Securities Regulatory Commission, or the CSRC, may be required in connection with this offering under a recently adopted PRC regulation; any requirement to obtain prior CSRC approval could delay this offering and a failure to obtain this approval could have a material adverse effect on our business, operating results, reputation and trading price of our common stock and may also create uncertainties for this offering; the regulation also establishes more complex procedures for acquisitions conducted by non-PRC investors which could make it more difficult to pursue growth through acquisitions.

On August 8, 2006, six PRC regulatory agencies, namely, the PRC Ministry of Commerce, the State-owned Assets Supervision and Administration Commission of the State Council, or SASAC, the State Administration of Taxation, the State Administration for Industry and Commerce, the CSRC and SAFE, jointly adopted the Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the New M&A Rule, which became effective on September 8, 2006. This New M&A Rule purports, among other things, to require offshore special purpose vehicles, or SPVs, formed for overseas listing purposes through acquisitions of PRC domestic companies and directly or indirectly controlled by PRC companies or individuals, to obtain the approval of the CSRC prior to publicly listing their securities on a non-PRC stock exchange. On September 21, 2006, the CSRC published a notice on its official website specifying documents and materials required to be submitted to it by SPVs seeking CSRC approval of their overseas listings. While the application of the New M&A Rule remains unclear, we believe, based on the advice of our PRC counsel, Commerce & Finance Law Offices, that CSRC approval may not be applicable to us in the context of this offering because we established our PRC subsidiary through direct investment by non-PRC persons rather than by merger or acquisition of PRC domestic companies. However, as it is uncertain how the New M&A Rule will be interpreted or implemented, we cannot assure you that the relevant PRC government agency, including the CSRC, or PRC courts would reach the same conclusion as our PRC counsel. If the CSRC or other PRC regulatory agencies subsequently determine that we need to obtain the CSRC's approval for this offering, we may face sanctions by the CSRC or other PRC regulatory agencies. In such event, these regulatory agencies may impose fines and penalties on our operations in the PRC, limit our operating privileges in the PRC, delay or restrict the repatriation of the proceeds from this offering into the PRC, or take other actions that could have a material adverse effect on our business, financial condition, results of operations, reputation and prospects, as well as the trading price of our common stock. The CSRC or other PRC regulatory agencies may also take actions requiring us, or making it advisable for us, to halt this offering before settlement and delivery of the common stock offered by this prospectus.

The New M&A Rule also established additional procedures and requirements that could make merger and acquisition activities by non-PRC investors more time-consuming and complex, including requirements in some instances that the Ministry of Commerce be notified in advance of any change-of-control transaction in which a non-PRC investor takes control of a PRC domestic enterprise. In the future, we may grow our business in part by

Table of Contents

acquiring complementary businesses, although we do not have any plans to do so at this time. Complying with the requirements of the New M&A Rule to complete such transactions could be time-consuming, and any required approval processes, including obtaining approval from the Ministry of Commerce, may delay or inhibit our ability to complete such transactions, which could affect our ability to expand our business or maintain our market share.

The discontinuation of any of the preferential tax treatments currently available to us in China could materially and adversely affect our business, financial condition and results of operations.

The PRC government or its local agencies or bureaus provides preferential tax treatment, in the form of reduced tax rates or tax holidays, to certain qualified enterprises. Our wholly-owned PRC subsidiary in Wuxi, as a PRC high-technology company operating in a designated high-tech development zone, benefits from a 15% preferential enterprise income tax rate, compared to a standard rate of 33%, and is exempt from enterprise income tax for two years from 2007, the year in which our Wuxi subsidiary first had positive accumulated earnings, and is entitled to a 50% reduction in the enterprise income tax for the succeeding three years.

Moreover, under current PRC laws and regulations, no tax is required to be withheld by our Wuxi subsidiary with respect to any dividend payments made by it to us, as its stockholder, and no PRC tax is payable by us on the dividends received from our Wuxi subsidiary provided that such profits are permitted to be paid by it in accordance with PRC laws and regulations. In addition, as an FIE, our Wuxi subsidiary enjoys certain tax deductions for purchasing equipment made in China. Under the relevant regulation, if an FIE purchases Chinese-made equipment, and the price does not exceed the total investment amount of such FIE, for projects that fall within certain specified categories, 40% of the purchase price amount may be credited against the surplus between the amount of enterprise income tax payable in the current year and the amount paid in the previous year. If the credited amount is greater than the surplus, the excess amount can be carried forward for up to five years, subject to certain exceptions. In addition, we have also benefited from rebates of value-added tax for our export products.

The discontinuation of these preferential tax treatments could materially and adversely affect our business, financial condition and results of operations. On March 16, 2007, the National People's Congress, the PRC legislature, approved and promulgated a new tax law named Enterprise Income Tax Law, which will take effect beginning January 1, 2008. Under the new tax law, foreign invested enterprises, or FIEs, and domestic companies are subject to a uniform income tax rate of 25%. The new tax law provides a five-year transition period starting from its effective date for those enterprises which were established before the promulgation date of the new tax law and which were entitled to a preferential lower income tax rate under the then effective tax laws or regulations. The income tax rate of such enterprises will gradually transition to the uniform tax rate within the transition period in accordance with implementing rules to be issued by the State Council. For those enterprises which are enjoying tax holidays, such tax holidays may continue until their expiration in accordance with regulations to be issued by the State Council, but where the tax holiday has not yet started because of losses, such tax holiday shall be deemed to commence from the first effective year of the new tax law. While the new tax law equalizes the income tax rates for FIEs and domestic companies, preferential tax treatment would continue to be given to companies in certain encouraged sectors and to entities classified as high-technology companies supported by the PRC government, whether FIEs or domestic companies. According to the new tax law, entities that qualify as high-technology companies especially supported by the PRC government are expected to benefit from a tax rate of 15% as compared to the uniform tax rate of 25%. However, the new tax law is vague as to the definition of high-technology companies especially supported by the PRC government, and there can be no assurances that our Wuxi subsidiary will qualify as a high-technology company supported by the PRC government or if it does qualify, that it will continue to do so in the future and continue to benefit from such preferential tax rate. Following the effectiveness of the new tax law, our effective income tax rate may increase, unless we are otherwise eligible for preferential treatment. The new tax law provides only a framework of the enterprise tax provisions, leaving many details on the definitions of numerous terms as well as the interpretation and specific application of various provisions unclear and unspecified.

Table of Contents

We may be treated as a resident enterprise for PRC tax purposes after the Enterprise Income Tax Law becomes effective on January 1, 2008, which may subject us to PRC income tax for any dividends we receive from our Wuxi subsidiary and PRC income tax withholding for any dividends we pay to our non-PRC stockholders.

Under the Enterprise Income Tax Law, enterprises established under the laws of non-PRC jurisdictions, but whose de facto management body is located in the PRC are treated as resident enterprises for PRC tax purposes. It is currently unclear in which situations a non-PRC enterprise's de facto management body is considered to be located in the PRC because no implementation rules to the new laws have been promulgated yet. However, we are not treated as a PRC resident enterprise under the Sino-U.S. Tax Treaty ratified by the U.S. and Chinese governments in 1984. Some members of our management team are currently based in the PRC, and may remain in the PRC after the effectiveness of the new tax law. If we are treated as a resident enterprise for PRC tax purposes, we will be subject to PRC tax on our worldwide income at the 25% uniform tax rate, which will include any dividend income we receive from our Wuxi subsidiary. Although the new tax law provides that dividend income between qualified resident enterprises is exempted income, it is not clear what is considered a qualified resident enterprise under the new tax law. If we are required under the new tax law to pay income tax for any dividends we receive from our Wuxi subsidiary, it will materially and adversely affect our consolidated results of operations and the amount of dividends we may pay to our stockholders.

Furthermore, unlike the Income Tax Law for Enterprises with Foreign Investment and Foreign Enterprises currently in effect, which specifically exempts withholding tax on any dividends payable to non-PRC investors, the new tax law provides that an income tax rate of 20% will normally be applicable to dividends payable to non-PRC enterprise investors which are derived from sources within the PRC, unless there exists a tax treaty between the PRC and the relevant jurisdictions in which such non-PRC enterprise stockholders reside whereupon the relevant tax may be reduced or exempted. However, no implementation rules to the new tax law have been promulgated. Therefore, although the new tax law provides that income tax may be reduced or exempted in accordance with applicable tax treaties, there can be no assurance that the dividends paid to us or our non-PRC enterprise stockholders will benefit from such reduction or exemption. If we are required under the new tax law to withhold PRC income tax on our dividends payable to our non-PRC enterprise stockholders, your investment in us may be materially and adversely affected.

The intercompany transactions between us and our Wuxi subsidiary may be subject to scrutiny by the United States and the PRC tax authorities, and there may be material and adverse tax consequences if the United States or the PRC tax authorities determine that these transactions were not entered into on an arm's length basis.

Our Wuxi subsidiary, Memsic Semiconductor (Wuxi) Co., Ltd., or Memsic Wuxi, is a PRC company. Our Wuxi subsidiary generally purchases manufacturing components from third parties but purchases a small amount of manufacturing components from our U.S. headquarters at cost. To more efficiently manage our manufacturing process, we expect our Wuxi subsidiary to purchase all manufacturing components from third parties from January 2008. We purchase all of the MEMS sensors our Wuxi subsidiary produces.

We could face material and adverse tax consequences if the United States or the PRC tax authorities determine that the transactions between us and our Wuxi subsidiary were not entered into on an arm's length basis and they may adjust our income and expenses for United States or PRC tax purposes in the form of a transfer pricing adjustment. A transfer pricing adjustment could result in a reduction, for PRC tax purposes, of deductions recognized by our Wuxi subsidiary, or an increase, for the U.S. tax purposes, of income recognized by us on a consolidated basis, which could increase our overall tax liability and adversely affect our results of operations.

Our Wuxi subsidiary is subject to restrictions on paying dividends or making other distributions to us.

We may rely on dividends paid by our Wuxi subsidiary for our cash needs, including the funds necessary to pay any dividends or other cash distributions to our stockholders, service any debt we may incur and pay our

Table of Contents

operating expenses. Regulations in the PRC currently permit payment of dividends only out of accumulated profits as determined in accordance with accounting standards and regulations in China. Our Wuxi subsidiary is required to set aside at least 10% (up to an aggregate amount equal to half of its registered capital) of its after-tax profits each year, if any, to fund certain reserve funds. These reserve funds are not distributable as cash dividends. We currently do not have any reserve funds because our Wuxi subsidiary was in a cumulative loss position as of December 31, 2006. If our Wuxi subsidiary incurs debt on its own behalf in the future, the instruments governing the debt may restrict its ability to pay dividends or make other distributions to us. Limitations on the ability of our Wuxi subsidiary to pay dividends to us could adversely limit our ability to grow, make investments or acquisitions that could be beneficial to our businesses, pay dividends, or otherwise fund and conduct our business. Accordingly, if for any of the above or other reasons, we do not receive dividends from our Wuxi subsidiary, our liquidity, financial condition and ability to make dividend distribution to our stockholders will be materially and adversely affected.

Restrictions on currency exchange may limit our ability to receive and use our revenue effectively.

The PRC government imposes controls on the convertibility of Renminbi, or RMB, into foreign currencies and, in certain cases, the remittance of currency out of China. Because all or substantially all of our net sales are denominated in U.S. dollars, but a significant portion of our expenses are denominated in RMB, any restrictions on currency exchange may limit our ability to use cash from sales generated in U.S. dollars to fund our business activities in China. The principal regulation governing foreign currency exchange in China is the Foreign Currency Administration Rules (1996), as amended. Under these rules, RMB are freely convertible for trade and service-related foreign exchange transactions, but not for direct investment, loans or investment in securities outside China unless the prior approval of the State Administration of Foreign Exchange, or SAFE, is obtained. Although the PRC government regulations now allow greater convertibility of RMB for current account transactions, significant restrictions still remain. For example, foreign exchange transactions under the capital account of our Wuxi subsidiary, including principal payments in respect of foreign currency-denominated obligations, remain subject to significant foreign exchange controls and the approval of SAFE. These limitations could affect our ability to obtain foreign exchange for capital expenditures. The PRC government may also at its discretion restrict access in the future to foreign currencies for current account transactions. If the foreign exchange control system prevents us from obtaining sufficient foreign currency to satisfy our currency demands, we may not be able to pay dividends in foreign currencies to our stockholders. In addition, we cannot be certain that the PRC regulatory authorities will not impose more stringent restrictions on foreign exchange transactions in the future.

Fluctuations in the value of RMB could negatively impact our result of operations.

The value of the RMB against the U.S. dollar and other currencies may fluctuate and is affected by, among other things, changes in political and economic conditions inside and outside of China. On July 21, 2005, the PRC government changed its policy of pegging the value of the RMB to the U.S. dollar. Under the new policy, the RMB is permitted to fluctuate within a managed band based on market supply and demand and by reference to a basket of certain foreign currencies. This change in policy has resulted in an 8% appreciation of the RMB against the U.S. dollar between July 21, 2005 and September 30, 2007. While the international reaction to the RMB revaluation has generally been positive, there remains significant international pressure on the PRC government to adopt an even more flexible currency policy. In the long term, the RMB may appreciate or depreciate significantly in value against the U.S. dollar, depending on the fluctuation of the basket of currencies against which it is currently valued, or the permission to enter into a full float.

Our reporting currency is the U.S. dollar and all of our sales and liabilities are denominated in U.S. dollars. Approximately one third of our operating expenses and a majority of our assets are denominated in RMB. Accordingly, as a result of China's 2005 currency policy, our operating expenses, in U.S. dollar equivalents, increased and our operating margins and net income were adversely affected. In addition, the value of our assets, in U.S. dollar equivalents, decreased. To the extent that we need to convert U.S. dollars we receive from this offering

Table of Contents

into RMB for our operations, appreciation of the RMB against the U.S. dollar would have an adverse effect on the RMB amount we receive from the conversion. Conversely, if we decide to convert our RMB into U.S. dollars for the purpose of making payments for dividends on our common stock or for other business purposes, appreciation of the U.S. dollar against the RMB would have a negative effect on the U.S. dollar amount available to us. As a result, any significant revaluation of the RMB may materially and adversely affect our cash flows, revenue, earnings and financial position, and the value of, and any dividends payable on, our common stock in U.S. dollars.

Recent PRC regulations relating to offshore investment activities by PRC residents and employee stock options granted by overseas-listed companies may increase our administrative burden, restrict our overseas and cross-border investment activity or otherwise adversely affect the implementation of our acquisition strategy. If our stockholders who are PRC residents, or our PRC employees who are granted or exercise stock options, fail to make any required registrations or filings under such regulations, we may be unable to distribute profits and may become subject to liability under PRC laws.

The PRC State Administration of Foreign Exchange, or SAFE, recently promulgated regulations that require PRC residents and PRC corporate entities to register with local branches of SAFE in connection with their direct or indirect offshore investment activities. Under the SAFE regulations, PRC residents who make, or have previously made, direct or indirect investments in offshore companies, will be required to register those investments. In addition, any PRC resident who is a direct or indirect stockholder of an offshore company is required to file or update the registration with the local branch of SAFE, with respect to that offshore company, any material change involving its round-trip investment or capital variation, such as an increase or decrease in capital, transfer or swap of shares, merger, division, long-term equity or debt investment or creation of any security interest. Although our PRC counsel has advised us that these SAFE regulations are not applicable to us or our stockholders, we cannot assure you that SAFE will agree with our position. If SAFE disagrees with us, and if any of our PRC stockholders fails to make in a timely manner the required SAFE registration or file or update the registration, our PRC subsidiary may be prohibited from distributing its profits and the proceeds from any reduction in capital, share transfer or liquidation to us, and we may also be prohibited from injecting additional capital into our PRC subsidiary. Moreover, failure to comply with the various SAFE registration requirements described above could result in liability under PRC laws for evasion of applicable foreign exchange restrictions.

The failure or inability of our PRC resident stockholders to comply with the registration procedures set forth therein may subject us to fines and legal sanctions. In addition, because it is uncertain how the SAFE regulations will be interpreted or implemented, we cannot predict how these regulations will affect our business operations or future strategy. For example, we may be subject to more stringent review and approval process with respect to our foreign exchange activities, such as remittance of dividends and foreign-currency-denominated borrowings, which may adversely affect our results of operations and financial condition. Furthermore, if we decide to acquire a PRC domestic company, we cannot assure you that we or the owners of such company, as the case may be, will be able to obtain the necessary approvals or complete the necessary filings and registrations required by the SAFE regulations. This may restrict our ability to implement our acquisition strategy and could adversely affect our business and prospects.

On March 28, 2007, SAFE promulgated the Application Procedure of Foreign Exchange Administration for Domestic Individuals Participating in Employee Stock Holding Plan or Stock Option Plan of Overseas-Listed Company, or the Stock Option Rule. Under the Stock Option Rule, PRC citizens who are granted stock options by an overseas publicly-listed company are required, through a PRC agent or PRC subsidiary of such overseas publicly-listed company, to register with SAFE and complete certain other procedures. We and our PRC employees who have been granted stock options will be subject to the Stock Option Rule when our company becomes an overseas publicly-listed company. If we or our PRC optionees fail to comply with these regulations, we or our PRC optionees may be subject to fines and legal sanctions.

A number of our PRC employees have exercised their stock options prior to our becoming an overseas publicly-listed company. Since there is not yet a clear regulation on how and whether these PRC employees are

Table of Contents

required to complete their SAFE registration, and it is uncertain as to how the government authorities will interpret the Stock Option Rule, it is unclear whether such exercises are permissible by PRC laws and it is uncertain how SAFE or other government authorities will interpret or administrate such regulations. Therefore, we cannot predict how such exercises will affect our business or operations.

PRC regulation of direct investment and loans by offshore holding companies to PRC entities may delay or limit us from using the proceeds of this offering to make additional capital contribution or loans to our Wuxi subsidiary.

Any capital contributions or loans, that we, as an offshore entity, make to our Wuxi subsidiary, including from the proceeds of this offering, are subject to PRC regulations. For example, any of our loans to our Wuxi subsidiary cannot exceed the difference between the total amount of investment that our Wuxi subsidiary is approved to make under relevant PRC laws and the registered capital of our Wuxi subsidiary, and any such loans must be registered with the local branch of the SAFE as a procedural matter. In addition, our additional capital contributions to our Wuxi subsidiary must be approved by the PRC Ministry of Commerce or its local counterpart. We cannot assure you that we will be able to obtain these approvals on a timely basis, or at all. If we fail to obtain such approvals, our ability to make equity contribution or provide loans to our Wuxi subsidiary or to fund its operations may be adversely affected, which could harm our Wuxi subsidiary's liquidity and its ability to fund its working capital and expansion projects and meet its obligations and commitments.

We are obligated to withhold and pay PRC individual income tax on behalf of our employees who are subject to PRC individual income tax. If we fail to withhold or pay such individual income tax in accordance with applicable PRC regulations, we may be subject to certain sanctions and other penalties and may become subject to liability under PRC laws.

Under PRC laws, we are obligated to withhold and pay individual income tax on behalf of our employees who are subject to PRC individual income tax. In addition, the State Administration of Taxation has issued several circulars concerning employee stock options. Under these circulars, our employees working in China (which could include both PRC employees and expatriate employees subject to PRC individual income tax) who exercise stock options will be subject to PRC individual income tax. We are obligated to file documents related to employee stock options with relevant tax authorities and withhold and pay individual income taxes for those employees who exercise their stock options. However, the relevant tax authority has advised us that due to the difficulty in determining the fair market value of our shares as a private company, we need not withhold and pay the individual income tax for the exercises until after the closing of this offering. Thus, we have not withheld and paid the individual income tax for the option exercises. We cannot assure you that the tax authority will not act otherwise and request us to withhold and pay the individual income tax immediately and impose sanctions, such as fines, on us.

Any recurrence of Severe Acute Respiratory Syndrome, or SARS, an outbreak of contagious diseases, such as avian influenza, could negatively impact our business and results of operations.

An outbreak of avian flu in the human population could result in a widespread health crisis that could adversely affect the economies and financial markets of many countries, particularly in Asia. A recurrence of SARS in Southeast Asia could also have similar adverse effects. Since a substantial part of our operations and a substantial number of our customers and suppliers are currently based in Asia (mainly the PRC, Taiwan and Japan), an outbreak of avian flu, SARS or other contagious diseases in Asia or elsewhere, or the perception that such outbreak could occur, and the measures taken by the governments of countries affected, including the PRC, would adversely affect our business, financial condition or results of operations.

Table of Contents

Risks Related to This Offering

There has been no public market for our common stock prior to this offering, and you may not be able to resell our common stock at or above the price you paid, or at all.

Prior to this initial public offering, there has been no public market for our common stock. If an active trading market for our common stock does not develop after this offering, the market price and liquidity of our common stock will be materially and adversely affected. The initial public offering price for our common stock will be determined by negotiations between us and the underwriters and may bear no relationship to the market price for our common stock after the initial public offering. We cannot assure you that an active trading market for our common stock will develop or that the market price of our common stock will not decline below the initial public offering price.

The market price for our common stock may be volatile.

There has been a history of significant volatility in the market prices of securities of technology companies. The market price for our common stock may be volatile and may be subject to wide fluctuations in response to factors including the following:

actual or anticipated fluctuations in our quarterly operating results;

changes in financial estimates by securities research analysts;

conditions in the semiconductors industry;

changes in the economic performance or market valuations of other companies in the semiconductors industry;

announcements by us or our competitors of new products, acquisitions, strategic partnerships, joint ventures or capital commitments;

addition or departure of key personnel;

fluctuations of exchange rates between the RMB and the U.S. dollar;

intellectual property litigation;

release of lock-up or other transfer restrictions on our outstanding shares or sales of additional shares; and

general economic or political conditions in Asia, particularly China, the United States and Europe.

In addition, the securities market has from time to time experienced significant price and volume fluctuations that are not related to the operating performance of particular companies. These market fluctuations may also materially and adversely affect the market price of our shares.

If securities or industry analysts do not publish research or reports about our business, or if they adversely change their recommendations regarding our common stock, the market price for our common stock and trading volume could decline.

Edgar Filing: MEMSIC Inc - Form S-1/A

The trading market for our common stock upon listing may be influenced by research or reports that industry or securities analysts publish about us or our business. If one or more analysts who cover us downgrade our common stock, the market price for our common stock would likely decline. If one or more of these analysts cease coverage of us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which, in turn, could cause the market price for our common stock or trading volume to decline.

Table of Contents

Substantial future sales or the perception of sales of our common stock in the public market could cause the price of our common stock to decline.

Sales of our common stock in the public market after this offering, or the perception that these sales may occur, could cause the market price of our common stock to decline. Upon completion of this offering, we will have 22,615,714 shares of common stock outstanding. All shares of our common stock sold in this offering will be freely transferable without restriction or additional registration under the Securities Act. The remaining shares outstanding after this offering will be available for sale, upon the expiration of the 180-day lock-up period beginning from the date of this prospectus, subject to volume and other restrictions as applicable under Rule 144 and Rule 701 under the Securities Act. Any or all of these shares that are subject to lock-up may be released prior to expiration of the lock-up period at the discretion of the lead underwriters for this offering. To the extent these shares are sold into the market, the market price of our common stock could decline.

In addition, upon the expiration of the 180-day lock-up period certain holders of our common stock will have rights, under certain conditions, to cause us to register under the Securities Act the sale of their common stock. See Description of Capital Stock Rights of Certain Investors After This Offering. Registration of these shares under the Securities Act will result in these shares becoming freely tradable without restrictions under the Securities Act immediately upon the effectiveness of the registration. Sale of these registered shares in the public market could cause the price of our common stock to decline.

You will experience immediate and substantial dilution in the net tangible book value of common stock purchased.

The initial public offering price per share of our common stock will be substantially higher than the net tangible book value per share prior to the offering. Consequently, when you purchase our common stock in the offering, you will incur an immediate dilution of US\$7.96 per share, representing the difference between our net tangible book value per share as of September 30, 2007, after giving effect to the automatic conversion of our outstanding shares of preferred stock to common stock and the receipt of estimated net proceeds from this offering, and the assumed initial public offering price of US\$12.00 per share, the midpoint of the price range set forth on the cover of this prospectus. See Dilution .

We have not determined any specific use for the net proceeds from this offering. Our management will therefore have significant flexibility in using such proceeds and may use the proceeds in ways with which you do not agree.

We intend to use the net proceeds from this offering for the expansion of our manufacturing facility and general corporate purposes. We may also use a portion of the net proceeds to acquire or invest in businesses, products and technologies that we believe will complement our business. However, depending on future developments and circumstances, we may use some of the proceeds for other purposes. We do not have more specific plans for the net proceeds from this offering. Therefore, our management will have significant flexibility in applying the net proceeds we receive from this offering. The net proceeds could be applied in ways that do not improve our profitability or increase our share price. The actual amounts and timing of these expenditures will vary significantly depending on a number of factors, including the amount of cash used in or generated by our operations and the market response to the introduction of any new product offerings.

Delaware law and provisions of our charter documents could discourage potential acquisition proposals and could delay, deter or prevent a change in control.

Our charter documents contain provisions that could discourage, delay or prevent a change in control or changes in our management that our stockholders may deem advantageous. These provisions:

require super-majority voting to amend some provisions in our amended and restated certificate of incorporation and bylaws;

Table of Contents

require a staggered board of directors making it more difficult for stockholders to replace a majority of our directors;

authorize the issuance of blank check preferred stock that our board could issue to increase the number of outstanding shares and to discourage a takeover attempt;

provide that a special meeting of stockholders may be called only by the president, the chief executive officer or the board of directors acting pursuant to a resolution adopted by the board; and

establish advance notice requirements for nominations for election to our board by stockholders at stockholder meetings.

In addition, we are subject to Section 203 of the Delaware General Corporation Law, which, subject to some exceptions, prohibits business combinations between a Delaware corporation and an interested stockholder, which is generally defined as a stockholder who becomes a beneficial owner of 15% or more of a Delaware corporation's voting stock for a three-year period following the date that the stockholder became an interested stockholder. Section 203 could have the effect of delaying, deferring or preventing a change in control that our stockholders might consider to be in their best interests. See Description of Capital Stock.

These anti-takeover defenses could discourage, delay or prevent a transaction involving a change in control. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choice and cause us to take corporate actions with which you may disagree.

Our corporate actions are substantially controlled by our principal stockholders and affiliated entities.

After this offering, our principal stockholders and their affiliated entities will beneficially own, assuming no exercise of the over-allotment option, approximately 46.0% of our outstanding shares of common stock. In addition, Dr. Yang Zhao, our president and chief executive officer, will beneficially own, assuming no exercise of the over-allotment option, 7.7% of our outstanding shares of common stock. These stockholders, if acting together, could exert substantial influence over matters such as electing directors and approving material mergers, acquisitions or other business combination transactions. This concentration of ownership may also discourage, delay or prevent a change in control of our company, which could deprive our stockholders of an opportunity to receive a premium for their shares as part of a sale of our company and might reduce the price of our shares. These actions may be taken even if they are opposed by our other stockholders, including those who purchase shares in this offering. In cases where their interests are aligned and they vote together, these stockholders will also have the power to prevent or cause a change in control. In addition, these persons could divert business opportunities from us to themselves or others.

Failure to achieve and maintain effective internal controls in accordance with Section 404 of the Sarbanes-Oxley Act could have a material adverse effect on our business.

As a public company, we will be required to document and test our internal financial control procedures in order to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act, which will require annual management assessments of the effectiveness of our internal controls over financial reporting and a report by our independent auditors that both addresses management's assessments and provides for the independent auditor's assessment of the effectiveness of our internal controls. During the course of our testing, we may identify deficiencies which we may not be able to remediate in time to meet our deadline for compliance with Section 404, and we may also identify inaccuracies or deficiencies in our financial reporting that could require revisions to or restatement of prior period results. Testing and maintaining internal controls will also involve significant costs and can divert our management's attention from other matters that are important to our business. We may not be able to conclude on an ongoing basis that we have effective internal controls over financial reporting in accordance with Section 404, and our independent auditors may not be able or willing to issue a favorable assessment of our conclusions. Failure to achieve and maintain an effective internal control

Table of Contents

environment could harm our operating results, could cause us to fail to meet our reporting obligations and could require that we restate our financial statements for prior periods, any of which could cause investors to lose confidence in our reported financial information and cause a decline, which could be material, in the trading price of our common stock.

We will incur increased costs as a result of being a public company.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act and rules subsequently implemented by the SEC and NASDAQ have required changes in corporate governance practices of public companies. We expect these new rules and regulations to increase our legal, accounting and financial compliance costs and make some of our corporate activities more time-consuming and costly. Also, we will incur additional costs associated with satisfying our public company reporting requirements. We are currently evaluating and monitoring developments with respect to these rules and regulations, and we cannot predict or estimate the amount of additional costs we may incur or the timing of such costs.

It may be difficult to enforce judgments against us in U.S. courts.

