

IMAGE SENSING SYSTEMS INC
Form S-1
May 12, 2008

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As filed with the Securities and Exchange Commission on May 12, 2008

Registration No. 333-_____

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1

REGISTRATION STATEMENT UNDER

THE SECURITIES ACT OF 1933

Image Sensing Systems, Inc.

(Exact name of registrant as specified in its charter)

Minnesota

(State or other jurisdiction of incorporation or organization)

3829

(Primary Standard Industrial Classification Code Number)

41-1519168

(I.R.S. Employer Identification No.)

500 Spruce Tree Centre

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1600 University Avenue West

St. Paul, Minnesota 55104

Telephone: (651) 603-7700

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

Gregory R. L. Smith

Chief Financial Officer

Image Sensing Systems, Inc.

500 Spruce Tree Centre

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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 being 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 number of 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 number of the earlier effective registration statement for the same offering.

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If this Form is a post-effective amendment to a registration statement 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 regulation statement for the same offering.

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to Be Registered	Amount to be registered(1)	Proposed maximum offering price per unit(2)	Proposed maximum aggregate offering price(1)(2)	Amount of registration fee
Common Stock, \$0.01 par value	1,725,000 shares	\$15.78	\$27,220,500	\$1,070

(1) Includes 225,000 shares of common stock issuable upon exercise of the underwriters' over-allotment option.

(2) Pursuant to Rule 457(c) under the Securities Act, the offering price is equal to the average of the high and low prices of the common stock reported on The NASDAQ Capital Market on May 7, 2008.

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 this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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

SUBJECT TO COMPLETION, DATED MAY 12, 2008

PROSPECTUS

1,500,000 Shares

Image Sensing Systems, Inc.

Common Stock

We are offering 1,500,000 shares of our common stock. Our common stock is traded on The NASDAQ Capital Market under the symbol ISNS. On May 7, 2008, the last reported sale price for our common stock on The NASDAQ Capital Market was \$15.68 per share.

Investing in our common stock involves risks. See Risk Factors beginning on page 7.

	Per Share	Total
Public Offering Price	\$	\$
Underwriting Discount	\$	\$
Proceeds, before expenses, to Image Sensing Systems, Inc.	\$	\$

We have granted the underwriters the right to purchase up to an additional 225,000 shares of our common stock to cover over-allotments.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

Needham & Company, LLC

Craig-Hallum Capital Group

The date of this prospectus is _____, 2008.

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You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus. We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock.

Autoscope®, Autoscope Solo® and RTMS® are trademarks we own. This prospectus also refers to trademarks and tradenames of other organizations.

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PROSPECTUS SUMMARY

You should read the following prospectus summary together with the more detailed information and financial statements appearing elsewhere in this prospectus. Except as otherwise indicated, the information in this prospectus assumes that the underwriters will not exercise their over-allotment option.

Overview

We are the leading provider of software-based computer enabled detection, or CED, products and solutions for the intelligent transportation systems, or ITS, industry. Our family of products, which we market as the Autoscope Video Vehicle Detection System and Remote Traffic Microwave Sensor, or RTMS, Radar Detection System provides end users with the tools needed to optimize traffic flow, enhance driver safety, regulate air quality and address emerging security concerns. Our technology analyzes signals from sophisticated sensors and transmits the information to management systems and controllers or directly to users.

CED is a process in which software rather than humans examines outputs from various types of sophisticated sensors to determine what is happening in a field of view. In the ITS industry, CED is a critical component of managing congestion and traffic flow. In many markets, it is not possible to build roads, bridges and highways quickly enough to accommodate increasing automobile ownership. We believe CED-based ITS solutions therefore will become increasingly necessary to complement existing and new infrastructure to manage traffic flow and optimize throughput.

We believe our CED solutions are technically superior to those of our competitors because they have a higher level of accuracy, limit the occurrence of false detection, are generally easier to install with lower costs of ownership, work effectively in a multitude of light and weather conditions, and provide end users the ability to manage inputs from a variety of sensors for numerous tasks. We believe that the market for CED is increasingly favoring converged solutions that include ITS, security/surveillance and environmental management, which we expect to increase demand for CED products such as ours.

We believe the strength of our distribution channels positions us to increase the penetration of our technology-driven solutions in the marketplace. We market our Autoscope products in North America, the Caribbean and Latin America through an exclusive agreement with Econolite Control Products Inc., which we believe is the leading distributor of ITS control products in North America and the Caribbean. We market our Autoscope products outside of North America, the Caribbean and Latin America and our RTMS products through a combination of distribution and direct sales channels, including our overseas wholly-owned subsidiaries. Our end users primarily include governmental agencies and municipalities, and, as of December 31, 2007, we had sold over 80,000 instances in more than 60 countries.

In December 2007, we purchased certain radar-based detection assets from EIS Electronic Integrated Systems, Inc. and its affiliate, Dan Manor, which we refer to in this prospectus as the EIS asset purchase. EIS was a leading provider of radar-based detection solutions. On a pro forma basis for 2007, our revenue, including revenue from the EIS asset purchase, increased approximately 82% compared with our stand-alone revenue for 2006. In addition to the increased scale we gained through the EIS asset purchase, the addition of EIS RTMS radar products enables us to provide a wider array of CED products to our end users and support the introduction of hybrid product offerings to help drive market demand.

Industry Overview

The Intelligent Transportation Systems Market. The market for ITS is large and growing. According to a December 2007 report by Global Industry Analysts, Inc., total ITS sales in the United States and Europe for 2007 were approximately \$3.4 billion and \$2.8 billion, respectively, and total global ITS sales were approximately \$8.7 billion. Global Industry Analysts expects total global ITS sales to reach \$12.5 billion by the end of 2010, representing a compound annual growth rate of 11.6% for the period from 2000 to 2010.

ITS encompasses a broad range of information processing and control electronics technologies that, when integrated into roadway infrastructure, help monitor and manage traffic flow, reduce congestion and enhance driver safety. ITS applications include a wide array of traffic management systems, such as traffic signal control, automatic number plate recognition and variable messaging signs. ITS technologies include video vehicle detection, inductive loop detection, sensing technologies, floating cellular data, computational technologies and wireless communications.

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In traffic management applications, CED products are used for automated vehicle detection and are a primary data source upon which ITS solutions are built. Traditionally, automated vehicle detection is performed using inductive wire loops buried in the pavement. However, in-pavement loop detectors are costly to install, difficult to maintain, expensive to repair and not capable of wide-area vehicle detection without installations of multiple loops. Above-ground CED solutions for ITS offer several advantages to in-pavement loop detectors. Above-ground CED solutions tend to have lower total cost of ownership than in-pavement loop detectors because above-ground CED solutions are non-destructive to road surfaces, have no wear and tear from traffic and pavement expansion and contraction, do not require closing roadways to install or repair, and are capable of wide-area vehicle detection with a single device, thus enabling one input device to do the work of many in-pavement loops. In addition, unlike in-pavement loops, above-ground CED solutions can detect smoke and debris. These factors result in greater up-time and increased reliability and functionality of above-ground CED solutions compared to in-pavement loop detectors.

We believe our Autoscope and RTMS products are competitive with and can take market share from in-pavement loop detectors. We believe the U.S. ITS video detection market sales in 2007 were approximately \$110 to \$130 million and growing at approximately 20% per year. We believe we are the leader in the U.S. ITS video detection market in terms of unit sales, and we estimate that U.S. sales of the in-pavement loop detectors our products can supplant were approximately \$500 million in 2007.

Solutions for Adjacent Markets. We believe that the adjacent markets of ITS, security/surveillance and environmental management are converging, and that this convergence will accelerate as CED systems become more cost-effective when a single CED unit can be used for multiple purposes.

Our Competitive Strengths

We believe the following competitive strengths will continue to enhance our leadership position in ITS and adjacent industries:

Leading Proprietary Technologies. Over the last two decades, we have developed a proprietary portfolio of complex software algorithms that allow our video and radar detector products to capture and analyze objects in diverse weather and lighting conditions and balance the accuracy of positive detection and the avoidance of false detections.

Proven Ability to Develop, Enhance and Market New Products. Over the last two decades, we have demonstrated the ability to lead the market with new products and product enhancements. For example, we were the first company to provide our end users with a fully integrated color camera, zoom lens and machine vision processor in our Autoscope Solo system. Additionally, EIS was the first company to introduce radar-based technology solutions for ITS applications, and it has continued to lead the market with technology enhancements and new products, such as RTMS.

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Leading Distribution Channel. Since 1991, we have maintained a relationship with Econolite for the distribution of our Autoscope products in North America and the Caribbean and, since May 2002, in Latin America. We believe Econolite is the leading distributor of ITS products in North America and the Caribbean and our relationship enhances our ability to commercialize new products and allows us to focus on our core business of advanced signal processing software algorithms.

Broad Product Portfolio. We believe that our family of Autoscope and RTMS products allows us to meet the needs of our end users and affords us the opportunity to offer next-generation hybrid products that will satisfy traffic, security/surveillance and environmental management requirements.

Experienced Management Team and Engineering Staff. We recently transitioned to a new, highly experienced management team charged with executing our growth strategy. Additionally, we believe that the continuity of our engineering staff allows us to develop improved products.

Strong Financial Performance. Over the past five years, we have grown our revenue organically at an average double-digit compound annual growth rate and maintained average net margins approaching 25%.

Our Growth Strategy

As part of our growth strategy, we seek to:

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Enhance and Extend Our Technology Leadership in ITS. We believe we have established ourselves as the leading provider of CED in the ITS market. We believe that we have an opportunity to accelerate our growth while maintaining our traditionally high level of profitability by improving the functionality of our products, expanding our product offering to include hybrid products, and expanding our product portfolio and distribution channels through licensing or selected acquisitions.

Expand into Adjacent Markets. Our core skill, implementing software-based CED products and solutions, can be utilized more broadly as traffic, security/surveillance and environmental management markets converge. We are integrating this concept into our long-range engineering development road-map and evaluating the use of technology licensing, acquisition and channel strategies that support this vision.

Increase the Scope of Our Distribution and Direct Sales. We have made substantial investments in product adjustments to tailor our solutions to the differing needs of our international end users, and have expanded our European and Asian subsidiaries. We believe these investments will permit us to take advantage of the accelerated pace of adoption of CED throughout the developing world.

Grow Through Complementary Acquisitions. We intend to pursue strategic acquisitions that extend our technology leadership, breadth of product offerings, sales and distribution channels and market share in ITS and adjacent market segments.

Recent Developments

Quarter Ended March 31, 2008. Our net income for the quarter ended March 31, 2008 was \$1.1 million, or \$0.26 per fully diluted share, compared to \$556,000, or \$0.14 per fully diluted share, for the same period in 2007. Revenues for the first quarter of 2008 were \$5.9 million, compared to \$2.6 million for the same period a year ago. Revenue from royalties increased 26% to \$2.9 million from \$2.3 million in the first quarter of 2007 and reflects the continued success of Econolite in selling Autoscope products in the United States and Canada. North American sales, which are sales of RTMS in North America, were \$1.6 million. International sales, which include both Autoscope and RTMS sales outside of North America, were \$1.4 million in the first quarter of 2008, a four-fold increase over \$353,000 in the same period in 2007. Sales of RTMS world-wide for the 2008 first quarter were \$1.8 million. We acquired the RTMS family of products in December 2007.

New Bank Financing. On May 1, 2008, we entered into a loan agreement with Associated Bank, National Association for a line of credit and a term loan that replaced our previous arrangements with Wells Fargo Bank, N.A. The loan agreement provides for a three-year amortizing \$3.0 million term loan and a three-year \$5.0 million revolving line of credit. We had drawn fully the \$3.0 million term loan and have borrowed \$2.0 million on the line of credit as of May 1, 2008. A major benefit of the new credit facilities is that we are required to pledge only our auction rate securities as collateral, and the borrowings are based on an advance formula which includes auction rate securities and receivables. This has freed up over \$3.5 million in money market funds that were pledged under the Wells Fargo Bank arrangement.

Auction Rate Securities. At March 31, 2008, we held \$5.5 million (par value) of investments comprised of auction rate securities, or ARS, with maturity dates ranging from 2031 to 2047. All our ARS held are AAA/Aaa rated, with substantially all collateralized by student loans guaranteed by the U.S. government under the Federal Family Education Loan Program. Until mid-February 2008, the auction rate securities market was highly liquid. Since mid-February 2008, a substantial number of auctions have failed, meaning that there was not enough demand to sell all of the securities that holders desired to sell at auction. The immediate effect of a failed auction is that the holders cannot sell the securities at auction. In the case of a failed auction, with respect to the ARS held by us, the ARS are deemed not currently liquid. In the case of funds invested by us in ARS which are the subject of a failed auction, we may not be able to access the funds in the near term without a loss of principal unless a future auction on these investments is successful or the issuer calls the security pursuant to a mandatory tender or redemption prior to maturity.

At March 31, 2008, there was insufficient observable ARS market information available to determine the fair value of our investments. Therefore, we estimated fair value by using broker quotes based primarily on (a) a discounted cash flow model with factors including tax status, credit quality, duration, insurance swaps, levels of federal guarantees and likelihood of redemption and (b) estimates of observable market data for similar securities (when available). Based on this analysis, we recorded an unrealized loss of \$251,000 (\$166,000 net of tax) related to our ARS investments and have classified the investments as long-term on our balance sheet as of March 31, 2008. We believe this unrealized loss is primarily attributable to the limited liquidity of these investments, and it is our intent to hold these investments long enough to avoid realizing any significant loss. Nonetheless, if uncertainties in the credit and capital markets continue, if these markets further deteriorate, or if we no longer have the ability to hold these investments, we may be required to recognize other-than-temporary impairment charges.

Corporate Information

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We were incorporated under Minnesota law in December 1984. Our executive offices are located at 500 Spruce Tree Centre, 1600 University Avenue West, St. Paul, Minnesota 55104. Our telephone number is (651) 603-7700. Our website is www.imagesensing.com. The information contained on our website is not a part of this prospectus. We have included our website address in this prospectus as an inactive textual reference only.

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The Offering

Common stock offered by Image Sensing Systems, Inc.	1,500,000 shares
Common stock to be outstanding after this offering	5,427,806 shares
Over-allotment option	The underwriters have a 30-day option to purchase up to 225,000 additional shares of common stock from us.
Use of proceeds	We intend to use the net proceeds from this offering to repay an outstanding term loan and line of credit and for general corporate purposes, including acquiring or investing in businesses, products or technologies. See Use of Proceeds.
NASDAQ Capital Market symbol	ISNS

Except as otherwise noted, the information in this prospectus is based upon 3,927,806 shares of our common stock outstanding as of April 30, 2008 and excludes (a) 381,233 shares of common stock issuable upon the exercise of then outstanding stock options (of which options to purchase 202,983 shares are exercisable) at a weighted average exercise price of \$8.92 per share; (b) 78,200 shares of common stock reserved and available for future issuances under our 2005 Stock Incentive Plan; and (c) exercise of the underwriters' overallotment option.

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Summary Financial Data

(in thousands, except per share data)

The following tables set forth, for the periods and dates indicated, our summary financial data. The summary financial data as of and for the years ended December 31, 2005, 2006 and 2007 have been derived from our audited financial statements included elsewhere in this prospectus.

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The pro forma financial data presented for the year ended December 31, 2007 is unaudited and gives effect to our acquisition of certain assets from EIS Electronic Integrated Systems, Inc. on December 6, 2007 as if the acquisition had occurred on January 1, 2007. The unaudited pro forma financial data is based on our audited financial statements and the audited financial statements of EIS and reflects the assumptions set forth in this prospectus under Summary Unaudited Pro Forma Condensed Combined Statement of Operations. The pro forma data is presented for informational purposes only, and does not purport to represent what our results of operations would actually have been if the transaction had occurred on the date indicated. The as adjusted balance sheet data assumes the sale of 1,500,000 shares in this offering at an assumed public offering price of \$ per share, after deducting estimated underwriting discounts and expenses, as well as the application of the net proceeds in this offering as described under Use of Proceeds. Neither the actual statement of income data nor the pro forma or as adjusted financial data presented is necessarily indicative of the results we may achieve in any future period.