Although we are a Delaware corporation, our manufacturing subsidiary and approximately 40% of our assets were located outside of the United States as of September 30, 2007. As a result, you may not be able to enforce against us in U.S. courts judgments based on the civil liability provisions of U.S. federal securities laws. It is unclear if original actions of civil liabilities based solely upon U.S. federal securities laws are enforceable in courts outside the United States. It is equally unclear if judgments entered by U.S. courts based on the civil liability provisions of U.S. federal securities laws are enforceable in courts outside the United States. Any enforcement action in a court outside the United States will be subject to compliance with procedural requirements under applicable local law, including the condition that the judgment does not violate the public policy of the applicable jurisdiction.

Table of Contents

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections entitled Prospectus Summary, Risk Factors, Management's Discussion and Analysis of Financial Condition and Results of Operations and Business, contains forward-looking statements. These statements may relate to, but are not limited to, expectations of future operating results or financial performance, capital expenditures, introduction of new products, regulatory compliance, plans for growth and future operations, as well as assumptions relating to the foregoing. Forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified. These risks and other factors include, but are not limited to, those listed under Risk Factors. In some cases, you can identify forward-looking statements by terminology such as may, will, should, could, expect, anticipate, believe, estimate, predict, intend, potential, might, would, continue or the negative of these terms or other comparable terms. These statements are only predictions. Actual events or results may differ materially.

We believe that it is important to communicate our future expectations to our investors. However, there may be events in the future that we are not able to accurately predict or control and that may cause our actual results to differ materially from the expectations we describe in our forward-looking statements. Except as required by applicable law, including the securities laws of the United States and the rules and regulations of the SEC, we do not plan to publicly update or revise any forward-looking statements contained in this prospectus after we distribute this prospectus, whether as a result of any new information, future events or otherwise. Before you invest in our common stock, you should be aware that the occurrence of any of the events described in the Risk Factors section and elsewhere in this prospectus could harm our business, prospects, operating results and financial condition. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements.

Table of Contents

USE OF PROCEEDS

We estimate that our net proceeds from the sale of our common stock that we are offering will be approximately \$63.1 million at an assumed initial public offering price of \$12.00 per share, the midpoint of the range set forth on the cover of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. A \$1.00 increase or decrease in the assumed initial public offering price of \$12.00 per share would increase or decrease, as applicable, the net proceeds to us from this offering by \$5.6 million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise their option to purchase additional common stock in full, then we estimate that the net proceeds to us from the sale of such additional common stock will be approximately \$10.0 million.

This offering is primarily for the purpose of creating a public market for our common stock for the benefit of all stockholders, raising capital, retaining key employees by providing them with equity incentives in a public company, and promoting our corporate brand and image. We intend to apply approximately \$30 million of our net proceeds towards the expansion of our manufacturing facilities in Wuxi; approximately \$10 million to \$20 million towards working capital; and the remaining proceeds to be reserved for future strategic acquisitions. However, at this time we do not have any commitment to any specific acquisitions. Depending on our profitability, competitiveness, research and development and the rate of growth, our management will have significant flexibility in using the net proceeds of the offering.

Table of Contents

DIVIDEND POLICY

Since our inception, we have never declared any cash dividends on shares of our common stock. We intend to retain future earnings to finance the growth of our business and do not anticipate paying any cash dividends on our common stock in the foreseeable future.

Even if our board of directors, at its sole discretion, decides to distribute dividends, the form, frequency and amount of such dividends will depend upon our future operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors our board of directors may deem relevant.

To the extent we receive any distributions from our Wuxi subsidiary, we and our Wuxi subsidiary must comply with PRC laws and regulations and its articles of association in declaring and paying dividends to us. Under applicable requirements of PRC law, our Wuxi subsidiary may only distribute dividends after it has made allowances for recovery of losses, if any, allocated at least 10% of its net profit as reserve funds, and set aside a discretionary percentage of its net profit for staff and workers' bonus and welfare funds. Our Wuxi subsidiary is not required to set aside any of its net profit as reserve funds if such reserves are at least 50% of its respective registered capital. Furthermore, if our Wuxi subsidiary records no net income for a year as determined in accordance with generally accepted accounting principles in the PRC, it generally may not distribute dividends for that year.

Any dividend we declare will be paid in U.S. dollars to the holders of our common stock, to the extent permitted by applicable laws and regulations.

Table of Contents**CAPITALIZATION**

The following table sets forth our capitalization as of September 30, 2007:

on an actual basis;

on a pro forma basis to give effect to the automatic conversion of all outstanding shares of preferred stock into 14,060,819 shares of common stock;

on a pro forma, as adjusted basis to reflect (i) the automatic conversion of all outstanding shares of preferred stock into 14,060,819 shares of common stock upon the closing of this offering, and (ii) the issuance of and the receipt of the estimated net proceeds from the sale of 6,000,000 shares of common stock in this offering at an assumed public offering price of \$12.00 per share, the midpoint of the estimated price range as shown on the front cover of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	As of September 30, 2007		
	Actual	Pro forma (in thousands)	Pro forma as adjusted
Series A convertible preferred stock, \$0.01 par value: 13,661,000 shares authorized, 9,840,000 issued and outstanding	\$ 5,412	\$	\$
Series B convertible preferred stock, \$0.01 par value: 6,939,246 shares authorized, 6,939,246 issued and outstanding	8,250		
Series C convertible preferred stock, \$0.01 par value: 7,266,666 shares authorized, 7,266,666 issued and outstanding	10,900		
Series D convertible preferred stock, \$0.01 par value: 4,545,000 shares authorized, 4,075,727 issued and outstanding	8,967		
Stockholders' equity (deficit):			
Common stock, \$0.00001 par value: 22,500,000 shares authorized actual; 22,500,000 shares authorized pro forma; and 100 million shares authorized, pro forma as adjusted; 2,554,895 issued and outstanding, actual; 16,615,714 issued and outstanding, pro forma; and 22,615,714 issued and outstanding pro forma as adjusted			
Additional paid-in capital	610	34,139	97,278
Accumulated deficit	(6,180)	(6,180)	(6,180)
Accumulated other comprehensive income	697	697	697
Total stockholders' equity (deficit)	(4,873)	28,656	91,795
Total capitalization	\$ 28,656	\$ 28,656	\$ 91,795

Assuming the number of shares sold by us in the offering remains the same as set forth on the cover page, a \$1.00 increase or decrease in the assumed initial public offering price would increase or decrease, as applicable, our total capitalization by approximately US\$5.6 million.

The table above excludes the following shares:

1,752,180 shares of common stock upon exercise of options outstanding as of September 30, 2007 at a weighted average exercise price of \$3.96 per share granted under our Stock Option Plans; and

1,876,425 shares of common stock reserved for issuance under our Stock Option Plans.
This information is qualified by, and should be read in conjunction with, our financial statements and the notes thereto included in this prospectus.

Table of Contents**DILUTION**

If you invest in our common stock, your interest will be diluted to the extent of the difference between the initial public offering price per share of our common stock and the pro forma net tangible book value per share of our common stock after this offering. Dilution results from the fact that the per share offering price of the common stock is substantially in excess of the net tangible book value per share attributable to the existing equity holders. Net tangible book value represents net book equity excluding intangible assets, if any.

Our net tangible book value as of September 30, 2007 was approximately \$(5.2) million or \$(2.04) per share of common stock. Net tangible book value per share represents the amount of total tangible assets, minus the amount of total liabilities and Series A through D convertible preferred stock, divided by the total number of shares outstanding. Our pro forma net tangible book value as of September 30, 2007 was \$1.70 per share on that date. Pro forma net tangible book value adjusts net tangible book value to give effect to the conversion of all of our outstanding shares of preferred stock into 14,060,819 shares of common stock upon the closing of this offering. Pro forma net tangible book value as adjusted adjusts pro forma net tangible book value to give effect to the issuance of and receipt of the estimated net proceeds from the sale of 6,000,000 shares of common stock in this offering at an assumed public offering price of \$12.00 per share, the midpoint of the estimated price range as shown on the front cover of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Dilution is determined by subtracting pro forma net tangible book value per share of common stock from the initial public offering price per share of common stock. The following table illustrates the dilution on a per share basis assuming the underwriters do not exercise their over-allotment option:

	Per share
Initial public offering price	\$ 12.00
Net tangible book value as of September 30, 2007	\$ (2.04)
Pro forma net tangible book value after giving effect to the automatic conversion of all of our outstanding shares of preferred stock	\$ 1.70
Pro forma net tangible book value as adjusted after giving effect to the automatic conversion of all of our outstanding shares of preferred stock and this offering	\$ 4.04
Amount of dilution in net tangible book value to new investors in this offering	\$ 7.96

The following table summarizes, on the same pro forma as adjusted basis as of September 30, 2007, the differences between the stockholder as of such date and the new stockholders with respect to the number of shares purchased from us in this offering, the total consideration paid to us, and the average price per share paid at an initial public offering price of \$12.00 before deducting the estimated underwriting discount and commissions and estimated offering expenses payable by us and assuming our existing owners had exchanged all of their preferred stock for our common stock on a one-for-two basis, as of the date of this offering.

	Shares purchased		Total consideration		Average price per share
	Number	Percentage	Amount	Percentage	
Existing stockholders	16,615,714	73.5%	\$ 33,764	31.9%	\$ 2.03
New stockholders	6,000,000	26.5%	\$ 72,000	68.1%	\$ 12.00
Total	22,615,714	100.0%	\$ 105,764	100.0%	

The discussion and tables above also assume no exercise of any outstanding options. As of September 30, 2007, there were 1,752,180 shares of common stock issuable upon exercise of outstanding options at a weighted average exercise price of \$3.96 per share. If all these options had been exercised on September 30, 2007 after giving effect to the conversion of our preferred stock and this offering, after deduction of underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma net tangible book value would have been approximately \$4.04 per share and the dilution in net tangible book value to new stockholders would have been \$7.96 per share. In addition, our existing stockholders would hold 18,367,894 shares of common stock

Table of Contents

purchased from us, which would represent 75.4% of the shares of common stock purchased from us, for a total consideration paid of \$40.7 million, and the average price per share paid would be \$2.22. Our new stockholders would hold shares representing 24.6% of the shares of common stock purchased from us.

A \$1.00 increase or decrease in the assumed initial public offering price would increase or decrease, as applicable, (i) net tangible book value per share by \$0.25 and (ii) dilution per share by \$0.75, assuming no change to the number of shares offered by us as set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and other estimated operating expenses.

Table of Contents**SELECTED CONSOLIDATED FINANCIAL INFORMATION**

The following selected financial information should be read in conjunction with our financial statements and their related notes and Management's Discussion and Analysis of Financial Condition and Results of Operations included in this prospectus. The following statements of operations data for the years ended December 31, 2004, 2005 and 2006 and the balance sheet data as of December 31, 2005 and 2006 are derived from, and are qualified by reference to the audited financial statements included in this prospectus. The statement of operations data for the year ended December 31, 2003 and balance sheet data as of December 31, 2003 and 2004 have been derived from our audited financial statements not included in this prospectus. The statement of operations data for the year ended December 31, 2002 and the balance sheet data as of December 31, 2002 have been derived from our unaudited financial statements not included in this prospectus. The statement of operations data for the nine months ended September 30, 2006 and 2007 have been derived from our unaudited interim financial statements included elsewhere in this prospectus. We have prepared the unaudited interim financial statements on the same basis as our audited financial statements. The unaudited interim financial statements include all adjustments, consisting only of normal and recurring adjustments, that we consider necessary to fairly present our financial position and results of operation for the periods and as of the dates presented. Our historical results do not necessarily indicate our future results. In addition, our unaudited results as of and for the nine months ended September 30, 2007 may not be indicative of our results as of and for the full year ending December 31, 2007.

	2002 (unaudited)	For the year ended December 31, 2003 2004 2005			2006	For the nine months ended September 30, 2006 2007 (unaudited)		
		(in thousands, except percentages and per share data)						
Consolidated Statement of Operations Data:								
Net sales	\$ 477	\$ 1,853	\$ 6,895	\$ 9,053	\$ 13,118	\$ 9,169	\$ 18,769	
Cost of goods sold	246	712	1,998	2,891	4,332	3,079	6,449	
Gross profit	231	1,141	4,897	6,162	8,786	6,090	12,320	
Gross margin	48.4%	61.6%	71.0%	68.1%	67.0%	66.4%	65.6%	
Operating expenses:								
Research and development	1,493	411	400	1,004	1,874	1,281	2,411	
Sales and marketing	1,201	1,054	1,194	1,466	1,705	1,195	2,100	
General and administrative	1,590	1,392	1,686	2,004	2,544	1,727	2,641	
Total operating expense	4,284	2,857	3,280	4,474	6,123	4,203	7,152	
Operating income (loss)	(4,053)	(1,716)	1,617	1,688	2,663	1,887	5,168	
Other income (expense):								
Change in value of warrant to purchase Series A convertible preferred stock				(143)	(2,992)	(1,928)		
Interest and dividend income	103	37	108	202	485	332	484	
Interest expense	(19)	(6)	(49)	(20)			(23)	
Other, net	0	(2)	(19)	37	39	17	32	
Total other income (expense)	84	29	40	76	(2,468)	(1,579)	493	
Income (loss) before income taxes and accounting change		(1,687)	1,657	1,764	195	308	5,661	
Provision (benefit) for income taxes			29	(1,005)	(303)	(498)	958	
Income (loss) before cumulative effect of accounting change	(3,969)	(1,687)	1,628	2,769	498	806	4,703	
Cumulative effect on periods prior to July 1, 2005 of change in the valuation of the warrant to purchase Series A convertible preferred stock, net of zero income taxes				(2,714)				
Net income (loss)	\$ (3,969)	\$ (1,687)	\$ 1,628	\$ 55	\$ 498	\$ 806	\$ 4,703	

Table of Contents

	For the year ended December 31,					For the nine months ended September 30,	
	2002 (unaudited)	2003	2004	2005	2006	2006 (unaudited)	2007 (unaudited)
(in thousands, except percentages and per share data)							
Net income (loss) available to common stockholders:							
Basic	\$ (5,123)	\$ (2,897)	\$ 30	\$ (1,480)	\$ (1,378)	\$ (306)	\$ 506
Diluted	\$ (5,123)	\$ (2,897)	\$ 30	\$ (1,480)	\$ (1,378)	\$ (306)	\$ 578
Basic and diluted income (loss) per common share before cumulative effect of accounting change							
	\$ (2.58)	\$ (1.45)	\$ 0.02	\$ (0.53)	\$ (0.66)	\$ (0.15)	\$ 0.21
Net income (loss) per share:							
Basic	\$ (2.58)	\$ (1.45)	\$ 0.02	\$ (0.72)	\$ (0.66)	\$ (0.15)	\$ 0.21
Diluted	\$ (2.58)	\$ (1.45)	\$ 0.02	\$ (0.72)	\$ (0.66)	\$ (0.15)	\$ 0.20
Unaudited:							
Pro forma net income per common share:							
Basic					\$ 0.03		\$ 0.29
Diluted					\$ 0.03		\$ 0.28

The pro forma consolidated balance sheet data as of September 30, 2007 in the table below give effect to the conversion of all outstanding shares of our convertible preferred stock to 14,060,819 shares of our common stock as if such conversion had occurred at September 30, 2007. The pro forma as adjusted consolidated balance sheet data as of September 30, 2007 in the table below give effect to the conversion of all outstanding shares of our convertible preferred stock to 14,060,819 shares of our common stock as well as the issuance of and the receipt of the estimated net proceeds from the sale of 6,000,000 shares of common stock in this offering at an assumed initial public offering price of \$12.00 per share after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us as if such events had occurred at September 30, 2007.

	As of December 31,					As of September 30, 2007		
	2002 (unaudited)	2003	2004	2005	2006	Actual	Pro forma (unaudited)	Pro forma as adjusted
(in thousands)								
Consolidated Balance Sheet Data:								
Cash and cash equivalents	\$ 5,011	\$ 2,832	\$ 9,762	\$ 4,461	\$ 7,142	\$ 5,465	\$ 5,465	\$ 69,076
Short-term investments				6,100	6,900	7,550	7,550	7,550
Total current assets	5,514	3,697	13,520	15,193	21,873	24,777	24,777	88,388
Total assets	6,456	6,144	17,355	18,792	25,769	33,404	33,404	95,683
Total current liabilities	589	503	1,625	5,227	3,426	4,748	4,748	4,748
Long term debt		858	858					
Series A through D convertible preferred stock	17,356	19,059	28,809	30,345	32,929	33,529		

Table of Contents

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes to those statements included elsewhere in this prospectus. In addition to historical financial information, the following discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results and timing of selected events may differ materially from those anticipated in these forward-looking statements as a result of many factors, including but not limited to those discussed under "Risk Factors" and elsewhere in this prospectus. See "Cautionary Note Regarding Forward-looking Statements".

Overview

We provide advanced semiconductor sensor and system solutions based on integrated MEMS technology and mixed signal circuit design. Our accelerometer products are used to measure tilt, shock, vibration and acceleration, and have a wide range of applications such as mobile phones, automotive safety systems and video projectors. We combine proprietary thermal-based MEMS technology and advanced analog mixed signal processing circuitry design into a single chip using a standard CMOS process. This approach allows us to provide sensor solutions at a lower cost, with higher performance and greater functionality than our competitors. In addition, our technology platform allows us to easily integrate additional functions or create new sensors to expand into magnetic, touch and flow sensors and related applications.

We have experienced significant growth since our products were first commercialized in 2001. We shipped more than 25 million units of accelerometers from 2004 through September 30, 2007, including 2.7 million units in 2004, 3.8 million units in 2005, 6.8 million units in 2006 and 12.0 million units for the nine months ended September 30, 2007. In 2004, 2005 and 2006, and for the nine months ended September 30, 2007, our net sales totaled \$6.9 million, \$9.1 million, \$13.1 million and \$18.8 million, respectively. The increases in our sales volume and sales revenue during this period were primarily attributable to increases in the sale of our products for mobile phone applications and automotive applications. We expect sales of our accelerometer products to continue to represent a predominant share of our revenue for the foreseeable future. We expect to begin commercial sales of our non-accelerometer products, including magnetic sensors, flow sensors and touch sensors in the first half of 2008.

We have been profitable on an operating basis since 2004. In 2004, 2005 and 2006, and for the nine months ended September 30, 2007, our income from operations totaled \$1.6 million, \$1.7 million, \$2.7 million and \$5.2 million, respectively. Our gross margins in 2004, 2005 and 2006, and for the nine months ended September 30, 2007 were 71.0%, 68.1%, 67.0%, and 65.6% respectively. During these periods, our net income totaled \$1.6 million, \$55,494, \$0.5 million and \$4.7 million, respectively. Our net income in 2005 was affected by the cumulative effect of accounting change with regard to the warrants to purchase Series A redeemable convertible preferred stock of \$2.7 million and the change in fair value of the warrants of \$0.1 million. Our net income in 2006 was affected by the change in fair value of the warrants of \$3.0 million. We repurchased these warrants in 2006, and do not expect any further revaluation of warrants in the future since we do not have any other outstanding warrants as of the date of this prospectus. See "Description of Certain Line Items" Other Income (Expense).

We sell our products either to distributors, which then resell to OEMs and ODMs, or to OEM and ODM customers directly. Historically, a small number of our customers have accounted for a substantial portion of our revenue, and sales to our largest distributor customers and OEM and ODM customers have varied significantly. This significant variation is in part due to the fact that our sales are made on the basis of purchase orders rather than long-term contracts. Although our distributors generally provide us with non-binding rolling forecasts, our distributors generally have up to 30 days prior to delivery to cancel or reschedule shipments pursuant to our distribution agreements. This arrangement has added to the fluctuation and unpredictability of our sales. Because

Table of Contents

our products are a component of our customers' products, our sales performance is significantly affected by the sales performance of our customers' products. It is difficult for us to accurately forecast our product demand because in the case where we sell our products to distributors, we may not know the identity of the distributor's OEM and ODM customers and information regarding their demand.

OEM and ODM customers' products are complex and require significant time to define, design and ramp to volume production. Our sales cycle begins with our marketing and sales staff and application engineers engaging with our OEM and ODM customers' system designers and management, which is typically a multi-month, or even multi-year, process. If such process is successful, an OEM and ODM customer will decide to incorporate our solution in its product, which we refer to as a design-win. Because the sales cycles for our products are long, we incur expenses to develop and sell our products, regardless of whether we achieve the design-win and well in advance of generating revenue, if any, from those expenditures. Although we do not have long-term purchase commitments from any of our distributor customers or OEM and ODM customers, once one of our products is incorporated into an OEM's or ODM's design, it is likely to remain a part of the design for the life cycle of its product. We believe this to be the case because a redesign would generally be time consuming and expensive. We have experienced revenue growth due to an increase in the number of our products offered, an expansion of our customer base, an increase in the number of design-wins within any one OEM and ODM customer and an increase in the average revenue per design-win.

We manufacture our products utilizing a semi-fabless model by outsourcing the production of CMOS wafers and completing the post-CMOS MEMS process in-house. By outsourcing the standard CMOS manufacturing process, we are able to more efficiently manage our capital expenditures and cost of goods sold.

Description of Certain Line Items

Net Sales

Net sales represent gross revenue net of estimated amount of product returns and sales rebates from our customers. Sales to distributors are made pursuant to distributor agreements, which allow for the return of goods under certain circumstances. We recognize revenue in accordance with Staff Accounting Bulletin No. 104 and Statement of Financial Accounting Standards No. 48, or SFAS 48. See *Critical Accounting Policies - Revenue Recognition*. Prior to August 31, 2007, we deferred recognition of sales to a major distributor, World Peace Industrial Co., Ltd., or WPI, which did not meet the criteria of SFAS 48, until the product was sold through to WPI's OEM and ODM customers. WPI accounted for 34.6% of our revenue in 2006 and 53.6% of our revenue for the nine months ended September 30, 2007. On August 30, 2007, we amended the distributor agreement with WPI to allow returns only upon our approval. Accordingly, the criteria under SFAS No. 48 have been met for this distributor as of September 1, 2007, and we recognized revenue upon shipment to WPI for all shipments subsequent to this date. For all shipments to WPI made prior to August 31, 2007, we continued to recognize our revenue upon shipments to its OEM and ODM customers. See *Critical Accounting Policies - Revenue Recognition*.

Historically, our revenue has been derived primarily from shipments of our accelerometer products. The primary factors that affect our revenue are the sales volumes and average selling prices of our products. The significant increases in our net sales have been primarily attributable to the increases in the sales volumes of our products, particularly those for mobile phone and automotive applications. The average selling prices of our products generally decline over time and are primarily affected by a combination of the following factors:

the semiconductor market is highly competitive, and as a result, the average selling prices of particular products generally experience rapid declines over the course of their respective product and technology life cycles. We seek to mitigate the impact of this trend on our business by continuing to rapidly design, develop and sell new generations of products with additional functionalities to replace older generation products;

Table of Contents

we may also reduce our product prices as we are able increase our production yields or to reduce our manufacturing costs, particularly the wafer prices;

changes in our product mix may affect the average selling prices of our products. Historically, for example, our revenue derived from consumer and mobile phone markets, as a percentage of our total revenue, has increased. Our products for these markets generally have lower average selling prices than products for the automotive market. The average selling prices of products may continue to be affected by our strategy to increase market adoption of our products in certain markets; and

we occasionally grant discounts granted to our large customers or OEM and ODM customers for high volume purchases.

Net Sales by Application

Net sales from mobile phone applications, as a percentage of total net sales, have increased in recent years, and we expect this trend to continue for the foreseeable future as we seek further penetration into this market. Net sales from the automotive applications, in absolute terms, have increased, primarily attributable to increases in sales of rollover application products to Autoliv Inc. To increase net sales from the automotive market, we are currently seeking to increase sales from other automotive applications and expand our customer base. However, any revenue increases, if at all, from the automotive market will require significant time, as the development lead time in this market is generally longer than other markets. Net sales from consumer applications have fluctuated historically as a result of the generally short life cycle of consumer electronics and changes in our customer base. As our product offering and customer base for consumer applications continue to diversify, we expect the net sales from consumer applications to fluctuate less. Industrial and medical markets are limited, and we do not expect revenue from these markets to contribute significantly to our total revenue.

The following table sets forth our net sales by application for the periods indicated by amount and as a percentage of our net sales.

	For the year ended December 31,						For the nine months ended September 30,			
	2004		2005		2006		2006		2007	
	Amount	% of net sales	Amount	% of net sales	Amount	% of net sales	Amount	% of net sales	Amount	% of net sales
	(in thousands, except percentages)									
Mobile phone	\$ 1,179	17.1%	\$ 740	8.2%	\$ 5,123	39.0%	\$2,930	32.0%	\$ 10,362	55.2%
Consumer	4,265	61.9	5,912	65.3	4,207	32.1	3,327	36.3	3,310	17.6
Automotive	1,094	15.8	1,413	15.6	2,781	21.2	2,015	22.0	3,693	19.7
Industrial/other	357	5.2	988	10.9	1,007	7.7	897	9.7	1,404	7.5
Total net sales	\$ 6,895	100.0%	\$ 9,053	100.0%	\$ 13,118	100.0%	\$ 9,169	100.0%	\$ 18,769	100.0%

Net Sales by Customer Base

Our customers primarily consist of distributors, OEMs and ODMs. Historically, a small number of our customers have accounted for a substantial portion of our net sales. We expect that significant customer concentration will continue for the foreseeable future. Our customers representing 10% or more of our net sales accounted for approximately 61.7%, 60.3%, 65.6% and 70.4%, respectively, of our net sales in 2004, 2005, 2006, and for the nine months ended September 30, 2007.

For the nine months ended September 30, 2007, two customers accounted for 10% or more of our net sales, consisting of WPI, a distributor, as to 53.6%, and Autoliv Inc., an OEM, as to 16.8%. In 2006, three customers accounted for 10% or more of our net sales, consisting of WPI as to 34.6%, Mitsui Electronics Inc., or Mitsui, a

Table of Contents

distributor, as to 16.0% and Autoliv Inc. as to 15.0%. In 2005, three customers accounted for 10% or more of our net sales, consisting of Inventec, Inc., an OEM, as to 30.0%, Mitsui as to 19.3% and Avnet Memec, a distributor, as to 11.0%, respectively. In 2004, three customers accounted for 10% or more of our net sales, consisting of Mitsui as to 35.3% and Brilliant Technology Company Macnica, Inc, a distributor, as to 13.4%, and Inventec, Inc. as to 13.0%.

We have experienced and will continue to experience fluctuations in demand from a significant number of customers, including many of our largest customers. It is difficult for us to accurately forecast our product demand because in the case where we sell our products to distributors, we sometimes do not know the identity of the distributor's OEM and ODM customers and information regarding their demand.

Occasionally, design changes in the products of our OEM and ODM customers resulted in the loss of our sales. For example, a design change in a product of a large OEM customer in 2005 for consumer applications resulted in the loss of our sales to such customer in 2006. Such customer accounted for 30.0% of our net sales in 2005.

Net Sales by Geography

Our products are shipped to OEM and ODM customers worldwide. However, we focus on different application markets among geographical regions. In the greater China region, our revenue has historically been primarily derived from products for mobile phone applications. We are also seeking to expand the consumer application market in the greater China region. In Japan, our revenue has primarily been derived from products for consumer applications, particularly projectors. We are also seeking to penetrate the automotive market in Japan, and have recently achieved a significant design-win. See Business Products and Technologies Accelerometer Products and Applications Automotive Applications. In North America, our revenue has primarily been derived from products for automotive applications. In Europe, our revenue has fluctuated as a result of the gain and subsequent loss of a significant customer for global positioning system, or GPS, application. We also derive significant revenue from products for automotive applications in Europe.

The following table sets forth our net sales by geographical region for the periods indicated by amount and as a percentage of our net sales.

	For the year ended December 31,						For the nine months ended September 30,			
	2004		2005		2006		2006		2007	
	Amount	% of net sales	Amount	% of net sales	Amount	% of net sales	Amount	% of net sales	Amount	% of net sales
	(in thousands, except percentages)									
Asia (excluding Japan)	\$ 1,148	16.6%	\$ 2,052	22.7%	\$ 6,613	50.4%	\$ 4,061	44.3%	\$ 11,780	62.8%
Europe	1,566	22.7	3,179	35.1	677	5.1	527	5.7	743	4.0
Japan	3,254	47.2	2,400	26.5	3,263	24.9	2,547	27.8	2,485	13.2
North America	867	12.6	1,339	14.8	2,528	19.3	2,026	22.1	3,669	19.5
Others	60	0.9	83	0.9	37	0.3	8	0.1	92	0.5
Total net sales	\$ 6,895	100.0%	\$ 9,053	100.0%	\$ 13,118	100.0%	\$ 9,169	100.0%	\$ 18,769	100.0%

Cost of Goods Sold

We are a semi-fabless company. We outsource wafer production to third-party foundries and complete the post-CMOS MEMS and most of the packaging, assembly and testing functions in-house. We also purchase our ceramic packaging materials from third-party suppliers. Cost of goods sold consists of: (i) cost of wafer, ceramic and other materials purchased from third parties; (ii) manufacturing overhead, primarily consisting of salaries and wages of our quality control employees and manufacturing-related management employees, depreciation, and equipment and parts; (iii) direct labor, primarily consisting of salaries and wages of our manufacturing operators; and (iv) outsourced processing fee paid to third-party packaging service provider.

Table of Contents

Our relationships with third-party foundry and packaging service providers do not provide for guaranteed levels of production capacity at pre-determined prices. As a result, our outsourcing costs relating to wafer production, and to a lesser extent, packaging services are susceptible to changes based on conditions in the global semiconductor market and available capacity.

Prior to August 31, 2007 we deferred recognition of cost of goods sold for a major distributor, WPI, which did not meet the criteria of SFAS 48, until the product was sold through to WPI's OEM and ODM customers. WPI accounted for more than 35% of our revenue in 2006 and the nine months ended September 30, 2007. On August 30, 2007, we amended the distributor agreement with WPI to allow for returns only upon our approval. Accordingly, the criteria under SFAS No. 48 have been met for this distributor as of September 1, 2007, and we recognized the cost of goods sold as the related products are sold. For all shipments to WPI made prior to August 31, 2007, we continued to recognize costs related to products once sold by WPI to its OEM and ODM customers. See [Critical Accounting Policies Revenue Recognition](#).

Gross Profit and Gross Margin

Historically, our gross profit has generally experienced growth in line with increases in our revenue, and our gross margin has remained relatively stable at 71.0%, 68.1%, 67.0%, 66.4% and 65.6%, respectively, in 2004, 2005, 2006 and for the nine months ended September 30, 2006 and September 30, 2007. However, our gross profit and gross margin may fluctuate significantly in the future as a result of a variety of factors, including average selling prices of our products, our product application mix, prices of wafers, excess and obsolete inventory, pricing by competitors, changes in production yields, and percentage of sales conducted through distributors. Our products for mobile phone applications, which are sold to distributor customers, have historically had lower margins than our products for automotive products, which are sold directly to our OEM and ODM customers. The increase in the percentage of our net sales in products for mobile phone applications in recent years had an adverse effect on our overall gross margin. Notwithstanding the relatively lower margin in the mobile phone applications market, we expect to derive an increasing percentage of our total net sales from such markets because of the significant potential for further revenue growth from increased penetration in such markets.

Research and Development Expenses

Research and development expenses are recognized as they are incurred and primarily consist of salaries and wages of research and development employees; research costs, primarily consisting of mask costs and prototype wafers, consulting fees paid for outside design services; travel and other expenses; and beginning in 2006, stock-based compensation under SFAS 123(R) attributable to our research and development employees.

Historically, research and development expenses have increased both in absolute terms and as a percentage of total net sales. We expect this trend to continue for the foreseeable future as we (i) seek to diversify into non-accelerometer products and (ii) hire additional employees in connection with the new research and development institute established in the second quarter of 2007.

General and Administrative Expenses

General and administrative expenses primarily consist of salaries and wages for administrative personnel; costs for professional services, including legal, tax and accounting services; depreciation and amortization expenses for non-manufacturing equipment; travel and entertainment expenses; office supply and other office-related expenses; office rental expenses; others, such as utilities, insurance and provision for accounts receivable; and beginning in 2006, stock-based compensation under SFAS 123(R) attributable to our administrative personnel. In addition, general and administrative expenses in 2005 and 2006 included certain charges for the intrinsic value of options vested during 2005 and the fair value of the options vested during 2006, respectively. We expect that our general and administrative expenses will increase as we hire additional personnel and incur

Table of Contents

costs related to the anticipated growth of our business and our operations as a public company upon the completion of this offering. However, we expect that such expenses will decrease as a percentage of net sales.

Sales and Marketing Expenses

Sales and marketing expenses primarily consist of wages, salaries and commissions for our sales and marketing personnel; consulting expenses, primarily consisting of sales consulting services and software application consulting services; travel expenses; independent sales representatives commissions; office rental; market promotion and others expenses; and beginning in 2006, stock-based compensation under SFAS 123(R) attributable to our sales and marketing personnel. We expect sales and marketing expenses to continue to increase as we hire additional sales and marketing personnel, expand our sales and marketing network and engage in additional marketing and promotional activities. However, we expect that such expenses will decrease as a percentage of net sales.

Other Income (Expense)

Other income (expense), primarily consists of (i) interest income earned on our short term investments of cash and cash equivalents, and interest expense incurred on our borrowings; (ii) net foreign currency exchange gains and losses; and (iii) in 2005 and 2006, this amount also included the \$3.1 million increase in fair value of the warrants to purchase Series A preferred stock. We repurchased the warrants in 2006.

As part of the investment Analog Devices, Inc., or Analog Devices, made in our company in March 1999, we issued to Analog Devices warrants to acquire a total of 3,571,000 shares of Series A convertible preferred stock at \$0.10 per share. The warrant has both a liability aspect and an equity aspect in respect of the shares of redeemable Series A preferred stock. Statement of Financial Accounting Standards No. 150, or SFAS 150, which became effective for periods after July 1, 2005, requires that such a financial instrument be classified as a liability at the fair value of the shares issuable upon exercise of the warrant. SFAS 150 required that the cumulative effect of the change in the valuation of such a financial instrument at July 1, 2005 be reported separately in the statement of operations, and changes in valuation for periods subsequent to July 1, 2005 be recorded in the statement of operations as a charge to the income statement. Accordingly, we recognized a non-cash charge in connection with adjusting the warrant to fair value through the date of our repurchase in December 2006. We repurchased these warrants in December 2006 and, as a result, there were no related charges after that date. As of the date of this prospectus, we have no freestanding derivative liabilities.

Provision (Benefit) for Income Taxes

We conduct sales through our headquarters in Andover, Massachusetts. Our Wuxi subsidiary is primarily engaged in manufacturing and engineering activities and does not conduct direct sales to customers. For internal accounting and PRC tax purposes, we account for the transfers of goods from our Wuxi subsidiary to our U.S. headquarters as sales, and calculate the transfer price of such sales based on a markup of manufacturing and operating costs. We believe the prices of these sales were consistent with the prevailing market prices.

U.S. Tax

In the United States, we are subject to the federal income tax and the Massachusetts state income tax, which are approximately at the rates of 34% and 9.5%, respectively. As of December 31, 2006, we had federal net operating loss (NOL) and state NOL of approximately \$1.9 million and \$1.7 million, respectively, available to offset future federal and state income tax liabilities, respectively. The federal NOLs will expire at various times through 2023 and the state NOLs will expire at various times through 2008. We may be subject to Section 382 of the Code which imposes certain limitations on net operating losses that we could utilize. However, we believe the impact of any limitations would not have a material impact on our ability to utilize the NOL carry forward.

Table of Contents

PRC tax

Our PRC taxes primarily consist of enterprise income tax, value-added tax, and certain other miscellaneous taxes. As of December 31, 2006, our Wuxi subsidiary had PRC NOL of approximately \$0.3 million which is available to offset future PRC enterprise income tax during the tax exemption period. Also, we did not record deferred tax assets or liabilities as a result of any temporary differences between the pre-tax income and taxable income for our China subsidiary for the years ended December 31, 2004, 2005 and 2006 and for the nine months ended September 30, 2007, as they are expected to reverse during the tax exemption period.

Enterprise Income Tax

PRC enterprise income tax is calculated based on taxable income determined under PRC accounting principles. In accordance with Income Tax of China for Enterprises with Foreign Investment and Foreign Enterprises, or the Foreign Enterprise Income Tax Law, and the related implementing rules, foreign investment enterprises, or FIEs, incorporated in the PRC are generally subject to an enterprise income tax rate of 33%.

The Foreign Enterprise Income Tax Law and the related implementing rules provide certain favorable tax treatments to FIEs which qualify as high-technology companies and are registered and operate in designated high-technology zones in the PRC. Our Wuxi subsidiary is a high-technology FIE registered and operating in a designated high-technology zone. Accordingly, under the Foreign Enterprise Income Tax Law, its implementing rules and several local regulations, our Wuxi subsidiary is entitled to a preferential enterprise income tax rate of 15%. In addition, our Wuxi subsidiary is entitled to a five-year tax holiday, pursuant to which it is exempted from paying the enterprise income tax for 2007, the year in which it first has positive accumulated earnings, and 2008. After the two-year exemption period, our Wuxi subsidiary will be entitled to a preferential enterprise income tax rate of 7.5% for 2009 through 2011. After the expiration of this five-year tax holiday period, a preferential enterprise income tax rate of 15% may apply for so long as our Wuxi subsidiary continues to operate in a high-technology zone and maintains high-technology status.

To qualify as a high-technology company for PRC enterprise income tax purposes, a business entity generally must meet certain financial and non-financial criteria, including, but not limited to:

the technology researched and developed by the company falling into the high-technology category promulgated by the PRC government;

a minimum level of revenue generated from high-technology related sales or services as a percentage of total revenue;

a minimum number of employees engaged in research and development;

a minimum requirement for the education degree of employees; and

a minimum level of research and development expenses as a percentage of total revenue.

Our Wuxi subsidiary's status as a high-technology company is re-assessed every other year. If the PRC central government or applicable local governments determine that our Wuxi subsidiary is no longer qualified as a high-technology company or if the tax incentive for high-technology companies is terminated by the PRC government, then our effective enterprise income tax rate would increase as a result.

In addition, as an FIE, our Wuxi subsidiary enjoys certain tax deductions for purchasing equipment made in China. Under the relevant regulation, if an FIE purchases Chinese-made equipment, and the price does not exceed the total investment amount of the FIE, for projects that fall within certain specified categories, 40% of the purchase price amount may be credited against the surplus between the amount of enterprise income tax payable in the current year and the amount paid in the previous year. If the credited amount is greater than the surplus, the excess amount can be carried forward for up to five years, subject to certain exceptions.

Table of Contents

If our Wuxi subsidiary ceases to qualify for its current preferential enterprise income tax rates, we will consider options that may be available at the time that would enable it to qualify for other preferential tax treatment. To the extent we are unable to offset the expiration of, or the inability to obtain, preferential tax treatment with new tax exemptions, tax incentives or other tax benefits, our effective tax rate will increase. The amount of income tax payable by our Wuxi subsidiary in the future will depend on various factors, including, among other things, the results of operations and taxable income of our Wuxi subsidiary (which is in turn partially dependent on our internal transfer pricing policies) and the applicable statutory tax rate.

On March 16, 2007, the National People's Congress approved and promulgated a new tax law named Enterprise Income Tax Law, which will take effect beginning January 1, 2008. Under the new tax law, FIEs and domestic companies are subject to a uniform tax rate of 25%. The new tax law provides a five-year transition period starting from its effective date for those enterprises which were established before the promulgation date of the new tax law and which were entitled to a preferential lower tax rate under the then effective tax laws or regulations. In accordance with regulations issued by the State Council, the tax rate of such enterprises may gradually transition to the uniform tax rate within the transition period. For those enterprises which are enjoying tax holidays, such tax holidays may continue until their expiration in accordance with the regulations issued by the State Council, but where the tax holiday has not yet started because of losses, such tax holiday shall be deemed to commence from the first effective year of the new tax law. While the new tax law equalizes the tax rates for FIEs and domestic companies, preferential tax treatment would continue to be given to companies in certain encouraged sectors and to entities classified as high-technology companies supported by the State, whether FIEs or domestic companies. As a result of the new tax law, following the year 2011, upon expiration of our preferential enterprise income tax rate of 7.5%, our effective tax rate may increase, unless we are otherwise eligible for preferential treatment.

See Risk Factors Risks Related to Doing Business in China The discontinuation of any of the preferential tax treatments currently available to us in China could materially and adversely affect our business, financial condition and results of operations.

Other PRC taxes

Other miscellaneous PRC taxes primarily consist of property tax, land-use tax and stamp tax which are accounted for in our general and administrative expenses, and education surcharge, which is recorded as part of our cost of goods sold.

Critical Accounting Policies

The preparation of our consolidated financial statements and related notes requires us to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, net sales and expenses, and related disclosure of contingent assets and liabilities. We have based our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Our management has discussed the development, selection and disclosure of these estimates with our board of directors. Actual results may differ from these estimates under different assumptions or conditions.

An accounting policy is considered to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, and if different estimates that reasonably could have been used, or changes in the accounting estimates that are reasonably likely to occur periodically, could materially impact the consolidated financial statements. We believe that the following critical accounting policies are the most sensitive and are those that require the more significant estimates and assumptions used in the preparation of our consolidated financial statements. You should read the following descriptions of critical accounting policies, judgments and estimates in conjunction with our consolidated financial statements and other disclosures filed in with this prospectus.

Table of Contents**Revenue Recognition**

We recognize revenue from the sale of our products to OEM and ODM customers when all of the following conditions have been met: (i) evidence exists of an arrangement with the customer, typically consisting of a purchase order or contract; (ii) our products have been shipped and risk of loss has passed to the customer; (iii) we have completed all of the necessary terms of the purchase order or contract; (iv) the amount of revenue to which we are entitled is fixed or determinable; and (v) we believe it is probable that it will be able to collect the amount due from the customer. To the extent that one or more of these conditions has not been satisfied, we defer recognition of revenue. An allowance for estimated future product returns and sales price allowances is established at the date of revenue recognition. An allowance for uncollectible receivables is established by a charge to operations, when in our opinion, it is probable that the amount due to us will not be collected. Historically, product returns and bad debt expense have not been significant.

Our products are warranted against manufacturing defects for twelve months following the date of sale (eighteen months following date of sale to a distributor). Products returned under the provisions of the warranty agreement require our pre-approval. Our sole obligation under the provisions of the warranty agreement is to replace or repair the product. Reserves for potential warranty claims are provided at the time of revenue recognition and are based on several factors including historical claims experience, current sales levels and our estimate of repair costs. To date, warranty expenses have not been significant.

Sales to distributors are made pursuant to distributor agreements, which allow for the return of goods under certain circumstances. We follow the provision of SFAS No. 48 Revenue Recognition When Right of Return Exists. SFAS No. 48 includes the following criteria for recognition of sales to distributors: (i) the selling price to the distributors is fixed or determinable at the date of shipment; (ii) our product has been shipped and risk of loss has passed to the distributors; (iv) it is probable that the amount due from the distributor will be collected; (v) we do not have a significant future obligations to directly assist in the distributors resale of the project and (vi) the amount of future returns can be reasonably estimated. Once these criteria are met, we recognize revenue upon shipment to the distributor and estimates returns based on historical sales returns.

WPI is a significant distributor which accounted for 34.6% of our net sales in 2006 and 53.6% of our revenue for the nine months ended September 30, 2007. The criteria under SFAS No. 48 have not been met for WPI for the periods prior to August 31, 2007. Based on the early stage of our relationship with WPI and its size, we were unable to make a reasonable estimate of future returns. Therefore, we deferred recognition of revenue and related costs of good sold associated with WPI until the relevant products were shipped by WPI to its OEM and ODM customers for those periods.

On August 30, 2007, we amended the distributor agreement with WPI to allow for returns only upon our approval. Accordingly, the criteria under SFAS No. 48 have been met for this distributor as of September 1, 2007, and we recognized revenue and related costs upon shipment to this distributor for all shipments subsequent to this date. For all shipments to WPI made prior to August 31, 2007, we continued to recognize our revenue and related costs upon shipments to its OEM and ODM customers.

Allowance for Doubtful Accounts

The following table sets forth the movement on allowance for uncollectible accounts receivable for the periods indicated.

	Year ended December 31,		
	2004	2005	2006
Balance at beginning of period	\$ 22,866	\$ 11,378	\$ 5,940
Provision for losses			6,097
Receivables charged against reserve	(11,488)	(5,438)	(4,915)
Balance at end of period	\$ 11,378	\$ 5,940	\$ 7,122

Table of Contents

Our standard policy on payment terms is 30 days from delivery. In 2004, 2005, 2006 and for the nine months ended September 30, 2007, our average accounts receivable turnover was 47 days, 46 days, 50 days and 59 days, respectively. At certain times our trade accounts receivable have included balances from customers that have exceeded 10% of total accounts receivable. We have established credit limits for each of our customers and reviews such limits prior to product shipment. We believe that such customers are of high credit quality and that we are not subject to unusual risk with respect to such customers.

Allowance for uncollectible accounts receivable is included as a charge to sales and marketing expense. We evaluate the sufficiency of our allowance for accounts receivable on a quarterly basis.

The sufficiency of our allowance for uncollectible accounts receivable is evaluated based on the recoverability of our accounts receivable, which is in turn based on a combination of factors, many of which are based on estimates. These factors include indicators of a specific customer's inability to meet its financial obligations to us, such as in the case of bankruptcy filings or deterioration in the customer's operating results or financial position. In addition, we may consider the length of time the receivables are past due, the financial health of the customer and historical experience. If circumstances related to specific customers change, our estimates of the recoverability of receivables could be further adjusted.

Inventories

Inventories are stated at the lower of cost (weighted average first in-first out) or market. We evaluate our inventory for potential excess and obsolete inventories based on forecasted demands and record a provision for such amounts as necessary. We recorded a provision of \$26,452, \$0, and \$2,710 in 2004, 2005 and 2006, respectively.

Stock-Based Compensation

General

Statement of Financial Accounting Standards No. 123(R), or SFAS 123(R), Share-Based Payment, addresses accounting for stock-based compensation arrangements, including stock options and shares issued to directors, officers and employees under various stock-based compensation arrangements. This statement requires that companies use the fair value method, rather than the intrinsic-value method, to determine compensation expense for all stock-based arrangements. Under the fair value method, stock-based compensation expense is determined at the measurement date, which is generally the date of grant, as the aggregate amount by which the estimated future value of the equity security at the expected date of acquisition as computed under a stock valuation model exceeds the exercise price to be paid. The resulting compensation expense, if any, is recognized for financial reporting over the term of vesting or performance. This statement was first effective for us on January 1, 2006. As permitted, we have elected to use the prospective application as our transition method, under which SFAS 123(R) applies to all prospective stock option and share grants of stock-based compensation awards and to grants prior to January 1, 2006 that have been modified subsequently.

For all periods prior to January 1, 2006, we accounted for stock-based compensation arrangements with directors, officers and employees utilizing the intrinsic-value method and provided pro forma disclosure applying the fair value recognition provisions of SFAS 123 to stock-based awards using the minimum value method.

Stock-based compensation arrangements with non-employees are accounted for utilizing the fair value method or, if a more reliable measurement, the value of the services or consideration received. The resulting compensation expense, if any, is recognized for financial reporting over the term of performance or vesting.

Description of 2000 Omnibus Stock Plan

On March 29, 2000, our stockholders and board of directors approved the 2000 Omnibus Stock Plan, as amended, or 2000 Stock Plan, under which 2,969,000 shares of our common stock was reserved for issuance to

Table of Contents

directors, officers, employees, and consultants. Options granted under the 2000 Stock Plan may be incentive stock options, nonqualified stock options and/or restricted stock. The 2000 Stock Plan provides that the exercise price of incentive stock options must be at least equal to the market value of our common stock at the date such option is granted. For incentive stock option grants to an employee who owns more than 10% of the outstanding shares of our common stock, the exercise price on the incentive stock option must be 110% of market value at the time of grant. Granted options expire in ten years or less from the date of grant and vest based on the terms of the awards, generally ratably over four years.

There has not been a public market for our common stock. Accordingly, the board of directors has determined the market value of the common stock at the date of grant by considering a number of relevant factors including our operating and financial performance and corporate milestones achieved, the prices at which shares of convertible preferred stock in arms length transactions were sold, the composition of and changes to the management team, the superior rights and preferences of securities senior to the common stock at the time of each grant and the likelihood of achieving a liquidity event for the shares of common stock underlying stock options.

Determination of Fair Value of Common Stock

We had the following option grants during the twelve month period ended September 30, 2007:

Date of Award	Options granted	Exercise option price per share	Fair Value of common stock	Fair value option
August 2007	457,950	\$ 7.64 ⁽¹⁾	\$ 7.64	\$ 4.64
July 2007	389,000	\$ 6.84 ⁽¹⁾	\$ 6.84	\$ 4.18
March 2007 - April 2007	37,500	\$ 3.70	\$ 3.70	\$ 2.16
January 2007 - February 2007	115,000	\$ 1.54	\$ 3.22	\$ 2.38
November 2006	118,500	\$ 1.54	\$ 2.94	\$ 2.12

(1) We granted 389,000 common stock options with an exercise price of \$4.88 per share in July 2007 and 457,950 common stock options with an exercise price of \$6.50 per share in August 2007. At the time of the grants, the exercise price was determined by our board of directors with input from management based on the estimated fair value of our common stock. Subsequently, we had retrospective valuation reports prepared by Orchard Partners Inc. to support the fair value of the options granted and determined the fair value to be \$6.84 for the options granted in July and \$7.64 for the options granted in August. As a result of the valuation reports, the grants were modified to increase their respective exercise prices to the reported fair values.

We issued Series D preferred stock at \$2.20 per share in December 2006 and April 2007.

At the time of these grants, the exercise price was determined by the board with input by management based on the various objective and subjective factors mentioned above as well as valuation reports when available. The intrinsic value per share is being recognized as compensation expense over the applicable vesting period (which corresponds to the service period).

We engaged Orchard Partners, Inc., an independent third party, to assist management in preparing retrospective valuation reports to support the fair value of options granted. We believe that the valuation methodologies used in the retrospective valuations are consistent with the Practice Aid of the American Institute of Certified Public Accountants entitled *Valuation of Privately Held Company Equity Securities Issued as Compensation*.

In each retrospective valuation, a weighted average of the guideline public company method, the guideline transaction method and the discounted future cash flow method was used to estimate the enterprise value of the Company at the applicable valuation date. The guideline public company method and the guideline transaction method estimate the fair value of a company by applying to that company market multiples, in this case revenue and/or EBITDA multiples, of firms in similar lines of business. The companies used for comparison under the

Table of Contents

guideline public company method and guideline transaction method were selected based on a number of factors, including but not limited to, the similarity of their industry, business model, financial risk and other factors to those of the Company's. The discounted future cash flow method involves applying appropriate risk-adjusted discount rates between 18% to 25% to estimated debt-free cash flows, based on forecasted revenues and costs. The projections used in connection with this valuation were based on our expected operating performance over the forecast period. There is inherent uncertainty in these estimates; if different discount rates or assumptions had been used, the valuation would have been different.

We allocated value to the common stockholders using the probability-weighted expected return method. Under the probability-weighted expected return method, the fair value of the common stock is estimated based upon an analysis of future values for us assuming various future outcomes, the timing of which is based on the plans of our board and management. Share value is based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available as well as the rights of each share class.

Four scenarios were considered. Three of the scenarios assume a stockholder exit, either through an initial public offering, or IPO, a sale of the Company to a strategic acquirer, or dissolution of the company at or below liquidation preference. The fourth scenario assumes operations continue as a private company and no exit transaction occurs. For the IPO scenario, the estimated future and present values for our common stock were calculated using assumptions including: the expected pre-money valuation based on the guideline public company method discussed above; the expected dates of the future expected IPO; and an appropriate risk-adjusted discount rate. For the sale scenario, the estimated future and present values for our common stock were calculated using assumptions including: the expected dates of the future expected sale and an appropriate risk-adjusted discount rate. For the dissolution scenario, all of the proceeds are distributed to the preferred stockholders. No proceeds are available for distribution to the common stockholders, and the value of the common stock is zero. For the private company with no exit scenario, an equal weighting of the guideline public company method and the discounted cash flow method based on present day assumptions was used. Finally, the present value calculated for our common stock under each scenario was probability weighted based on management's estimate of the relative occurrence of each scenario.

Table of Contents

The likelihood of each scenario has evolved over time as the probability of a favorable outcome has improved. The probability of the IPO scenario reflects not only the Company's performance, but also the presence of a favorable capital market environment for an IPO. The valuation resulting from each outcome and discount rate applied has also evolved over the past year. Key assumptions and valuations on each valuation date are summarized in the table below. The amounts in the table below reflect the one-for-two reverse stock split of the shares of our common stock effected on November 20, 2007. See "The Offering".

Valuation date	11/09/2006	12/31/2006	03/30/2007	06/30/2007	08/22/2007	09/30/2007
Estimated pre IPO valuation (in thousands)	\$ 150,000	\$ 150,000	\$ 150,000	\$ 200,000	\$ 200,000	\$ 250,000
Diluted shares outstanding (in thousands)	17,644	17,261	17,351	17,531	17,896	18,329
Implied future value per share	\$ 8.50	\$ 8.69	\$ 8.64	\$ 11.41	\$ 11.18	\$ 13.64

Probability weighting applied:

IPO	23%	23%	25%	60%	70%	85%
Sale	30	30	35	30	20	10
Liquidation	17	17	10	0	0	0
Remain private	30	30	30	10	10	5
Discount rate	25%	25%	25%	20%	18%	18%

Fair value of common stock,
per share

2.94	\$ 3.22	\$ 3.70	\$ 6.84	\$ 7.64	\$ 11.70
------	---------	---------	---------	---------	----------

For the period from November 1, 2006 to March 1, 2007, the estimated fair value of our common stock increased from \$2.94 per share to \$3.22 per share due to the following factors:

the closing of our Series D financing in December 2006;

the increase of 592% from 2005 to 2006 in sales to mobile phone applications; and

the opening of our sales offices in Shanghai and Shenzhen, China.

For the period from March 1, 2007 to April 26, 2007, the estimated fair value of our common stock increased from \$3.22 per share to \$3.70 per share due to the following factors:

the growth of our revenue for such period, which continued to meet the high end of our expectations; and

the hiring of our Vice President of Marketing and Business Development.

For the period from April 26, 2007 to July 26, 2007, the estimated fair value of our common stock increased from \$3.70 per share to \$6.84 per share due to the following factors:

the increase of our revenue by 66% from \$3.1 million in the second quarter of 2006 to \$5.1 million in the second quarter of 2007; and the increase in our net income by 78% from \$0.6 million in the second quarter of 2006 to \$1.1 million in the second quarter of 2007;

Edgar Filing: MEMSIC Inc - Form S-1/A

the hiring of our Chief Financial Officer and Vice President of Engineering;

the decision by our largest mobile phone OEM customer to list our accelerometers as a standard component in its mid to low-end product lines.

Table of Contents

approximately 15 design wins primarily with major mobile phone manufacturers in China;

the commencement of discussions with potential underwriters regarding a potential initial public offering of our Company, which increased confidence by our management in completing an initial public offering;

input from potential lead underwriters regarding the estimated initial public offering valuation range.

the engagement of Citigroup Global Markets Inc. to be the lead underwriter for our potential initial public offering; and

the commencement of our initial public offering process.

For the period from July 26, 2007 to August 22, 2007, the estimated fair value of our common stock increased from \$6.84 per share to \$7.64 per share due to the following factors:

an increase in the assumed marketability of our common stock and therefore a decrease in a discount for marketability as the probability of the initial public offering increased; and

our ability to continue to effectively execute our business plan.

For the period from August 22, 2007 to September 30, 2007, the estimated fair value of our common stock increased from \$7.64 per share to \$11.70 per share due to the following factors:

the initial filing of the registration statement on Form S-1;

increased confidence by our management team to successfully complete the initial public offering in the near term;

the engagement of our co-managers and their respective input regarding our potential initial public offering valuation range;

the strong third quarter of 2007 financial results of our Company, as our net sales increased by 136% from the same period of last year, 82% from the second quarter of 2007, and our net income grew to \$2.8 million from \$0.2 million in the same period of 2006;

our significant order backlog as of September 30, 2007;

two design wins for digital camera applications expanded our presence in the digital camera market.

A number of events that occurred between August 22, 2007 and September 30, 2007 significantly affected the estimate of the fair value of our common stock as of September 30, 2007. However, the effect of such events cannot be individually quantified. We, together with our independent valuation consultant, determined that our strong financial results, significant design wins and growing order backlog in the third quarter of 2007 collectively contributed to an increase in the fair value of our common stock of approximately \$2.50 per share. Increased management confidence in a near-term initial public offering in conjunction with the favorable equity market environment for comparable technology companies increased the probability of an initial public offering in the near term from 70% to 85% and shortened the discount period, which in turn resulted in an additional increase of approximately \$1.50 per share in the estimated fair value of our common stock.

Edgar Filing: MEMSIC Inc - Form S-1/A

The estimated fair value of our common stock was \$11.70 per share (after the one-for-two reverse stock split) as of September 30, 2007, which falls within the proposed initial public offering price range of \$11.00 to \$13.00 per share. Our proposed initial public offering price range was determined by discussions between us and our underwriters based on a number of factors, such as fluctuations in market conditions, the financial results of our recent periods and our improved financial outlook of future periods. See [Risk Factors](#) [Risks Related to This Offering](#). There has been no public market for our common stock prior to this offering, and you may not be able to resell our common stock at or above the price you paid, or at all. and [Risk Factors](#) [Risks Related to This Offering](#). The market price for our common stock may be volatile.