	Fiscal Year Ended			Pro Forma
	December 31, 2005	2006	2007	Year Ended December 31, 2007 (unaudited)
Consolidated Statement of Income Data:				
Revenue:				
Product sales	\$ 2,407	\$ 2,980	\$ 4,336	\$ 13,078
Royalties	8,595	10,136	10,747	10,747
	11,002	13,116	15,083	23,825
Cost of revenue:				
Product sales	1,042	1,501	1,987	4,739
Royalties	383	220		
	1,425	1,721	1,987	4,739
Gross profit	9,577	11,395	13,096	19,086
Operating expenses:				
Selling, marketing and product support	2,567	2,850	3,463	4,466
General and administrative	1,400	2,382	2,653	4,942
Research and development	1,516	2,639	2,299	2,761
Amortization of intangible assets			51	768
In-process research and development			4,500	4,500
Legal expense - lawsuit				409
	5,483	7,871	12,966	17,846
Income (loss) from operations	4,094	3,524	130	1,240
Other income (expense), net	252	523	543	(328)
Income (loss) before income taxes	4,346	4,047	673	912
Income taxes (benefit)	1,505	942	(199)	255
Net income (loss)	\$ 2,841	\$ 3,105	\$ 872	\$ 657
Net income (loss) per share:				
Basic	\$ 0.79	\$ 0.83	\$ 0.23	\$ 0.17
Diluted	\$ 0.73	\$ 0.80	\$ 0.22	\$ 0.16
Weighted average number of common shares outstanding:				
Basic	3,602	3,725	3,789	3,936
Diluted	3,868	3,891	3,881	4,028

Balance Sheet Data:	Actual	As Adjusted⁽¹⁾
Cash and cash equivalents	\$5,613	\$
Accounts receivable, net	4,997	4,997
Total current assets	17,822	
Goodwill and intangible assets	10,140	10,140
Short-term debt	5,000	
Total shareholders' equity	23,225	

- (1) Reflects the sale of 1,500,000 shares in this offering at an assumed public offering price of \$ per share, after deducting estimated underwriting discounts and commissions and offering expenses, and the application of the net proceeds from our sale of common stock in this offering.

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RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the following risk factors and all the other information contained in this prospectus before you decide to buy our common stock. If any of the following risks related to our business actually occurs, our business, financial condition and operating results would be adversely affected. The market price of our common stock could decline due to any of these risks and uncertainties related to our business, or related to an investment in our common stock, and you may lose part or all of your investment.

Risks Related to Our Business

Historically, substantially all of our revenue has been generated from sales of our Autoscope family of products, and if we do not maintain the market for these products, our business will be harmed.

Historically, substantially all of our revenue has been generated from sales of, or royalties from the sales of, the Autoscope Vehicle Detection System. We anticipate that revenue from the sale of the Autoscope system will continue to account for a substantial portion of our revenue for the foreseeable future. As such, any decline in sales of our Autoscope system would have a material adverse impact on our business, financial condition and results of operations.

The features and functions in our products have not been as widely utilized as traditional products offered by our competitors, and if our end users do not have demand for the features and functions in our products, it could adversely affect our business and growth prospects.

Machine vision and radar technologies have not been utilized in the traffic management industry as extensively as other more traditional technologies, mainly in-pavement loop detectors. Our financial success and growth prospects depend on the continued development of the market for advanced technology solutions for traffic management and the acceptance of our Autoscope and RTMS systems, and future systems

we may develop, as reliable, cost-effective alternatives to traditional vehicle detection systems. We cannot assure you that we will be able to utilize our technology profitably in other products or markets. If our end users do not continue to increase their demand for the features and functions provided by our Autoscope and RTMS systems, or hybrid or other systems we may develop, our business and growth prospects could be adversely affected.

If governmental entities elect not to use our products due to budgetary constraints, project delays or other reasons, our revenue may fluctuate severely or be substantially diminished.

The Autoscope and RTMS systems are sold primarily to governmental entities for use in large traffic control projects using advanced technologies. We expect that we will continue to rely substantially on revenue and royalties from sales of the Autoscope and RTMS systems to governmental entities. In addition to normal business risks, it often takes considerable time before governmental traffic control projects are developed to the point at which a purchase of the Autoscope and RTMS systems would be made, and a purchase of our products also may be subject to a time-consuming approval process. Additionally, governmental budgets and plans may change without warning. Other risks of selling to governmental entities include dependence on appropriations and administrative allocation of funds, changes in governmental procurement legislation and regulations and other policies that may reflect political developments, significant changes in contract scheduling, intense competition for government business and termination of purchase decisions for the convenience of the governmental entity. Substantial delays in purchase decisions by governmental entities, or governmental budgetary constraints, could cause our revenue and income to drop substantially or to fluctuate significantly between fiscal periods.

If Econolite's sales volume decreases or if it fails to pay royalties to us in a timely manner or at all, our financial results will suffer.

We have an agreement with Econolite under which Econolite is the exclusive distributor of the Autoscope system in North America, the Caribbean and Latin America. The agreement also grants Econolite a first refusal right that arises when we make a proposal to Econolite to extend the license to additional products in North America, the Caribbean and Latin America and a first negotiation right that arises when we make a proposal to Econolite to include rights corresponding to Econolite's rights under our current agreement in countries not in these territories. In exchange for its rights under the agreement, Econolite pays us royalties for sales of the Autoscope system. Since 2002, a significant part of our revenue has consisted of royalties resulting from sales made by Econolite, including 78% in 2005, 77% in 2006 and 71% in 2007. Econolite's account receivable represented 67% of our accounts receivable at December 31, 2007 and 69% of our accounts receivable at December 31, 2006. We expect that Econolite will continue to account for a significant portion of our revenue for the foreseeable future. Any decrease in Econolite's sales volume could significantly reduce our royalty revenue and adversely impact earnings. A failure by Econolite to make royalty payments to us in a timely manner or at all will harm our financial condition. In addition, we believe sales of our products are a material part of Econolite's business, and any significant decrease in Econolite's sales of the other products it sells could harm Econolite, which could have a material adverse effect on our business and prospects.

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Increased competition may make it difficult for us to acquire and retain end users. If we are unsuccessful in developing new applications and product enhancements, our products may become noncompetitive or obsolete.

Competition in the area of advanced traffic management and surveillance is growing. Some of the companies that may compete with us in the business of developing and implementing traffic control systems have substantially more financial, technological, marketing, personnel and research and development resources than we have. Therefore, they may be able to respond more quickly than we can to new or changing opportunities, technologies, standards or end user requirements. If we are unable to compete successfully with these companies, the market share for our products will decrease, and competitive pressures may seriously harm our business.

Additionally, the market for vehicle detection is continuously seeking more advanced technological solutions to traffic management and control problems. Technologies such as embedded loop detectors, pressure plates, pneumatic tubes, radars, lasers, magnetometers, acoustics and microwaves that have been used as traffic sensing devices in the past will be enhanced for use in the traffic management industry, and new technologies may be developed. We are aware of several companies that are developing traffic management devices using machine vision

technology or other advanced technology. We expect to face increasingly competitive product developments, applications and enhancements. New technologies or applications in traffic control systems may provide our end users with alternatives to the Autoscope and RTMS systems and could render our solutions noncompetitive or obsolete. If we are unable to increase the number of our applications and develop and commercialize product enhancements and applications in a timely manner that responds to changing technology and satisfies the needs of our end users, our business and financial results will suffer.

Our dependence on third parties for manufacturing and marketing our products may prevent us from meeting customers' needs in a timely manner.

We do not have, and do not intend to develop in the near future, internal capabilities to manufacture our products. We have entered into agreements with Econolite and Wireless Technology, Inc., or WTI, to manufacture the Autoscope system and related products for sales in North America, the Caribbean and Latin America. The hardware components for our RTMS products are made by manufacturers in Taiwan and Canada, and the components are assembled and tested in Canada. In addition, we work with suppliers, some of whom are overseas, to manufacture Autoscope and RTMS products that need to comply with the European Union's regulatory RoHS directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment. If Econolite, WTI and our suppliers are unable to manufacture our products in the future, we may be unable to identify other manufacturers able to meet product and quality demands in a timely manner or at all. Our inability to find suitable manufacturers for our products could result in delays or reductions in product shipments, which in turn may harm our business reputation and results of operations. In addition, we have granted Econolite the exclusive right to market the Autoscope system and related products in North America, the Caribbean and Latin America. Consequently, our revenue depends to a significant extent on Econolite's marketing efforts. Econolite's inability to effectively market the Autoscope system, or the disruption or termination of that relationship, could result in reduced revenue and market share for our products.

We and our third party manufacturers obtain some of the components of our products from a single source, and an interruption in the supply of those components may prevent us from meeting customers' needs in a timely manner and could therefore reduce our sales.

Although substantially all of the hardware components incorporated into the Autoscope and RTMS systems are standard electronics components that are available from multiple sources, we and our third party manufacturers obtain some of the components from a single source. The loss or interruption of any of these supply sources could force us or our manufacturers to identify new suppliers, which could increase our costs, reduce our sales and profitability, or harm our customer relations by delaying product deliveries.

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We may face increased competition if we fail to adequately protect our intellectual property rights, and efforts to protect our intellectual property rights may result in costly litigation.

Our success depends in large measure on the protection of our proprietary technology rights. We rely on trade secret, copyright and trademark laws, and confidentiality agreements with employees and third parties, all of which offer only limited protection. Although we acquired six patent applications filed with the U.S. Patent and Trademark Office, or USPTO, in the EIS asset purchase, we cannot assure you that the scope of these or any future patents relating to our products will exclude competitors or provide competitive advantages to us. We also cannot assure you that we will become aware of all instances in which others develop similar products, duplicate any of our products, reverse engineer or misappropriate our proprietary technology. If our proprietary technology is misappropriated, our business and financial results could be adversely affected. Litigation may be necessary in the future to enforce our intellectual property rights, to protect our trade secrets or to determine the validity and scope of the proprietary rights of others. In addition, we may be the subject of lawsuits by others who claim we violate their intellectual property rights. Even if the result is favorable, litigation could result in substantial costs and the diversion of management resources, either of which could harm our business.

As described above, although we have acquired six patent applications filed with the USPTO, we have not applied for patent protection in all countries in which we market and sell the Autoscope and RTMS systems. Consequently, our proprietary rights in the technology underlying the Autoscope and RTMS systems in countries other than the U.S. will be protected only to the extent that trade secret, copyright or other non-patent

protection is available and to the extent we are able to enforce our rights. The laws of other countries in which we market our products may afford little or no effective protection of our proprietary technology, which could harm our business.

The expiration of the University of Minnesota patent for certain aspects of our Autoscope system may result in additional competition, which could adversely affect our revenue and earnings.

The patent rights for certain aspects of the underlying technology for the Autoscope system previously owned by the University of Minnesota expired in July 2006. Other businesses may choose to use the University patent technology to develop a product that competes with the Autoscope system, and this competition could adversely impact our revenue and earnings.

We plan to continue introducing new products and technologies and may not realize the degree or timing of benefits we initially anticipated, which could adversely affect our business and results of operations.

We regularly invest substantial amounts in research and development efforts that pursue advancements in a range of technologies, products and services. Our ability to realize the anticipated benefits of these advancements depends on a variety of factors, including meeting development, production, certification and regulatory approval schedules; execution of internal and external performance plans; availability of supplier-produced parts and materials; performance of suppliers and vendors; achieving cost efficiencies; validation of innovative technologies; and the level of end user interest in new technologies and products. These factors involve significant risks and uncertainties. We may encounter difficulties in developing and producing these new products and may not realize the degree or timing of benefits initially anticipated. In particular, we cannot predict with certainty whether, when or in what quantities our current or potential end users will have a demand for products currently in development or pending release. Moreover, as new products are announced, sales of current products may decrease as end users delay making purchases until such new products are available. Any of the foregoing could adversely affect our business and results of operations.

We price our products at a premium compared to other technologies. As such, we may not be able to quickly respond to emerging low-cost competitors, and our inability to do so could adversely affect revenue and profitability.

We price our products at a premium as compared to less sophisticated technologies. As the technological sophistication of our competitors and the size of the market increases, competing low-cost developers of machine vision products for traffic are likely to emerge and grow stronger. If end users prefer low-cost alternatives over our products, our revenue and profitability could be adversely affected.

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Our revenue could be adversely affected by the emergence of local competitors and local biases in international markets.

Our experience indicates that local officials that purchase traffic management products in the international markets we serve favor products that are developed and manufactured locally. As local competitors to our products emerge, local biases could erode our revenue in Europe and Asia and adversely affect our sales and revenue in those markets.

Failure to predict technological convergence could harm our business and could reduce our sales.

With our Autoscope and RTMS product families, we currently utilize only certain detection technologies available in the ITS field. If we fail to predict convergence of technology preferences in the market for ITS, or fail to acquire complementary businesses or products that broaden our current product offerings, we may fail to capture certain segments of the market, which could harm our business and reduce our sales.

We sell our products internationally and are subject to various risks relating to such international activities, which could harm our international sales and profitability.

During 2005, 2006 and 2007, 22%, 23% and 27% of our total revenue, respectively, was attributable to international sales. We sell outside of the U.S. through our agreement with Econolite, through our wholly-owned subsidiaries and through our distributor network. By doing business in

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international markets, including Canada, we are exposed to risks separate and distinct from those we face in our domestic operations. Our international business may be adversely affected by changing economic conditions in foreign countries. Because most of our sales are currently denominated in U.S. dollars, if the value of the U.S. dollar increases relative to foreign currencies, our products could become more costly to the international consumer and therefore less competitive in international markets, which could adversely affect our profitability. Furthermore, although currently only a small percentage of our sales are denominated in non-U.S. currency, this percentage may increase in the future, in which case fluctuations in exchange rates could affect demand for our products. Engaging in international business inherently involves a number of other difficulties and risks, including:

- export restrictions and controls relating to technology;
- pricing pressure that we may experience internationally;
- required compliance with existing and new foreign regulatory requirements and laws;
- laws and business practices favoring local companies;
- longer payment cycles;
- difficulties in enforcing agreements and collecting receivables through foreign legal systems;
- political and economic instability;
- potentially adverse tax consequences, tariffs and other trade barriers;
- international terrorism and anti-American sentiment;
- difficulties and costs of staffing and managing foreign operations;
- changes in currency exchange rates; and
- difficulties in enforcing intellectual property rights.

Our exposure to each of these risks may increase our costs, lengthen our sales cycle and require significant management attention. We cannot assure you that one or more of these factors will not harm our business.

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Our inability to comply with European and Asian regulatory restrictions over hazardous substances and electronic waste could restrict product sales in those markets and reduce profitability in the future.

The European Union has finalized the Waste Electrical and Electronic Equipment, or WEEE, directive, which makes producers of electrical goods financially responsible for specified collection, recycling, treatment and disposal of past and future covered products. This directive must now be enacted and implemented by individual European Union governments, and certain producers are to be financially responsible under the WEEE legislation. This may impose on us requirements, which, if we are unable to meet them, could adversely affect our ability to market our products in European Union countries, and sales revenues and profitability would suffer as a consequence. In addition, the European Parliament has enacted a directive for the restriction of the use of certain hazardous substances in electrical and electronic equipment, or RoHS. This legislation governs restriction of the use of such substances as mercury, lead, cadmium and hexavalent cadmium. If we are unable to have our product manufactured in compliance with the RoHS directive, we would be unable to market our products in European Union countries, and

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sales revenues and profitability would suffer. In addition, various Asian governments could adopt their own versions of environment-friendly electronic regulations similar to the European directives, RoHS and WEEE. This could require new and unanticipated manufacturing changes, product testing and certification requirements, thereby increasing cost, delaying sales and lowering revenue and profitability.

Our inability to manage growth effectively could seriously harm our business.

Growth and expansion of our business could significantly strain our capital resources as well as the time and abilities of our management personnel. Our ability to manage growth effectively will require continued improvement of our operational, financial and management systems and the successful training, motivation and management of our employees. If we are unable to manage growth successfully, our business and operating results will suffer.

Our business operations will be severely disrupted if we lose key personnel or if we fail to attract and retain qualified personnel.

Our technology depends upon the knowledge, experience and skills of our key management and scientific and technical personnel. Additionally, our ability to continue technological developments and to market our products, and thereby develop a competitive edge in the marketplace, depends in large part on our ability to attract and retain qualified scientific and technical personnel. Competition for qualified personnel is intense, and we cannot assure you that we will be able to attract and retain the individuals we need, especially if our business expands and requires us to employ additional personnel. In addition, the loss of personnel or our failure to hire additional personnel could materially and adversely affect our business, operating results and ability to expand. The loss of key personnel, including Ken Aubrey and Dan Manor, or our inability to hire and retain qualified personnel, will harm our business.

Our operating costs tend to be fixed, while our revenue tends to be seasonal, thereby resulting in operating results that fluctuate from quarter to quarter.

Our expense levels are based in part on our product development efforts and our expectations regarding future revenues and, in the short-term, are generally fixed. Our quarterly revenues, however, have varied significantly in the past, with our first quarter historically being the weakest due to weather conditions in North America, Europe and northern Asia that make roadway construction more difficult. Additionally, our international revenues have a significant large project component, resulting in a varying revenue stream. We expect the seasonality of our revenue and the fixed nature of our operating costs to continue in the foreseeable future. Therefore, we may be unable to adjust our spending in a timely manner to compensate for any unexpected revenue shortfall. As a result, if anticipated revenues in any quarter do not occur or are delayed, our operating results for the quarter would be disproportionately affected. Operating results also may fluctuate due to factors such as the demand for our products, product life cycle, the development, introduction and acceptance of new products and product enhancements by us or our competitors, changes in the mix of distribution channels through which our products are offered, changes in the level of operating expenses, end user order deferrals in anticipation of new products, competitive conditions in the industry, and economic conditions generally. No assurance can be given that we will be able to achieve or maintain profitability on a quarterly or annual basis in the future.

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As of March 31, 2008, we had \$5.5 million invested in auction rate securities, or ARS. Since mid-February 2008, the auctions for these securities have failed, which adversely affects their liquidity. In May 2008, we recorded an unrealized loss of \$251,000 (\$166,000 net of tax) due to a determination of a temporary impairment to the value of our ARS. If we must record other-than-temporary impairment charges on our ARS or recognize a loss on their disposition, our financial condition would be adversely affected.

At March 31, 2008, we held \$5.5 million (par value) of investments comprised of ARS. Liquidity for these securities has been provided by an auction process that resets the applicable interest rate at pre-determined intervals, usually every 28 to 35 days. Until mid-February 2008, the auction rate securities market was highly liquid. Since mid-February 2008, a substantial number of auctions have failed. In the case of a failed auction, with respect to the ARS held by us, the ARS are deemed not currently liquid. In the case of funds invested by us in ARS which are the subject of a failed auction, we may not be able to access the funds in the near term without a loss of principal unless a future auction on these

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investments is successful or the issuer calls the security pursuant to a mandatory tender or redemption prior to maturity. In May 2008, based on an analysis of our ARS portfolio, we determined there was an unrealized loss of \$251,000 (\$166,000 net of tax). We cannot predict whether future auctions related to our ARS will be successful. If uncertainties in the credit and capital markets continue, if these markets further deteriorate, or if we no longer have the ability to hold these investments, we may be required to recognize other-than-temporary impairment charges on our ARS or a loss on the disposition of our ARS, which would have an adverse effect on our financial condition.

EIS is party to a lawsuit involving assets that we acquired from EIS in December 2007. If the assets are determined to infringe a third party's patent and EIS and its affiliates fail to fulfill their obligation to indemnify us or our affiliates, or if our losses from the allegedly infringing technology exceed the obligations of EIS and its affiliates to indemnify us, our business could suffer.

In 2005, a third party sued EIS alleging infringement of a patent held by the third party on automatic lane calibration. The allegedly infringing technology is part of the assets we purchased in the EIS asset purchase. In October 2007, the court entered a final judgment dismissing the third party's claim of patent infringement, but the third party has appealed the court's order. Under the EIS asset purchase agreement, EIS agreed to defend this litigation at its own expense, we are not responsible for any liabilities of EIS or its affiliates arising before the closing of the EIS asset purchase on December 6, 2007, and EIS and its affiliates are obligated to indemnify us and our affiliates for any losses we or our affiliates incur in connection with the litigation or disputed technology. However, if the EIS technology we acquired is finally determined to infringe the third party patent and EIS and its affiliates fail to satisfy their indemnification obligations to us or our affiliates, or if our losses from the allegedly infringing technology exceed the obligation of EIS or its affiliates to indemnify us, our business could suffer.

Risks Related to This Offering

Because our stock is thinly traded and our stock price is volatile, you may not be able to resell your shares at or above the public offering price.

Our common stock is thinly traded, with 3,476,781 shares of our 3,927,806 outstanding shares held by non-affiliates as of April 30, 2008. Based on the trading history of our common stock and the nature of the market for publicly traded securities of companies in evolving high-tech industries, we believe there are several factors that have caused and are likely to continue to cause the market price of our common stock to fluctuate substantially. The fluctuations may occur on a day-to-day basis or over a longer period of time. Factors that may cause fluctuations in our stock price include announcements of large orders obtained by us or our competitors, substantial cutbacks in government funding of highway projects or of the potential availability of alternative technologies for use in traffic control and safety, quarterly fluctuation in our financial results or the financial results of our competitors, consolidation among our competitors, fluctuations in stock market prices and volumes, and the volatility of the stock market. Consequently, you may not be able to sell our common stock at prices equal to or greater than the price you paid in this offering.

Securities class action litigation often has been initiated when a company's stock price has fallen below the company's public offering price soon after the offering closes or following a period of volatility in the market price of the company's securities. If class action litigation is initiated against us, we would incur substantial costs, and our management's attention would be diverted from our operations. All of these factors could cause the market price of our stock to decline further, and you may lose some or all of your investment.

Future sales of our common stock by our existing shareholders could cause our stock price to decline.

If our shareholders sell substantial amounts of our common stock in the public market, the market price of our common stock could decrease significantly. The perception in the public market that our shareholders might sell shares of our common stock could also depress the market price of our common stock. Shareholders who beneficially own 147,202 shares acquired in the EIS asset purchase hold registration rights. In addition, we have registration statements on file with the Securities and Exchange Commission covering shares of our common stock acquired upon option exercises. The market price of shares of our common stock may decrease significantly when the lock-up agreements, as described in

Underwriting, lapse and such shareholders and option holders are able to sell shares of our common stock into the market. A decline in the price

of shares of our common stock might impede our ability to raise capital through the issuance of additional shares of our common stock or other equity securities and may cause you to lose part or all of your investment in our shares of common stock.

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We have broad discretion in the use of the proceeds of this offering and may apply the proceeds in ways with which you do not agree.

Our net proceeds from this offering will be used to repay an outstanding term loan and line of credit and, as determined by management in its sole discretion, for general corporate purposes, including acquiring or investing in businesses, products or technologies. However, other than the payment of the outstanding term loan, we have not determined the allocation of these net proceeds among the various uses described in this prospectus. Our management will have broad discretion over the use and investment of these net proceeds, and, accordingly, you will have to rely upon the judgment of our management with respect to our use of these net proceeds, with only limited information concerning management's specific intentions. You will not have the opportunity, as part of your investment decision, to assess whether we use the net proceeds from this offering appropriately. We may place the net proceeds in investments that do not produce income or that lose value, which may cause our stock price to decline.

We may not be successful in implementing our acquisition strategy, and future acquisitions could result in disruptions to our business by, among other things, distracting management time and diverting financial resources. Further, if we are unsuccessful in integrating acquired companies into our business, it could materially and adversely affect our financial condition and operating results.

Part of our continuing business strategy is to make acquisitions of or investments in companies, products or technologies that complement our current products, enhance our market coverage or technical capabilities or offer growth opportunities. As part of this strategy, in December 2007, we completed the EIS asset purchase. We may not be able to identify suitable acquisition candidates or investment partners or products in the future or, if we do, we may not be able to make such acquisitions on commercially acceptable terms or at all. For any acquisitions, including the EIS asset purchase, a significant amount of management's time and financial resources may be required to complete the acquisition and integrate the acquired business into our existing operations. Even with this investment of management time and financial resources, an acquisition, including the EIS asset purchase, may not produce the revenue, earnings or business synergies anticipated. Acquisitions involve numerous other risks, including assumption of unanticipated operating problems or legal liabilities, problems integrating the purchased operations, technologies or products, diversion of management's attention from our core businesses, restrictions on the manner in which we may use purchased companies or assets imposed by acquisition agreements, adverse effects on existing business relationships with suppliers and customers, incorrect estimates made in the accounting for acquisitions and amortization of acquired intangible assets that would reduce future reported earnings (such as goodwill impairments), ensuring acquired companies' compliance with the requirements of the Sarbanes-Oxley Act, and potential loss of customers or key employees of acquired businesses. In addition, the accounting for acquisitions will change for us upon adoption of SFAS No. 141 (Revised 2007), Business Combinations, on January 1, 2009. We cannot assure you that any acquisitions, investments, strategic alliances or joint ventures, including the EIS asset purchase, will be completed in a timely manner or achieve anticipated synergies, will be structured or financed in a way that will enhance our business or creditworthiness, or will meet our strategic objectives or otherwise be successful. In addition, we may not be able to secure the financing necessary to consummate future acquisitions, and future acquisitions and investments could involve the issuance of additional equity securities or the incurrence of additional debt, which could increase dilution or harm our financial condition or creditworthiness.

Our directors and executive officers will continue to have substantial control over us after this offering and could limit your ability to influence the outcome of key transactions, including changes of control.

We anticipate that our executive officers and directors and entities affiliated with them will, in the aggregate, beneficially own 8.0% of our outstanding common stock after the completion of this offering, assuming the underwriters do not exercise their over-allotment option. Our executive officers and directors and their affiliated entities, if acting together, would be able to control or influence significantly all matters requiring approval by our shareholders, including the election of directors and the approval of mergers or other significant corporate transactions. These shareholders may have interests that differ from yours, and they may vote in a way with which you disagree and that may be adverse to your interests. The concentration of ownership of our common stock may have the effect of delaying, preventing or deterring a change of control of our company, could deprive our shareholders of an opportunity to receive a premium for their common stock as part of a sale of our company, and may affect the market price of our common stock. This concentration of ownership of our common stock may also have the effect of influencing the completion of a change in control that may not necessarily be in the best interests of all of our shareholders.

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Our articles of incorporation and bylaws, Minnesota law and the terms of the EIS asset purchase agreement may inhibit a takeover that shareholders consider favorable.

Provisions of our articles of incorporation and bylaws and applicable provisions of Minnesota law may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which shareholders might otherwise receive a premium for their shares or transactions that our shareholders might otherwise deem to be in their best interests. These provisions:

permit our board of directors to issue up to 5,000,000 shares of preferred stock with any rights, preferences and privileges as it may designate, including the right to approve an acquisition or other change in our control;

provide that the authorized number of directors may be changed by resolution of the board of directors;

provide that all vacancies, including newly-created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum; and

eliminate cumulative voting rights, therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose.

In addition, Section 302A.671 of the Minnesota Business Corporation Act, or MBCA, generally limits the voting rights of a shareholder acquiring a substantial percentage of our voting shares in an attempted takeover or otherwise becoming a substantial shareholder of our company unless holders of a majority of the voting power of the disinterested shares approve full voting rights for the substantial shareholder. Section 302A.673 of the MBCA generally limits our ability to engage in any business combination with certain persons who own 10% or more of our outstanding voting stock or any of our associates or affiliates who at any time in the past four years have owned 10% or more of our outstanding voting stock. These provisions may have the effect of entrenching our management team and may deprive you of the opportunity to sell your shares to potential acquirers at a premium over prevailing prices. This potential inability to obtain a control premium could reduce the

price of our common stock.

The EIS asset purchase also accelerates earn-out payments we must make to EIS if we are acquired or sell substantially all of our assets prior to December 6, 2010. The required acceleration of these payments could negatively affect the ability of our shareholders to obtain a premium over our prevailing stock price and reduce our stock price generally.

We can issue shares of preferred stock without shareholder approval, which could adversely affect the rights of common shareholders.

Our articles of incorporation permit our board of directors to establish the rights, privileges, preferences and restrictions, including voting rights, of future series of our preferred stock and to issue such stock without approval from our shareholders. The rights of holders of our common stock may suffer as a result of the rights granted to holders of preferred stock that may be issued in the future. In addition, we could issue preferred stock to prevent a change in control of our company, depriving common shareholders of an opportunity to sell their stock at a price in excess of the prevailing market price.

We do not intend to declare dividends on our stock after this offering.

We currently intend to retain all future earnings for the operation and expansion of our business and, therefore, do not anticipate declaring or paying cash dividends on our common stock in the foreseeable future. Any payment of cash dividends on our common stock will be at the discretion of our board of directors and will depend upon our operating results, earnings, current and anticipated cash needs, capital requirements, financial condition, future prospects, any contractual restrictions and any other factors deemed relevant by our board of directors. Therefore, you should not expect to receive dividend income from shares of our common stock.

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INFORMATION REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 that involve risks and uncertainties. In some cases, you can identify forward-looking statements by the words anticipate, believe, continue, could, estimate, expect, intend, may, ongoing, plan, potential, predict, project, should, of these terms or other comparable terminology, although not all forward-looking statements contain these words. These statements involve known and unknown risks, uncertainties and other factors that may cause our results or our industry's actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Forward-looking statements are only predictions and are not guarantees of performance. These statements are based on our management's beliefs and assumptions, which in turn are based on currently available information.

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These important factors include those that we discuss in this prospectus under the heading Risk Factors. You should read these risk factors and the other cautionary statements made in this prospectus as being applicable to all related forward-looking statements wherever they appear in this prospectus. We cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. You should read this prospectus completely. Other than as required by law, we undertake no obligation to update these forward-looking statements, even though our situation may change in the future.

USE OF PROCEEDS

We estimate that the net proceeds from our sale of shares of common stock in this offering will be approximately \$ million, or approximately \$ million if the underwriters exercise their over-allotment option in full. These estimates are based upon an assumed public offering price of \$ per share, less estimated underwriting discounts and commissions and offering expenses payable by us.

We intend to use \$2.0 million of the net proceeds to repay the \$2.0 million outstanding under our revolving line of credit with Associated Bank that we incurred on May 1, 2008. The revolving line of credit provides up to \$5.0 million in borrowings at an annual rate equal to the greater of LIBOR plus 2.75% as reset from time to time by Associated Bank or 4.5% (effective rate of 5.65% at May 1, 2008). We also intend to use \$3.0 million of the net proceeds to repay the \$3.0 million outstanding on our term loan owed to Associated Bank that we incurred on May 1, 2008. The term loan bears interest at an annual rate of 6.75%. The line of credit and the term loan mature on May 1, 2011.

Outstanding borrowings under the line of credit and term loan from Associated Bank are secured by a security interest in all of our goods, general intangibles, accounts, deposit accounts, investment property, letter of credit rights, letters of credit, chattel paper and instruments. We have also pledged \$5.4 million in auction rate securities to Associated Bank to secure the line of credit and term loan.

The line of credit and the term loan from Associated Bank replaced our \$3.0 million line of credit facility and the \$8.0 million term loan facility from Wells Fargo Bank, which were terminated. We used the proceeds of the loan from Wells Fargo Bank to pay part of the price for the EIS asset purchase.

We intend to use the remaining net proceeds for general corporate purposes, including acquiring or investing in businesses, products or technologies. However, we have no current plans, agreements or commitments and are not currently engaged in any negotiations with respect to any transaction. We reserve the right to modify the use of proceeds for other purposes if we are unable to identify suitable acquisition partners or investment opportunities. Pending the uses described above, we intend to invest the net proceeds of this offering in short- to medium-term, investment-grade, interest-bearing securities.

DIVIDEND POLICY

We have not historically paid any dividends on our common stock. After the completion of this offering, we intend to retain our future earnings, if any, to finance the expansion and growth of our business. We do not expect to pay cash dividends on our common stock in the foreseeable future. Payment of future cash dividends, if any, will be at the discretion of our board of directors after taking into account various factors, including our operating results, earnings, current and anticipated cash needs, capital requirements, financial condition, future prospects, any contractual restrictions and any other factors deemed relevant by our board of directors.

Table of Contents**PRICE RANGE OF COMMON STOCK**

Our common stock is traded on The NASDAQ Capital Market under the symbol ISNS. The quarterly high and low sales prices for our common stock for our last two fiscal years are set forth below.

Quarter	Low	High
2008 Quarter Two (through April 30, 2008)	\$11.37	\$14.17
2008 Quarter One	12.08	17.50
2007 Quarter Four	11.65	18.54
2007 Quarter Three	11.56	16.74
2007 Quarter Two	14.86	19.70
2007 Quarter One	13.70	18.90
2006 Quarter Four	12.50	14.57
2006 Quarter Three	11.25	14.25
2006 Quarter Two	11.50	14.91
2006 Quarter One	11.44	13.50

On May 7, 2008, the last reported sales price of our common stock on The NASDAQ Capital Market was \$15.68 per share.

Table of Contents**CAPITALIZATION**

The following table sets forth our capitalization as of December 31, 2007:

on an actual basis; and

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on an as adjusted basis to reflect our sale of shares in this offering at an assumed public offering price of \$ per share, after deducting estimated underwriting discounts and commissions and offering expenses, and the application of the net proceeds from our sale of common stock in this offering.

You should read this information in conjunction with the sections entitled Use of Proceeds and Management's Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and the related notes appearing elsewhere in this prospectus.

	December 31, 2007 Actual (in thousands)	As Adjusted
Cash and cash equivalents	\$5,613	\$
Short-term debt ⁽¹⁾	\$5,000	\$
Shareholders' equity:		
Preferred stock, \$.01 par value, 5,000 authorized, none issued and outstanding, actual and as adjusted		
Common stock \$.01 par value, 20,000 shares authorized, 3,928 issued and outstanding, actual, and 5,428 issued and outstanding, as adjusted	39	57
Additional paid-in capital	11,004	
Accumulated other comprehensive income	161	161
Retained earnings	12,021	12,021
Total shareholders' equity	23,225	
Total capitalization	\$28,225	\$

(1) We have pledged cash equivalents as collateral for 105% of our short-term debt. This collateral is reflected as restricted cash on our consolidated balance sheet appearing elsewhere in this prospectus.

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SELECTED FINANCIAL DATA

You should read the following selected financial data together with our financial statements and the related notes appearing elsewhere in this prospectus and Management's Discussion and Analysis of Financial Condition and Results of Operations, which follows immediately after this section. The selected financial data in this section is not intended to replace our consolidated financial statements and related notes. Our historical results are not necessarily indicative of our future results.