Table of Contents

As of September 30, 2007, the aggregate intrinsic value of all 1,752,180 shares of common stock issuable upon the exercise of options outstanding based on the midpoint of the estimated public offering price range was \$14.1 million.

Valuation of Stock Options

We have incorporated the fair values determined in the retrospective valuations into the Black-Scholes option pricing model when calculating the compensation expense to be recognized for the stock options granted in 2006 and 2007. The key assumptions used in the Black-Scholes option pricing model include:

the risk-free interest rate is based on the yield available on U.S. Treasury zero-coupon bonds at the date of grant with maturity dates approximately equal to the expected life at the grant date;

the expected life of the options is based on evaluations of historical and expected future employee exercise behavior;

volatility is based on historic volatilities from traded shares of a selected publicly traded peer group, believed to be comparable after consideration of size, maturity, profitability, growth, risk and return on investment; and

dividend yield, reflecting the fact that we have not paid dividends in the past and our expectation of not paying any dividends in the foreseeable future. We utilize historical data to estimate pre-vesting forfeitures and recognizes stock-based compensation expense only for those awards that are expected to vest.

The fair value of each option grant was estimated on the date of grant utilizing the following assumptions:

	2006	2007
Volatility	65%	65%-68%
Expected dividend yield	0%	0%
Expected life	5 years	5 years
Risk free interest rate	4.3%-4.9%	4.5%-5.6%
Forfeitures	27%	27%

For stock options granted in the year ended December 31, 2006 and the nine-month periods ended September 30, 2006 and 2007, we recognized stock-based compensation expense for the fair value of stock options granted in the amount of \$9,292, \$3,423, and \$0.2 million, respectively. As of December 31, 2006, total unrecognized stock-based compensation expense related to the 2006 common stock option grants expected to be charged to operations over the next three and half years is estimated to approximate \$0.2 million. As of September 30, 2007, the total of unrecognized stock-based compensation expense was estimated to approximate \$3 million.

For stock options issued in 2005, we recognized a deferred stock compensation expense of \$0.6 million for the intrinsic value of these options applying the fair value provided from a valuation report on February 28, 2006. For the year ended December 31, 2006 and the nine-month periods ended September 30, 2006 and 2007, we recognized stock-based compensation expense for these options in the amount of \$94,033, \$70,524 and \$77,306, respectively. At December 31, 2006 and September 30, 2007, the total unrecognized stock-based compensation expense was approximately \$0.2 million and \$0.2 million, respectively.

Warrants to Purchase Series A Preferred Stock

We had warrants outstanding to Analog Devices, Inc. that allowed for the purchase of 3,571,000 shares of our Series A convertible preferred stock at \$0.10 per share, which was issued in 1999. We had presented this instrument outside of permanent stockholders' deficit in accordance with ASR 268 at its carrying value of \$1.6 million until June 30, 2005.

Table of Contents

Effective July 1, 2005, we adopted FASB Staff Position No. 150-5, *Issuer's Accounting Under FASB No. 150 for Freestanding Warrants and Other Similar Instruments on Shares that are Redeemable*. This pronouncement required us to present this instrument as a liability and remeasure the fair market value of the instrument at each balance sheet date with the corresponding adjustment recorded through the statement of operations. Accordingly, as of July 1, 2005, we recorded a cumulative change in accounting charge in the amount of \$2.7 million, representing the difference between the recorded value of the warrant and the fair value of the warrant.

In accordance with SFAS No. 150-5, we have re-measured the fair market value of the instrument at each balance sheet date with the corresponding adjustment recorded through the statement of operations. The change in the fair value of the warrant was determined using the Black Scholes option-pricing model, utilizing the following assumptions:

	As of June 30, 2005	As of December 31, 2005	2006
Market value of underlying securities	\$1.31	\$1.35	\$2.19
Exercise price	\$0.10	\$0.10	\$0.10
Term	3.68 years	3.17 years	2.17 years
Volatility	70%	60%	60%
Risk free interest rate	3.69%	4.37%	4.81%

On December 22, 2006, we, at our discretion, repurchased from Analog Devices, Inc. the Series A convertible preferred stock warrant for approximately \$7.5 million.

Income Taxes

Deferred tax assets and liabilities relate to temporary differences between the financial reporting bases and the tax bases of assets and liabilities, the carryforward tax losses and available tax credits. Such assets and liabilities are measured using tax rates and laws expected to be in effect at the time of their reversal or utilization. Valuation allowances are established, when necessary, to reduce the net deferred tax asset to an amount more likely than not to be realized. For interim reporting periods, we use the estimated annual effective tax rate except with respect to discrete items, whose impact is recognized in the interim period in which the discrete item occurred. See Description of Certain Line Items Provision (Benefit) for Income Taxes.

We reinvest any earnings of our Wuxi subsidiary in its operations. We have not provided for U.S. income taxes that could result from the distribution of such earnings to us. If these earnings were ultimately distributed to the U.S. in the form of dividends or otherwise, or if the shares of the Wuxi subsidiary were sold or transferred, we would be subject to additional U.S. income taxes, net of impact of any available foreign tax credits. It is not practicable to estimate the amount of unrecognized deferred U.S. taxes on these undistributed earnings.

On January 1, 2007, we adopted FIN 48. At the adoption date, we had no unrecognized tax affected benefits and determined the impact of FIN 48 was not material to our consolidated financial statements.

Short-term Investments

Short-term investments are carried at fair value, with the unrealized gains and losses, if any, net of tax, reported in other comprehensive income. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as short-term investments are included in interest and dividend income. On a quarterly basis, we review the valuation of short-term investments and recognize an impairment loss where the decline in value is deemed to be other than a temporary decline.

Table of Contents**Results of Operations**

The following tables set forth a summary of our consolidated statements of operations for the periods by amount and as a percentage of our total net sales. This information should be read together with our audited consolidated financial statements and related notes included elsewhere in this prospectus. The operating results in any period are not necessarily indicative of the results that may be expected for any future period.

	For the year ended December 31,						For the nine months ended September 30,			
	2004		2005		2006		2006		2007	
	Amount	% of net sales	Amount	% of net sales	Amount	% of net sales	Amount	% of net sales	Amount	% of net sales
(in thousands, except percentages)										
Net sales	\$ 6,895	100.0%	\$ 9,053	100.0%	\$ 13,118	100.0%	\$ 9,169	100.0%	\$ 18,769	100.0%
Cost of goods sold	1,998	29.0	2,891	31.9	4,332	33.0	3,079	33.6	6,449	34.4
Gross profit and gross margin	4,897	71.0	6,162	68.1	8,786	67.0	6,090	66.4	12,320	65.6
Operating expenses:										
Research and development	400	5.8	1,004	11.1	1,874	14.3	1,281	14.0	2,411	12.8
Sales and marketing	1,194	17.3	1,466	16.2	1,705	13.0	1,195	13.0	2,100	11.2
General and administrative	1,686	24.5	2,004	22.1	2,544	19.4	1,727	18.8	2,641	14.1
Total operating expenses	3,280	47.6	4,474	49.4	6,123	46.7	4,203	45.8	7,152	38.1
Operating income	1,617	23.4	1,688	18.7	2,663	20.3	1,887	20.6	5,168	27.5
Other income (expense):										
Change in value of warrant to purchase Series A redeemable convertible preferred stock			(143)	(1.6)	(2,992)	(22.8)	(1,928)	(21.0)		
Interest and dividend income	108	1.6	202	2.2	485	3.7	332	3.6	484	2.5
Interest expense	(49)	(0.7)	(20)	(0.2)					(23)	(0.1)
Other, net	(19)	(0.3)	37	0.4	39	0.3	17	0.2	32	0.2
Total other income (expense)	40	0.6	76	0.8	(2,468)	(18.8)	(1,579)	(17.2)	493	2.6
Income (loss) before income taxes and accounting change	1,657	24.0	1,764	19.5	195	1.5	308	3.4	5,661	30.1
Provision (benefit) for income taxes	29	0.4	(1,005)	(11.1)	(303)	(2.3)	(498)	(5.4)	958	5.1
Income before cumulative effect of accounting change	1,628	23.6	2,769	30.6	498	3.8	806	8.8	4,703	25.0
Cumulative effect on periods prior to July 1, 2005 of change in the valuation of the warrant to purchase Series A convertible preferred stock			(2,714)	(30.0)						
Net income	\$ 1,628	23.6%	\$ 55	0.6%	\$ 498	3.8%	\$ 806	8.8%	\$ 4,703	25.0%
Net income (loss) available to common stockholders:										
Basic	\$ 30	0.4%	\$ (1,480)	(16.4)%	\$ (1,378)	(10.5)%	\$ (306)	(3.3)%	\$ 506	2.7%
Diluted	\$ 30	0.4%	\$ (1,480)	(16.4)%	\$ (1,378)	(10.5)%	\$ (306)	(3.3)%	\$ 578	3.1%

Nine Months Ended September 30, 2007 Compared to Nine Months Ended September 30, 2006

Net sales. Our net sales increased by 104.7% to \$18.8 million for the nine months ended September 30, 2007 from \$9.2 million for the same period in 2006. This increase was due to a 163.1% increase in the number of units sold primarily for mobile phone applications and, to a lesser extent, automotive applications, in particular rollover applications. In addition, approximately \$1.1 million of the increase in net sales was related to the amendment of the distributor agreement with WPI on August 30, 2007. Commencing September 1, 2007, we recognized revenue based on actual shipments to WPI. For all shipments to WPI made prior to August 30, 2007, we continued to recognize our revenue upon WPI's shipments to the end customer. At September 30, 2007, all

Table of Contents

such shipments have been sold to end customers and therefore there was no remaining deferred revenue at that date. The increase in our net sales relative to the same period in 2006 was partially offset by a 27.3% decline in the average selling prices of our products.

The increase in the number of units sold for mobile phone applications was primarily attributable to sales in mobile phone applications to our largest customer, which accounted for \$9.5 million in net sales for the nine months ended September 30, 2007, compared to \$2.4 million in net sales for the nine months ended September 30, 2006. Revenue from this customer in the aggregate amounted to \$10.1 million, which represented 53.6% of total net sales for the nine months ended September 30, 2007, compared to \$3.5 million, which represented 37.8% of total net sales for the nine months ended September 30, 2006. The increase in the number of units sold for automotive applications was also attributable to sales to one of our largest customers, which accounted for \$3.2 million, which represented 16.8% in total net sales for the nine months ended September 30, 2007, compared to \$1.5 million, which represented 16.0% in total net sales for the nine months ended September 30, 2006.

Cost of goods sold. Our cost of goods sold increased by 109.4% to \$6.4 million for the nine months ended September 30, 2007 from \$3.1 million for the same period in 2006. This increase was primarily due to the increase in our net sales driven by the increase in the quantity of products sold which was partially offset by a decrease in wafer unit cost and higher production yields resulting from improvements in manufacturing processes.

Gross profit and gross margin. Our gross profit increased by 102.3% to \$12.3 million for the nine months ended September 30, 2007 from \$6.1 million for the same period in 2006. Gross margin for the nine months ended September 30, 2007 and September 30, 2006 was 65.6% and 66.4% respectively. The decrease in gross margin was primarily due to (i) the increase in our percentage of sales of products for mobile phone applications which have relatively lower gross margins as compared to our other products; and (ii) the general decline in average selling prices of our products. We expect pressure on our gross margin to continue for the foreseeable future. See Description of Certain Line Items Gross Profit and Gross Margin .

Operating expenses. Our overall operating expense increased by 70.2% to \$7.2 million for the nine months ended September 30, 2007 from \$4.2 million for the same period in 2006.

Research and development. Our research and development expenses increased by 88.3%, to \$2.4 million for the nine months ended September 30, 2007 from \$1.3 million for the same period in 2006. This increase was primarily due to (i) an increase of 12 employees in research and development in China and funding for their research and development activities in anticipation of the opening of our new research and development institute in the second quarter of 2007; (ii) the hiring of two employees in research and development, including our Vice President of Engineering in the U.S.; and (iii) an increase of \$0.5 million in new product design and application costs and consulting fees paid for third-party design services. Research and development expenses, as a percentage of total net sales, were 14.0% and 12.8% for the nine months ended September 30, 2006 and 2007.

Sales and marketing. Our sales and marketing expenses increased by 75.8% to \$2.1 million for the nine months ended September 30, 2007 from \$1.2 million for the same period in 2006. This increase was primarily due to (i) an increase of \$0.4 million in consulting expenses for sales consulting services in Japan and media content development consulting services; (ii) an increase of \$0.3 million in the salaries and wages primarily due to the establishment of three new sales offices in Shenzhen, Shanghai and Taipei to meet the increasing demand for our products in the greater China region; and (iii) an increase of \$0.2 million in travel and other miscellaneous expenses related to increased visits to clients as part of our efforts to enhance our customer relationships. Sales and marketing expenses, as a percentage of total net sales, decreased to 11.2% for the nine months ended September 30, 2007 from 13.0% for the nine months ended September 30, 2006.

General and administrative. Our general and administrative expenses increased by 52.9% to \$2.6 million for the nine months ended September 30, 2007 from \$1.7 million for the same period in 2006. This increase was

Table of Contents

primarily due to (i) an increase of \$0.4 million in professional services expenses, including audit and legal services; (ii) an increase of \$0.2 million in salaries and wages as a result of 7 additional administrative employees hired in response to the overall expansion of our business; and (iii) an increase of \$0.2 million in compensation expenses related to employee stock options. General and administrative expenses, as a percentage of total net sales, decreased to 14.1% for the nine months ended September 30, 2007 from 18.8% for the nine months ended September 30, 2006.

Income from operations. As a result of factors mentioned above, we recorded income from operations of \$5.2 million for the nine months ended September 30, 2007, compared to \$1.9 million for the same period in 2006.

Other income, net. Our other income, net, increased by 131.2% to \$0.5 million for the nine months ended September 30, 2007 from an expense of \$1.6 million for the same period in 2006. The increase was primarily due to the change in value of Series A preferred stock warrants that resulted in a charge of \$1.9 million in the first nine months of 2006 and an increase in interest and dividend income of \$0.1 million, which is the result of a combination of an increase in the average balance of interest-earning cash and cash equivalents and an increase in interest rates. We did not incur a charge from a change in the value of Series A preferred stock warrants for the nine months ended September 30, 2007 because such warrants were repurchased by us in December 2006.

Provision (benefit) for income taxes. Our income tax provision for the nine months ended September 30, 2007 was \$1.0 million, compared to an income tax benefit of \$0.5 million for the same period in 2006. Our tax provision for the nine months ended September 30, 2007 reflected principally the U.S. statutory federal and state income taxes of \$2.1 million offset by the income tax benefit of \$1.1 million related to income of our Wuxi subsidiary not taxed in China due to its tax holidays. Our tax holidays are expected to end in 2009. Our tax benefit for the nine months ended September 30, 2006 was due to the reversal of the remaining valuation allowance of our deferred tax assets of \$1.1 million offset by permanent differences related principally to the non-tax deductible expense associated with the revaluation of the warrant to purchase Series A convertible preferred stock.

Net income. We recorded net income of \$4.7 million for the nine months ended September 30, 2007, compared to a net income of \$0.8 million for the same period in 2006.

Year Ended December 31, 2006 Compared to Year Ended December 31, 2005

Net Sales. Our net sales increased by 44.9% to \$13.1 million in 2006 from \$9.1 million in 2005. This increase was due to an increase of 78.5% in the number of units sold primarily for mobile phone applications and to a lesser extent, automotive applications, particularly rollover application. The increase was partially offset by a 18.8% decline in the average selling prices of our products.

The increase in the number of units sold for mobile phone applications was primarily attributable to an increase in sales in mobile phone applications to our largest customer, which accounted for \$3.8 million in net sales in 2006, compared to \$0.2 million in net sales in 2005. Revenue from this customer in the aggregate amounted to \$4.5 million, which represented 34.6% of total net sales for the year ended December 31, 2006, compared to \$0.3 million for the year ended December 31, 2005. The increase in the number of units sold for automotive applications was also attributable to sales to one of our largest customers, which accounted for \$2.0 million, which represented 15% of total net sales in 2006, compared to \$0.5 million in net sales in 2005. Our net sales were partially offset by the loss of one of our largest customers, which purchased our products for consumer GPS applications and ceased manufacturing of a line of products containing our parts. Revenue from this customer decreased from \$2.7 million in 2005 to \$0 in 2006.

Cost of goods sold. Our cost of goods sold increased by 49.8% to \$4.3 million in 2006 from \$2.9 million in 2005. This increase was primarily due to the increase in our net sales driven by the increase in the quantity of products sold which was partially offset by a decrease in wafer unit cost and higher production yields resulting from improvements in manufacturing processes.

Table of Contents

Gross profit and gross margin. Our gross profit increased by 42.6% to \$8.8 million in 2006 from \$6.2 million in 2005. Our gross margin decreased slightly to 67.0% in 2006 from 68.1% in 2005 primarily due to the continuing decline in the average selling prices of our products, particularly as a result of the increase in our percentage of sales of products for mobile phone applications which have relatively lower gross margins as compared to other products, partially offset by (i) a general decline in wafer prices in the market; and (ii) higher production yields resulting from improvements in manufacturing processes. Pressure on our gross margin continued in 2007 and is expected to continue for the foreseeable future. See Description of Certain Line Items Gross Profit and Gross Margin .

Operating expenses. Our overall operating expense increased by 36.9% to \$6.1 million in 2006 from \$4.5 million in 2005.

Research and development. Our research and development expenses increased by 86.7%, to \$1.9 million in 2006 from \$1.0 million in 2005. This increase is primarily due to (i) an increase of \$0.6 million in wages and salaries as a result of an increase in our head count for engineers and other research and development employees in both China and the U.S. from 43 in 2005 to 60 in 2006; (ii) an increase of \$0.2 million in payment for consulting services due for third-party design services; and (iii) an increase of \$0.1 million in research costs relating to the development of new products. Research and development expenses, as a percentage of total net sales, increased to 14.3% for the year ended December 31, 2006 from 11.1% for the year ended December 31, 2005.

Sales and marketing. Our sales and marketing expenses increased by 16.3% to \$1.7 million in 2006 from \$1.5 million in 2005. The increase was primarily due to (i) an increase of \$0.2 million in wages and salaries due to an increase in commissions in line with the increase in our net sales, and an increase in the number of sales and marketing employees from 11 in 2005 to 19 in 2006; and (ii) an increase of \$86,000 consulting fees for third-party sales consulting and sales-related software application services. Sales and marketing expenses, as a percentage of total net sales, decreased to 13.0% for the year ended December 31, 2006 from 16.2% for the year ended December 31, 2005.

General and administrative. Our general and administrative expenses increased by 27.0% to \$2.5 million in 2006 from \$2.0 million in 2005. This increase was primarily due to (i) an increase of \$0.3 million in wages and salaries as a result of an increase in the number of administrative employees from 14 in 2005 to 18 in 2006 in response to the overall expansion of our business; and (ii) an increase of \$50,000 in travel and entertainment expenses. General and administrative expenses, as a percentage of total net sales, decreased to 19.4% for the year ended December 31, 2006 from 22.1% for the year ended December 31, 2005.

Operating income. As a result of factors mentioned above, we recognized operating income of \$2.7 million in 2006, compared to \$1.7 million in 2005.

Other income. Our other income was an expense of \$2.5 million in 2006 compared to an income of \$75,955 in 2005. The expense in 2006 was primarily due to the change in value of Series A preferred stock warrants for \$3.0 million. See Critical Accounting Policies Warrants to Purchase Preferred Stock.

Provision (benefit) for income taxes. Our income tax benefit was \$0.3 million in 2006 compared to an income tax benefit of \$1.0 million in 2005. The tax benefit in 2006 was due principally to the reversal of approximately \$1.1 million of the valuation allowance related to the realization of deferred tax assets based on projected 2007 taxable income and the tax benefit of approximately \$0.5 million due to the utilization of net operating loss carryforwards in China not previously benefited. Our Wuxi subsidiary is not subject to income taxes until its tax holiday expires, which is expected to be in 2009. The resultant tax benefits were partially offset by approximately \$1.0 million non-tax deductible expense related to the revaluation of the warrant to purchase Series A convertible preferred stock. The tax benefit in 2005 was primarily due to the reversal of approximately \$1.1 million of valuation allowance related to the expected realization of deferred tax assets based on projected 2006 taxable income.

Net income. We reported net income of \$0.5 million in 2006, compared to \$55,494 in 2005.

Table of Contents

Year Ended December 31, 2005 Compared to Year Ended December 31, 2004

Net sales. Our net sales increased by 31.3% to \$9.1 million in 2005 from \$6.9 million in 2004. This increase was primarily due to an increase in units of products for GPS application. The increase was partially offset by the continuing decline in the average selling prices of our products.

Cost of goods sold. Our cost of goods sold increased by 44.7% to \$2.9 million in 2005 from \$2.0 million in 2004. This increase was primarily due to the growth in our sales driven by the increase in the quantity of products sold which was partially offset by a decrease in wafer unit, labor and processing cost.

Gross profit and gross margin. Our gross profit increased by 25.8% to \$6.2 million in 2005 from \$4.9 million in 2004. Gross margin decreased to 68.1% in 2005 from 71.0% in 2004, primarily due to the continuing decline in the average selling prices of our products, partially offset by (i) a general decline in wafer prices in the market; and (ii) higher production yields resulting from improvements in manufacturing processes, the effect of which was partially offset by the general decline in average selling prices of our products and the increase in our percentage of sales of products for mobile phone applications that have relatively lower gross margins as compared to other products.

Operating expenses. Our overall operating expense increased by 36.4% to \$4.5 million in 2005 from \$3.3 million in 2004.

Research and development. Our research and development expenses increased by 150.1%, to \$1.0 million in 2005 from \$0.4 million in 2004. This increase was primarily due to increases in (i) funding for our research and development activities; (ii) new product rollouts; and (iii) the number of engineers and other research and development employees in both China and the U.S. research and development expenses, as a percentage of total net sales, increased to 11.1% for the year ended December 31, 2005 from 5.8% for the year ended December 31, 2004.

Sales and marketing. Our sales and marketing expenses increased by 22.8% to \$1.5 million in 2005 from \$1.2 million in 2004. The increase was primarily due to an increase in commissions in line with the increase in our net sales, and an increase in the number of sales and marketing employees and an increase in commissions to third-party sales representatives due to an increase in sales. Sales and marketing expenses, as a percentage of total net sales, decreased to 16.2% for the year ended December 31, 2005 from 17.3% for the year ended December 31, 2004.

General and administrative. Our general and administrative expenses increased by 18.9% to \$2.0 million in 2005 from \$1.7 million in 2004. This increase was primarily due to (i) an increase in wages and salaries due to an increase in the number of administrative employees in response to the overall expansion of our business; (ii) an increase in depreciation and amortization expenses resulting from purchases of new non-manufacturing equipment; and (iii) an increase in compensation expense due to the intrinsic value of the options granted to employees. General and administrative expenses, as a percentage of total net sales, decreased to 22.1% for the year ended December 31, 2005 from 24.4% for the year ended December 31, 2004.

Operating income. As a result of factors mentioned above, we recognized operating income of \$1.7 million in 2005, as compared to \$1.6 million in 2004.

Other income. Our other income increased to \$75,955 in 2005 from \$40,346 in 2004. The increase was primarily due to an increase in interest income of \$94,564 as a result of (i) an increase in the average balance of interest-earning cash equivalents; (ii) the purchase of certain short-term investments which bore higher interest rates than cash equivalents; and (iii) a general increase in market interest rates.

Provision (benefit) for income taxes. We recorded a provision for income taxes of \$29,000 in 2004 compared to an income tax benefit of \$1.0 million in 2005. The income tax provision in 2004 was principally

Table of Contents

U.S. federal alternative minimum tax. This provision was less than the U.S. statutory federal and state income tax rate due to the utilization of net operating loss carryforwards that were previously not benefited. The income tax benefit in 2005 was primarily due to the reversal of approximately \$1.1 million of valuation allowance related to the expected realization of deferred tax assets based on projected 2006 taxable income.

Cumulative effect on periods prior to July 1, 2005 of change in valuation of the Series A preferred stock warrant. As of July 1, 2005, we recognized a charge to operations in the amount of \$2.7 million, representing the difference between the \$1.6 million in recognized redemption value of the Series A preferred stock warrant and the \$4.3 million in fair value of such warrant at that date.

Net income. As a result of factors mentioned above, we reported net income of \$55,494 in 2005, as compared to \$1.6 million in 2004.

Quarterly Results of Operations

The following tables present our unaudited quarterly results of operations for the nine most recent quarters. You should read the table in conjunction with the consolidated financial statements and related notes contained elsewhere in this prospectus. We have prepared the unaudited information on the same basis as our audited consolidated financial statements. This table includes all adjustments, consisting only of normal recurring adjustments, that we consider necessary to fairly present results of operation for the quarters presented. Results of operation for any quarter are not necessarily indicative of results for any future quarters or for a full year.

	Three months ended								
	Sept. 30, 2005	Dec. 31, 2005	March 31, 2006	June 30, 2006	Sept. 30, 2006	Dec. 31, 2006	March 31, 2007	June 30, 2007	Sept. 30, 2007
	(in thousands)								
Net Sales	\$ 3,196	\$ 2,336	\$ 2,125	\$ 3,086	\$ 3,958	\$ 3,949	\$ 4,316	\$ 5,125	\$ 9,328
Cost of goods sold	936	973	735	1,084	1,261	1,252	1,394	1,775	3,280
Gross profit	2,260	1,363	1,390	2,002	2,697	2,697	2,922	3,350	6,048
Gross margin	70.7%	58.3%	65.4%	50.6%	75.0%	68.3%	67.7%	65.4%	64.8%
Operating expenses:									
Research and development	269	445	346	449	485	594	683	759	969
Sales and marketing	397	386	440	356	398	511	569	688	843
General and administrative	483	629	511	590	626	817	648	898	1,095
Total operating expenses	1,149	1,460	1,297	1,395	1,509	1,922	1,900	2,345	2,907
Operating income (loss)	1,111	(97)	93	607	1,188	775	1,022	1,005	3,141
Other interest income (expense), net	25	(1)	(215)	(711)	(653)	(889)	149	179	165
Income (loss) before income taxes and cumulative effect of accounting change	1,136	(98)	(122)	(104)	535	(114)	1,171	1,184	3,306
Provision (benefit) for income taxes	2	(1,012)	(67)	(749)	318	195	392	38	528
Income (loss) before cumulative effect of accounting change	1,134	914	(55)	645	217	(309)	779	1,146	2,778
Cumulative effect on periods prior to July 1, 2005 of change in valuation of the warrant to purchase Series A convertible preferred stock, net of zero income taxes	(2,714)								
Net income (loss)	\$ (1,580)	\$ 914	\$ (55)	\$ 645	\$ 217	\$ (309)	\$ 779	\$ 1,146	\$ 2,778

Our revenue and operating results are difficult to predict and have fluctuated in the past from quarter to quarter. Historically, our net sales derived from the first quarter, as a percentage of net sales during the year, has been lower than net sales in other quarters during the year. We believe that this has been affected by the Chinese New Year holiday, which generally takes place in January or February, when business

Edgar Filing: MEMSIC Inc - Form S-1/A

activities in China generally slow down. Our third and fourth quarters are generally our strongest. We believe that this trend will continue as we continue to derive a significant portion of our revenue from OEM and ODM customers in China.

Table of Contents

However, because of our limited operating history, such seasonal trend may not apply to, or be indicative of, our future operating results.

Liquidity and Capital Resources

Since our inception, proceeds from private sales of our equity interests to investors have been critical to funding our operations and meeting our capital expenditure requirements. Since 1999, we have raised approximately \$33.2 million in gross financing proceeds, excluding net proceeds expected from this offering, from the issuance and sale of convertible preferred stock. Substantially all of the funds received from our sale of Series D cumulative convertible preferred stock, approximately \$8 million, were used in December 2006 to repurchase the warrants as well as some of the shares of our Series A convertible preferred stock issued to Analog Devices. Other than proceeds from this sale, the proceeds from all of these issuances have generally been used for general business purposes. Shares of our convertible preferred stock are convertible at the option of the holder into common stock at any time, subject to adjustment as a result of changes in our capitalization such as a stock split. All outstanding preferred stock will automatically be converted into common stock in the event of a public offering of common stock at a price per share above a certain minimum set forth in our amended and restated certificate of incorporation with gross proceeds of at least \$30 million. Assuming this offering meets such minimum gross proceeds requirement, automatic conversion will take place upon the consummation of this offering.

We outsource certain steps of the manufacturing process to third parties while conducting the remaining steps in-house. As a result, our principal uses of cash historically have consisted of both payments to our suppliers for the costs related to the outsourcing of wafer fabrication and outsourced processing fees paid to and materials purchased from third parties, as well as payments for our manufacturing overhead and equipment purchases. Other significant cash outlays primarily consist of salaries, wages and commissions for our non-manufacturing related employees. As of September 30, 2007, our principal sources of liquidity consisted of cash, cash equivalents and short-term investments of \$13.0 million.