We derived the consolidated statement of income data for the years ended December 31, 2003, 2004, 2005, 2006 and 2007 and the consolidated balance sheet data as of December 31, 2003, 2004, 2005, 2006 and 2007 from our audited consolidated financial statements, which for 2005, 2006 and 2007 are contained elsewhere in this prospectus.

	Fiscal Years Ended December 31,				
	2003	2004	2005	2006	2007 ⁽¹⁾
(in thousands, except per share data)					
Consolidated Statement of Income Data:					
Revenue:					
International sales	\$ 3,339	\$ 3,309	\$ 2,407	\$ 2,980	\$ 4,067
North American sales					269
Royalties	5,920	7,521	8,595	10,136	10,747
	<u>9,259</u>	<u>10,830</u>	<u>11,002</u>	<u>13,116</u>	<u>15,083</u>
Cost of revenue:					
International sales	1,533	1,599	1,042	1,501	1,927
North American sales					60
Royalties	277	321	383	220	
	<u>1,810</u>	<u>1,920</u>	<u>1,425</u>	<u>1,721</u>	<u>1,987</u>
Gross profit	7,449	8,910	9,577	11,395	13,096
Operating expenses:					
Selling, marketing and product support	2,536	2,523	2,567	2,850	3,463
General and administrative	1,235	1,317	1,400	2,383	2,653
Research and development	730	1,126	1,516	2,639	2,299
Amortization of intangible assets					51
In-process research and development					4,500
	<u>4,501</u>	<u>4,966</u>	<u>5,483</u>	<u>7,871</u>	<u>12,966</u>
Income from operations	2,948	3,944	4,094	3,524	130
Other income, net	23	102	252	523	543
Income before income taxes	2,971	4,046	4,346	4,047	673
Income tax expense (benefit)	836	1,352	1,505	942	(199)
Net income	<u>\$ 2,135</u>	<u>\$ 2,694</u>	<u>\$ 2,841</u>	<u>\$ 3,105</u>	<u>\$ 872</u>
Net income per share:					
Basic	\$ 0.66	\$ 0.79	\$ 0.79	\$ 0.83	\$ 0.23
Diluted	\$ 0.60	\$ 0.71	\$ 0.73	\$ 0.80	\$ 0.22
Weighted average number of common shares outstanding:					
Basic	3,215	3,409	3,602	3,725	3,789
Diluted	3,598	3,810	3,868	3,891	3,881

	At December 31,				
	2003	2004	2005	2006	2007
(in thousands)					
Consolidated Balance Sheet Data:					
Total assets ⁽¹⁾	\$ 9,587	\$ 13,063	\$ 16,791	\$ 21,224	\$ 30,388
Bank debt ⁽¹⁾					5,000
Total shareholders' equity	7,760	11,779	15,722	19,333	23,225

- (1) Amounts as of and for the year ended December 31, 2007 reflect the impact of the EIS asset purchase from December 6, 2007, the acquisition date.

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SUMMARY UNAUDITED PRO FORMA CONDENSED COMBINED STATEMENT OF OPERATIONS

The following unaudited pro forma condensed combined statement of operations presents the pro forma effect of the EIS asset purchase on our results of operations. The EIS asset purchase was effective December 6, 2007. Our fiscal year ends on December 31 of each year, and the fiscal year of EIS ends on September 30 of each year. The unaudited pro forma condensed combined statement of operations for the year ended December 31, 2007 is based on the assumption that the EIS asset purchase had occurred at the beginning of the period presented, or January 1, 2007, after giving effect to the assumptions and adjustments described in the accompanying notes to the unaudited pro forma condensed combined financial data. The complete unaudited pro forma condensed combined statement of operations together with the accompanying notes appear beginning on page F-17.

The unaudited pro forma condensed combined statement of operations for the year ended December 31, 2007 has been derived from our audited consolidated statement of operations for the year ended December 31, 2007 and EIS audited consolidated statement of operations for the year ended September 30, 2007.

The unaudited pro forma condensed combined statement of operations may not be indicative of the results of operations that would have been achieved if the EIS asset purchase had occurred on the date indicated or which we may achieve in the future.

The unaudited pro forma condensed combined statement of operations should be read in conjunction with the historical financial information of EIS included with our Current Report on Form 8-K/A filed with the SEC on February 20, 2008 and our separate historical financial statements and accompanying notes presented elsewhere in this prospectus.

	Pro Forma Year Ended December 31, 2007 (in thousands, except per share data)
Revenues:	
Product sales	\$ 13,078
Royalties	10,747
	23,825
Cost of revenue:	
Cost of product sales	4,739
Royalties	4,739

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Gross profit	19,086
Operating expenses:	
Selling, marketing and product support	4,466
General and administrative	4,942
Research and development	2,761
Amortization of intangible assets	768
In-process research and development	4,500
Legal expense – lawsuit	409
	17,846
Income from operations	1,240
Other income (expense)	(328)
Income before income taxes	912
Income tax expense	255
Net income	\$ 657
Net income per share:	
Basic	\$ 0.17
Diluted	\$ 0.16
Weighted average number of common shares outstanding:	
Basic	3,936
Diluted	4,028

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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 the Selected Financial Data and our financial statements and the accompanying notes. Our actual results could differ materially from those anticipated in the forward-looking statements included in this discussion as a result of certain factors, including, but not limited to, those discussed in Risk Factors and Information Regarding Forward-Looking Statements included elsewhere in this prospectus.

Overview

General. We provide software-based computer enabled detection, or CED, products and solutions that use advanced signal processing software algorithms to detect and monitor objects in a designated field of view. Our technology analyzes the signal from a sophisticated sensor and passes the information along to management systems, controllers or directly to users. Our core products, the Autoscope® Video Vehicle Detection System and the RTMS® Radar Detection System, operate using our proprietary software in conjunction with video cameras or radar and commonly available electronic components. Each of these systems is used by traffic managers primarily to improve the flow of vehicle traffic and to enhance safety at intersections, main thoroughfares, freeways and tunnels.

Autoscope systems are sold to distributors and end users of traffic management products in North America, the Caribbean and Latin America by Econolite, our exclusive licensee in these regions. RTMS systems are sold to distributors and end users in North America. We also sell both Autoscope and RTMS to distributors and end users in Europe and Asia through our European and Hong Kong subsidiaries, respectively. End users of our products throughout the world are generally funded by government agencies responsible for traffic management or traffic law enforcement.

EIS Asset Purchase. On December 6, 2007, we purchased certain assets from EIS Electronic Integrated Systems Inc., or EIS, including its principal product line, the RTMS system. In its fiscal year ended September 30, 2007, EIS had revenue of \$8.7 million, substantially all of which related to RTMS sales. Our consolidated financial statements include revenue and expenses related to the operations of the former EIS business

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from December 7, 2007 through December 31, 2007. Within these expenses was a significant charge recognized for in-process research and development related to intellectual property purchased as part of the transaction.

Trends and Challenges in Our Business.

We believe recent growth in our business can be attributed primarily to the following global trends:

worsening traffic caused by increased numbers of vehicles in metropolitan areas without corresponding expansions of roadway infrastructure, which has increased demand for our products;

advances in information technology, which have made our products easier to market and implement;

funding allocations for centralized traffic management services continue to rise in large cities, which has increased the ability of our primary end users to implement our products; and

general increases in the cost-effectiveness of electronics, which make our products more affordable for end users.

We believe our continued growth primarily depends upon:

continued adoption and governmental funding of ITS for traffic control in developed countries;

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countries in the developing world adopting above-ground detection technology, such as video or radar, instead of in-pavement loop technology to manage traffic;

use of CED to provide solutions to security/surveillance and environmental issues associated with increasing automobile use in metropolitan areas; and

our ability to develop new products, such as hybrid CED devices incorporating, for example, radar and video technologies, that provide increasingly accurate information and enhance the end users' ability to cost-effectively manage traffic, security/surveillance and environmental issues.

Because our principal end users are governmental entities, we are faced with challenges related to potential delays in purchase decisions by those entities and unforeseen changes in budgetary constraints. These contingencies could result in significant and unforeseen fluctuations in our revenue between periods.

Key Financial Terms and Metrics.

Revenue. Revenue historically has been derived from two sources: (1) royalties received from Econolite for sales of the Autoscope system in North America, the Caribbean and Latin America and (2) revenue received from direct sales of Autoscope systems in Europe and Asia. Royalties from Econolite historically have provided the majority of our revenue. We calculate the royalties using a profit sharing model where we split evenly the gross profit on sales of Autoscope product made through Econolite. This royalty arrangement has the benefit of decreasing our cost of revenues and our selling, marketing and product support expenses because these costs and expenses are borne primarily by Econolite. Although this royalty model has a positive impact on our gross margin, it also negatively impacts our total revenue, which would be higher if all the sales made by Econolite were made directly by us. The royalty arrangement is exclusive and expires in June 2011. Our acquisition of the RTMS product line, which we assemble, gives us an additional source of revenue that we expect will significantly increase our overall revenue and lessen fluctuations in our revenue from period to period due to our ownership of more than one product line and the higher volumes it brings, notwithstanding normal seasonality.

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Cost of Revenue. There is no cost of revenue related to Econolite royalties, as virtually all manufacturing, warranty and related costs are incurred by Econolite. Cost of revenue related to direct product sales consists primarily of the amount charged by our third party contractors to manufacture the Autoscope and RTMS hardware platforms, which is influenced mainly by the cost of electronic components. The cost of revenue also includes logistics costs and estimated expenses for product warranties and inventory reserves. The key metric that we follow is achieving certain gross margin percentages by geographic region.

Operating Expenses. Our operating expenses fall into three categories: (1) selling, marketing and product support; (2) general and administrative; and (3) research and development. Selling, marketing and product support expenses consist of various costs related to sales and support of our products, including salaries, benefits and commissions paid to our personnel, commissions paid to third parties, travel, trade show and advertising costs, second-tier technical support for Econolite, and primary technical support, where applicable. General and administrative expenses consist of certain corporate and administrative functions that support the development and sales of our products and provide an infrastructure to support future growth. General and administrative expenses reflect management, supervisory and staff salaries and benefits, legal and auditing fees, travel, rent and costs associated with being a public company, such as board of director fees, Sarbanes-Oxley compliance, listing fees and annual reporting expenses. Research and development expenses consist mainly of salaries and benefits for our engineers and third party costs for consulting and prototyping. We measure all operating expenses against our annually approved budget, which is developed with achieving a certain operating margin as a key focus. Also included in operating expenses is non-cash expense for intangible asset amortization and in-process research and development expense for technology that had not yet reached technological feasibility.

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Seasonality. Our quarterly revenues and operating results have varied significantly in the past due to the seasonality of our business. Our first quarter generally is the weakest due to weather conditions that make roadway construction more difficult in North America, Europe and northern Asia. We expect such seasonality to continue for the foreseeable future. Additionally, our international revenues have a significant large project component, resulting in a varying revenue stream. Accordingly, we believe that quarter-to-quarter comparisons of our financial results should not be relied upon as an indication of our future performance. No assurance can be given that we will be able to achieve or maintain profitability on a quarterly or annual basis in the future.

History. We were incorporated in the state of Minnesota in December 1984 and began operations by pioneering the commercial application of wide-area video vehicle detection for traffic management. The technology underlying our products was initially developed at the University of Minnesota. In 1989, the University was awarded a patent for that technology, which it exclusively licensed to us. In 1991, we sub-licensed this technology to Econolite, a leading manufacturer and seller of traffic control products in North America and the Caribbean, to manufacture and distribute products incorporating the technology.

Results of Operations

The following table sets forth, for the periods indicated, certain statements of income data as a percent of total revenue and gross margin on international sales and royalties as a percentage of international sales and royalties, respectively.

	Year Ended December 31,		
	2005	2006	2007
International sales	21.9%	22.7%	27.0%
North American sales			1.8
Royalties	78.1	77.3	71.2
Total revenue	100.0	100.0	100.0
Gross margin International sales	56.7	49.6	52.6

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Gross margin North American sales			77.7
Gross margin royalties	95.5	97.8	100.0
Selling, marketing and product support	23.3	21.7	23.0
General and administrative	12.7	18.2	17.6
Research and development	13.8	20.1	15.2
Amortization of intangibles			0.3
In-process research and development			29.8
Income from operations	37.2	26.9	0.9
Income tax expense (benefit)	13.7	7.2	(1.3)
Net income	25.8	23.7	5.8

Year Ended December 31, 2007 Compared to Year Ended December 31, 2006. Total revenue increased to \$15.1 million in 2007 from \$13.1 million in 2006, an increase of 15.0%. International sales increased to \$4.1 million in 2007 from \$3.0 million in 2006, an increase of 36.7%. The increase was a result of growing acceptance of Autoscope products in both Europe and Asia, resulting in new end users. Royalty income increased to \$10.7 million in 2007 from \$10.1 million in 2006, an increase of 6.0%. The increase in royalty income reflects the continued success of Econolite's distribution of Autoscope in the North American market. North American sales were \$269,000 in 2007. North American sales represent sales of RTMS products from December 6, 2007, which is the date of the EIS asset purchase. (See Note 4 in the notes to the consolidated financial statements.) We expect North American and international sales will increase substantially in 2008 due mainly to the addition of the RTMS product line.

Gross margins for international sales increased to 52.6% in 2007 from 49.6% in 2006. Gross margins on royalty income increased to 100% in 2007 from 97.8% in 2006. International gross margins were positively impacted by a shift in product sales mix to higher margin products in 2007 versus 2006. Royalty gross margins were positively impacted by the patent royalty we owed to the University of Minnesota ending in the third quarter of 2006. We anticipate that gross margins for our international and North American sales will be in the ranges of 55.0% to 60.0% and 65.0% to 70.0%, respectively, in 2008, while we expect royalty gross margins will be 100% in 2008.

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Selling, marketing and product support expense increased to \$3.5 million or 23.0% of total revenue in 2007 from \$2.9 million or 21.7% of total revenue in 2006. The change related mostly to headcount additions and increased promotional expense for the launch in April 2007 of our Autoscope Terra product line, which runs on our enhanced Terra platform. We anticipate that selling, marketing and product support expense will increase significantly in terms of actual expense and as a percentage of total revenue in 2008 compared to 2007 due to the addition of RTMS-related expenses.

General and administrative expense increased to \$2.7 million or 17.6% of total revenue in 2007 from \$2.4 million or 18.2% of total revenue in 2006. The 2007 increase resulted mainly from a combination of headcount additions, higher stock option and bonus expenses and, to a lesser extent, increased audit, tax, legal and consulting fees. The 2006 expense included a \$375,000 legal settlement with Econolite. We anticipate that general and administrative expense will increase significantly in terms of actual expense in 2008 compared to 2007 due to the addition of RTMS-related expenses but will decrease as a percentage of total revenue in 2008 when compared to 2007.

Research and development expense decreased to \$2.3 million or 15.2% of total revenue in 2007 from \$2.6 million or 20.1% of total revenue in 2006. The decrease was directly related to significant prototype material and consulting expenses incurred in accelerating technical efforts on our next-generation Autoscope Terra product line in 2006 that did not carry into 2007. We anticipate that research and development expense will increase significantly in terms of actual expense in 2008 compared to 2007 due to the addition of RTMS-related expenses but will be flat as a percentage of total revenue in 2008 when compared to 2007.

Amortization of intangibles expense was \$51,000 in 2007 and reflects the amortization of intangible assets acquired in the EIS asset purchase from December 7, 2007 to December 31, 2007. Assuming there are no changes to our intangible assets, we anticipate amortization expense to be approximately \$768,000 in 2008.

In-process research and development expense was \$4.5 million in 2007 (\$3.0 million net of tax). This expense was a result of a purchase price allocation component related to the EIS asset purchase and is one-time in nature. Prior to the asset purchase, EIS was engaged in research

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and development activity into its next generation product line, known internally as G4. G4 research activity began in 2006. Because G4 had not yet reached technological feasibility, the value of the G4 program was expensed as in-process research and development at the date of the EIS asset purchase. As of the date of the EIS asset purchase, the program was estimated to be between 50% and 75% complete. G4, when released, is expected to provide new features and functionality and avoid existing patent claims of competitors based upon unique technology. The value of the G4 program was appraised utilizing a multi-period excess earnings cash flow analysis based upon facts and circumstances surrounding the in-process development activities and the expected economic benefits to be derived from the resulting products. Key assumptions for the analysis include revenue from G4 products beginning in mid-2008, achievement of an efficient cost to manufacture and a risk adjusted discount rate of 17.0% on cash flows. We estimate that we will incur from \$300,000 to \$500,000 in costs to complete the G4 program. At the date of the EIS asset purchase, EIS was actively selling its G3 product, which has provided the majority of its revenues in the last two years. If G4 is not commercialized according to plan, our financial projections may not be attained.

Other income increased to \$543,000 in 2007 from \$523,000 in 2006. In 2007, other income was mainly tax-exempt interest income that was partially offset by interest expense on bank debt incurred in December 2007. In 2006, interest income was also mainly tax-exempt.