We believe that our current cash and cash flow from operations will be sufficient to meet our anticipated cash needs, including working capital requirements and capital expenditures for at least the next twelve months. Our future cash requirements will depend on many factors, including our operating income, the timing of our new product introductions, the costs to maintaining adequate manufacturing capacity, the continuing market acceptance of our products, or other changing business conditions and future developments, including any investments or acquisitions we may decide to pursue. If our existing cash is insufficient to meet our requirements, we may seek to sell additional equity securities, debt securities or borrow from banks. We cannot assure you that financing will be available in the amounts we need or on terms acceptable to us, if at all. The sale of additional equity securities, including convertible debt securities, would be dilutive to our stockholders. The incurrence of indebtedness would divert cash for working capital requirements and capital expenditures to service debt and could result in operating and financial covenants that restrict our operations and our ability to pay dividends to our stockholders. If we are unable to obtain additional equity or debt financing, our business, operations and prospects may suffer.

The following table sets forth a summary of our cash flows for the periods indicated.

	For the year ended December 31,			For the nine months ended September 30,	
	2004	2005	2006	2006	2007
	(in thousands)				
Net cash provided by operating activities	\$ 35	\$ 2,366	\$ 4,063	\$ 2,177	\$ 2,020
Net cash used in investing activities	(1,634)	(6,540)	(1,787)	(1,411)	(4,121)
Net cash provided by (used in) financing activities	8,583	(1,158)	345	19	373
Effect of exchange rate changes on cash and cash equivalents	2	54	60	39	51
Net increase (decrease) in cash and cash equivalents	\$ 6,986	\$ (5,278)	\$ 2,681	\$ 824	\$ (1,677)

Table of Contents***Operating Activities***

Net cash provided by operating activities for the nine months ended September 30, 2007 was \$2.0 million, which was derived from a net income of \$4.7 million adjusted to reflect a net increase relating to non-cash items and a net decrease relating to changes in balances of operating assets and liabilities. The adjustments relating to non-cash items, a net of \$1.7 million, were primarily due to depreciation and amortization expense of \$0.7 million, stock based compensation expense of \$0.4 million, and deferred income tax of \$0.5 million. The adjustments relating to changes in balances of operating assets and liabilities, a net of \$4.4 million, primarily comprised of \$1.5 million increase in accounts payable and accrued expenses; \$1.1 million decrease in deferred revenue, due to the amendment of WPI's distributor agreement; \$2.2 million increase in account receivables, primarily due to an increase in sales; \$1.9 million increase in inventories, primarily due to an increase in sales forecast; and \$0.6 million increase in other assets, primarily due to an increase in approved export tax receivables.

Net cash provided by operating activities in 2006 was \$4.1 million, which was derived from a net income of \$0.5 million adjusted to reflect a net increase relating to non-cash items and a net decrease relating to changes in balances of operating assets and liabilities. The adjustments relating to non-cash items, a net of \$3.6 million, primarily comprised of an increase for a valuation adjustment of warrant to purchase Series A redeemable convertible preferred stock of \$3.0 million, depreciation and amortization expense of \$0.7 million, stock-based compensation expense of \$0.2 million and the forgiveness of stockholder loan to Dr. Zhao of \$50,000. The adjustments relating to changes in balances of operating assets and liabilities, a net of \$20,173, primarily comprised of \$1.5 million increase in accounts payable and accrued expenses, primarily due to an increase in material purchases and compensation expense accrual; \$1.1 million increase in deferred revenue due to deferral of sales to WPI; \$1.6 million increase in account receivables, primarily due to an increase in sales; \$0.9 million increase in inventories, primarily due to an increase in sales forecast; and \$0.1 million increase in other assets, primarily due to intellectual property related costs paid during 2006.

Net cash provided by operating activities in 2005 was \$2.4 million, which was derived from a net income of \$55,494 adjusted to reflect a net increase relating to non-cash items and a net decrease relating to changes in balances of operating assets and liabilities. The adjustments relating to non-cash items, a net of \$2.6 million, primarily comprised of an income tax benefit of \$1.0 million, depreciation and amortization expense of \$0.6 million, amortization of deferred compensation of \$77,274, forgiveness of stockholder loan to Dr. Zhao of \$50,000, a valuation adjustment for the warrant to purchase Series A redeemable convertible preferred stock of \$0.1 million and a cumulative adjustment for the warrant to purchase Series A convertible preferred stock of \$2.7 million. The adjustments relating to changes in balances of operating assets and liabilities, a net of \$0.3 million, primarily comprised of a decrease of \$0.6 million in accounts payable and accrued expenses, primarily due to payment for material purchases from 2004; \$0.5 million increase in account receivables, primarily due to an increase in sales; \$0.6 million decrease in inventories, primarily due to a reduction in overstocked inventory from 2004; and \$0.2 million decrease in other assets, primarily due to the write-off of the deposit to our packaging subcontractor.

Net cash provided by operating activities in 2004 was \$34,792, which was derived from a net income of \$1.6 million adjusted to reflect a net increase relating to non-cash items and a net decrease relating to changes in balances of operating assets and liabilities. The adjustments relating to non-cash items, a net of \$0.4 million, primarily comprised of a depreciation and amortization expense of \$0.4 million, amortization of deferred compensation of \$10,560 and the forgiveness of stockholder loan to Dr. Zhao of \$50,000. The adjustments relating to changes in balances of operating assets and liabilities, a net of \$2.0 million, primarily comprised of a \$0.9 million increase in accounts payable and accrued expenses, primarily due to purchases of production material; \$0.4 million increase in account receivables, primarily due to an increase in sales; \$2.3 million increase in inventories, primarily due to an increase in sales forecast, and \$0.2 million increase in other current assets, primarily due to an increase in refundable export taxes.

Table of Contents

Investing Activities

Net cash used in investing activities for the nine months ended September 30, 2007 was \$4.1 million, primarily due to (i) the purchase of property and equipment for expanding our manufacturing capacity, and (ii) the purchase of short-term investments.

Net cash used in investing activities in 2006 was \$1.8 million, primarily due to (i) purchase of short-term available-for-sale investments; and (ii) capital expenditures for our expanding our manufacturing capacity.

Net cash used in investing activities in 2005 was \$6.5 million, primarily due to (i) purchase of short-term investments; and (ii) capital expenditures for our new Wuxi facility. This amount was partially offset by the proceeds from the sales of some of our short-term investments. This amount was partially offset by the proceeds from the sales of some of our short-term investments.

Net cash used in investing activities in 2004 was \$1.6 million, primarily due to our capital expenditures for our new Wuxi facility.

Financing Activities

Net cash provided by financing activities for the nine months ended September 30, 2007 was \$0.4 million, primarily due to \$0.6 million in net proceeds from issuance of our Series D convertible preferred stock and \$0.9 million received from borrowings on our line of credit.

Net cash provided by financing activities in 2006 was \$0.3 million, primarily due to \$8.3 million in net proceeds from issuance of our Series D convertible preferred stock, of which \$8.0 million was used to repurchase Analog Devices warrant and a portion of its Series A preferred stock.

Net cash used in financing activities in 2005 was \$1.2 million, which represented the repayment of borrowings under a bank loan.

Net cash provided by financing activities in 2004 was \$8.6 million, primarily due to \$8.3 million in net proceeds received from the sale of our Series C convertible preferred stock and \$0.2 million of proceeds received from a bank loan.

Capital Expenditures

We are expanding our current manufacturing facility. Upon completion, the current facility is expected to have an additional 600 square meters of production area. Expansion on our current facility began in the fourth quarter of 2006, and is expected to be completed by the end of 2007. We expect that the total capital expenditure for this expansion project will be approximately \$7 million, of which \$4 million will be financed by bank credit facilities, with the remainder paid through our cash flow from operations and resources on hand. As of September 30, 2007, we have expended \$4.0 million on this project.

In addition, we are preparing for the construction of two new buildings adjacent to our current facility. Upon completion, the new facility is expected to comprise 20,800 square meters, consisting of 8,700 square meters for a new research and development institute, and 12,100 square meters for new manufacturing facilities. Construction of our new facility will begin in the fourth quarter of 2007 and is expected to be completed in two phases. Phase one of our new facility is expected to be completed in the first quarter of 2008 and will house our new research and development institute and operations and management offices. Total costs of phase one, including construction and machinery, are estimated to be approximately \$6 million. Phase two of our new facility is expected to be completed within three years in a number of phases. Upon completion of phase two, we expect to have in place manufacturing capacity to meet our future production requirements for both

Table of Contents

accelerometer products and non-accelerometer products. Total costs of phase two, including construction and machinery, are estimated to be \$30 million. We intend to finance substantially all of our new facility with a portion of the net proceeds of this offering.

Our capital expenditures amounted to \$1.7 million, \$0.4 million, \$0.8 million and \$3.7 million in 2004, 2005, 2006 and for the nine months ended September 30, 2007, respectively. We estimate our capital expenditures for the remaining three months in 2007 to be approximately \$2.0 million, which will primarily relate to the expansion of our current facility as well as the construction of phase one of our new facility in Wuxi.

See Business Facilities .

Off-balance Sheet Arrangements

We do not have special purpose entities, and other than operating leases for office leases, described below, we do not engage in off-balance sheet financing arrangements.

Contractual Obligations

The following table sets forth our contractual obligations as of September 30, 2007.

Contractual obligation	Total	Payments due by period			More than 5 years
		Less than 1 year	1-3 years	3-5 years	
Operating lease commitments	\$ 864,600	\$ 26,700	\$ 443,200	\$ 394,700	\$
Note payable	1,000,000	1,000,000			
Non-cancellable purchase orders	752,400	752,400			
	\$ 2,617,000	\$ 1,779,100	\$ 443,200	\$ 394,700	\$

Operating lease commitments represent the leases we entered into for our headquarters, sales offices and certain equipment. Note payable represents a one-year bank loan our Wuxi subsidiary borrowed in July 2007. Non-cancellable purchase orders represent those we placed with TSMC, our principal supplier of wafer purchases required in our manufacturing process.

In addition, we are under contractual obligation to make royalty payments to Simon Fraser University on a license relating to our core thermal accelerometer technology. These royalty payments are calculated as a percentage of net sales subject to a maximum of \$100,000 per year.

Qualitative and Quantitative Disclosure about Market Risk

Interest rate risk. Currently, our exposure to interest rate risk primarily relates to the interest income generated by excess cash invested in deposits as well as short-term securities. We have not historically used and do not expect to use in the future any derivative financial instruments to manage our interest risk exposure. Interest-earning instruments carry a degree of interest rate risk. We have not been exposed nor do we anticipate being exposed to material risks due to changes in interest rates.

At September 30, 2007, we had an interest bearing note payable. We believe we have effectively managed the interest rate risk by entering into a fixed rate loan.

Foreign exchange risk. The value of the RMB against the U.S. dollar and other currencies may fluctuate and is affected by, among other things, changes in China's political and economic conditions. The conversion of RMB into foreign currencies, including U.S. dollars, has been based on rates set by the People's Bank of China. On July 21, 2005, the PRC government changed its decade-old policy of pegging the value of the RMB to the

Table of Contents

U.S. dollar. Under this new policy, the RMB is permitted to fluctuate within a narrow and managed band against a basket of certain foreign currencies. While the international reaction to the RMB revaluation has generally been positive, there remains significant international pressure on the PRC government to adopt an even more flexible currency policy, which could result in a further and more significant appreciation of the RMB against the U.S. dollar. Although all of our revenue and a significant portion of our payments are denominated in U.S. dollars, a large portion of our payments are denominated in RMB. Fluctuations in exchange rates, primarily those involving the U.S. dollar, may affect our costs and operating margins as well as our net income reported in U.S. dollars. For example, to the extent that we need to convert U.S. dollars we receive from this offering into RMB for our operations, appreciation of the RMB against the U.S. dollar would have an adverse effect on the RMB amount we receive from the conversion. We have not used any forward contracts or currency borrowings to hedge our exposure to foreign currency exchange risk.

Recent Accounting Pronouncements

In February 2007, the FASB issued SFAS No. 159, The Fair Value Option for Financial Assets and Financial Liabilities, including an amendment of FASB Statement No. 115. SFAS No. 159 permits entities to choose to measure many financial instruments and certain other items at fair value. Unrealized gains and losses on items for which the fair value option has been elected will be recognized in earnings at each subsequent reporting date. This statement is effective for financial statements issued for fiscal years beginning after November 15, 2007. SFAS 159 will be effective for us on January 1, 2008. We are evaluating the impact that the adoption of SFAS 159 may have on our future financial condition and results of operations.

In September 2006, the FASB issued SFAS No. 157, Fair Value Measurements, or SFAS 157. This standard defines fair value, establishes a framework for measuring fair value in accounting principles generally accepted in the United States, and expands disclosure about fair value measurements. This pronouncement applies under other accounting standards that require or permit fair value measurements. Accordingly, this statement does not require any new fair value measurement. This statement is effective for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. We will be required to adopt SFAS 157 in the first quarter of fiscal year of 2008. We are currently evaluating the requirements of SFAS 157 and had not yet determined the impact on its financial statements.

Table of Contents

BUSINESS

Overview

We provide advanced semiconductor sensor and system solutions based on integrated MEMS technology and mixed signal circuit design. Our accelerometer products are used to measure tilt, shock, vibration and acceleration, and have a wide range of applications such as mobile phones, automotive safety systems and video projectors. We combine proprietary thermal-based MEMS technology and advanced analog mixed signal processing circuitry design into a single chip using a standard CMOS process. This approach allows us to provide sensor solutions at a lower cost, with higher performance and greater functionality than our competitors. This standardized process enables us to easily integrate additional functions or create new sensors for MEMS applications beyond accelerometers and expand into the magnetic, touch and flow sensor markets. In addition, our technology platform allows us to easily integrate additional functions or create new sensors to expand into magnetic, touch and flow sensors and related applications.

Any product that requires the control or measurement of motion is a potential application for accelerometers. For example, in mobile phones, accelerometers enable a variety of value-added functions such as image orientation, gaming control and text scrolling. In automotive applications, accelerometers are being deployed in airbag, electronic stability control, rollover protection, and navigation systems. In consumer applications, accelerometers are used in global positioning systems, video gaming systems and interactive toys. Industrial and medical applications include inclination sensing, earthquake detection and cardiac pacemakers.

We have shipped more than 25 million units from 2004 through September 30, 2007. Our products have been used by leading international and China-based manufacturers. We are a pioneer in providing accelerometers to China's fast-growing mobile phone market and are among the leading providers of accelerometers for image projectors, supplying to several Japanese OEMs. Our largest automotive customer is Autoliv Inc., a leading European automotive safety systems supplier.

We manufacture our products utilizing a semi-fabless model by outsourcing the production of CMOS wafers and completing the post-CMOS MEMS process in-house. By outsourcing the standard CMOS manufacturing process, we are able to capitalize on a mature semiconductor infrastructure and standard wafer fabrication processes to more efficiently manage our capital resources. Moreover, we believe that retaining the key MEMS manufacturing process in-house enables us to protect and retain control over our key proprietary technology more effectively and to create a higher barrier to entry.

Founded in March 1999, we are headquartered in Andover, Massachusetts and have engineering and manufacturing facilities in Wuxi, Jiangsu Province, China. We conduct research and development at our facilities in Andover, Wuxi and Chicago, Illinois, which work closely with each other in our product and technology research and development activities. This enables us to access experienced and creative design talent in the United States, while benefiting from competitive engineering and manufacturing costs in China. In addition, our presence in China places us in close proximity to the supply chain for the rapidly growing Chinese markets for mobile phones and consumer electronics.

We have experienced significant growth since our products were first commercialized in 2001. In 2004, 2005 and 2006, and for the nine months ended September 30, 2007, our net sales totaled \$6.9 million, \$9.1 million, \$13.1 million and \$18.8 million, respectively. We have been profitable on an operating basis since 2004. In 2004, 2005 and 2006, and for the nine months ended September 30, 2007, our income from operations totaled \$1.6 million, \$1.7 million, \$2.7 million and \$5.2 million, respectively. During the same periods, our net income totaled \$1.6 million, \$55,494, \$0.5 million and \$4.7 million, respectively. Our net income in 2005 was affected by the cumulative effect of accounting change regarding the valuation of Series A preferred stock warrants of \$2.7 million and the change in fair value of Series A preferred stock warrants of \$0.1 million. Our net income in 2006 was affected by change in fair market value of Series A preferred stock warrants of \$3.0 million. These

Table of Contents

warrants were repurchased by us in 2006. See Management's Discussion and Analysis of Financial Condition and Results of Operations Description of Certain Line Items Other Income (Expense) .

Industry Background***Analog and Mixed-signal Semiconductor Market***

Semiconductor components are the building blocks of electronic systems. Analog semiconductors monitor, regulate or transform physical properties, including voltage, current, temperature, pressure, weight, light, sound or speed into electrical signals that have a continuous range of values. Electronic systems rely on analog semiconductors to provide the interface between digital semiconductors and the physical world. Mixed-signal semiconductors combine elements of both analog and digital semiconductors, but are generally classified as analog semiconductors because of their analog content. Analog and mixed-signal semiconductors are often used in applications and markets where users have unique requirements regarding performance specifications such as size, speed, accuracy and efficiency. As a result, the analog and mixed-signal semiconductor market is highly fragmented, providing smaller companies an opportunity to compete successfully against larger companies in certain market segments. According to Semiconductor Forecast Worldwide: Forecast Database published by Gartner Inc., an information technology research and advisory firm, on August 29, 2007, the market for analog semiconductors will grow from \$16.4 billion in 2006 to \$22.3 billion in 2011.

As digital semiconductors, such as microprocessors, graphics processors, digital signal processors and memory chips become more technologically advanced, the analog and mixed-signal semiconductors that interface with them must also operate with greater speed, accuracy and efficiency. These factors, coupled with growth in the consumer electronic market, are fostering growth in the analog and mixed-signal semiconductor market.

Worldwide MEMS Sensor Market

Sensors are a type of analog semiconductor that measures the strength or presence of a physical property such as voltage, current, temperature, pressure, weight, light, sound or speed. MEMS are microscopic structures integrated onto silicon that combine mechanical, optical or fluidic elements with electronics. These devices, when built into sensors, provide the direct measurement between the physical world variable and the electronic circuitry. In a typical sensor incorporating MEMS technology, the MEMS structure provides the active sensing function while the integrated analog circuitry provides the electrical interface. MEMS enable electronic systems of all kinds to be smaller, faster, more energy-efficient and less expensive.

MEMS sensors used for motion, direction and pressure sensing applications include accelerometers, which measure acceleration or gravitational forces, gyroscopes, used for sensing rotational motion, and pressure sensors, employed in pressure monitoring systems. MEMS sensors have been marketed for several decades, achieving high market penetration in the automotive market with use in airbag deployment systems. Through significant advances in MEMS design and manufacturing, MEMS sensors may increasingly be priced at an affordable price to enable mass-market adoption. Frost & Sullivan expects the MEMS sensor market will grow as functions and products enabled by MEMS sensor solutions achieve broader penetration in the mobile phone, consumer, automotive, aerospace, medical and industrial markets.

Frost & Sullivan, an independent market research firm, estimates that the MEMS sensor market will grow at a compound annual rate of 14.8% from \$1.8 billion in 2006 to \$4.2 billion in 2012. The following tables set forth the actual and estimated total MEMS sensor revenue by market segment and product type for the period indicated, according to Frost & Sullivan.

Table of Contents**Total MEMS Sensor Revenue by Market Segment**

	For the year ended December 31,							CAGR 2006 - 2012
	2006	2007 (E)	2008 (E)	2009 (E)	2010 (E)	2011 (E)	2012 (E)	
	(in millions)							
Mobile Phones	\$ 44	\$ 63	\$ 88	\$ 142	\$ 261	\$ 427	\$ 651	56.6%
Consumer	112	138	172	206	250	307	370	22.0
Automotive	1,262	1,495	1,667	1,843	2,004	2,138	2,297	10.5
Industrial & others	394	443	498	559	639	732	841	13.5
Total MEMS Sensor Revenue	\$ 1,812	\$ 2,139	\$ 2,425	\$ 2,750	\$ 3,154	\$ 3,604	\$ 4,159	14.8%

(E): Estimate

Source: Frost & Sullivan

Total MEMS Sensor Revenue by Product Type

	For the year ended December 31,							CAGR 2006 - 2012
	2006	2007 (E)	2008 (E)	2009 (E)	2010 (E)	2011 (E)	2012 (E)	
	(in millions)							
Accelerometers	\$ 508	\$ 564	\$ 632	\$ 703	\$ 797	\$ 931	\$ 1,110	13.9%
Gyroscopes	469	542	621	722	886	1,064	1,275	18.2
Pressure sensors	836	1,034	1,172	1,325	1,470	1,610	1,773	13.4
Total MEMS Sensor Revenue	\$ 1,813	\$ 2,140	\$ 2,425	\$ 2,750	\$ 3,153	\$ 3,605	\$ 4,158	14.8%

(E): Estimate

Source: Frost & Sullivan

The automotive market for MEMS sensor applications is well-established and is currently the largest segment in terms of sales. Automotive applications, particularly airbag deployment systems, provided the first high-volume application for MEMS sensors. Accelerometers, placed across various points of a vehicle, are used to calculate the rate of deceleration that occurs in the event of a collision and convert this information into an electric signal that triggers the deployment of an airbag. MEMS sensors have become essential in a variety of automotive applications for improving passenger safety and comfort. In addition to airbag deployment systems, MEMS sensors are also applied to rollover detection, electronic stability control, navigation, vehicle security and tire pressure monitoring systems. In rollover detection systems, accelerometers can measure the roll axis of a vehicle, and upon determining that a rollover is imminent, deploy passenger safety devices before the tire is lifted from the ground. Accelerometers are also used to sense under-steer or over-steer in electronic stability control, or ESC, systems which can then apply braking force to wheels and/or reduce excess engine power. Key factors contributing to the increasing use of MEMS sensors in the automotive market include the adoption of heightened safety standards in developing countries such as China and India, increased demand for electronic stability control and rollover safety systems, and growth in the use of navigation systems.

We expect consumer applications to provide another major market opportunity for MEMS sensors over the next decade. Accelerometers have a wide range of applications for consumer electronics, including projectors, laptop computers, personal navigation systems, audio players, digital cameras and gaming controls. In digital cameras, accelerometers are used for image-orientation, automatically adjusting the display of photos in

upright or horizontal positions. In projectors, accelerometers enable the auto-keystone function which automatically adjusts any vertical or horizontal distortions of the image projected. Accelerometers also assist navigation systems to continue functioning upon loss of GPS signals. Through a process called dead reckoning,

Table of Contents

accelerometers are able to estimate one's current position based upon a previously determined position and advance that position based upon known speed, elapsed time, and course. Future growth areas in consumer applications for accelerometers may include video game controls. In addition, we expect accelerometers to have increasing applications in children's toys as they become increasingly sophisticated and interactive.

We believe that the mobile phone market is well-positioned to become the next major application area for MEMS sensors. Mobile phones continue to become increasingly sophisticated, as technology advances in the miniaturization of semiconductor design and processing technology enable a growing number of features to be incorporated into handsets. Mobile phone manufacturers continue to introduce products that integrate accelerometers in order to enable applications such as picture orientation, gaming control and navigation. Next generation accelerometer-enabled applications include music beats and lights, which generate sounds or displays by shaking the phone; pedometer measurement, which measures the number of steps walked, distance traveled and calories burned; compass tilt compensation, which corrects tilts on navigation units of handheld devices; man down features, which trigger an alarm or dials an emergency hotline when a person falls down and no movement is detected; and wave message, which enables LEDs to display a text message by waving the mobile phone. We expect continuous rapid technological advances and new functions to contribute to faster obsolescence of older generations of mobile phones and faster replacement demand.

Other important markets for MEMS sensors are in aerospace, medical and industrial applications. In the industrial applications market, MEMS sensors can be used for vibration monitoring and control. For example, MEMS sensors can be used to measure vibrations which can degrade performance and reduce the useful life of industrial equipment. As a result, potential problems can be identified prior to equipment failure, therefore allowing appropriate preventive measures to be implemented. MEMS sensors are also used in the medical industry to sense heart-rate response in cardiac pacemakers. The accelerometer detects motion and converts the signal to the pacing rate required for the patient's level of physical activity. In addition, there is a significant and highly-specialized market for MEMS sensors use for aerospace and defense applications.

Challenges Associated with Expanding Accelerometer Market

Accelerometers face a number of constraints in achieving mass market adoption for applications such as mobile phones and consumer electronics devices, including:

More complete system-level solutions. Conventional accelerometers typically require system designers to source components from different vendors, develop their own application software and devote significant design time for each specific usage. As a result, system designers face an increasingly complex and costly design cycle. To reduce the design time and costs, electronic system designers are increasingly seeking complete system-level sensor solutions that accelerate time-to-market and can be leveraged across various system designs;

Lower price. MEMS accelerometers need to be priced at an affordable level to enable mass market adoption within consumer and mobile phone applications. Customers in these markets are generally more price-sensitive than customers in the markets for industrial or automotive applications;

Smaller dimensions. Many of the consumer electronic products that utilize MEMS accelerometers, including mobile phones, digital cameras and portable gaming devices are shrinking in size while at the same time improving performance and functionality. These conflicting trends require smaller but feature-rich portable devices to meet the customers' demand; and

Higher functionality. Similar to other segments of the semiconductor market, the market for MEMS accelerometers is characterized by a continuous demand for products that offer greater functionality. The primary indicators of functionality include motion detection precision level, mechanical shock limit, failure rate, power consumption and frequency range.

Table of Contents

Competitive Strengths

Our key competitive strengths include the following:

Proprietary technology enabling superior reliability, functionality and pricing. We have acquired proprietary rights to produce MEMS accelerometers based on our proprietary thermal technology which provides motion sensing based on the detected movements of a heated gas bubble and operates with no moving parts. This technology has higher shock tolerance, a lower failure rate and lower cost relative to alternative mechanical solutions. In addition, our thermal-based accelerometers can be manufactured on a standard CMOS process with on-chip mixed signal processing, which enables us to enhance reliability and reduces our production cost. These characteristics enable our accelerometers to meet diverse performance requirements, thereby allowing them to be used across mobile phone, consumer, automotive and industrial applications, including collaborations with media content providers and software companies to provide applications and content. Furthermore, our approach of using a standard CMOS process allows us to easily integrate additional functions, or create new sensors to expand into the magnetic, touch and flow sensor markets, as well as other MEMS application areas beyond accelerometers.

Comprehensive system solutions offering. Our solutions offer customers a fully-integrated sensor system on chip that includes the reference designs, algorithms, source code and, on some of our products, the application to facilitate rapid commercial introduction. These solutions enable our customers to shorten their product development cycle and allow for rapid adoption of our products in new applications. We conceptualize a new application idea for our products and then create a fully functioning test board for demonstration to our customers. After our customers adopt our ideas, our field engineers collaborate with customers to test applications and solve implementation issues. We believe this gives us an advantage because many of our target customers have excellent end-market access, but lack the resources to engage in their own application and systems development.

Leading market position and established customer relationships. We are a pioneer in providing accelerometers to China's fast-growing mobile phone market. We have strong relationships with mobile phone manufacturers in China. We are also among the leading sensor providers in a diverse range of other applications such as key-stone screen adjustment sensors for image projectors, supplying to several Japanese OEMs. In addition, our accelerometers are incorporated in rollover protection devices for the automotive market where Autoliv Inc. is a major customer. We are in frequent communication and close collaboration with our customers throughout the design and development phase of our customers products. This interaction helps establish us as the preferred supplier to our customers' next product designs.

Efficient semi-fabless manufacturing model creating higher entry barrier. Our semi-fabless model enhances our ability to manage capital expenditures while retaining manufacturing control over key MEMS-based process steps. We outsource the production of standard CMOS wafers, which is a mature semiconductor infrastructure and standard fabrication process, to our principal foundry service provider, and perform in-house the proprietary post-CMOS MEMS process of building MEMS on top of the standard CMOS wafer. Our facility in Wuxi, China is equipped with MEMS manufacturing equipment. Maintaining manufacturing control of our MEMS-based process steps enables us to achieve high yields and provides us with greater flexibility to respond to customer requirements on a timely basis. In addition, we believe that by performing proprietary manufacturing processes in-house, we create a higher barrier to entry. We seek to meet our packaging requirements in-house and outsource any excess requirements to a third-party service provider, which has built a dedicated packaging line for our needs. The location of our facility in China enables us to better control engineering and operating costs and facilitates the integration of our operations into the Chinese electronics manufacturing supply chain.