Our income tax effective rate was not meaningful in 2007 due to the significant in-process research and development expense impact on pre-tax book income coupled with federal tax credits that brought our position to a benefit. Our 2006 income tax effective rate was unusually low due to a number of federal and refund claims. We expect the effective rate in 2008 to be in the range of 27% to 30%.

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Year Ended December 31, 2006 Compared to Year Ended December 31, 2005. Total revenue increased to \$13.1 million in 2006 from \$11.0 million in 2005, an increase of 19.2%. International sales increased to \$3.0 million in 2006 from \$2.4 million in 2005, an increase of 25%. Royalty income increased to \$10.1 million in 2006 from \$8.6 million in 2005, an increase of 17.4%. The increase in international sales was a result of better performance in our Asian subsidiary, including a significant fourth quarter tunnel installation in China. The increase in royalty income reflects the continued success of Econolite's distribution of Autoscope in the North American market, including an unexpectedly strong fourth quarter in 2006.

Gross margins for international sales decreased to 49.6% in 2006 from 56.7% in 2005. Gross margins on royalty income increased to 97.8% in 2006 from 95.5% in 2005. International gross margins were negatively impacted by slightly higher manufacturing costs and higher warranty reserves in 2006 versus 2005. Royalty gross margins were positively impacted by the patent royalty we owed to the University of Minnesota ending in the third quarter of 2006.

Selling, marketing and product support expense increased to \$2.9 million or 21.7% of total revenue in 2006 from \$2.6 million or 23.3% of total revenue in 2005. The change related mostly to headcount additions.

General and administrative expense increased to \$2.4 million or 18.2% of total revenue in 2006 from \$1.4 million or 12.7% of total revenue in 2005. The 2006 increase resulted mainly from a combination of headcount additions, stock option expense recognition, increased audit, tax, legal and consulting fees, and a \$375,000 legal settlement with Econolite.

Research and development expense increased to \$2.6 million or 20.1% of total revenue in 2006 from \$1.5 million or 13.8% of total revenue in 2005. The increase was directly related to headcount additions and significant prototype material and consulting expenses incurred in accelerating technical efforts on our next-generation Autoscope Terra product line.

Other income increased to \$523,000 in 2006 from \$252,000 in 2005. Increased interest income in 2006 was due to a combination of higher cash and investment balances and higher interest rates relative to 2005.

Our income tax effective rate decreased to 23.3% of pretax income in 2006 from 34.6% in 2005. The decrease was due to a number of federal and state adjustments and increased research and development credits.

Liquidity and Capital Resources

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At December 31, 2007, we had \$5.6 million in cash and cash equivalents compared to \$11.6 million at December 31, 2006. The primary reasons for the decrease were cash payments made in conjunction with the EIS asset purchase and the restriction of cash as a result of our term loan with Wells Fargo Bank. Net cash provided by operating activities was \$1.5 million in 2007 compared to \$4.6 and \$2.4 million in 2006 and 2005, respectively. The major components of operating activities for 2007 were net income of \$872,000 and the non-cash in-process research and development expense, net of tax, of \$3.0 million that were partially offset by the working capital impact of carrying higher accounts receivable and inventory balances. At December 31, 2007, we no longer held any short-term investments, and we had borrowed \$5.0 million on our term loan with Wells Fargo Bank to partially fund the EIS asset purchase. We expect that the EIS asset purchase will positively impact cash flows in 2008. As discussed below, any earn-outs to the EIS sellers for 2008, 2009 and 2010 performance are due and payable the following year.

Before May 1, 2008, we had two credit facilities with Wells Fargo Bank, a revolving line of credit and a term loan. The revolving line of credit provided up to \$3.0 million in short-term borrowings at Wells Fargo Bank's prime rate. The term loan provided up to \$8.0 million in short-term borrowings at Wells Fargo Bank's prime rate less 0.50%. An advance under the credit facilities required that our securities, cash or investments, or eligible investments be pledged against the loan so that the amount of the loan was no more than approximately 85% of the eligible investments pledged. In December 2007, we borrowed \$5.0 million on the loan and pledged certain cash equivalents, which were disclosed as restricted cash on our consolidated balance sheet as of December 31, 2007. We terminated the credit facilities with Wells Fargo Bank on May 1, 2008.

On May 1, 2008, we entered into two credit facilities with Associated Bank, a revolving line of credit and a term loan. We used the loan proceeds to pay in full the amounts owed under our credit facilities from Wells Fargo Bank. The revolving line of credit provides up to \$5.0 million in borrowings at an annual rate equal to the greater of LIBOR plus 2.75% as reset from time to time by Associated Bank or 4.5% (effective rate of 5.65% at May 1, 2008). The term loan provides up to \$3.0 million in borrowings and bears interest at an annual rate of 6.75%. The line of credit and the term loan mature on May 1, 2011. Outstanding borrowings under the line of credit and term loan from Associated Bank are secured by a security interest in substantially all of our assets. We have also pledged \$5.4 million in auction rate securities to Associated Bank to secure the line of credit and term loan. As of May 1, 2008, there was \$2.0 million outstanding under the line of credit and \$3.0 million outstanding under the term loan.

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At March 31, 2008, we held \$5.5 million (par value) of investments comprised of auction rate securities, or ARS. All of our ARS are AAA rated by one or more of the major credit rating agencies and have contractual maturities from 2031 to 2047. Further, all of these securities are collateralized by student loans, and approximately 97% of the collateral in the aggregate is guaranteed by the U.S. government under the Federal Family Education Loan Program. Since mid-February 2008, we have experienced failed auctions for our entire ARS portfolio, resulting in our inability to sell these securities. A failed auction results in a lack of liquidity in the securities but does not signify a default by the issuer. Upon an auction failure, the interest rates do not reset at a market rate but instead reset based on a formula contained in the security, which generally is higher than the current market rate. If we need to access these funds, we will not be able to do so without the possible loss of principal or until a future auction for these investments is successful, they are redeemed by the issuer or they mature. We cannot predict if or when a successful auction or redemption may take place. We do not believe we need access to these funds for operational purposes for the foreseeable future.

At March 31, 2008, there was insufficient observable ARS market information available to determine the fair value of our auction rate securities. Therefore, we estimated fair value by using broker quotes based primarily on (a) a discounted cash flow model with factors including tax status, credit quality, duration, insurance swaps, levels of federal guarantees and likelihood of redemption and (b) estimates of observable market data for similar securities (when available). Based on this analysis, we recorded an unrealized loss of \$251,000 (\$166,000 net of tax) related to our ARS investments and have classified the investments as long-term on our balance sheet as of March 31, 2008. We believe this unrealized loss is primarily attributable to the limited liquidity of these investments, and it is our intent to hold these investments long enough to avoid realizing any significant loss. Nonetheless, if uncertainties in the credit and capital markets continue, if these markets further deteriorate, or if we no longer have the ability to hold these investments, we may be required to recognize other-than-temporary impairment charges or a loss on the disposition of our ARS. We will continue to monitor and evaluate these investments on a quarterly basis for impairment or for the need to reclassify as long-term investments.

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We believe that our cash and cash equivalents on hand at May 1, 2008, along with our credit facilities with Associated Bank and cash provided by operating activities, are adequate to fund our current business plan and maintain our collateral coverage and borrowing bases on our bank debt for 2008, regardless of the liquidity of our auction rate securities.

In conjunction with our EIS asset purchase, the sellers have an earn-out arrangement over approximately three years. The earn-out is based on earnings from RTMS sales less related cost of revenue and operating expenses, depreciation and amortization, and is calculated annually. If the earnings are at target levels, the sellers would receive \$2.0 million annually or \$6.0 million in total. Earn-out payments generally are due within three months of the end of an earn-out period. The first earn-out period runs from December 6, 2007 to December 31, 2008. Thus, if any earn-out payment is due for this period, it would be paid by March 31, 2009. If we are acquired or sell substantially all of our assets before December 6, 2010, we must pay EIS \$6.0 million less earn-out amounts previously paid as an acceleration of potential earn-out payments under the EIS asset purchase agreement.

Off-Balance Sheet Arrangements

We do not participate in transactions or have relationships or other arrangements with an unconsolidated entity, including special purpose and similar entities or other off-balance sheet arrangements.

Critical Accounting Policies

Goodwill and Intangible Assets. Goodwill is not amortized but is tested for impairment annually or whenever an impairment indicator arises. Our recorded goodwill relates to our Hong Kong-based subsidiary, Flow Traffic Ltd., and certain assets purchased from EIS. Goodwill for the EIS asset purchase was recorded in December 2007 and will be tested for impairment annually beginning in 2008. The Flow Traffic goodwill is tested for impairment on December 31 of each year. The impairment test requires us to estimate the fair value of our subsidiary and then compare it to the carrying value of the subsidiary. If the carrying value exceeds the fair value, further analysis is performed to determine if there is an impairment loss. We estimate the fair value by using the income approach, where fair value is dependent on the present value of future economic benefits to be derived from ownership of Flow Traffic. The future economic benefits are significantly dependent on future revenue growth. No impairment of goodwill was recorded as of December 31, 2007 and 2006. If Flow Traffic and the EIS assets do not provide the future economic benefits we project, the fair value of these assets may become impaired, and we would need to record an impairment loss. Any earn-outs related to the EIS asset purchase will be recorded as additional goodwill in the year earned. Intangible assets are related to the EIS asset purchase for trade names and technology and are amortized over their anticipated useful lives of five to eight years.

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Revenue Recognition. Royalty income is recognized based upon a monthly royalty report provided to us by Econolite. This report is prepared by Econolite based on its sales of products we developed and is based on sales delivered and accepted by its customers. We recognize revenue from North American and international sales at the time of delivery and acceptance, the selling price is fixed or determinable and collectibility is reasonably assured. We record provisions against sales revenue for estimated returns and allowances in the period when the related revenue is recorded based upon historical sales returns and changes in end user demands. Sales returns and warranty allowances are estimated at the time of sale based on historical experience.

Income Taxes. Income taxes are accounted for under the liability method. Deferred income taxes reflect the effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and amounts used for income tax purposes. Deferred tax assets are offset by a valuation allowance as deemed necessary based on our estimate of our future sources of taxable income and the expected timing of temporary difference reversals. Uncertain tax positions are recognized if the tax position is more likely than not of being sustained on audit based on the technical merits of the position.

Inventories. Inventories are stated at the lower of cost (first-in, first-out method) or market and allowances have been made for obsolete, excess or unmarketable inventories based on estimated future usage or actual or anticipated product line changes.

New Accounting Pronouncements

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In June 2006, the Financial Accounting Standards Board, or FASB, issued Interpretation No. 48, *Accounting for Uncertainty in Income Taxes* - an interpretation of Statement of Financial Accounting Standard, or SFAS, No. 109, *Accounting for Income Taxes*, which clarifies the accounting for uncertainty in income taxes. FIN 48 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The interpretation requires that we recognize in the financial statements the impact of a tax position. Recognition is allowed if the tax position is more likely than not of being sustained on audit, based on the technical merits of the position. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods and disclosure. The provisions of FIN 48 are effective for fiscal years beginning after December 15, 2006, with the cumulative effect of the change in accounting principle recorded as an adjustment to opening retained earnings. We adopted FIN 48 in 2007, and it did not materially affect our financial position or results of operations.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*. SFAS No. 157 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurement but does not require any new fair value measurements. SFAS No. 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. In November 2007, the FASB decided to issue a proposed staff position to partially defer for one year the implementation of SFAS No. 157. The proposed deferral would apply to all nonfinancial assets and liabilities except those that are recognized or disclosed at fair value. The original effective date would continue to apply for items that are not subject to the proposed partial. We currently are evaluating the impact of this standard on our financial position and results of operations.

In December 2007, the FASB issued SFAS No. 141 (Revised 2007), *Business Combinations*. SFAS No. 141(R) will significantly change the accounting for business combinations. Under SFAS No. 141(R), an acquiring entity will be required to recognize all the assets acquired and liabilities assumed in a transaction at the acquisition-date fair value with limited exceptions. SFAS No. 141(R) will change the accounting treatment for certain specific items. SFAS No. 141(R) also includes a substantial number of new disclosure requirements. SFAS No. 141(R) applies prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. Earlier adoption is prohibited. This Statement will impact us if we complete an acquisition after the effective date.

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In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements - An Amendment of ARB No. 51*. SFAS No. 160 establishes new accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. SFAS No. 160 also includes expanded disclosure requirements regarding the interests of the parent and its noncontrolling interest. SFAS No. 160 is effective for fiscal years, and interim periods with those fiscal years, beginning on or after December 15, 2008. Earlier adoption is prohibited. We are currently assessing the potential impact that the adoption of SFAS No. 160 will have on our financial statements.

Contractual Obligations

The following table presents information regarding contractual obligations that existed as of December 31, 2007 by fiscal year (in thousands).

	Total	Less than 1 Year	2 3 Years	4 5 Years	More than 5 Years
Bank debt	\$ 5,000	\$ 5,000	\$	\$	\$
Lease obligations	904	380	524		
Reserve for tax uncertainties	150		150		
Total	\$ 6,054	\$ 5,380	\$ 674	\$	\$

Quantitative and Qualitative Disclosures About Market Risks

Our foreign sales and results of operations are subject to the impact of foreign currency fluctuations. We have not hedged our exposure to translation gains and losses. A 10% adverse change in foreign currency rates would not have a material effect on our results of operations or financial position.

At March 31, 2008, we held \$5.5 million (par value) of investments comprised of ARS. All of our ARS are AAA rated by one or more of the major credit rating agencies and have contractual maturities from 2031 to 2047. Further, all of these securities are collateralized by student loans, and approximately 97% of the collateral in the aggregate is guaranteed by the U.S. government under the Federal Family Education Loan Program. Since mid-February 2008, we have experienced failed auctions for our entire ARS portfolio, resulting in our inability to sell these securities. A failed auction results in a lack of liquidity in the securities but does not signify a default by the issuer. Upon an auction failure, the interest rates do not reset at a market rate but instead reset based on a formula contained in the security, which generally is higher than the current market rate. If we need to access these funds, we will not be able to do so without the possible loss of principal or until a future auction for these investments is successful, they are redeemed by the issuer or they mature. We cannot predict if or when a successful auction or redemption may take place. We do not believe we need access to these funds for operational purposes for the foreseeable future.

At March 31, 2008, there was insufficient observable ARS market information available to determine the fair value of our auction rate securities. Therefore, we estimated fair value by using broker quotes based primarily on (a) a discounted cash flow model with factors including tax status, credit quality, duration, insurance swaps, levels of federal guarantees and likelihood of redemption and (b) estimates of observable market data for similar securities (when available). Based on this analysis, we recorded an unrealized loss of \$251,000 (\$166,000 net of tax) related to our ARS investments and have classified the investments as long-term on our balance sheet as of March 31, 2008. We believe this unrealized loss is primarily attributable to the limited liquidity of these investments, and it is our intent to hold these investments long enough to avoid realizing any significant loss. Nonetheless, if uncertainties in the credit and capital markets continue, if these markets further deteriorate, or if we no longer have the ability to hold these investments, we may be required to recognize other-than-temporary impairment charges or a loss on the disposition of our ARS. We will continue to monitor and evaluate these investments on a quarterly basis for impairment or for the need to reclassify as long-term investments.

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BUSINESS

We develop and market video image processing products for use in traffic applications such as intersection control, highway, bridge and tunnel traffic management and traffic data collection.

We are the leading provider of software-based computer enabled detection, or CED, products and solutions for the intelligent transportation systems, or ITS, industry. Our family of products, which we market as Autoscope and RTMS, provides end users with the tools needed to optimize traffic flow, enhance driver safety, regulate air quality and address emerging security/surveillance concerns. Our technology analyzes signals from sophisticated sensors and transmits the information to management systems and controllers or directly to users.

CED is a process in which software rather than humans examines outputs from various types of sophisticated sensors to determine what is happening in a field of view. In the ITS industry, CED is a critical component of managing congestion and traffic flow. In many markets, it is not possible to build roads, bridges and highways quickly enough to accommodate increasing automobile ownership. For example, in 2007 there were approximately 3.0 million vehicles in Moscow, and the number of vehicles is expected to increase by 50% to 4.5 million vehicles by 2012. In China, 7.0 million vehicles were introduced in 2006, with this figure increasing by 133% to 16.3 million additional vehicles expected in 2014. We believe this growing use of vehicles worldwide will make CED-based ITS solutions increasingly necessary to complement existing and new roadway infrastructure to manage traffic flow and optimize throughput.

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We believe our CED solutions are technically superior to those of our competitors because they have a higher level of accuracy, limit the occurrence of false detection, are generally easier to install with lower costs of ownership, work effectively in a multitude of light and weather conditions, and provide end users the ability to manage inputs from a variety of sensors for a number of tasks. It is our view that the technical advantages of our products make our solutions ideally suited for use in ITS as well as adjacent markets. We believe that the market for CED is increasingly favoring converged solutions that include ITS, security/surveillance and environmental management, which we expect to increase demand for CED products such as ours.