Strong technology-driven management team. We benefit from the leadership of our management team who have diverse backgrounds in the United States and Asia, including extensive experience in the MEMS and integrated circuit design industry. Our founder and CEO, Dr. Yang Zhao, has been dedicated to the research and development of MEMS sensors since the early 1990's when he was a doctoral student at Princeton University.

Table of Contents

Dr. Zhao has been named as an inventor on a number of patents, including three we own as well as on six of our pending patent applications in the United States. He has led our in-house research and development team in making significant technology innovations and improvements and diversifying our product mix into new sensor categories. Furthermore, our management team has successfully guided us through our rapid business expansion while maintaining focus on the development and expansion of our core technological capabilities.

Our Strategy

We intend to solidify and strengthen our market position by pursuing a growth strategy with the following key elements:

Increase penetration of existing markets and customers. We have shipped more than 25 million accelerometers from 2004 through September 30, 2007, to the mobile phone, consumer, automotive and industrial and other markets. Nevertheless, the penetration rate of accelerometers into our target markets remains relatively low. As new innovative applications are developed, we believe this penetration rate will increase. For example, we are currently working with our customers in the mobile phone market to enable new applications based on our products. Mobile phone features enabled by our sensor solutions include picture orientation, gaming control, scrolling functions and pedometer measurement. We are also actively seeking design wins by capitalizing on existing relationships with major OEM customers in the automotive, industrial and business tools markets in Taiwan, Japan, Europe and the United States. While we currently provide a limited range of products to our existing customers, we are focused on expanding in these relationships to broaden the adoption of our solutions across additional product lines.

Diversify into new sensor and integrated products. Our core accelerometer and MEMS manufacturing technology and our expertise in developing and commercializing motion sensors in general have provided us with a strong foundation and the capabilities to diversify into new sensor products. These new products will include magnetic, temperature, pressure, gyroscope and flow sensors. Emerging applications for sensors typically lack incumbent competitors, thereby providing an opportunity for a first-mover to define the dominant application technology. We also believe that there is an opportunity in integrated sensor products, which combine multiple sensing devices onto one chip. The market for integrated sensor products offers us the opportunity to expand our existing market by developing small footprint, low-power integrated sensor solutions.

Maintain cost leadership. We believe that our technology of integrating a MEMS accelerometer with mixed signal processing circuitry on a single chip using a standard CMOS process fundamentally lowers our cost of production. We intend to maintain our cost advantage by developing new innovative proprietary technologies, focusing on designing products on readily available foundry processes, and leveraging our low-cost manufacturing capabilities in China.

Leverage cross-continental research and development model to strengthen technology platform. We intend to continue to invest in our United States and China research and development teams to enhance our technology platform. We have research and development teams in Andover, Wuxi and Chicago that work closely with each other in our product and technology research and development activities. Currently, our original research and development activities are performed in the United States where innovative ideas, new research initiatives, product prototyping, MEMS technology development and integrated circuit designs typically commence. Our China team of manufacturing engineers and other technical personnel is focused on implementing the technology developed by our U.S. team. This cross-continental research and development model seeks to capitalize on the comparative advantages of respective research and development capabilities of the United States and China, and keeps us at the forefront of MEMS accelerometer research while maintaining a competitive cost base.

Engage in selective acquisitions to build new MEMS capabilities. We intend to evaluate and potentially make acquisitions of technologies and products that are complementary to our product portfolio. We believe that there is a large market potential for integrated system-on-chip sensor products which incorporate multiple types of sensors. While we develop our technologies in-house, we are also actively seeking opportunities to acquire or

Table of Contents

license key technologies from third parties as well. We believe our strong core technology platform will also provide us an advantage in integrating the acquired technologies to create a broader range of sensor solutions products in the market.

Products and Technologies

Historically, we have focused on the development and sale of MEMS accelerometer products. However, in recent years, we have also allocated significant resources to the development of other sensor products. We expect to begin sales of our magnetic, touch and flow sensor products in the second half of 2008.

Accelerometer Products and Applications

Our accelerometer products cover a broad range of applications. As part of our product offering, we seek to provide comprehensive solutions to our customers, which involve the development of a fully-integrated system on chip together with the reference designs, algorithms, source code and media content. These solutions enable our customers to reduce their product development cycle and allow for more rapid adoption of our products in new applications.

We categorize the application segments of our accelerometer products into (i) mobile phones; (ii) consumer; (iii) automotive; and (iv) industrial and others. Due to our limited operating history, our sales volume for these applications may fluctuate significantly from period to period. The following table sets forth certain information of our products.

Market segment	Part numbers	Key end-products	Application	% of net sales in 2006
Mobile phone	MXA6500MP	Mobile phones	Picture orientation / auto adjustment	39.1%
	MXC6202XMP	Integrated mobile phone and audio players	Gaming control	
			Menu scroll	
			Pedometer	
			Music beat and light	
			Man down emergency dialing ^(d)	
Consumer	MXA2500JV	Projectors	Auto-keyston ^(e)	32.0%
	MXR6999MP	Personal navigation systems	GPS dead reckoning ^(g)	
	MXA6500MP	Audio players	Picture Orientation / auto adjustment	
	MXA2500GL	Digital cameras	Hard disk drive drop detection	
	MXR2100ML	Laptop computers		
	Automotive	MXD2020ML	Rollover protection systems	
MXA2312ML		Electronic stability control ⁽⁵⁾	Over-steer / under-steer detection	
MXA6500MP			Engine vibration detection	
MXC6202XMP			Airbag systems	Tilt detection

Edgar Filing: MEMSIC Inc - Form S-1/A

		Security systems		
		Car navigation systems		
Industrial & others	MXD2020EL	Inclinometers	Angle measurement	7.7%
	MXD6125QB	Electric tools	Auto leveling	
	MXR6999MP	Earthquake monitoring systems	Vibration monitoring	
	MXR7202GL	Elevator safety systems	Tilt detection	
		Cardiac pacemakers		

-
- (1) Man down sounds alarm or dials an emergency hotline when a person falls down and no movement is detected.
 - (2) Wave message enables LED to display text message by waving mobile phone or wave stick.
 - (3) Auto-keystone is a function on a projector that automatically adjusts any vertical or horizontal distortions of the image projected.
 - (4) Navigation system assists navigation during loss of GPS signals through dead reckoning (estimating one's current position based upon a previously determined position, and advancing that position based upon known speed, elapsed time, and course).
 - (5) Electronic stability control, or ESC, compares the driver's intended direction in steering and braking inputs to the vehicle's response by measuring lateral acceleration, rotation and individual wheel speeds. In an emergency situation, an ESC applies braking force to individual front or rear wheels and/or reduces excess engine power to correct under-steer or over-steer.

Table of Contents

Mobile Phone Applications

We are a pioneer in providing accelerometers to the fast growing Chinese mobile phone market. We supply our accelerometer products to a major phone manufacturer in China through one of our distributors. It was among the first phone manufacturers in China to incorporate accelerometer functions into mobile phones. We began to supply our products to this customer in 2006, and starting from May 2007, our accelerometer products have become a standard feature of mobile phones manufactured by this customer.

Consumer Applications

We believe that the market for our accelerometer products for consumer electronics applications has significant growth potential due to the wide variety of consumer electronics available for which our products may be suitable today and the relatively low penetration of accelerometers in these products. Historically, the consumer applications that have represented a significant portion of our revenue included global positioning systems and auto-keystone screen adjustment function for image projectors. We believe we are among the leading suppliers of accelerometer products for auto-keystone applications in projectors to customers that include several Japanese OEMs. In addition, we believe that the market for portable projectors will expand and our accelerometer products for auto-keystone application will be well-positioned to capture that market.

We also expect the future growth areas in consumer applications for accelerometer products to be in video games, joysticks and game pad controls as a result of the recent successes of motion-based video. In addition, we also expect our products to have a wide range of applications in children's toys as they become increasingly sophisticated and interactive. We are working with OEMs and ODMs to achieve design-wins in different markets ranging from mobile phones, consumer electronics, automotive safety systems and home appliances.

Automotive Applications

We are a supplier of accelerometer products for rollover protection systems to Autoliv Inc., which is a leading automotive safety systems supplier to automobile manufacturers in Europe and North America. Our accelerometer measures the roll axis of a vehicle, and upon determining that a rollover is imminent, deploys passenger safety devices before the tire is lifted from the ground. In addition, in the Japanese market, we have achieved design wins with a leading supplier of automotive sensors to incorporate our products for fuel shut-down applications. Recently, we achieved a significant design win with Autoliv Inc. to incorporate our products for its electronic stability control, or ESC, to supply to a leading automobile manufacturer.

Since our inception, one of our objectives has been to expand our relationships with customers in the automotive industry. Because barriers to entry are generally higher and product life cycles are generally longer in the automotive industry, once customer-supplier relationships are established, the unit demand and margins are generally more stable compared to sales of our other products. Products ordered from customers in the automotive industry generally require more customization and higher technical and quality standards. As a result, our relationships with these customers enable us to keep pace with the latest technological developments and quality standards in the automotive market.

Industrial and Other Applications

Our accelerometer products have also been used in a variety of industrial applications such as inclination sensing and earthquake detection. Inclination sensing is used in road building equipment and warehouse equipment such as forklifts. Our accelerometers are also used in the medical industry to sense heart-rate response in cardiac pacemakers by detecting motion and converting the signal to the pacing rate required for the patient's level of physical activity.

Table of Contents
Accelerometer Technology

Accelerometers are traditionally based on capacitive or piezoresistive technology that both operate by measuring the movement of a micro-mechanical mass structure. Limitations associated with such movement include surface adhesion (static cohesion between mechanical objects pressed against each other), hysteresis (occurs when the change in magnetism of a body lags behind changes in the magnetic field), mechanical ringing, electromagnetic interference and expensive custom fabrication processes. In order to resolve these issues, our MEMS accelerometers use a unique thermal technology based on heat transfer by natural convection. Our devices measure internal changes in heat transfer caused by acceleration, offering significant advantages over the use of a traditional micro-mechanical mass structure. Since the micro-mechanical mass in our sensor design is gas molecules, movable mechanical structures are eliminated within our accelerometer. As a result, our accelerometer can withstand a theoretical shock limit over 50,000g, five times more than that of traditional accelerometers. Our technology also eliminates the problems associated with surface adhesion. In addition, our thermal-based accelerometer can be manufactured on a standard CMOS process with on-chip mixed signal processing. This allows us to consistently produce higher quality accelerometers with failure rates significantly lower than that of traditional MEMS accelerometers at lower production costs.

The following summarizes a comparison between traditional capacitive/piezoresistive-based accelerometers and our thermal-based accelerometers.

	MEMSIC s	
	Capacitive accelerometer	
	thermal-based accelerometers	
Motion detection	Moving micro-mechanical mass structure	Thermal gas with no moving parts
Mechanical shock limit	10,000g	50,000g
Failure rate	100 ppm to 4,000 ppm	Less than 10 ppm
Cost	Higher	Lower
Power consumption	Lower	Higher

Our accelerometers generally consume more power than traditional accelerometers. Power consumption is an important factor for our target customers in the handheld devices market. Accordingly, we have focused significant research and development efforts to reduce power consumption in our products. In addition, our accelerometers generally lack the ability to measure acceleration at a higher frequency range. As a result, we are not focused on markets that require higher frequency range capabilities, such as the automotive crash sensor market.

Technology and Product Roadmap

By capitalizing on the strengths of our thermal-based accelerometer technology, we have developed and will continue to develop new products by seeking to meet the demands of our various types of customers. The objectives of our development efforts are to (i) reduce our product dimensions; (ii) lower our cost in order to

Table of Contents

maintain competitive pricing; (iii) reduce our products power consumption; and (iv) offer more integrated solutions. For example, historically, we introduced:

energy efficient products to target the handheld devices market, particularly mobile phones and digital still cameras, where power consumption is critical;

a lower-cost version of our accelerometer products to target at the low-end mobile phone market in China; and

media content on our accelerometer applications sold to our mobile phone OEM and ODM customers.

In 2008, we plan to introduce additional accelerometer products with tri-axis sensing capabilities, smaller dimensions and innovative package types.

In recent years, we have also allocated significant resources to the development of non-accelerometer based technologies and products. Beginning in the second half of 2008, we expect to introduce our magnetic sensor solution and new touch, pressure and flow sensor products. Our objective is to combine the technologies of these sensor products with our core accelerometer technology to enable new applications that were previously not achievable.

Research and Development

We have research and development teams in the United States and China that work closely together to develop new sensor technologies, improve existing technologies and customize our products to the particular needs of our customers. The engineers at our locations in Andover, Massachusetts and Chicago, Illinois are primarily responsible for developing original product designs and new technology as well as creating product prototypes. These new designs and technology are then implemented by our engineers at our Wuxi facilities in China. This enables us to access the world-class design talents in the United States and benefit from the cost-efficient and the increasing pool of engineers in China.

As of September 30, 2007, our research and development team consisted of 92 engineers, or 21.1% of our total employees, consisting of seven engineers at our U.S. facilities and 85 engineers at our Wuxi facilities in China. Historically, research and development expenses have increased both in absolute terms and as a percentage of total net sales. Our research and development expense amounted to \$0.4 million, \$1.0 million, \$1.9 million and \$2.4 million in 2004, 2005, 2006 and the nine months ended September 30, 2007 respectively, representing 5.8%, 11.1%, 14.3% and 12.8% of our net sales during these periods. We expect this trend to continue for the foreseeable future as we (i) seek to diversify into non-accelerometer products and (ii) hire additional employees in connection with the new research and development institute established in the second quarter of 2007.

Sales and Customers

We sell our products either through distributors, who then resell to OEMs and ODMs, or to OEM and ODM customers directly. OEMs, or original equipment manufacturers, incorporate our products in their end products, and ODMs, or original design manufacturers, incorporate our products in end products that they supply to OEMs. Our third-party distributors assist us in identifying potential OEM and ODM customers. We also retain third-party sales representatives that receive commissions on sales of our products. We currently sell a significant majority of our products to distributors and OEMs and ODMs. For these products, we receive payments directly from our distributors and ODMs rather than the OEMs for whom the ODMs design and manufacture products. As a result, we do not always have the ability to confirm directly with our OEM customers that our products are incorporated in their end products.

Currently, our largest customers are distributors, with whom we enter into distribution agreements. Under these distribution agreements, our distributors generally service a particular region or customer base on an

Table of Contents

exclusive basis. Although our distributors generally provide us with a non-binding rolling forecast, our distributors generally have up to 30 days prior to delivery to cancel or reschedule shipments pursuant to our distribution agreements. Certain large distributors and those with superior credit history may have longer credit terms. Payments are made in U.S. dollars. Our distributors are generally entitled to return, with our pre-authorization, without penalty, a maximum of ten percent of purchases made by such distributors during the previous 12-month period. The warranty period on products sold to our distributors is generally the standard warranty one-year period on the products sold plus six months, taking into account potential inventory holding period. The term of agreement with our distributors is generally one year, and is automatically renewable unless terminated with a 90-day notice. See Management Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies Revenue Recognition . Substantially all of our direct sales to OEMs and ODMs are based on purchase orders.

Historically, we have not entered into master agreements with our largest OEM and ODM customers. Our sales with these customers were generally conducted based on quotations that contain basic terms and conditions. These terms and conditions generally include price, quantity, standard lead time and terms of shipment. Purchases by our OEM and ODM customers are made in U.S. dollars and payments are generally due within 30 days after shipment.

Our products are currently incorporated into products sold by more than 100 OEMs and ODMs. For the nine months ended September 30, 2007, two customers accounted for 10% or more of our net sales, consisting of WPI, a distributor, as to 53.6%, and Autoliv Inc., an OEM, as to 16.8%. In 2006, three customers accounted for 10% or more of our net sales, consisting of WPI as to 34.6%, Mitsui Electronics Inc., or Mitsui, a distributor, as to 16.0% and Autoliv Inc. as to 15.0%. In 2005, three customers accounted for 10% or more of our net sales, consisting of Inventec, Inc., an OEM, as to 30.0%, Mitsui as to 19.3% and Avnet Memec, a distributor, as to 11.0%, respectively. In 2004, three customers accounted for 10% or more of our net sales, consisting of Mitsui as to 35.3% and Brilliant Technology Company Macnica, Inc, a distributor, as to 13.4%, and Inventec, Inc. as to 13.0%.

Marketing

We sell our products worldwide through multiple channels combined with the sales force and our network of independent distributors and sales representatives. We maintain sales offices in Shanghai and Shenzhen, China; Taipei, Taiwan; and Tokyo, Japan.

We seek to proactively create markets for our products by bringing proposed solutions with us to our potential OEM and ODM customers. A design win is achieved after we are notified by our customer that our product has been selected for integration into an OEM or ODM customer's products. After such design wins, our sales organization engages directly with all major customers and is instrumental to the design process. We believe that maintaining a close relationship with our customers improves their level of satisfaction and enables us to anticipate and influence their future product needs. Our independent distributors and sales representatives are selected based on their understanding of our target markets, technical knowledge and relationships with our target customers. We provide ongoing technical training to our distributors and sales representatives to keep them informed of our existing and new products.

Our sales and marketing team is responsible for market and competitive analysis and is focused on capitalizing on market opportunities. This team works closely with our research and development team to align development programs and product launches with our OEM and ODM customers' schedules. As of September 30, 2007, we had 19 employees in our sales and marketing team.

Our sales cycle varies for different markets. For example, it ranges from four to six months for the consumer electronics market to one to two or more years for the automotive market, and is dependent on each customer's research and development cycle. The sales cycle requires a significant investment in time, resources and

Table of Contents

engineering support before realization of income from product sales, if at all. These lengthy sales cycles mean that customer's vendor selections, once made, can be difficult to change.

Manufacturing

Unlike many of our competitors, we manufacture our products utilizing a semi-fabless model by outsourcing the production of CMOS wafers and completing the post-CMOS MEMS process in-house. Our semi-fabless model increases our ability to more efficiently manage our capital expenditures while retaining manufacturing control over key MEMS-based processing steps. Moreover, we believe that retaining the key MEMS manufacturing process in-house enables us to better protect our proprietary technology and create an effective barrier to entry.

As a semi-fabless company, we outsource to third parties the manufacturing processes which we consider as either standard or more cost-effective when outsourced. For example, we outsource our wafer production to third parties because our wafers use a standard CMOS technology. On the other hand, we conduct the post-CMOS MEMS process and a portion of the packaging process in-house because these are in part based on proprietary technologies. In addition, we perform our packaging and testing processes in-house to capitalize on the competitive cost structure of our Wuxi manufacturing facilities. Since 2001, we have outsourced a portion of our packaging processes to third-parties on an as-needed basis.

Our manufacturing process can be broadly divided into four stages: (i) wafer production; (ii) post-CMOS MEMS; (iii) packaging; and (iv) testing and final quality control.

Wafer Production

Our wafers are produced using a standard CMOS technology. CMOS process, or complementary metal oxide silicon process, is a fabrication process that incorporates complementary metal oxide semiconductor transistors within the same silicon substrate. This is currently the most commonly used IC fabrication process technology and commonly offered by mainstream foundries.

We have outsourced our wafer production for accelerometer products to TSMC, our principal foundry service provider, since our inception. We do not enter into long-term agreements with TSMC and we place our orders on a purchase order basis. Under TSMC's purchase orders, payment is due 30 days after the invoice date of the purchase order. Actual delivery date can take place up to seven days prior to or after the delivery date stated in the purchase order. In case of an order cancellation, we agree to compensate TSMC for the canceled shipment based on percentage of completion. Standard warranty period under TSMC's purchase orders is one year. We periodically negotiate with TSMC to establish price, volume, timing and other terms. We work closely with a view to achieving high manufacturing yields in the wafer fabrication process, which is an important aspect of our cost-control efforts.

In addition, in 2006, we entered into agreements with two additional foundry service providers, one based in the United States and the other Germany, for the development and supply of wafers used for magnetic sensors. Our agreement with the Germany-based service provider expires on December 31, 2009, and is automatically renewed for consecutive terms of one year each. It can be terminated without cause with a six-month notice period or with cause in certain instances of intellectual property infringement claims with a 90-day written notice. Our agreement with the U.S.-based service provider continues to be in effect as long as we continuously make purchases. The parties may also terminate the agreement for the breach of a material provision with a 30-day written notice. Our agreements with both service providers restrict their ability to sell products similar to ours to our competitors.

See **Risk Factors** **Risks Relating to Our Business and Industry** We rely principally on one third-party foundry to manufacture wafers, which are significant components to our manufacturing process. If we are unable

Table of Contents

to secure sufficient supply of wafers, or if the wafers supplied to us do not meet our quality standards, we may be unable to ship finished products and our customer relationships may be damaged .

Post-CMOS MEMS

After we receive the standard CMOS wafers from our foundry service provider, we conduct in-house a post-CMOS process of building MEMS on top of the standard CMOS wafer. Compared to outsourcing the post-CMOS process to third-party foundries, our patented process enables us to build MEMS onto the CMOS wafer with higher yields and at lower cost by using customized precision machining technology and based on masks or molds that have been designed, simulated and produced as part of the design process.

Packaging and Testing

We licensed from Analog Devices Inc. certain testing, wafer sawing and wafer level capping and chip-level packaging technology. This technology was licensed to us as part of the consideration we received from Analog Devices for its investment in our company in 1999. See

Intellectual Property . Historically, we outsourced our packaging services to third-party providers. Since the second half of 2005, we have increasingly met our packaging requirements in-house. For the nine months ended September 30, 2007, a majority of our products were packaged in-house. We currently procure ceramic packaging materials from two suppliers. We do not have long-term agreements with these suppliers, but make purchases based on purchase orders.

We conduct all of our testing procedures in-house at our Wuxi facilities. Our testing equipment purchased from third parties is generally custom-built for our needs.

Quality Assurance

We place great emphasis on the quality of our products, and our senior management is significantly involved in the management of quality assurance issues. Our automotive products are ISO/TS16949:2002 certified, which represents a high level of quality standard in the automotive industry. In addition, because the ISO/TS16949:2002 certification generally represents a significantly higher quality standard than the ISO9001:2000 certification for quality management standards, we have made our products for other applications, including those for consumer and mobile phone applications, ISO/TS16949:2002 compliant as well. Therefore, we have a very low product failure rate as compared to our competitors.

We have adopted policies and procedures for the development and implementation of reliability techniques that are required to be applied to the research, design manufacture, test application and service of our products.

Our design and manufacturing process are guided by the following principles:

simplifying designs and reducing circuit components where possible to meet performance goals;

re-using proven circuit components;

ensuring that appropriate end of life, fatigue and degradation of circuit components have been characterized for the use environment;
and

performing all procedures required by ISO/TS16949:2002.

In addition, we employ strict qualification procedures for new suppliers, including foundries and packaging service providers. We first evaluate each supplier's capability, quality, price and service, and then qualify its engineering samples, conduct on-site auditing as well as test each product's performance prior to incorporating it into our product or process. For ongoing quality assurance monitoring, we inspect all incoming products for quality control. We also conduct a quarterly analysis of each supplier for quality, service and product performance issues.

Table of Contents

As a result of our efforts, the part per million, or PPM, field failure rate for our products has declined continuously since we began production, reaching 3.06 in 2006 and 1.26 for the eight months ended August 31, 2007. The failure in time for our products, which measures reliability of products over time, reached 0.39 in 2006 and 0.4 in the eight months ended August 31, 2007. We estimate our product failure rates based on quality assurance tests conducted post-production as well as customer return rates due to product failure.

Intellectual Property

We design our accelerometer products in-house, but may outsource the design work of a discrete part of a new product to third-party designers. We rely on a combination of patents, trademarks and employee and third-party nondisclosure agreements to protect our intellectual property. Our standard consulting agreement contains protective provisions that include assignment of intellectual property rights to us if obtained during the course of work for us as well as non-compete and non-disclosure provisions. As of September 2007, we owned three patents and had 13 pending patent applications in the U.S. and owned two patents and had three pending patent applications and assignments in China. As of that date, we also had six pending patent applications in Japan, three pending patent applications in Germany and two pending patent applications filed with the European Patent Office. Our issued and pending patent applications relate primarily to the development of accelerometer products, including design, processing, packaging, testing and applications. We cannot assure you that any patent will be issued as a result of our applications or, if issued, that it will sufficiently protect our intellectual property rights. Our three U.S. patents expire between August 2016 and January 2025, and our three PRC patents expire between July 2012 and December 2014.

As part of the consideration we received from Analog Devices for its investment in our company in 1999, we acquired, through assignment and licensing arrangements, various technologies from Analog Devices:

SFU's rights on core technology. Analog Devices assigned to us the exclusive, worldwide and perpetual license from Canada's Simon Fraser University, or SFU, on our core thermal accelerometer technology. SFU is entitled to continue to use the licensed technology existing at the time of the license agreement, which was entered into in December 1998, as well as any related technology it develops thereafter without our support. As a result of the assignment, we agreed with SFU that we would make royalty payments on a quarterly basis and to pay or reimburse expenses relating to the filing, prosecution and maintenance of the related patent rights owned by SFU. We also agreed to provide to SFU our financial records periodically and permit SFU to perform independent audits of those records. SFU may terminate our license for (i) breaches by us of representations and warranties as well as confidentiality provisions; (ii) failure to make royalty payments and patent payments or reimbursements (as described above); (iii) failure to provide, or permit the audit of, our financial records; or (iv) failure to defend, indemnify and hold harmless SFU for claims or liabilities arising from our use of the licensed technology. In addition, the license is terminated automatically upon the occurrence of insolvency, bankruptcy or other similar events.

Analog Devices' rights on core technology. Analog Devices granted to us an exclusive, perpetual, worldwide, fully-paid license to use, sell, develop, or otherwise exploit the intellectual property rights that it owns relating to thermal accelerometer technology. Analog Devices agreed not to use such technology to make or sell thermal accelerometer products. Analog Devices may terminate this license if our company is dissolved or liquidated or if we breach a material provision of the license agreement.

Analog Devices' rights on packaging and testing technology. Analog Devices granted to us a non-exclusive, non-transferable, non-sublicensable, perpetual, worldwide and fully-paid license to certain testing, wafer sawing and wafer level capping and chip-level packaging technology rights to use, sell and develop thermal accelerometer products. Testing technology rights included the rights to use computer software programs and hardware systems dedicated to testing accelerometer products. Wafer sawing technology related to the method for separating individual integrated circuit, or IC, dies from a silicon wafer in which the wafer is adhered to a plastic film on a film carrier. Wafer level capping and

Table of Contents

chip-level packaging technologies related to the concept of encapsulating and packaging IC devices at wafer or chip level. Analog Devices may terminate this license if our company is dissolved or liquidated or if we breach a material provision of the license agreement.

See Risk Factors Risks Relating to Our Business and Industry Some of our key technologies and know-how are licensed from third parties, including a competing company, and the termination of any of the licenses will materially and adversely affect our business.

Most of our accelerometer products sold to our mobile phone customers incorporate media content that we co-develop with a third-party on an exclusive basis. Under this arrangement, we have the right to purchase the media content developed by the third-party, and we own all the intellectual property rights to the media content that we purchase.

In addition to our in-house research and development efforts, we have entered into joint development agreements with a number of leading Chinese universities, including Peking University and Huazhong University of Science and Technology. Under these agreements, we generally own the exclusive rights to the resulting intellectual property where we provide the entire funding, and co-own the resulting intellectual property rights where the funding is provided by both parties.

Substantially all of the agreements we enter into with our customers contain confidentiality provisions relating to our technology.

As of September 30, 2007, we have registered two trademarks in the United States and one trademark in China. Our registered Internet domain names include: www.memsic.com, www.memsic.com.cn and www. .com. The content on these websites does not form a part of this prospectus.

Competition

The market for sensor products, including accelerometer products, is highly competitive and dynamic and is characterized by rapid technological changes, evolving industry standards, price reductions and rapid product obsolescence. Our ability to compete effectively depends on defining, designing and regularly introducing new products that meet or anticipate the design needs of our customers' next generation products and applications. We face competition primarily from traditional capacitive/piezoresistive-based accelerometer manufacturers.

The most significant factors that affect our competitiveness are:

product pricing;

product features and performance levels tailored for specific market segments;

our ability to control sales and marketing as well as administrative expenses;

our ability to rapidly introduce products to market that support the features that our customers demand;

the quality and reliability of our products;

our ability to deliver products in required volumes, on a timely basis and at a competitive price; and

our customer support capabilities.

Many of our existing and potential competitors have significant greater financial, technical, manufacturing, sales and other resources than we do. We cannot assure you that we will be able to compete successfully against our current or future competitors.

Table of Contents

Employees

We had 100, 162, and 219 full-time employees as of December 31, 2004, 2005 and 2006, respectively. As of September 30, 2007, we had 433 employees, including 276 machine operators, 92 engineers, 29 administrative employees, 17 technicians, and 19 sales and marketing employees. Of these employees, 17 employees are located in the United States, consisting of seven engineers, six sales and marketing employees and four administrative employees. To date, we have not experienced a work stoppage and none of our employees is covered by a collective bargaining agreement. We believe that our relations with our employees are good.