We believe the strength of our distribution channels positions us to increase the penetration of our technology-driven solutions in the marketplace. We market our Autoscope products in North America, the Caribbean and Latin America through an exclusive agreement with Econolite, which we believe is the leading distributor of ITS intersection control products in North America and the Caribbean. We market our Autoscope products outside of North America, the Caribbean and Latin America and our RTMS products through a combination of distribution and direct sales channels, including our wholly-owned subsidiaries in Hong Kong, Poland and the United Kingdom. Our end users primarily include governmental agencies and municipalities, and, as of December 31, 2007, we had sold over 80,000 instances in more than 60 countries.

In December 2007, we completed the EIS asset purchase. EIS was a leading provider of radar-based detection solutions. On a pro forma basis for 2007, our revenues, including revenues from the EIS asset purchase, increased approximately 82% compared with our stand-alone revenues for 2006. In addition to the increased scale we gained through the EIS asset purchase, the addition of EIS RTMS radar products enables us to provide a wider array of CED products to our end users and support the introduction of hybrid product offerings to help drive market demand.

Industry Overview

The Intelligent Transportation Systems Market. The market for ITS is large and growing. According to a December 2007 report by Global Industry Analysts, Inc., total ITS sales in the United States and Europe for 2007 were approximately \$3.4 billion and \$2.8 billion, respectively, and total global ITS sales were approximately \$8.7 billion. Global Industry Analysts expects total global ITS sales to reach \$12.5 billion by the end of 2010, representing a compound annual growth rate of 11.6% for the period from 2000 to 2010.

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ITS encompasses a broad range of information processing and control electronics technologies that, when integrated into roadway infrastructure, help monitor and manage traffic flow, reduce congestion and enhance driver safety. The ITS market has been built around the detection of conditions that impact the proper operation of roadway infrastructure. ITS applications include a wide array of traffic management systems, such as traffic signal control, automatic number plate recognition and variable messaging signs. ITS technologies include video vehicle detection, inductive loop detection, sensing technologies, floating cellular data, computational technologies and wireless communications.

In traffic management applications, CED products are used for automated vehicle detection and are a primary data source upon which ITS solutions are built. Traditionally, automated vehicle detection is performed using inductive wire loops buried in the pavement. However, in-pavement loop detectors are costly to install, difficult to maintain, expensive to repair and not capable of wide-area vehicle detection without installations of multiple loops.

Above-ground CED solutions for ITS offer several advantages to in-pavement loop detectors. Above-ground CED solutions tend to have lower total cost of ownership than in-pavement loop detectors because above-ground CED solutions are non-destructive to road surfaces, do not require closing roadways to install or repair, and are capable of wide-area vehicle detection with a single device, thus enabling one input device to do the work of many in-pavement loops. Due to their location above ground, CED solutions have no exposure to the wear and tear associated with expanding and contracting pavement and the vibration and compaction caused by traffic. Furthermore, in the event of malfunction or product failure, above-ground CED solutions can be serviced and repaired without shutting down the roadway. Each of these factors results in greater up-time and increased reliability of above-ground CED solutions compared to in-pavement loop detectors. Above-ground CED solutions also tend to offer a broader set of detection capabilities and a wider field of view than in-pavement loop detectors. For example, unlike in-pavement loops, above-ground CED solutions can detect smoke and debris. In addition, a single unit video- or radar-based CED system can detect and measure a variety of data points, including vehicle presence, counts, speed, length, time occupancy, headway and flow rate as well as environmental factors and obstructions to the roadway. An equivalent installation using loops would require many installations per lane.

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We believe our Autoscope and RTMS products are competitive with and can take market share from in-pavement loop detectors. We believe the U.S. ITS video detection market sales in 2007 were approximately \$110 to \$130 million and growing at approximately 20% per year. We believe that we are the leader in the U.S. ITS video detection market in terms of unit sales, and we estimate that U.S. sales of the in-pavement loop detectors our products can supplant were approximately \$500 million in 2007.

We believe that several trends are driving the growth in ITS and adjacent market segments:

Proliferation of Traffic. In many countries, there has been a surge in the number of vehicles on roadways. Due to the growth of emerging economies and elevated standards of living, more people desire and are able to afford automobiles. For example, in 2006 there were 7.0 million new vehicles introduced in China and the number is expected to be 7.5 million in 2007 and 16.3 million by 2014. The number of vehicles utilizing the world's roadway infrastructure is growing at a quicker pace than new roads, bridges and highways are being constructed. The population of the United States has grown by about 30% or 70 million from 1982 to 2007, while highway miles have increased by approximately 5% in the same period. Between 1970 and 2005, the number of registered highway vehicles in the U.S. increased from 111 million to 247 million. Overall, the growth in roadway infrastructure is failing to match the surge in the number of vehicles using it. CED-based traffic management and control systems attempt to solve the problem by monitoring high traffic areas and analyzing data that can be used to mitigate traffic problems.

The Demographics of Urbanization. Accelerated worldwide urbanization drives the creation and expansion of middle classes and produces heightened demand for automobiles. Currently, there are over 400 cities in the world with over 1 million people. Since automobiles can be introduced to a metropolitan area faster than roadway infrastructure can be constructed, the result is continuously worsening traffic. Because expanding the roadway infrastructure is slow and costly to implement, and often environmentally undesirable, government agencies are increasingly turning to technology-based congestion solutions that optimize performance and throughput of existing and new roadway infrastructure. Detection is the requisite common denominator for any technology-based solution.

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The Melding of Large City Service Domains. Large cities require a wide range of service domains, including traffic, security/surveillance and environmental protection. These cities are increasingly turning to centralized management of these service domains, employing a command and control model that requires sharing and integrating data across service domains to operate effectively. For example, data collected for the traffic management service domain is relevant to all of the other service domains. This means that each CED sensor can supply information to multiple domain services. In turn, we believe the sharing of detection information across service domains will increase the level of sophistication required to process and interpret that information.

Advances in Wireless Technology Create the Ubiquitous Network. Businesses and government entities, motivated by the need for improved productivity and functionality, are increasingly adopting pervasive, networked information systems. The internet and widely available broadband networks, including recent advances in wireless technologies such as mesh networks, have greatly reduced the deployment costs of adding broadly distributed CED solutions to existing information systems. We believe that lower cost of deployment will increase demand for CED.

The Ascendancy of CED. Electronics of all sorts are becoming smaller and less costly to manufacture, while becoming more capable of performing certain complicated tasks than humans. CED solutions benefit from these trends. Of particular significance is the evolving concept of hybrid detection in which two or more sensing types such as radar and video are combined in a common CED device in which the weaknesses of each are synergistically offset by the strengths of the other. By leveraging a common digital signal processor and network interface, we believe the incremental cost of a hybrid device will be significantly lower than deploying multiple, single-sensor CED devices. This makes the concepts of rich sensing and instrumenting the city through CED solutions cost effective, which we believe will result in extensive proliferation of sophisticated sensors and detection devices.

Solutions for Adjacent Markets. We believe that the adjacent markets of ITS, security/surveillance and environmental management are converging, and that this convergence will accelerate as CED systems become more cost-effective when a single CED unit can be used for multiple purposes. Because the CED technologies involved are closely related, we believe our CED technology can be adapted to or is already capable of addressing these adjacent markets. According to Civitas Group, the global market for homeland security is estimated in 2006 to have

been approximately \$55.0 billion; whereas National Defense Magazine states that the environmental management market was \$520.0 billion in 2002. Both are growing.

We believe that environmental management systems will become a necessity, especially in large cities where the costs of air pollution are being increasingly borne by city residents. Long traffic delays ensure that idling vehicles have adverse effects on urban areas. In conjunction with video detection for ITS, CED products can help governmental agencies reduce air pollution and energy consumption by controlling traffic flow and reducing travel time, accidents and delays. We believe that the convergence of traffic, security/surveillance and environmental management should drive significant continued CED demand growth.

Our Competitive Strengths

We are the leading provider of software-based CED products and solutions for the ITS industry. We have the following competitive strengths that we expect will continue to enhance our leadership position in ITS and adjacent industries:

Leading Proprietary Technologies. Over the last two decades, we have developed a proprietary portfolio of complex software algorithms and applications that we have continuously enhanced and refined. These algorithms, which include our advanced signal processing technologies, allow our video and radar detection products to capture and analyze objects in diverse weather and lighting conditions and to balance the accuracy of positive detection and the avoidance of false detections. Due to the strength of these proprietary technologies, we believe we command premium pricing and, as a result, have achieved, on average, annual double-digit revenue growth over the last five years. CED technologies similar to ours are also difficult to develop and refine in a commercially viable manner. We therefore believe we are well positioned to quickly introduce next-generation products to market and continue our historically strong growth.

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Proven Ability to Develop, Enhance and Market New Products. We are developing and enhancing our product offerings. Over the last two decades, we have demonstrated the ability to lead the market with new products and product enhancements. For example, we were the first company to provide our end users with a fully integrated color camera, zoom lens and machine vision processor in our Autoscope Solo system. Additionally, EIS was one of the first companies to introduce radar-based technology solutions for ITS applications, and it has continued to lead the market with technology enhancements and new products, such as RTMS. We have successfully collaborated with our long-term channel partners to market these new products. We believe that developing, enhancing and marketing new products with our partners translates into strong organic revenue growth and high levels of profitability.

Leading Distribution Channel. We have maintained a relationship with Econolite for the distribution of our Autoscope products in North America and the Caribbean since 1991 and in Latin America since 2002. We believe that Econolite is the leading distributor of ITS control products in North America and the Caribbean. In our view, this relationship enhances our ability to commercialize and market new products and allows us to focus on our core business of advanced signal processing software algorithms. Although we expect our percentage of revenue attributable to Econolite to somewhat lessen over the next few years due to international diversification, we expect that our revenue dollars attributable to Econolite will continue to grow.

Broad Product Portfolio. Our product portfolio leverages our core software-based algorithms for CED to enable end users to detect and monitor objects in a designated field of view. We believe that our family of Autoscope and RTMS products allow us to offer a broad product portfolio that meets the needs of our end users. Additionally, our intention is to use our broad product portfolio to offer hybrid products that satisfy traffic, security/surveillance and environmental management requirements.

Experienced Management Team and Engineering Staff. We recently transitioned to a new management team charged with executing our growth strategy. Our management team is highly experienced in the ITS and software industries. Additionally, we believe that the continuity of our engineering staff allows us to continuously develop improved products.

Strong Financial Performance. Over the past five years, we have grown our revenue organically at an average double-digit compound annual growth rate. During this time, we maintained average net margins approaching 25%. As of December 31, 2007, we had \$23.2 million in

shareholders' equity. Our financial performance and strength gives us the ability to take advantage of favorable market trends without the restrictions that often handicap other nimble, leading-edge technology companies similar to us in size.

Our Growth Strategy

As part of our growth strategy, we seek to:

Enhance and Extend Our Technology Leadership in ITS. We believe we have established ourselves as the leading provider of CED in the ITS market segment. We believe that we now have an opportunity to accelerate our growth while maintaining our traditionally high level of profitability. We believe we will do this by improving the accuracy and functionality of our products, opportunistically expanding our product offering into adjacent markets, as well as expanding our portfolio and channels through licensing or selected acquisitions. We intend to develop and introduce hybrid CED products, which we believe will take advantage of our technical leadership in ITS and further differentiate us from our competitors.

Expand into Adjacent Markets. Our core skill is the implementation of software-based CED products and solutions. Over the past two decades, we have been developing and refining our complex signal processing software algorithms. We believe that our core software skills can be effectively utilized more broadly as markets, including security/surveillance and environmental management systems, converge. We believe that a driver of this convergence is that CED systems will become more cost-effective when a single CED unit can be used for multiple purposes. As a result, our objective is to become the leading supplier of critical CED components to third party management systems, particularly those that exploit the convergence of traffic, security/surveillance and environmental management systems. To do this, we are integrating this concept into our long-range engineering development road-map and will evaluate the use of technology licensing, acquisition and channel strategies that support this vision.

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Increase the Scope of Our Distribution and Direct Sales. We have made substantial investments in product adjustments to tailor our solutions to the differing needs of our international end users. We have also invested in the expansion of our European and Asian subsidiaries. We believe that markets in Eastern Europe, the Asia/Pacific region, the Middle East, Africa and South America, which have historically lagged North America and Western Europe in their use of CED, have recently begun to increase the adoption of CED in their traffic, security/surveillance and environmental management systems. We intend to continue to refine our product offerings through engineering development, technology licensing and/or acquisitions to take advantage of the accelerated pace of adoption of CED throughout the developing world.

Grow Through Complementary Acquisitions. We intend to pursue strategic acquisitions that extend our technology leadership, breadth of product offerings and market share in ITS and adjacent market segments. We expect to target acquisitions that will serve as a platform for additional growth opportunities, including new product offerings, technology enhancements and the introduction of new sales and distribution channels. We intend to employ a selective and disciplined approach when evaluating acquisition opportunities.

Our Products and Solutions

Our vehicle and traffic detection products are critical components of many ITS applications, including intersection control, highway management and tunnel safety. Our Autoscope video systems and RTMS radar systems convert sensory input collected by video cameras and radar units into vehicle detection and traffic data used to operate, monitor and improve the efficiency of roadway infrastructure. At the core of each product line are proprietary digital signal processing algorithms and sophisticated embedded software that analyze sensory input and deliver actionable data to integrated ITS applications. Between ISS and EIS, we spent approximately \$2.8 million, \$3.3 million and \$2.1 million on research and development in 2007, 2006 and 2005, respectively, to develop and enhance our Autoscope and RTMS technology. We believe our digital signal processing software algorithms represent a foundation on which support for additional sensory inputs such as audio, chemical, smoke, weather and vibration sensors may be added in the future. A diagram displaying our fundamental product architecture is shown below.

The Image Sensing Product Architecture

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Autoscope. Our Autoscope system processes video input from a traffic scene in real time and extracts the required traffic data, including vehicle presence, counts, speed, length, time occupancy (percent of time the detection zone is occupied), average headway (time interval between vehicles) and flow rate (vehicles per hour per lane). Autoscope supports a variety of standard video cameras or can be purchased with an integrated video camera. For intersections, the system communicates with the intersection signal controller, which changes the traffic lights based on the data provided. In highway applications, the system gathers vehicle count and flow rates and detects anomalous incidents, such as stopped or wrong-way vehicles. In tunnel safety applications, Autoscope provides alerts to operators upon detecting stopped, wrong-way or slow moving vehicles and upon detecting pedestrians, debris or smoke. In any application, the data may also be transmitted to a traffic management center via the internet or other standard communication means and processed in real time to assist in traffic management and stored for later analysis for traffic planning purposes.

All systems come with the latest Autoscope software suite, which provides a communications server and applications software for configuring, monitoring and maintaining system installations. Using a computer mouse, desired detection zones within a camera's field of view are programmed to specify where and what type of traffic data is collected. The application's software graphical user interface is currently available in 15 languages. A translation kit is available to translate the graphical user interface into other local languages as may be necessary or desired.

The Autoscope system runs on our Terra platform, which we introduced in April 2007. Enhancements to the Terra platform include the use of the Texas Instruments DaVinci dual core advanced RISC™ machine and digital signal processor, digital MPEG-4 streaming, high speed Ethernet interface, web browser maintenance and data and video over power line communications.

The Terra platform comes in the following two varieties:

Autoscope Solo Terra. The Autoscope Solo Terra is an integrated color zoom camera and machine vision processing computer contained in one compact housing unit that is situated on roadway infrastructure overlooking the traffic scene. The Solo Terra provides the best performance of our platforms due to the high-quality video resulting from the integration of camera and processor. The Solo Terra is our leading Autoscope offering in the North American market.

Autoscope RackVision Terra. The Autoscope RackVision Terra allows end users to use standard video cameras (both new or previously installed) with Autoscope technology. The RackVision Terra consists of a machine vision processing computer that is located in an intersection signal controller, control hub, incident management center or traffic management center that receives video from a separate camera. The RackVision Terra is our top selling Autoscope product in international markets.

Sales of and royalties from the Autoscope system have generated substantially all of our revenues since our inception.

RTMS. Our RTMS systems use radar to measure vehicle presence, volume, occupancy, speed and classification information for roadway monitoring applications. Data is transmitted to a central computer at a traffic management center via the internet or other standard communication means, including wireless. Data can be processed in real-time to assist in traffic management and stored for later analysis for traffic planning purposes.

RTMS is an integrated radar transmitter/receiver and special purpose computer contained in a compact, self-contained unit. The unit is typically situated on roadway poles and side-fired, making it especially well suited for highway detection applications.

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Comparison of Video and Radar Detection. Video detection is best suited to applications in which the ability to act on complex and detailed information is desired. However, video can encounter difficulties in poorly-lit environments, adverse weather conditions (such as fog or driving snow), in situations in which vehicles are obscured (for example, by other vehicles), or in extraordinarily dirty environments in which airborne particulates obscure the view. Also, despite the compensating factors of using high-quality color video, video can be susceptible to false detections due to shadows or reflections. Radar is less able to distinguish fine details than video but is considerably less affected by adverse environmental conditions and to some degree can see through certain kinds of obstructions. It also does not recognize shadows or visual reflections.