Facilities

Our corporate headquarters are located at One Tech Drive, Suite 325, Andover, Massachusetts 01810. In addition, we also have an office in Chicago, Illinois. Our Andover headquarter is responsible for sales and marketing, financing, and research and development, while the Chicago office is also responsible for research and development. In addition, we have sales offices in Shanghai and Shenzhen, China; Taipei, Taiwan; and Tokyo, Japan. We lease these premises from unrelated third parties. The lease contract on our corporate headquarters in Andover expires in June 2013.

Our current manufacturing facility and our new facility under construction are located on a parcel of land of approximately 35,000 square meters in Wuxi, Jiangsu Province of China. We purchased the land use rights to the land in 2003. Our current manufacturing facility is housed in a building that comprises a production area of approximately 2,800 square meters and an office area of approximately 1,300 square meters. The current facility is responsible for manufacturing, product engineering, manufacturing engineering, quality assurance, packaging and testing as well as application engineering.

We are expanding our current manufacturing facility. Upon completion, the current facility is expected to have an additional 600 square meters of production area. Expansion on our current facility began in the fourth quarter of 2006, and is expected to be completed by the end of 2007. We expect that the total capital expenditure for this expansion project will be approximately \$7 million, of which \$4 million will be financed by a newly-established credit facility, with the remainder paid through our working capital. As of September 30, 2007, we have expended \$4.0 million on this project. See Management's Discussion and Analysis of Financial Condition and Results of Operations Contractual Obligations .

In addition, we are preparing for the construction of two new buildings adjacent to our current facility. Upon completion, the new facility is expected to comprise 20,800 square meters, consisting of 8,700 square meters for a new research and development institute, and 12,100 square meters of new manufacturing facilities. Construction on our new facility will begin in the fourth quarter of 2007 and is expected to be completed in two phases. Phase one of our new facility is expected to be completed in the first quarter of 2008 and will house our new research and development institute and operations and management offices. Total capital expenditure of phase one, including construction and machinery, are estimated to be \$6 million. Phase two of our new facility is expected to be completed within three years in a number of phases. Upon completion of phase two, we expect to have in place manufacturing capacity to meet our future production requirements for both accelerometer products and non-accelerometer products. Total capital expenditure of phase two, including construction and machinery, are estimated to be \$30 million. We intend to finance substantially all of our new facilities with a portion of the net proceeds of this offering.

See Risk Factors Risks Relating to Our Business and Industry Our expansion plans require substantial capital expenditures and are subject to a number of uncertainties, and our failure to complete these plans would have a material adverse effect on our future growth.

Insurance

We maintain insurance policies for our Wuxi facility on our buildings and equipment covering property damage and damage due to non-predictable and non-controllable accidents and natural disasters, among other

Table of Contents

events, hail, storms, tornados, typhoons, earthquakes and floods. We maintain general liability insurance which includes product liability coverage and business disruption insurance coverage in an amount that we believe is appropriate for our operations. In addition, we maintain directors and officers insurance in the amount of \$2 million.

Environmental Matters

Our manufacturing and design operations do not cause any significant pollution. Our manufacturing facilities in Wuxi, China have received ISO14001 certification for environmental management system. Our products comply with the European Union's Restriction on Hazardous Substance Directive, which became effective as of July 1, 2006, as well as China's Restriction on Hazardous Substance Directive, which became effective as of March 1, 2007.

Legal Proceedings

We are not involved in any litigation or other legal matters which, if decided adversely against us, could reasonably be expected to have a material adverse impact on our business or operations. However, many participants in our industry have significant intellectual property rights and have demonstrated a willingness to instigate litigation based on allegations of infringement. We cannot assure you that we will not receive notices of intellectual property right infringements in the future.

Table of Contents

REGULATIONS

China

The foreign invested companies in China are subject to substantial regulation. This section summarizes the material effects of PRC regulations on our business in China.

Regulations and Policies that Encourage the Development of Foreign Invested High-technology Companies

Income Tax of China for Enterprises with Foreign Investment and Foreign Enterprises, or the Foreign Enterprise Income Tax Law, and the related rules and regulations provide certain favorable tax treatments to FIEs, which qualify as high-technology companies and operate in designated high-technology zones in the PRC. A high-technology company is subject to review and inspection by the relevant governmental authorities.

Accreditation of High-Technology Companies

According to Accreditation Conditions and Measures of High-technology Enterprise in the State High-technology Industry Development Zone promulgated by the Ministry of Science and Technology in 2000, to qualify as a high-technology company a business entity generally must meet certain financial and non-financial criteria including, but not limited to:

the technology researched and developed by the company falls into the high-technology category promulgated by the PRC government;

a minimum level of revenue generated from high-technology related sales or services as a percentage of total revenue;

a minimum number of employees engaged in research and development;

a minimum requirement for the education degree of employees; and

a minimum level of research and development expenses as a percentage of total revenue.

A company's status as a high-technology company is re-assessed every other year.

Preferential Taxation Policies

Enterprise Income Tax. Under the Foreign Enterprise Income Tax Law, the related implementing rules and several local regulations, an enterprise that is established in the State High-technology Industry Development Zone and has been accredited as a high-technology company by relevant authorities at the provincial level is subject to an enterprise income tax rate of 15% and will be exempted from the enterprise income tax for two years starting from the year in which it first has positive accumulated earnings. After which it will enjoy a 50% reduction in the enterprise income tax rate for the succeeding three years.

On March 16, 2007, the National People's Congress approved and promulgated a new tax law named Enterprise Income Tax Law, which takes effect beginning January 1, 2008. Under the new tax law, FIEs and domestic companies are subject to a uniform income tax rate of 25%. The new tax law provides a five-year transition period starting from its effective date for those enterprises which were established before the promulgation date of the new tax law and which were entitled to a preferential lower tax rate under the then effective tax laws or regulations. The income tax rate of such enterprises will gradually transition to the uniform tax rate within such transition period in accordance with the detail rules to be issued by the State Council. For those enterprises which are enjoying fixed tax holidays, such tax holidays may continue until its expiration in accordance with the regulations issued by the State Council, but where the tax holiday has not yet started because of losses, such tax holiday shall be deemed to commence from the first effective year of the new tax law, i.e., 2008. While the new tax law equalizes the tax

rates for FIEs and domestic companies, preferential tax treatment

Table of Contents

would continue to be given to companies in certain encouraged sectors and to entities classified as high-technology companies supported by the PRC government, whether FIEs or domestic companies.

For the potential effects of the new tax law on preferential tax treatment, see Risk Factors Risks Related to Doing Business in China The discontinuation of any of the preferential tax treatments currently available to us in China could materially and adversely affect our business, financial condition and results of operations.

Tax Credit for Enterprise Income Tax for Domestic Equipment Purchased by Foreign-funded Enterprises. According to the Circular of the Issue of Tax Credit for Enterprise Income Tax for Domestic Equipment Purchased by Foreign-funded Enterprises issued by the Ministry of Finance and State Administration of Taxation in 2000, if an FIE purchases domestically produced equipment, and the price does not exceed the total investment amount of such FIE, for projects that fall within the encouraged category or the restricted B category under the Foreign Investment Industrial Guidance Catalogue and that is not specifically listed under the Import Commodities Not Exempt from Duty and Tax for Foreign Investment Projects Catalogue, 40% of the purchase price amount may be credited against the surplus between the amount of the enterprise income tax of the current year and the amount paid in the previous year. If the credited amount is greater than the surplus, the excess amount can be carried forward for up to five years, subject to certain exceptions.

Export rebate. In accordance with the Instructions Relating to Promotion of Export of High-technology Products jointly issued by the Ministry of Foreign Trade and Economic Cooperation and the Ministry of Science and Technology in 1999, products listed in the China High-technology Products Export Catalogue, including IC products, can enjoy a full rebate of value-added tax on the export products at a rate of 17%. This export rebate rate decreased to 13% from January 1, 2004. However, the Circular of Promoting Export Rebate Rate of Partial IT Products issued by the Ministry of Finance and State Administration of Taxation on December 10, 2004 increased the export rebate rate back to 17%.

Intellectual Property Protection for Semiconductors

China has adopted legislation related to intellectual property rights, including trademarks, patents and copyrights. China is a signatory to the main international conventions on intellectual property rights and became a member of the Agreement on Trade Related Aspects of Intellectual Property Rights upon its accession to the WTO in December 2001. Set forth below are major PRC laws and international treaties effective in China protecting intellectual property rights in semiconductors:

the Patent Law of the People's Republic of China, adopted at the fourth meeting of the Standing Committee of the Sixth National People's Congress on March 12, 1984, effective April 1, 1985, as amended, and the Implementing Regulations issued by the State Council on June 15, 2001, effective July 1, 2001, as amended;

the Paris Convention for the Protection of Industrial Property of the World Intellectual Property Organization, of which China became a member state on March 19, 1985;

the General Principles of the Civil Law of the People's Republic of China adopted at the fourth session of the Sixth National People's Congress on April 12, 1986, effective January 1, 1987. In this legislation, intellectual property rights were defined in China's basic civil law for the first time as the civil rights of citizens and legal persons;

the Regulations for the Protection of the Layout Design of Integrated Circuits, or the Layout Design Regulations, adopted March 28, 2001 at the thirty-sixth session of the executive meeting of the State Council, effective October 1, 2001, and the Implementing Rules issued by the State Intellectual Property Office on September 8, 2001, effective October 1, 2001;

the World Intellectual Property Organization's Washington Treaty on Intellectual Property in Respect of ICs, of which China was among the first signatory states in 1990;

Table of Contents

the Copyright Law of the People's Republic of China, adopted by the 15th meeting of the Seventh National People's Congress Standing Committee on September 7, 1990, effective June 1, 1991, as amended; and

the Regulations on the Protection of Computer Software, issued by the State Council on December 20, 2001, effective January 1, 2002.

Protection of Integrated Circuit Layout Design

Under the Integrated Circuits Layout Design Protection Regulations, or Layout Design Regulations, promulgated by the State Council in April 2001 and effective October 2001, an integrated circuit layout design is defined as a three-dimensional configuration in a semiconductor that has two or more components, at least one of which is an active component, and part or all of the interconnected circuitry or the three-dimensional configuration has been prepared for the production of semiconductors.

The following persons and entities can hold proprietary rights in the layout designs that they create: (i) PRC natural persons, legal persons or other organizations; (ii) foreign persons or companies whom are creators of an integrated circuit layout design and whose layout designs are first commercially used in China; and (iii) foreign persons or companies from a country that either has an agreement with China concerning the protection of layout designs or is a signatory to an international treaty concerning the protection of layout designs to which China is also a signatory.

A holder of proprietary rights in a layout design may:

duplicate the entire protected layout design or any part of the original design; and

use the protected layout design, the integrated circuit containing the layout design, or commodities containing the integrated circuit commercially.

The proprietary rights are valid after the layout design is registered with the State Intellectual Property Office in China.

Proprietary rights in a layout design are granted for ten years, commencing from the earlier of the date of the application for registration of the layout design or the first date of its commercial use anywhere in the world. However, a layout design is not entitled to any protection beyond 15 years from the time of its creation, regardless of when the layout design is registered or put into commercial use. The holder of the proprietary rights may transfer those rights to another party or grant permission for use of the design.

Registration of a Layout Design

The State Intellectual Property Office in China decides on applications for registration of layout designs. An application must be made within two years of the design being put in commercial use anywhere in the world, or the application will be rejected.

We may register any layout design that we may have in the future.

Compulsory Licenses for Exploitation of Patents in Respect of Semiconductor Technology

Under the Patent Law and the Implementing Regulations of the Patent Law, a company may request the State Intellectual Property Office to grant a compulsory license to use the patent if: (i) three years have passed from the date of granting an invention patent or a utility model patent; and (ii) the company has been unsuccessful in obtaining a license from the holder of the rights within a reasonable period of time despite good faith attempts to obtain the license. A compulsory license for the use of a semiconductor technology patent is

Table of Contents

restricted to public and non-commercial uses, or to uses that counter anti-competitive actions, as determined by judicial or administrative procedures.

Under the Layout Design Regulations, the State Council authorities in charge of intellectual property may grant a non-voluntary license to use a layout design in the event of a national emergency or any extraordinary state of affairs, where public interest so requires, or where the holder is engaging in unfair competition, which requires remedy, as determined by a court or governmental authorities in charge of matters involving unfair competition. The scope and duration of the license will be determined in accordance with the reasons justifying the grant. The scope shall be limited to non-commercial use for public purposes, or to remedy the holder's unfair competitive actions as determined by a court or governmental authorities in charge of matters involving unfair competition.

Our PRC patents and the layout designs may be subject to the compulsory license in accordance with the relevant regulations.

Regulations on Foreign Exchange

Foreign exchange regulation in China is primarily governed by the following rules:

Foreign Currency Administration Rules (1996), as amended, or the Exchange Rules; and

Administration Rules of the Settlement, Sale and Payment of Foreign Exchange (1996), or the Administration Rules.

Under the Exchange Rules, the RMB is convertible for current account items, including the distribution of dividends, interest payments, trade and service-related foreign exchange transactions. Conversion of RMB for capital account items, such as direct investment, loan, security investment and repatriation of investment, however, is still subject to the approval of the SAFE or its competent local branches.

Under the Administration Rules, enterprises may only buy, sell or remit foreign currencies at those banks authorized to conduct foreign exchange business after providing valid commercial documents and relevant supporting documents and, in the case of capital account item transactions, obtaining approval from the SAFE or its competent local branches. Capital investments by enterprises outside of China are also subject to limitations, which include approvals by the Ministry of Commerce, the SAFE and the State Development and Reform Commission, or their respective competent local branches.

Regulations on Dividend Distribution

The principal regulations governing dividend distributions of wholly foreign-owned companies include:

Wholly Foreign-Owned Enterprise Law (1986), as amended; and

Wholly Foreign-Owned Enterprise Law Implementing Rules (1990), as amended.

Under these regulations, wholly foreign-owned companies in the PRC may pay dividends only out of their accumulated profits as determined in accordance with PRC accounting standards. Remitting dividends by a wholly foreign-owned enterprise out of China shall be subject to examination by the banks designated by SAFE. In addition, these wholly foreign-owned companies are required to set aside at least 10% of their respective accumulated profits each year, if any, to fund certain reserve funds, until the accumulative amount of such fund reaches 50% of its registered capital. At the discretion of these wholly foreign-owned companies, they may allocate a portion of their after-tax profits based on PRC accounting standards to staff welfare and bonus funds. These reserve funds and staff welfare and bonus funds are not distributable as cash dividends.

Table of Contents

SAFE Regulations on Employee Stock Options

On March 28, 2007, SAFE promulgated the Application Procedure of Foreign Exchange Administration for Domestic Individuals Participating in Employee Stock Holding Plan or Stock Option Plan of Overseas Listed Company, or the Stock Option Rule. The purpose of the Stock Option Rule is to regulate foreign exchange administration of PRC domestic individuals who participate in employee stock holding plans and stock option plans of overseas listed companies. According to the Stock Option Rule, if a PRC domestic individual participates in any employee stock holding plan or stock option plan of an overseas listed company, a PRC domestic agent or the PRC subsidiary of such overseas listed company shall, among others things, file, on behalf of such individual, an application with SAFE to obtain approval for an annual allowance with respect to the purchase of foreign exchange in connection with stock holding or stock option exercises as PRC domestic individuals may not directly use overseas funds to purchase stock or exercise stock options. Concurrent with the filing of such application with SAFE, the PRC subsidiary shall obtain approval from SAFE to open a special foreign exchange account at a PRC domestic bank to hold the funds required in connection with the stock purchase or option exercise, any returned principal or profits upon sales of stock, any dividends issued upon the stock and any other income or expenditures approved by SAFE. The PRC subsidiary also is required to obtain approval from SAFE to open an overseas special foreign exchange account at an overseas trust bank to hold overseas funds used in connection with any stock purchase.

All proceeds obtained by PRC domestic individuals from sales of stock shall be fully remitted back to China after relevant overseas expenses are deducted. The foreign exchange proceeds from these sales can be converted into RMB or transferred to such individuals' foreign exchange savings account after the proceeds have been remitted back to the special foreign exchange account opened at the PRC domestic bank. If the stock option is exercised in a cashless exercise, the PRC domestic individuals are required to remit the proceeds to the special foreign exchange account.

Although the Stock Option Rule has been promulgated recently and many issues require further interpretation, we and our PRC employees who have been granted stock options will be subject to the Stock Option Rule when our company becomes an overseas listed company. If we or our PRC employees fail to comply with the Stock Option Rule, we and/or our PRC employees may face sanctions imposed by foreign exchange authority or any other PRC government authorities.

In addition, the State Administration of Taxation recently has issued a few circulars concerning employee stock options. Under these circulars, our employees working in China who exercise stock options will be subject to PRC individual income tax. Our PRC subsidiaries have obligations to file documents related to employee stock options with relevant tax authorities and withhold individual income taxes of those employees who exercise their stock options. If our employees fail to pay and we fail to withhold their income taxes, we may face sanctions imposed by tax authorities or other PRC government authorities.

PRC Land Use Tax Tentative Regulations

Under the newly revised PRC Land Use Tax Tentative Regulations, since January 1, 2007, foreign-invested enterprises are subject to land use tax, levied on a yearly basis. As such, since January 1, 2007, our Wuxi subsidiary is subject to, and will be levied, land use tax.

PRC Technology Import and Export

According to the Regulation of PRC on Administration of Technology Import and Export effective as of January 1, 2002, technology import and export is broadly defined to include, without limitation, the transfer or license of patents, software and know-how, and the provision of services in relation to technology.

Technology falling into the Catalogue of Prohibited Import or Export Technology, which is promulgated by the PRC government from time to time, shall not be imported or exported. Technology falling into the Catalogue

Table of Contents

of Restricted Import or Export Technology can only be imported or exported upon the approval of the Ministry of Commerce of China. Technology, which does not fall into the above two catalogues, can be imported or exported upon the registration with competent commercial administration authority. For technology import, any transferor or licensor of the technologies shall guarantee that it is the owner of the technologies to be transferred or it has right to transfer or license the technologies. The transferor or licensor shall be responsible for any infringement on the rights of any third parties, if the transferee or licensee uses the technologies pursuant to the technology transfer or license contract. The transferor or licensor of the technologies shall ensure that the technologies it provides are complete, correct, effective and meet the target agreed upon in the license or transfer agreement.

PRC Environmental Law

We are subject to a variety of PRC environmental laws and regulations promulgated by central and local governments concerning examination and acceptance of environmental protection measures in construction projects, the use, discharge and disposal of toxic and hazardous materials, the discharge and disposal of waste water, solid waste, and waste gases, control of industrial noise and fire prevention. These laws and regulations set out detailed procedures that must be implemented throughout a project's construction and operation phases.

An environmental impact assessment report must be submitted to the relevant environmental protection authority for review and approval before construction begins. Upon completion of construction, and prior to commencement of operations, an additional examination and acceptance by the relevant environmental protection authority is required. We can commence operations only after the examination is complete and we have received the necessary acceptance notification. Within one month after receiving approval of the environmental impact assessment report, we are required to apply to the competent environmental authority and file information on the types and quantities of liquid, solid and gaseous waste we plan to discharge, and the manner of discharge and disposal, as well as industrial noise and other related issues. If these types of waste and noise are found by the authorities to be within regulated levels, renewable discharge permits are issued for a specified period of time. We can discharge waste only after obtaining such discharge permits.

PRC's environmental protection authority continuously monitor and conducts periodic audits on the level of our environmental protection compliance. Discharge of liquid, solid and gaseous waste above the permitted levels may result in penalties such as fines, and if not rectified within a specified period, suspension of operations.

The European Union

The European Parliament and the Council of the European Union has adopted the EU Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment, or the RoHS, which requires the member states to promulgate laws to restrict the use of hazardous substances in electrical and electronic equipment, or EEE, and to contribute to the protection of human health and the environmentally sound recovery and disposal of waste EEE. In particular, the member states are required to ensure that from July 1, 2006 new EEEs put on the market does not contain lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls, or polybrominated diphenyl ethers. Breaches of national provisions adopted by the member states are subject to the penalties that are effective, proportionate and dissuasive.

We currently sell our products to four EU member states, namely France, Germany, Italy and Sweden, and each of which has adopted its RoHS provisions. All of our products are RoHS compliant.

Table of Contents**MANAGEMENT****Executive Officers and Directors**

The following table sets forth certain information concerning our executive officers and directors as of September 1, 2007:

Name	Age	Position(s)
<i>Executive Officers:</i>		
Dr. Yang Zhao ⁽⁴⁾	44	President and Chief Executive Officer; Director
Shang Hsiao	46	Chief Financial Officer
Feiming Huang	41	Vice President and General Manager
Patrick Chiumiento	57	Vice President of Marketing and Business Development
Gary O Brien	43	Vice President of Engineering
Patricia Niu	40	Vice President of Finance
<i>Non-Employee Directors:</i>		
Roger Blethen ⁽³⁾⁽⁴⁾	56	Director
Ron Dizey ⁽¹⁾	42	Director
James A. Saalfield ⁽¹⁾	60	Director
Michael Tung ⁽²⁾⁽⁴⁾	52	Director
David Yang ⁽²⁾⁽³⁾	39	Director
Paul M. Zavracky ⁽²⁾⁽³⁾	59	Director

(1) Messrs. Dizey and Saalfield have agreed to resign from our board of directors effective upon completion of this offering.

(2) Member of the audit committee.

(3) Member of the compensation committee.

(4) Member of the nominating committee.

There are no family relationships among any of our executive officers and directors.

Executive Officers

Dr. Yang Zhao is our founder and has served as our President and Chief Executive Officer since our inception. Dr. Zhao has over 15 years of experience in MEMS technology and related business development. Prior to founding our company in 1999, Dr. Zhao served in various management positions at Analog Devices, Inc. for seven years, where he was instrumental in developing ADI's potential MEMS product line and forming industry-wide strategic relationships. Dr. Zhao is well-recognized in the field of MEMS technology. He has been named as an inventor on 11 U.S. patents in IC circuit, processing, packaging and MEMS technology. Dr. Zhao holds a B.S. degree in physics from Peking University, as well as a master's degree and a Ph.D. in electrical engineering from Princeton University where he studied under Professor Daniel Tsui, who won the 1998 Nobel Prize in physics. He is currently the vice chairman of the board at the School of Engineering of Peking University.

Shang Hsiao has served as our Chief Financial Officer since 2007. Mr. Hsiao has more than 20 years of experience in financial, legal, tax and business. Prior to joining us, Mr. Hsiao served as the chief executive officer at Centuryfone Networking and Communication Co. from September 2003 to May 2007. From July 2000 to September 2003, Mr. Hsiao served as the chief financial officer at YesKey Group. From January 1994 to July 2000, Mr. Hsiao was a senior manager of business, tax, and legal advisory for Arthur Andersen LLP in Philadelphia and Shanghai. Mr. Hsiao received his J.D. degree from Rutgers School of Law in New Jersey in 1994 and a B.A. in finance and accounting from Temple University in Pennsylvania in 1989. Mr. Hsiao has been a certified public accountant since 1989 and was admitted to the Pennsylvania Bar in 1994.

Table of Contents

Feiming Huang has served as our Vice President and General Manager since 1999. Prior to joining us in October 1999, Mr. Huang served as a bipolar process engineer, application engineer, fab manager, packaging and testing manager, metal-oxide semiconductor division general manager, and executive vice president of China Huajing Electronics Group Corp. from 1988 to 1999. Mr. Huang finished the EMBA program at University of Warwick in England specializing in manufacturing management and quality systems in October 1999. He received a B.S. in electrical engineering from South-China Poly-tech University and an M.S. in electrical engineering Hua Zhong University.

Patrick Chiumiento has served as our Vice President Marketing and Business Development since February 2007. Mr. Chiumiento has over 25 years of experience in technical marketing, sales and business development in the semiconductor industry. Prior to joining us in February 2007, Mr. Chiumiento was the co-founder of Chipwrights, Inc., a producer of high performance DSP devices optimized for the imaging market, and served as its vice president of World Wide Sales & Business Development from 2000 to 2005 and chief executive officer from 2005 to 2007. Mr. Chiumiento co-founded N*Able Technologies, Inc. in 1996 and served as its vice president of sales and marketing from 1996 to 1999. From 1973 to 1996, Mr. Chiumiento held various vice president and management level positions at a number of companies including Databook Corporation, IBM Microelectronics, Chips and Technologies, NEC Electronics (USA), and ITT Semiconductor. He received a B.S.E.E. from University of Massachusetts at Lowell and completed his post graduate studies in Business Administration at Merrimac College and Northeastern University.

Gary O Brien has served as our Vice President of Engineering since July 2007. Mr. O Brien has 14 years of experience in the design and development of multiple accelerometer and pressure sensors. Mr. O Brien joined Motorola's Sensor Products Division in Tempe, Arizona, as a mixed signal circuit design engineer in 1993. From 1993 through 2005, he designed and developed multiple pressure, acceleration and angular rate (gyroscope) sensor systems for Motorola and its recent spin-off company, Freescale Semiconductor. From 2005 until 2007, Mr. O Brien was an assistant professor at Arizona State University. He currently holds nine issued patents in the MEMS area, in addition to having previously generated multiple automotive accelerometer and pressure sensor/ASIC designs. Mr. O Brien received a B.S. degree in electrical engineering with honors from the Florida Institute of Technology in Melbourne, FL, in 1988. He received an M.S. degree in electrical engineering from the Georgia Institute of Technology, Atlanta in 1993, and a Ph.D. in electrical engineering from the University of Michigan, Ann Arbor in 2004.

Patricia Niu has served as our Vice President of Finance since September 2006. Ms. Niu has over 12 years of experience in corporate finance and four years of experience in commercial banking. Prior to joining us in 2002, Ms. Niu served as the International Business Unit Controller at Key3Media Events, Inc. from 2001 to 2002 and the Senior Financial Analyst and Audit Supervisor at Fesenius Medical Care, N.A. from 1995 to 2001. From 1989 through 1995, Ms. Niu served as a commercial lender at the Savings Bank in Wakefield, Massachusetts and the Bank of China, Head Office in Beijing, China. Ms. Niu received an M.B.A. from Northeastern University in Boston in 1994 and a B.A. from Beijing Foreign Studies University in China in 1989. She is also a certified public accountant.

Non-Employee Directors

Roger Blethen has served as a director since April 2005. In 2001, Mr. Blethen was appointed chairman of the board of LTX Corporation, a major provider of semiconductor test solutions to major integrated-circuit manufacturers. Mr. Blethen served as the president and chief executive officer of LTX Corporation from 1994 to October 2005. As a co-founder of LTX in 1976, Mr. Blethen led the development and marketing of three generations of LTX semiconductor test equipment (STE) systems. Mr. Blethen served as a Director and Chairman of U.K.-based Synad Technologies Ltd. Mr. Blethen currently serves Northeastern University as a Member of the Corporation and on its Industrial Advisory Board to the Department of Electrical and Computer Engineering. Mr. Blethen recently became a charter member of the Corporate Directors Club, an education and networking organization for Public Company directors. Mr. Blethen received his B.S. in Electrical Engineering from Northeastern University in 1974.

Table of Contents

Ron Dizy has served as a director since 2001. Mr. Dizy is currently president and chief executive officer of Sempa Power Systems. Prior to joining Sempa in 2007, Mr. Dizy was a partner at Celtic House since 2000. Prior to joining Celtic House, Mr. Dizy served as a portfolio manager in the venture capital group at the Ontario Teachers' Pension Plan. In 1992, Mr. Dizy co-founded Altera Systems Corporation, a consulting firm focused on business applications of artificial intelligence. From September 1990 to August 1992, he served as Principal Knowledge Engineer at AICorp, a leading software firm in the field of business AI. He also served as Senior Consultant at Andersen Consulting from May 1987 to August 1990. Mr. Dizy has served as a director of many private companies including Sirific Wireless, Camilion Solutions, ViXS Systems, FastLane Technologies (acquired by Quest Software), Nexia Biotechnologies, ITF Optical Technologies and Pinpoint Local Positioning Systems. Mr. Dizy received a Bachelor of Applied Science degree in Industrial Engineering from the University of Toronto in 1987.

James A. Saalfield has served as a director since 1999. Mr. Saalfield has more than 20 years of experience investing in and advising early stage companies. Over the past 14 years, Mr. Saalfield has served on the board of directors of more than 25 public and private companies in the healthcare, data acquisition, data management and data distribution industries. He has served on the boards of KVH Industries, Physiometrix, PAREXEL International, Kronos, Inc., U.S. Genomics, Inc., Xanthus Pharmaceuticals Inc., Tracer Technologies Inc., Bus-Tech, Inc., and Spinwave Systems, Inc., among others. Mr. Saalfield has served as the Managing General Partner of Still River Funds and president of Still River Management Co. since 1995. Prior to founding Still River Funds, he was the Managing General Partner of Dean's Hill Limited Partnership from 1994 to 1995. Mr. Saalfield was a General Partner of Fleet Financial Group's venture capital funds, Fleet Venture Partners I-IV from 1985 through 1993. Earlier in his career, Mr. Saalfield served in a number of administrative positions at Harvard University, the last being Assistant Dean for Administrative Affairs at Harvard Business School in 1979. He received an M.B.A. from Harvard Business School in 1971 and a B.A. from Oberlin College in 1969.