We believe that by combining video and radar sensors and algorithmically comparing their outputs, we will be able to offer our end users products that provide superior accuracy. Hybrid CED detectors should be able to coalesce the strengths of each type of sensor to overcome the other's limitations. The result is improved overall performance in a broader range of circumstances.

Distribution, Sales and Marketing

We market and sell our products globally. As of December 31, 2007, we had supplied systems for more than 80,000 instances in more than 60 countries. Together with our partners, we offer a combination of high-performance CED technology and experienced local support. Our end users primarily consist of federal, state, city and county departments of transportation, road commissions and port, highway, tunnel and other transportation authorities. The decision-makers within these governmental entities typically are traffic planners and government engineers, who in turn often rely on consulting firms that perform planning and feasibility studies for the governmental entities. Our products sometimes are sold directly to system integrators or other suppliers of systems and services who are operating under subcontracts in connection with major road construction contracts.

Autoscope North American, Caribbean and Latin American Sales. We have granted Econolite an exclusive right to market and distribute the Autoscope system in North America, the Caribbean and Latin America. The agreement with Econolite grants it a first refusal right that arises when we make a proposal to Econolite to extend the license to additional products in North America, the Caribbean and Latin America and a first negotiation right that arises when we make a proposal to Econolite to include rights corresponding to Econolite's rights under our current agreement in countries not in these territories. Econolite provides the marketing and technical support needed for its sales in these territories. Econolite pays us a royalty on the revenue derived from its sales of the Autoscope system. We cooperate in marketing Autoscope products with Econolite for North America, the Caribbean and Latin America and provide second-tier technical support. We have the right to terminate our agreement with Econolite if it does not meet minimum annual sales levels or if Econolite fails to make payments as required by the agreement. The initial term of the agreement was 15 years, ending in 2006. In 2001, we signed a five-year extension of our agreement with Econolite, extending its original term to June 2011. The agreement is automatically renewable for additional one-year periods unless terminated by either party upon 60 days' notice.

RTMS North American, Caribbean and Latin American Sales. We market the RTMS system to a network of distributors covering countries in North America, the Caribbean and Latin America. We provide technical support to these distributors from our office in Toronto.

European and Asian Sales. We market Autoscope and RTMS to a network of distributors covering countries in Europe, the Middle East, Africa and Asia through wholly-owned subsidiaries that have offices in Hong Kong, Poland and the United Kingdom. Technical support to these distributors is provided by our wholly-owned subsidiaries in Europe and Asia, with second-tier support provided by our Toronto office or our corporate headquarters in St. Paul, Minnesota.

Competition

We compete with companies that develop, manufacture and sell traffic management devices using machine vision and radar sensing technologies as well as other above-ground CED technologies based on laser, infrared and acoustic sensors. We also compete with providers of in-pavement loop detectors. For competition with other above-ground CED products, we typically compete on performance and functionality, and to a lesser extent on price. When competing against providers of loop detectors, we compete principally on ease of installation and the total cost of ownership over a multi-year period, and to a lesser extent on functionality.

Among the companies that provide direct competition to the Autoscope system worldwide are Traficon N.V., Quixote Corporation, Iteris, Inc. and Citilog S.A. Among the companies that provide direct competition to RTMS worldwide are Wavetronix, LLC and Xtralis, LLC. All of these companies have working installations of their machine vision or radar systems in the U.S. and other parts of the world. To our knowledge,

however, these companies do not have as many installations as we have. In addition, there are local companies providing direct competition in specific markets such as Korea, China and Japan. We are aware that these and other companies will continue to develop technologies for use in traffic management and surveillance. One or more of these technologies could in the future provide increased competition for our Autoscope and RTMS systems.

Other potential competitors of which we are aware include Siemens AG, Cognex Corp., Matsushita Electric Industrial Co., Ltd. (Panasonic), Sumitomo Corporation, Omron Electronics LLC and 3M Company. These companies have machine vision or radar capabilities and have substantially more financial, technological, marketing, personnel and research and development resources than we have.

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Manufacturing

We currently have the Autoscope family of products for sale in North America, the Caribbean and Latin America manufactured through agreements with Econolite and Wireless Technology, Inc., or WTI. In 1991, we appointed Econolite as our exclusive licensee to manufacture and sell the Autoscope system and related technology and to sell the products in North America and the Caribbean. In 2002, we granted Econolite an exclusive license to sell Autoscope products in Latin America, and we granted WTI a non-transferable license to use any of our intellectual property as needed to manufacture Autoscope products for our use and Econolite's use. In Europe and Asia, we engage contract manufacturers to manufacture the Autoscope family of products. Econolite provides a one-year warranty on the Autoscope system and must provide all service required under this warranty. WTI provides Econolite a limited two-year warranty on material and workmanship on the products it manufactures. The terms of the warranties vary for overseas manufacturers.

For RTMS products, we engage contract manufacturers to produce subassemblies based on our designs. These subassemblies are then shipped to our facilities in Toronto, where we perform final assembly, testing and calibration and packaging of finished units for shipment. For most RTMS products, we provide a two-year warranty. We also perform warranty and post-warranty repairs of RTMS units in Toronto.

Most of the hardware components used to manufacture our products are standard electronics components that are available from multiple sources. Although some of the components used in our products are obtained from single-source suppliers, we believe other component vendors are available should the necessity arise. To our knowledge, our contract manufacturing and component vendors in Europe and Asia comply with the European directive on RoHS, which is the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Intellectual Property

To protect our rights to our proprietary know-how, technology and other intellectual property, it is our policy to require all employees and consultants to sign confidentiality agreements that prohibit the disclosure of confidential information to any third parties. These agreements also require disclosure and assignment to us of any discoveries and inventions made by employees and consultants while they are devoted to our business activities. In addition, in the EIS asset purchase, we acquired six patent applications on file with the U.S. Patent and Trademark Office relating to the RTMS products and technology. We also rely on trade secret, copyright and trademark laws to protect our intellectual property.

We intend to protect our intellectual property assets and will actively seek, when appropriate, protection for owned or licensed products and proprietary information by means of U.S. and foreign copyrights, trademarks, patents and contractual arrangements. We have registered trademark rights to Autoscope and Autoscope Solo in 29 countries, including the U.S. and most European countries, and we also have registered RTMS in the U.S.

We entered into a license agreement with the University of Minnesota in 1991. Under the agreement, the University granted us the exclusive right to make, have made, use, sell and lease any product that incorporated knowledge, information, know-how, software and devices in the possession of the University, including a patent held by the University, related to a video vehicle detection system developed by the University, including improvements to the technology. The patent expired in July 2006. The expiration of the University patent in July 2006 made the technology covered by the patent available to the public, allowing others to use the technology to design, manufacture and sell a product which could compete with our Autoscope product. However, since 1991, we have extensively added to the technology and product

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design to include our own intellectual property, and we have made extensive moderations and revisions to the University technology. We also developed our own techniques to make the technology commercially feasible. Consequently, we believe that the expiration of the University patent is not a threat to our business.

Employees

As of February 1, 2008, we had 80 employees. Of these, 21 employees were employed by our overseas subsidiaries in Hong Kong, the United Kingdom and Poland. None of our employees is represented by a union. We believe our employee relations are good.

Properties

We currently lease and occupy 11,564 square feet in St. Paul, Minnesota for our headquarters. This lease expires on May 31, 2010, and we have the right to renew the lease for two additional three-year terms. Our office in Toronto, Ontario, Canada consists of approximately 6,200 square feet of space, and our lease for this space expires in December 2010. We also lease smaller facilities in Hong Kong, the United Kingdom and Poland. We believe that our facilities are adequate to meet our current and expected needs.

We believe that our current space is generally adequate in the United States, Asia and Europe, and we do not intend to lease significantly more space in 2008.

Legal Proceedings

We are not currently a party to any material pending legal proceedings.

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MANAGEMENT

Executive Officers and Directors

The following table set forth the names and positions of our directors and executive officers:

Name	Age	Position
Kenneth R. Aubrey	59	President, Chief Executive Officer and Director
Gregory R. L. Smith	41	Chief Financial Officer
James Murdakes	75	Chairman of the Board
Michael G. Eleftheriou	63	Director
Richard C. Magnuson	66	Director
Panos G. Michalopoulos	59	Director
Sven A. Wehrwein	57	Director

Kenneth R. Aubrey was appointed as President in January 2007 and as Chief Executive Officer in May 2007. He was elected to the board of directors at our annual meeting of shareholders held in May 2007. From 1995 to 2006, Mr. Aubrey held various positions with Siemens AG,

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most recently as a business unit president of Siemens ITS Division, Industrial Solutions & Services Group. He concurrently managed Strategic Projects for the ITS Division. Prior to this, Mr. Aubrey served as a vice president of Strategic Projects for Siemens Information and Communication Networks Group, where he focused on merger and acquisition projects.

Gregory R. L. Smith was appointed as Chief Financial Officer and Treasurer in January 2007. From 2002 through 2006, Mr. Smith was Chief Financial Officer of MQSoftware, Inc., a privately-held software developer. Prior to that, Mr. Smith served as a vice president for Digital River, Inc., a publicly-held e-commerce outsourcing provider, where his duties included merger and acquisitions projects. Before joining Digital River, Inc., Mr. Smith was a certified public accountant with Ernst & Young LLP.

James Murdakes has been a director since 1994. Mr. Murdakes was elected as Chairman of the Board in February 2002 and was Chief Executive Officer from April 2002 until May 2007. He was also President from April 2002 until January 2007. He served as President and Chief Executive Officer of LSC, Inc., a Minneapolis-based systems integrator for computer network storage servers, from 1993 through 1996, and was Chairman of the Board and a management consultant to LSC in 1997. He was retired from full-time employment from 1998 to 2002 and in July 2007. Mr. Murdakes is also a director of Control Corporation, a private corporation providing data communications products for office, industrial, hospitality and retail automation markets.

Michael G. Eleftheriou has been a director since 2002. From June 2005 until September 2007, Mr. Eleftheriou was President and Chief Executive Officer of Catalyst International, Inc., a privately-held company focused on software products and services in supply chain execution and management. In September 2007, Catalyst International, Inc. was acquired by CDC Software, a wholly-owned subsidiary of CDC Corporation, which is based in Hong Kong. From November 2004 to June 2005, Mr. Eleftheriou served as Executive Vice President at NJK Holding, a Minneapolis-based privately-held investment company. From July 2001 until July 2004, Mr. Eleftheriou served as President and Chief Executive Officer of Creative Publishing International, a Minneapolis-based publisher, and served as interim President of Imaging Acceptance Corporation, the successor company, through October 2004. From November 2000 to July 2001, Mr. Eleftheriou provided executive consulting services to providers of web-based media. Prior to this, Mr. Eleftheriou held senior management positions with Control Data Systems, Inc., British Telecommunications plc and Control Data Corporation.

Richard C. Magnuson has been a director since 1990. From July 1997 to February 2007, Mr. Magnuson served as Chairman and Chief Financial Officer of BioMedix, Inc., a medical device company. From 1995 to 1997, he operated his own management consulting firm, Operating Management, Inc. Mr. Magnuson served as President and Chief Executive Officer of Image Sensing Systems, Inc. from 1991 to 1995 and as Vice President and Secretary during 1995. From 1988 to 1990, Mr. Magnuson worked with Image Sensing Systems, Inc. as a private consultant. Mr. Magnuson is also a director of privately-held BioMedix, Inc.

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Panos G. Michalopoulos is the founder of the company and has been a director since 1984. Dr. Michalopoulos was Chairman of the Board from our inception in 1984 through 1999 and served as Chief Scientific Advisor from 1995 through 2000. Dr. Michalopoulos has been a professor in the Department of Civil Engineering at the University of Minnesota since 1997. He has more than 35 years of research, teaching and consulting experience in traffic engineering operations surveillance and control. He has taught at several universities, consulted with many firms in the United States and abroad in the area of traffic management and control, and worked as a traffic engineer.

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Sven A. Wehrwein was named a director in October 2006. Mr. Wehrwein has been an independent financial consultant to emerging companies since 1999. Earlier in his 30-year financial career, he worked as an investment banker, chief financial officer and certified public accountant. Mr. Wehrwein is also a director of Compellent Technologies, Inc., Synovis Life Technologies, Inc., Uroplasty, Inc., and Vital Images, Inc., all of which are publicly-held companies.

Key Employee

Dan Manor was appointed as Managing Director of ISS Image Sensing Systems Canada Ltd. in December 2007 following the EIS asset purchase. Mr. Manor is the founder of EIS and served as its president from 1990 to 2007. Mr. Manor has over 30 years of experience in the design, manufacturing and installation of sophisticated radar, microwaves and other sensors, including eight years at ELTA, the electronic development subsidiary of Israel Aircraft Industries.

Board Composition

Our board of directors has determined that four of our six directors are independent directors as defined under the applicable rules of the SEC and The NASDAQ Capital Market. The four independent directors are Michael G. Eleftheriou, Richard C. Magnuson, Panos G. Michalopoulos and Sven A. Wehrwein. Each of the committees of the board is composed of only independent directors. In making the independence determinations, we reviewed all of our directors' relationships with us based primarily on a review of the responses of the directors to questions regarding employment, business, familial, compensation and other relationships with us and our management.

Board Committees

Our board of directors conducts its business through meetings of the board and the following three committees: audit committee, compensation and stock option committee, and nominating and corporate governance committee. Each of these committees has adopted and operates under a written charter. Copies of the charters are posted on our website. The current membership of the committees is described below.

Audit Committee	Compensation and Stock Option Committee	Nominating and Corporate Governance Committee
Sven A. Wehrwein (Chair) Richard C. Magnuson Michael G. Eleftheriou	Michael G. Eleftheriou (Chair) Panos G. Michalopoulos Sven A. Wehrwein	Panos G. Michalopoulos (Chair) Sven A. Wehrwein

Audit Committee. The audit committee is responsible for the selection and compensation of the independent registered public accounting firm, and it reviews with the auditors the scope of the annual audit, matters of internal control and procedure and the adequacy thereof, the audit results and reports and other general matters relating to our accounts, records, controls and financial reporting. The audit committee members meet the requirements for financial literacy under the applicable rules and regulations of the SEC and The NASDAQ Capital Market. Our board of directors has identified Richard C. Magnuson, Michael G. Eleftheriou and Sven A. Wehrwein to be audit committee financial experts as defined in the applicable rules of the SEC. Each member of our audit committee possesses the financial qualifications required of audit committee members set forth in the rules and regulations of The NASDAQ Capital Market and under the Securities Exchange Act of 1934.

Compensation and Stock Option Committee. The compensation and stock option committee reviews and recommends to the board of directors the compensation guidelines and stock option grants for executive officers and other key personnel. The committee's primary responsibilities include:

annually reviewing and approving corporate goals and objectives relevant to the Chief Executive Officer and Chief Financial Officer's compensation, evaluating their performances in light of those goals and objectives, and setting their compensation levels based on this evaluation and other factors deemed relevant and appropriate by the committee;

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annually reviewing and determining for our executive officers their annual base salary level, their annual incentive opportunity levels, employment agreements, severance arrangements and change of control agreements/provisions, and special or supplemental benefits, if any; and

reviewing and making recommendations to the board of directors with respect to compensation programs and policies, including incentive compensation plans and equity-based plans.

Nominating and Corporate Governance Committee. The nominating and corporate governance committee recommends new director nominees to the board and recommends policy guidelines on corporate governance issues.

Compensation Committee Interlocks and Insider Participation

No executive officer serves as a member of the board of directors or compensation committee of any entity that has any of its executive officers serving as a member of our board of directors or compensation committee.

Compensation Discussion and Analysis

Overview. This compensation discussion describes the material elements of compensation awarded to, earned by or paid to each of our named executive officers. For 2007, our named executive officers were James Murdakes, who was our Chief Executive Officer until June, Kenneth R. Aubrey, who was our President until June and then President and Chief Executive Officer for the remainder of the year, and Gregory R. L. Smith, who was our Chief Financial Officer throughout the year.

Objectives of the Compensation Program. The primary objective of our executive compensation program is to attract, motivate and retain key executives and align their compensation with our overall performance. Our compensation and stock option committee believes that incentive, performance-based compensation can be a key factor in motivating executive performance to maximize shareholder value and align executive performance with our corporate objectives and shareholder interests. To this end, the committee has established an executive compensation

philosophy that includes the following considerations:

an emphasis on performance-based compensation that differentiates compensation results based upon varying elements of company and individual performance;

a recognition of both quantitative and qualitative performance objectives based upon an executive officer's responsibilities; and

a mix of short-term cash and long-term equity-based compensation.

The committee believes it is important, when making its compensation-related decisions, to be informed as to current practices of similarly situated companies, but the committee does not rely on any specific comparator group in making compensation decisions. The committee does not engage in benchmarking compensation against comparator groups, and it has not established targeted percentile rankings with respect to total compensation or the specific elements of compensation for our named executive officers. However, members of our board of directors sit on the boards of other public and private companies and provide insight to the committee about compensation practices, generally.