Michael Tung has served as a director since 2004. Mr. Tung joined InveStar Capital Inc. as CFO and Managing Partner in April 2002 and is responsible for managing the investment portfolio companies in both Taiwan and U.S., including due diligence before investment, follow-on portfolio management, reporting requirements to our stockholders as well as the funding, financing/accounting related issues. Mr. Tung also serves as Managing Partner to manage the Silicon Valley office. Mr. Tung has over 20 years of experience in finance, taxation, accounting and general management. He served as CFO for more than 10 years in various organizations, including Acer America Corp., Foxconn Corporation and Fibera Inc. (a start-up company). Mr. Tung worked as Senior Audit Manager of KPMG for 10 years. Mr. Tung received a B.S. degree in Accounting from Tam Kay University.

David Yang has served as a director since 2007. Mr. Yang is a partner of The CID Group and joined the CID Group as one of the founding employees in 1998. Prior to founding The CID Group, Mr. Yang co-founded an incubator firm, Future Technology Consulting, Inc. to provide legal and advisory work to technology start-up companies in Taiwan. From 1994 to 1997, he served as a lawyer for Tsar and Tsai Law Firm and Jones Day Reavis Pogue. Mr. Yang has served as directors or observers on several private companies and two companies which he invested in are presently publicly listed, Techwell, Inc (Nasdaq: TWLL) and Advanced Analogic Technologies, Inc. (Nasdaq: AATI). Mr. Yang currently also serves as a director for Young Fast Optoelectronic Co., Ltd. Mr. Yang received a J.D. degree from Cornell University in 1993 and a B.A. degree in Asian Studies from the University of Michigan, Ann Arbor in 1990.

Paul M. Zavracky has served as a director since 1999. Dr. Zavracky's more than 30 years of business experience includes research at MIT Lincoln Laboratory, teaching at a major university, and management of successful venture funded companies. Prior to joining Northeastern as the Dean of the School of Technological Entrepreneurship, he was the president and chief operating officer of The MicroOptical Corporation, a start-up company he co-founded. Between 1991 and 1998, he was a tenured professor of electrical engineering at Northeastern University where he established a micro-electromechanical systems program that developed both surface and bulk micromachined devices. He raised more than \$9 million in research funding. Dr. Zavracky was the

Table of Contents

chief operating officer of Kopin Corporation, a venture backed company that he and a small group of colleagues from the Massachusetts Institute of Technology's Lincoln Labs started. He led the effort in establishing Kopin's SOI materials capability as an enabling technology for liquid crystal microdisplays. Dr. Zavracky spent five years at The Foxboro Company as principal scientist and technical group leader establishing a MEMS program beginning in 1980. Dr. Zavracky also spent five years at Coulter Corporation managing the government system group working on electrophotographic film and five years at MIT Lincoln Laboratory where he was involved in the development of materials for solar energy applications. He obtained his Ph.D. in physics at Tufts University. He holds bachelors and master's degrees in physics from Northeastern University. He has more than 100 publications and 67 issued patents.

Board Composition upon Completion of This Offering

Our bylaws effective upon completion of this offering provides that our board of directors shall consist of three to nine members, except that whenever we have only one stockholder, we may have only one director. Other than the foregoing, our board of directors will determine the number of directors from time to time by board resolution.

Prior to the completion of this offering, our board of directors consisted of seven directors. These seven directors were nominated and elected in accordance with the provisions of our amended and restated certificate of incorporation and the amended and restated stockholders' voting agreement between us, Dr. Zhao and all holders of our preferred stock. Upon completion of this offering, the nominating and voting provisions in our amended and restated stockholders' agreement will terminate, and our then-effective certificate of incorporation will not contain such provisions, and none of our stockholders will have any special rights regarding the election or designation of board members. See "Certain Relationships and Related Party Transactions - Relationship with Our Directors".

Messrs. Dize and Saalfield have agreed to resign from our board of directors effective upon completion of this offering. As a result, upon completion of this offering, our board of directors will consist of five members, one of whom will be Dr. Zhao, our President and Chief Executive Officer. Upon completion of this offering, our board of directors will be divided into three classes, each of which will be subject to re-election every three years, as follows:

Class I director, which will initially consist of David Yang, will serve for a term ending on the date of the annual meeting in 2008;

Class II directors, which will initially consist of Roger Blethen and Yang Zhao, will serve for a term ending on the date of the annual meeting in 2009; and

Class III directors, which will initially consist of Michael Tung and Paul Zavracky, will serve for a term ending on the date of the annual meeting in 2010.

After completion of the current term, each director is elected for a term of three years and serves until a successor is duly elected or until his or her death, resignation or removal. This classification of directors could have the effect of increasing the length of time necessary to change the composition of a majority of our board of directors. In general, at least two annual meetings of stockholders will be necessary for stockholders to effect a change in a majority of the members of our board of directors. This classified board of directors may discourage, delay or prevent a change in our management or control over us that stockholders may consider favorable. See "Risk Factors - Risks Related to This Offering - Delaware law and provisions of our charter documents could discourage potential acquisition proposals and could delay, deter or prevent a change in control."

Board Committees

Our board of directors has established an audit committee, a compensation committee and a nominating committee.

Table of Contents

Audit committee. Our audit committee consists of Messrs. Tung Yang and Zavracky, with Mr. Tung serving as chair. Our audit committee oversees our corporate accounting and financial reporting process and internal controls over financial reporting. Our audit committee evaluates the qualifications, independence and performance of our independent auditor; engages and determines the compensation of the independent auditor; approves the retention of the independent auditor to perform any proposed permissible non-audit services; reviews our financial disclosures, including our critical accounting policies and internal controls over financial reporting; prepares an annual report to our stockholders for inclusion in our proxy statement; reviews and approves in advance any proposed related party transactions; and discusses with management and the independent auditor the results of the annual audit and our financial statements. We believe that our audit committee members meet the requirements for independence and financial literacy under the current requirements of the Sarbanes-Oxley Act of 2002, The NASDAQ Global Market and the SEC rules and regulations. In addition, the board of directors has determined that Mr. Tung is qualified as an audit committee financial expert within the meaning of the SEC rules and regulations.

Compensation committee. Our compensation committee consists of Messrs. Blethen, Yang and Zavracky, with Mr. Blethen serving as chair. Our compensation committee administers our stock option plans and employee stock purchase plans; recommends to our board of directors the compensation of our executive officers; prepares a report of the committee required by the rules of the SEC to be included in our proxy statement; recommends to our board of directors any performance-based awards to be granted to any of our executive officers or other employees; recommend to our board of directors the terms and conditions of any employment agreement and any arrangements regarding severance or change of control payments with any of our executive officers; recommend to our board of directors, and review periodically, the compensation of our directors, recommend to our board of directors, and review periodically, the composition of our plans and programs for employee compensation. We believe that each member of our compensation committee meets the requirements for independence under, and the functioning of our compensation committee complies with, any applicable requirements of The NASDAQ Global Market and the SEC rules and regulations.

Nominating committee. Our nominating committee consists of Messrs. Blethen, Tung, and Zhao, with Mr. Tung serving as chair. Our nominating committee identifies individuals qualified to become members of the board and to recommend to our board of directors nominees for election as directors. We believe that Messrs. Blethen and Tung meet the independence requirements under The Nasdaq Global Market and SEC rules. Dr. Zhao, as our President and Chief Executive Officer, is not independent under these rules. However, under the Nasdaq Global Market and SEC rules, we are permitted to maintain a nominating committee comprised of less than all independent members for one year from the initial listing of our securities.

Code of Conduct and Code of Ethics

Our board of directors has adopted a code of conduct, which establishes the standards of ethical conduct applicable to all of our directors, officers and employees. Our code of conduct addresses issues relating to, among other things, conflicts of interest, related party transactions, use of company funds and sensitive payments, corporate opportunities, internal controls over financial reporting, and confidential information. In addition, our board of directors has adopted a code of ethics applicable to our chief executive officer and chief financial officer. Our code of ethics sets guidelines for these individuals to implement policies and procedures to enhance disclosure and reporting system at our company.

Compensation Committee Interlocks and Insider Participation

None of our executive officers serves as a member of the board of directors or compensation committee (or other committee performing equivalent functions) of any entity that has one or more executive officers serving on our board of directors or compensation committee. None of the members of our compensation committee has ever been an executive officer or employee of our company.

Table of Contents

Limitations on Director and Officer Liability and Indemnification

Our amended and restated certificate of incorporation effective upon completion of this offering will provide that we will indemnify each of our directors and officers to the fullest extent permitted under the Delaware General Corporation Law.

Table of Contents

COMPENSATION DISCUSSION AND ANALYSIS

General

We seek to attract and retain talented and dedicated executive officers in the semiconductor industry. To that end, we aim to compensate our executive officers in a manner consistent with our strategy and competitive practice and to align executive officers' incentives with stockholder value creation.

We view each component of executive compensation as related but distinct, and we also review total compensation of our executive officers to ensure that our overall compensation goals are met. The compensation committee determines appropriate compensation levels based on independent compensation reports to evaluate compensation paid by our peer companies in the semiconductor and other advanced technology- and information technology-related industries, input from our board of directors, achievement of profit and business objectives, and other considerations it deems relevant. We have conducted an annual benchmark review of our Chief Executive Officer's compensation as well as the appropriate mix of different forms of compensation based on an annual independent and commercially available compensation report of private companies in the semiconductor and other advanced technology- and information technology-related industries. In addition, we evaluate the Chief Executive Officer's performance measured against specific annual performance objectives and milestones. For 2006, the performance objectives included revenue and profit growth, gross margin performance, expense control, introduction of new products to market, key accounts won and lost, and recruitment of key personnel, among others. We generally seek to ensure that compensation is appropriate for an executive officer's level of responsibility and for the promotion of future performance.

We have not retained a compensation consultant to review our policies and procedures with respect to executive compensation. Historically, our compensation committee determined the compensation packages of Yang Zhao, our founder and Chief Executive Officer. Dr. Zhao determined the compensation of our other executive officers. For compensation decisions regarding the grant of equity compensation, the board of directors typically considers recommendations from Dr. Zhao. Upon completion of this offering, our compensation committee will play a more prominent role in determining the compensation of all our executive officers. In addition, we plan to hire a compensation consultant to review and recommend the appropriate compensation for our executive officers. Compensation of each executive officer, other than that of our Chief Executive Officer, will be proposed by our Chief Executive Officer and will be subject to approvals by our compensation committee. Compensation of our Chief Executive Officer will continue to be determined by our compensation committee.

Although we have not adopted any formal guidelines for allocating total compensation between equity compensation and cash compensation, we believe it is important for these executive officers to also have some equity ownership in our company to provide them with long-term incentives to build value for our stockholders. Accordingly, since 2000, we have granted our principal executive officers certain equity awards. We determine the amount of grants to each executive officer based on their prior experience if newly recruited, their ability to meet performance goals, whether they attained notable achievements, and their contribution to our overall performance. We believe that the awards are sufficient to provide these long-term incentives. We intend to implement and maintain compensation plans that tie a substantial portion of our executive officers' overall compensation to our short-term and long-term performance. We believe that a performance-based compensation is an important component of the total executive compensation package for maximizing stockholder value while, at the same time, attracting, motivating and retaining highly-qualified executive officers.

Accounting Considerations

Section 162(m) of the Code limits our deduction for federal income tax purposes to not more than \$1.0 million of compensation paid to individual executive officers in a calendar year. Compensation above \$1.0 million may be deducted if it is performance-based compensation. The compensation committee has not yet established a policy for determining which forms of incentive compensation awarded to our executive officers

Table of Contents

will be designed to qualify as performance-based compensation. To maintain flexibility in compensating our executive officers in a manner designed to promote our objectives, the compensation committee has not adopted a policy that requires all compensation to be deductible. However, the compensation committee intends to evaluate the effects of the compensation limits of Section 162(m) on any compensation it proposes to grant, and the compensation committee intends to provide future compensation in a manner consistent with our best interests and those of our stockholders.

Effective January 1, 2006, we adopted the fair market value provisions of SFAS 123(R). Under SFAS 123(R), we are required to estimate and record an expense for each award of equity compensation (including stock options and restricted common stock) over the vesting period of the award. The compensation committee has determined to retain our equity compensation program and has approved our 2007 Stock Incentive Plan (the 2007 Stock Plan) with 3,000,000 authorized shares available for the granting of stock options and equity awards which we will recognize this expense on an ongoing basis according to SFAS 123(R). We generally grant equity awards to our employees based on applicable accounting guidance at fair market value on the grant date in accordance with the determination in good faith by the compensation committee of our board of directors. Our compensation committee approved the engagement of an independent third-party valuation firm to assist its determination of fair market value of the equity awards in 2006 and 2007.

Elements of Compensation

We evaluate individual executive officer performance with a goal of setting compensation at levels we believe are comparable with executive officers in other companies of similar size, industry, comparability of labor markets and product offering, market capitalization, research and development investment, financial performance, and stage of development, which we consider to be our peer group companies. We have derived information relating to compensation levels from an independent and commercially available compensation report (the annual Compensation & Entrepreneurship Report in Information Technology, or the Report). The Report is a survey of companies in the private sector and does not identify the companies sampled by name, but anonymously classifies companies by size, region and business segment. In light of the Report, we subjectively attempt to keep the compensation of our executive officers within reasonable limits comparable with those companies in the Report that have more than 76 employees, are located in the New England area and are in the software and hardware, semiconductor and electronics businesses.

In determining compensation for our Chief Executive Officer in 2006 and 2007, the compensation committee had considered the stage of our development in setting his base salary and target bonus at approximately the 75th percentile of the comparable private companies surveyed in the Report, after taking into account aging of the data. The compensation committee considered the 75th percentile to be appropriate because it believed that we were comparable to the upper end of the companies in the survey in terms of size, number and success in financing and in terms of a high level of performance for a company of our age. For his 2008 compensation, the compensation committee expects to use a peer group of technology companies that have recently gone public, including such companies as Bladelogic, DivX, GSI Technology, Salary.com, and Solarfun Power, and expects to set his base salary at between the 50th and 60th percentile (taking into account pre-aging of the historical data) and target bonus at between the 50th and 60th percentile of such companies.

In determining compensation for our other executive officers in 2006 and 2007, our Chief Executive Officer sought to set overall compensation that is competitive and commensurate with each officer's experience. For existing executive officers, he sought to set overall compensation at approximately the 75th percentile of the private companies surveyed in the Report. For newly hired executive officers, each element of compensation as well as overall compensation was set at approximately the 50th percentile of the comparable companies surveyed in the Report. However, this is not a strict formula, as individual compensation may vary based on individual industry experience and professional achievements as well as on individual negotiations with the executive

Table of Contents

officers who may have differing preferences for equity or cash compensation. At this time, compensation paid to our executive officers consists of the following elements:

Base salary. Base salaries for our executive officers are established by our Chief Executive Officer based on his considerations of the scope of their responsibilities and individual experience, taking into account competitive market compensation as reviewed in the Report. Base salaries are reviewed at least annually based on performance and adjusted from time to time after taking into account individual experience, responsibilities and overall performance. Currently, the compensation committee determines the base salary of Dr. Zhao. Prior to this offering, our process for setting compensation has been informal compared with other public companies based on a review of their public filings. After this offering, we expect that the base salary for the other executives will be subject to approval of the compensation committee and the process will likely become more formalized. However, we have not determined a formal process to date. In 2006, our executive officers, Dr. Zhao, Patricia Niu, and Feiming Huang received an annual base salary of \$200,000, \$103,966, and \$109,572, respectively. Three of our executive officers joined us in 2007: in July 2007, Shang Hsiao became our Chief Financial Officer with an annual base salary of \$150,000; in February 2007, Patrick Chiumiento became our Vice President of Marketing and Business Development with an annual base salary of \$180,000; and in July 2007, Gary O'Brien became our Vice President of Engineering with an annual base salary of \$160,000.

Discretionary annual bonus. In addition to base salaries, our executive officers are awarded discretionary annual bonuses that are intended to reward officers for achievement of profit and business goals and for achieving individual annual performance objectives. These objectives may vary depending on the individual executive officer, but relate generally to financial and operational targets. In 2006, the compensation committee established a bonus plan focused on revenue, major account wins and introduction of new products to market with the weight of each element varying depending on the executive officer's responsibilities. Bonus levels depended on each executive officer's performance measured against specific performance objectives. Annual bonuses are paid in cash in an amount reviewed and approved by our board of directors, which has worked to determine the performance and operational criteria necessary for the award of such bonuses. The compensation committee retained discretion over the bonus plan and had the right to terminate it at any time.

Under the bonus plan, the target bonus payment any executive officer, with the exception of Dr. Zhao, could receive is measured as a fixed percentage of such executive officer's salary based on whether the performance objectives were met. The actual bonus payment varies based on how well the executive officer achieved the pre-determined performance objectives.

In 2006, the performance objectives for our Chief Executive Officer included a target for increases in net sales over 2005, with increasing bonus amounts for every increment of one million dollars achieved above the target. For reaching the target of an approximately 22% increase in net sales, the bonus was \$8,000; approximately 33% increase in net sales, the bonus was \$17,000; approximately 44% increase in net sales, the bonus was \$31,000; approximately 55% increase in net sales, the bonus was \$49,000; approximately 66% increase in net sales, the bonus was \$70,000; approximately 77% increase in net sales, the bonus was \$90,000; approximately 88% increase in net sales, the bonus was \$108,000; and approximately 99% increase in net sales, the bonus was \$129,000. In addition, the committee provided incentives to our Chief Executive Officer for each key account won, for each new product developed and delivered, and upon assembling the management team in the amounts of \$10,000, \$20,000 and \$25,000, respectively. A key account is any new customer that contributes over \$0.3 million in net sales. In addition, during 2006, the compensation committee, in its discretion, reduced the stockholder loan granted by the Company to our Chief Executive Officer by \$50,000 and added a tax gross-up for the amount reduced of \$34,960 based on an increase in our net sales of at least 30% and an increase in net income of at least 5% before charges associated with change in value of warrants and extraordinary items in fiscal year ended 2005 as compared with 2004.

Table of Contents

In 2006, the performance objectives for our Vice President of Operations included surpassing a net income target by at least 5% for a bonus of a 2% of base salary and a 2% additional bonus for each incremental 5% increase, surpassing a net sales target at a pre-determined baseline of \$12.0 million for a bonus of 5% of base salary for each \$1 million increase above the baseline. In addition, maintaining 100% on-time order shipment as net sales increase, maintaining a customer return rate below 10 units per million units shipped and reducing costs by 10% were rewarded with a bonus of 5%, 5% and 10% of base salary, respectively. The performance objectives for our Vice President of Finance included reaching a net income target for a bonus of 8% of base salary and an additional 8% bonus for each incremental 10% increase. Maintaining internal financial control within target was rewarded with a 10% bonus of base salary. The net income target for both Vice Presidents was \$2.8 million before tax, charges associated with change in value of warrants in 2006 and extraordinary items. Both Vice Presidents' target bonuses for 2006 were 30% of their base salary. Given our strong performance in 2006, most individual performance objectives were met. Based on our historical performance and growth as a privately held company, the compensation committee believed that the probability of achieving these objectives were challenging but achievable.

In 2007, the performance objectives for our Chief Executive Officer include a target for increases in net sales over 2006 with increasing bonus amounts for every increment of one million dollars achieved above the target. For reaching the target of an approximately 46% increase in net sales over 2006, the bonus will be \$8,000; approximately 54% increase in net sales, the bonus will be \$17,000; approximately 62% increase in net sales, the bonus will be \$31,000; approximately 69% increase in net sales, the bonus will be \$49,000; approximately 77% increase in net sales, the bonus will be \$70,000; approximately 85% increase in net sales, the bonus will be \$90,000; approximately 92% increase in net sales, the bonus will be \$108,000; approximately 100% increase in net sales, the bonus will be \$129,000; approximately 108% increase in net sales, the bonus will be \$155,000; and approximately 115% increase in net sales, the bonus will be \$185,000. The additional incentives for our Chief Executive Officer remained the same as in 2006. Although the net sales target for 2007 is more challenging than 2006, we believe it is achievable given the growth we have experienced in 2007.

In 2007, the compensation committee applied the same bonus plan as in 2006 for our Vice President of Operations and Vice President of Finance. The compensation committee, with the recommendation of our Chief Executive Officer, established performance objectives for the new executive officers who joined in 2007. Our Chief Financial Officer will be eligible for a discretionary bonus of \$50,000 upon the completion of our initial public offering. The performance objectives for our Vice President of Engineering for 2007 included reaching a net income target for a bonus of 2% of base salary and an additional 2% bonus for each incremental 10% increase in net income above the target, successful introduction and development of new product with a 10% bonus per product, and development and on-time introduction of technology platform with which to implement each new product with a 10% bonus per product. The performance objectives for our Vice President of Marketing and Business Development for 2007 included reaching a net income target for a bonus of 2% bonus of base salary and an additional 2% bonus for each incremental 5% increase in net income above the target, key partnership development with a 10% bonus per new relationship, and on-time introduction of new product with respect to product solution, strategic positioning and introduction to market with a 10% bonus for each new product. A key partnership is a relationship developed with a company that has leading-edge technology and solutions that will enhance our ability to penetrate new market segments or create new solutions for our customers. The net income target for the Vice Presidents is \$6.0 million before tax and extraordinary items in 2007. For our Vice Presidents, the target bonus for 2007 was 30% of their base salary. Based on amounts paid out and earned in 2006, we anticipate approximately the same level of achievement in 2007.

In February 2007, Mr. Chiumiento was provided with a guaranteed bonus after the first six months of employment of \$10,000 in accordance with his offer letter. In July 2007, Gary O'Brien became our Vice President of Engineering and was provided with a guaranteed bonus after the first six months of employment of \$8,000 in accordance with his offer letter.

Table of Contents

Long-term incentives. We believe that our current compensation structure is sufficient to align the interests of our executive officers with those of our stockholders and that long-term performance is achieved through an ownership culture that encourages performance by our named executive officers through the use of stock-based awards. We utilize stock options and restricted common stock to ensure that our named executive officers have a continuing stake in our long-term success. In the past, we have granted stock options and equity awards to our executive officers through our 2000 Stock Plan. We have since implemented the 2007 Stock Incentive Plan to grant stock options and equity awards to our executive officers, thereby increasing the number of authorized shares available for issuance by 1,500,000 shares, subject to potential adjustments. See 2007 Stock Incentive Plan. The board of directors has considered outstanding job performance, contributions to our company and achievement of certain benchmarks in granting past awards as well as considered the Report and the level of equity awards to employees of peer companies.

In August 2007, we had approximately 865,000 shares in the 2000 Stock Plan available for grant. In consideration of the excellent job of growing and managing the Company, we granted approximately 447,500 of those shares to approximately 100 employees. Of these allocations, Mr. Huang received 100,000 shares and Ms. Niu received 50,000 shares, which will vest 25% at each anniversary of grant at a modified exercise price of \$7.64 per share.

In October 2007, we also granted Dr. Zhao an option award of 250,000 shares from the 2000 Stock Plan to be vested in equal installments over four years and an additional performance-based option award of 250,000 shares from the 2007 Stock Plan. The performance-based options will vest based on the following terms and conditions: (i) no vesting shall occur until the completion of our initial public offering, and (ii) 62,500 options will vest on the day after any period of 12 rolling months in which we recognize at least \$10.5 million in earnings before taxes, excluding amortization of intangible assets associated with future acquisition; (iii) an additional 62,500 options will vest on the day after any period of 12 rolling months in which we recognize at least \$13.1 million in earnings before taxes, excluding amortization of intangible assets associated with future acquisition; (iv) an additional 62,500 options will vest on the day after any period of 12 rolling months in which we recognize at least \$15.8 million in earnings before taxes, excluding amortization of intangible assets associated with future acquisition; and (v) an additional 62,500 options will vest on the day after any period of 12 rolling months in which we recognize at least \$18.4 million in earnings before taxes, excluding amortization of intangible assets associated with future acquisition. Irrespective of the above terms and conditions, the options shall vest fully on the eighth anniversary of the grant date.

Dr. Zhao's grant was determined by a majority of our directors with input from the compensation committee regarding chief executive officer share ownership as compared with the private companies surveyed in the Report. Assuming that the total 500,000 options granted fully vests, Dr. Zhao's equity ownership based on our shares outstanding at September 30, 2007 will be within the median range of the CEO founders of companies in the Report. Dr. Zhao would hold about 13% of the Company's equity, whereas the median range of equity holdings for CEO founders was 10% to 18.6%.

We have granted stock options to each of the three executive officers who joined us in 2007. On February 5, 2007, we granted Mr. Chiumiento stock options to purchase 110,000 shares of our common stock at an exercise price of \$1.54 per share. On July 12, 2007, we granted Mr. Hsiao stock options to purchase 275,000 shares of our common stock at an exercise price of \$4.88 per share. On July 26, 2007, we granted Mr. O'Brien stock options to purchase 55,000 shares of our common stock at an exercise price of \$4.88 per share. For new hires such as Messrs. O'Brien, Hsiao and Chiumiento, equity awards were commensurate with individual experience, but were also subject to individual negotiation. The amount of each grant took into account current executive officers and the specific number of shares and their value at the time of grant required to recruit each individual. Prior to the offering, Dr. Zhao recommended to the compensation committee the amount of equity grants to the named executive officers, with the exception of himself. The compensation committee considers his recommendation and the above considerations in awarding each equity grant.

Table of Contents

We have not adopted stock ownership guidelines for our executive officers. The 2000 Stock Plan has provided the principal method for our executive officers to acquire equity or equity-linked interests in our company in the past.

Other compensation and benefits. We maintain employment benefits that are provided to certain full-time employees, including health insurance, housing, gasoline mileage reimbursements, retirement savings and 401(k) plan, short and/or long-term disability insurance, group and supplemental life insurance. We also provide vacation and other paid holidays to all employees, including our executive officers, which are comparable to those provided at our peer group of companies, companies of similar size, industry, comparability of labor markets and product offering, market capitalization, research and development investment, financial performance, and stage of development.

Executive Compensation

2006 Summary Compensation Table. The following table sets forth compensation information for our Chief Executive Officer, our Chief Financial Officer or someone serving in a similar capacity, and our other most highly compensated officer for the year ended December 31, 2006. We had no other executive officers who received compensation in excess of \$100,000 in the year ended December 31, 2006. These executive officers are referred to as the named executive officers elsewhere in this prospectus. Except as provided below, none of our named executive officers received any other compensation required to be disclosed by law or in excess of \$10,000 annually.

Name and principal position	2006 annual compensation		Long term compensation awards		All other compensation (\$)	Total (\$)
	Salary (\$)	Bonus (\$)	Stock awards (\$)	Option awards (\$)(1)		
Yang Zhao <i>President & Chief Executive Officer</i>	200,000	165,000			84,960 ⁽²⁾	449,960
Feiming Huang <i>Vice President Operations</i>	109,572	27,393				136,965
Patricia Niu <i>Vice President Finance</i>	103,966	16,016		2,114		122,096

- (1) Reflects the compensation expense recognized in 2006 under SFAS 123(R) as reported in our financial statements. See Management's Discussion and Analysis of Financial Conditions and Results of Operations Critical Accounting Policies Stock-Based Compensation for a discussion of the relevant assumptions used in calculating the compensation expense.
- (2) Reflects the partial forgiveness in the amount of \$50,000 of a stockholder loan to Dr. Zhao in consideration for his performance in 2005 and includes an income tax gross-up for such amount.

Grants of plan-based awards in 2006. We have granted and plan to continue to grant stock options to executive officers, employees and other service providers to purchase our common stock. The following table provides information regarding grants of plan-based awards to our named executive officers during the year ended December 31, 2006.

Name	Grant date	Option awards: number of securities underlying options	Exercise or base price of option awards	Grant date fair value of option awards
Patricia Niu	November 9, 2006	25,000 ⁽¹⁾	\$ 1.54	\$ 38,500

- (1) None of these options had vested as of December 31, 2006. The options vest 25% on each anniversary of grant.

Table of Contents

Outstanding equity awards at December 31, 2006. The following table provides information concerning outstanding equity awards as of December 31, 2006, by each of our named executive officers.

Name	Number of securities underlying unexercised options exercisable (#)	Number of securities underlying unexercised options unexercisable (#)	Option exercise price (\$)	Option expiration date
Yang Zhao	23,125 ⁽¹⁾	69,375	0.30	01/01/2015
Feiming Huang	60,000 ⁽²⁾		1.00	10/22/2009
	40,000 ⁽³⁾		1.00	02/28/2011
	30,000 ⁽⁴⁾			