Design of the Compensation Program. The committee has designed the compensation program to achieve the objectives described above, to ensure market competitiveness and to assure satisfaction of our objective of providing total executive pay that achieves an appropriate balance of variable pay-for-performance and at-risk compensation. The compensation program will reward an executive officer based upon corporate performance as well as the performance of that executive officer.

The compensation program includes consideration for the following elements: base salary, annual cash incentives, stock option grants and other benefits and perquisites. We characterize the annual cash incentives and the stock options that are granted to our named executive officers as performance-based compensation. Our executive compensation policy provides that a significant portion of the total compensation payable to our named executive officers will be in the form of performance-based compensation. While we do not have a target for each element of compensation relative to total compensation, the following table shows actual bonus payment amounts relative to total compensation paid for 2007 to Messrs. Aubrey and Smith. Mr. Murdakes did not receive incentive pay for 2007.

Named Executive Officer	2007 Bonus	2007 Actual	Actual Bonus Paid	Actual Paid % of Target	Actual Paid % of Total Compensation
	Target	Total Compensation			
Kenneth R. Aubrey	\$90,000	\$350,076	\$87,000	96.7 %	24.9 %
Gregory R. L. Smith	\$45,000	\$217,730	\$44,000	97.8 %	20.2 %

The elements of our compensation program are described below:

Base Salaries. Base salary is an important element of executive compensation because it provides executives with a fixed level of regular periodic income. In determining base salaries for our named executive officers, the committee considers historic individual and corporate

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performance, level of responsibility and market and competitive data. The committee establishes base salaries at a level to permit a significant portion of the total compensation that a named executive officer can earn to be performance-based cash incentives and equity awards.

Annual Cash Incentives. As part of our executive compensation program, our executive officers may receive annual cash incentive awards pursuant to our annual cash bonus program. Targeted bonus amounts are designed to provide competitive incentive pay and reflect our pay-for-performance philosophy. For 2007, Messrs. Aubrey and Smith received bonuses of \$87,000 and \$44,000, respectively, which amounts represent approximately 97% and 98% of each executive officer's maximum potential bonus. The committee historically has reviewed target bonus amounts annually.

Performance objectives intended to focus attention on achieving key goals are established at the beginning of each fiscal year. The primary quantitative objective is achievement of revenue and net income targets set forth in our annual operating plan established by the board of directors. Specifically, these include metrics such as revenue and net profit (after tax), international operations revenue and profit (not including the impact of the EIS asset purchase). Additionally, each named executive officer's performance is judged on success in achieving certain strategic and operational initiatives. In evaluating an executive's performance, the committee may consider other factors in awarding bonuses and may, in its discretion, award as a discretionary bonus a portion of any bonus amount that is not earned based upon achievement of the financial metrics described above. Mr. Aubrey's personal objectives include strategic goals related to international operations, new product integration and other strategic and management related goals. Mr. Smith's personal objectives include strategic and international operations objectives and internal process improvements. The committee reviews the individual incentive components of Messrs. Aubrey and Smith employment agreements, described below, and evaluates the objective portions relative to our performance. The committee also evaluates the subjective, individual performance goals in determining the total amount of bonus to be awarded, and has the ability to exercise discretion with respect to this portion. For Messrs. Aubrey and Smith, one-third of the bonus calculation is discretionary.

Stock Option Grants. Our executive officers also may receive equity-based incentive compensation under our 2005 Stock Incentive Plan. Grants under the 2005 Stock Incentive Plan are designed to align a significant portion of the executive compensation package with the long-term interests of our shareholders. All stock options granted by the committee in 2007 to newly hired executive officers vest 25% on each anniversary of the grant date. This vesting schedule is intended to require long-term focus on performance for the executive to realize value from the exercise of stock options. In addition, stock options are generally granted with an exercise price equal to the closing sale price of the stock on the date of grant, and they provide no cash benefit if the price of the stock does not exceed the grant price during the option's term. Therefore, for any value to be derived from an option grant, our performance needs to be at a level that results in increased stock price performance and shareholder value over a multi-year period.

Individual equity awards historically have been recommended by the committee based on an officer's current performance, potential for future contribution and responsibility and market competitiveness. Messrs. Aubrey and Smith received grants in 2007 upon the commencement of their employment as described elsewhere in this prospectus.

Retirement Plans. We generally expect executives to plan for and fund their own retirement. We maintain a 401(k) plan that permits eligible employees, including our named executive officers, to defer a limited portion of salary and bonus into any of several investment alternatives. In 2007, we began making matching contributions equal to 50% of the first 6% of compensation deferred by employees subject to a maximum match of \$5,000 and maximums established under the Internal Revenue Code of 1986. Prior to 2007, we made discretionary contributions to the 401(k) plan as profit sharing. Payments made to named executive officers for profit sharing are included in the Summary Compensation Table below. We do not maintain defined benefit retirement or senior executive retirement plans, or provide post-retirement medical benefits, for our executive officers.

Other Benefits and Perquisites. Our executive compensation program also includes other benefits and perquisites. The named executive officers participate in company-sponsored group benefit plans such as health, life and disability insurance plans available to all employees. In addition, executive officers may upon joining the company receive assistance in relocating. For more detailed information regarding benefits and perquisites provided to our executive officers, see the Summary Compensation Table contained elsewhere in this prospectus.

2008 Program. For 2008, the committee approved base salaries for Messrs. Aubrey and Smith of \$225,000 and \$154,000, respectively, and annual cash incentive tiers for Messrs. Aubrey and Smith for threshold/target/superior performance of \$36,000/\$72,000/\$108,000 and \$18,000/\$36,000/\$54,000, respectively. The 2008 annual cash incentive program is similar to the 2007 program except that incentives have been added related to the performance of the RTMS product line. In addition, on March 27, 2008, the committee granted options to purchase 18,000 shares of common stock to Mr. Aubrey and 9,000 shares to Mr. Smith. The options were granted under the 2005 Stock Incentive Plan; have a term of six years; vest as to 25% of the shares subject to the options on the first, second, third and fourth anniversary dates of the date of grant so long as the officer is then an employee of our company; and have an exercise price of \$12.37, which is equal to the closing price of our common stock on March 26, 2008 as reported on The NASDAQ Capital Market.

Named Executive Officers Role in Compensation Decisions. The committee determines the actual and targeted compensation of our named executive officers. The committee establishes each named executive officer's compensation plan based on major goals and objectives established by the board of directors. The committee also receives input from our Chief Executive Officer regarding an executive officer's leadership capabilities, past performance and potential for future contributions when making its determinations actual and targeted compensation amounts for named executive officers.

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Other Considerations. Although the committee considers tax and accounting issues in connection with its compensation decisions, those have not become material factors in the committee's compensation decisions to date.

Severance Arrangements with James Murdakes. James Murdakes retired as our Chief Executive Officer and President on June 30, 2007. The board of directors agreed to make severance payments to Mr. Murdakes from July 1, 2007 through December 31, 2007 at his then-current salary rate, resulting in total payments of \$77,500 to Mr. Murdakes during that time. In addition, the board of directors awarded Mr. Murdakes a company car he used while serving as our Chief Executive Officer and President upon his retirement from those positions. The severance payments related to a release we received from Mr. Murdakes and an acknowledgment of the continued effectiveness of his confidentiality, non-competition and invention assignment obligations to us, and the car award the board of directors made to Mr. Murdakes was discretionary and based on Mr. Murdakes' length of and distinguished service to the Company.

Summary Compensation Table 2007 and 2006

The following table sets forth information about compensation awarded to, earned by or paid to our named executive officers during 2007 and 2006.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Option Awards ⁽¹⁾ (\$)	Non-Equity Incentive Plan Compensation ⁽²⁾ (\$)	All Other Compensation (\$)	Total (\$)
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Kenneth R. Aubrey

*Chief Executive Officer and
President*

2007	\$ 180,384	\$	\$ 72,037	\$ 87,000	\$ 10,655	(3) \$ 350,076
2006	\$	\$	\$	\$	\$	\$

James Murdakes

*Chairman of the Board, former
Chief*

Executive Officer and President

2007	\$ 91,500	(4) \$	\$ 10,450	\$	\$ 92,545	(5) \$ 194,495
2006	\$ 145,000	\$ 40,000	\$	\$	\$ 16,929	(6) \$ 201,929

Gregory R. L. Smith

Chief Financial Officer

2007	\$ 134,705	\$	\$ 36,400	\$ 44,000	\$ 2,625	(7) \$ 217,730
2006	\$	\$	\$	\$	\$	\$

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- (1) Consists of the compensation costs of stock options for financial reporting purposes for the year under SFAS No. 123(R) rather than an amount paid to or realized by the officer. There can be no assurance that the SFAS No. 123(R) amounts will ever be realized. The amount shown for Mr. Murdakes relates to option awards made for his role as a board director. See note 13 to our consolidated financial statements for the assumptions used to determine the valuation of option awards.
 - (2) Consists of awards made for 2007 pursuant to the incentive plan component of each named executive officer's employment agreement.
 - (3) Consists of company paid relocation expense for Mr. Aubrey.
 - (4) Included are payments of \$14,000 made to Mr. Murdakes for his service as a board director during 2007.
 - (5) Includes \$77,500 for severance payments made from July 1, 2007 through December 31, 2007, \$1,800 for use of a company car from January 1, 2007 to June 30, 2007, and \$13,245 for an award of the company car to Mr. Murdakes.
 - (6) Includes profit sharing of \$5,372 paid into the 401(k) plan account of Mr. Murdakes. In addition, the amount includes 2005 federal employment tax payments of \$7,957 made for Mr. Murdakes, which were due as a result of his reclassification from a consultant to an employee. During 2006, Mr. Murdakes had the use of a company car. The value of such use was determined to be \$3,600.
 - (7) Consists of a company match paid into the 401(k) plan account of Mr. Smith.

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Grants of Plan-Based Awards 2007

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In the following table, we have provided information regarding non-equity incentive plan awards and regarding stock option awards made to our named executive officers in 2007 pursuant to our 2005 Stock Incentive Plan.

Name	Approval Date ⁽¹⁾	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards ⁽²⁾			Number of Securities Underlying Options	All Other Option Awards:		Grant Date Fair Value of Stock and Option Awards ⁽³⁾
			Threshold(\$)	Target(\$)	Maximum(\$)		Awards (\$/Sh)	Exercise or Base Price of Option	
Kenneth R. Aubrey	11/5/06	1/22/07	\$ 30,000	\$ 60,000	\$ 90,000	50,000	(4)	\$ 14.24	\$ 306,000
James Murdakes			\$	\$	\$	4,000	(5)	\$ 15.70	\$ 17,920
Gregory R. L. Smith	11/5/06	1/15/07	\$ 15,000	\$ 30,000	\$ 45,000	25,000	(4)	\$ 14.10	\$ 151,500

(1) For new employees, the committee approved on the date indicated the grant of options to be made on the employee's start date which is set forth in the grant date column.

(2) Represents the range of awards under the incentive component of each of the named executive officer's employment agreement for 2007. The amounts in these columns reflect the minimum payment level if an award is achieved, the target payment level and the maximum payment level under each plan if superior performance is attained. Amounts for 2008 have not yet been determined. Amounts actually paid for 2007 are set forth in the Non-Equity Incentive Plan Compensation column of the Summary Compensation Table 2007 and 2006 above.

(3) Represents the grant date fair value determined pursuant to SFAS No. 123(R). See note 13 to our consolidated financial statements for more information regarding the assumptions used to determine the valuation of the awards.

(4) Consists of stock options. The options vest in annual installments of 25% for four years on each anniversary date of the date of grant, beginning on the first anniversary date of the date of grant.

(5) Options vest 100% one year from the grant date.

Outstanding Equity Awards At Fiscal Year-End 2007

In February 1995, we adopted the 1995 Long-Term Incentive and Stock Option Plan and in April 2005, we adopted the 2005 Stock Incentive Plan, which provide for the granting of incentive stock options, non-qualified stock options, stock appreciation rights, restricted stock awards and performance awards to our officers, directors, employees, consultants and independent contractors. The 1995 plan expired in February 2005, although its expiration did not affect the options then outstanding under the plan. Only incentive stock options and non-qualified stock options have been granted to date under the 1995 plan and the 2005 plan. Options granted under the plans generally vest over three to five years based on service and have a contractual term of six to ten years. As of December 31, 2007, there were options outstanding under the plans to purchase 337,233 shares outstanding with a weighted average exercise price per share of \$8.47.

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In the following table, we have provided information regarding outstanding stock option awards held at December 31, 2007 by the named executive officers.

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Name	Option Awards		Option Exercise Price (\$)	Option Expiration Date
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable		
Kenneth R. Aubrey		50,000 ⁽¹⁾	\$ 14.24	1/22/2013
James Murdakes	36,000 ⁽²⁾		\$ 2.40	12/1/2008
	10,000 ⁽²⁾		\$ 2.35	2/12/2012
		4,000 ⁽³⁾	\$ 15.70	5/31/2011
Gregory R. L. Smith		25,000 ⁽⁴⁾	\$ 14.10	1/15/2013

(1) Options vest in annual installments of 25% for four years beginning on January 22, 2008.

(2) Options fully vested.

(3) Options vest 100% one year from the grant date on May 31, 2008.

(4) Options vest in annual installments of 25% for four years beginning on January 15, 2008.

Option Exercises and Stock Vested 2007

There were no stock options exercised by the named executive officers in 2007.

Stock Option Plans

Under the terms of our plans, if a participant's employment with us terminates by reason of the participant's death or disability, then to the extent a stock option held by the participant is vested as of the date of death or disability, the stock option may then be exercised by the participant, the

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legal representative of the participant's estate, the legatee of the participant under the will of the participant, or the distributee of the participant's estate, whichever is applicable, for a period of one year from the date of death or disability or until the expiration of the stated term of the stock option, whichever period is shorter. Any options that are not vested as of the date of death or termination due to disability will immediately lapse and be of no further force or effect.

If a participant's employment with us terminates for any reason other than death or disability, then to the extent any stock option held by the participant is vested as of the date of termination the stock option may then be exercised for a period of 90 days from the date of termination or until the expiration of the stated term of the stock option, whichever period is shorter. Any options that are not vested as of the date of termination will immediately lapse and be of no further force or effect. Upon the termination of the participant's employment by us for cause, any and all unexercised stock options granted to the participant will immediately lapse and be of no further force or effect.

In the event of a change in control of our company, all stock options held by executive officers then outstanding and not fully vested will become fully vested and exercisable in accordance with their terms. For purposes of the stock option plans under which there are outstanding and not fully vested stock options, a change in control means the happening of one of the following:

a public announcement that any entity has acquired or has the right to acquire beneficial ownership of 51% or more of the then outstanding shares of common stock of our company;

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the commencement of or public announcement of an intention to make a tender or exchange offer for 51% or more of the then outstanding shares of the common stock of our company;

a sale of all or substantially all of the assets of our company; or

the board of directors, in its sole discretion, determines that there has been a sufficient change in the stock ownership of our company to constitute a change in control.

Employment Agreements

James Murdakes. On March 9, 2007, we entered into an employment agreement with James Murdakes that superseded any and all former employment agreements. The agreement provides for Mr. Murdakes' transition to his role as President in early 2007, his role as Chief Executive Officer through May 31, 2007, when that role transitioned to his successor, and through June 30, 2007 his continued employment with us in the capacity of executive consultant to the newly-appointed Chief Executive Officer. The agreement also provided that, retroactive to January 1, 2007, Mr. Murdakes' base salary was \$155,000 per year and he was paid his pro rata base salary and received insurance and other benefits in accordance with our standard and executive benefits through June 30, 2007.

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Under the our agreement with Mr. Murdakes, upon retirement on July 1, 2007, Mr. Murdakes salary, participation in the employee benefits plans and receipt of employment perquisites ceased. However, upon signing a release, he received as severance a pro rata portion of his base salary through December 31, 2007. Under our agreement with Mr. Murdakes, during the period from July 1 through December 31, 2007, Mr. Murdakes provided consultation to the new Chief Executive Officer at no additional compensation and became eligible for compensation as a board member consistent with our pay schedule for outside directors. Mr. Murdakes also expressly agreed that the Confidentiality, Noncompetition and Invention Assignment Agreement that he signed in March 2007 remained in effect and survived his retirement.

Kenneth R. Aubrey. On December 12, 2006, we entered into an employment agreement with Kenneth R. Aubrey providing that Mr. Aubrey served at will as our President from January 15, 2007 through May 31, 2007, at which point Mr. Aubrey assumed the duties of Chief Executive Officer. Under the agreement, Mr. Aubrey initially was paid an annualized salary of \$175,000 through May 31, 2007 and then an annualized salary of \$200,000, subject to adjustment by our compensation and stock option committee in its sole and absolute discretion. He also received insurance and other benefits in accordance with our standard employee programs. As provided in our agreement with Mr. Aubrey, upon commencing employment, we granted Mr. Aubrey an option to purchase 50,000 shares at an exercise price of \$14.24 per share, which is equal to the closing price of our common stock on the most recent business day before the grant date. These options vest as to 25% of the option shares on each of the first, second, third and fourth anniversary dates of the date of grant so long as Mr. Aubrey is then an employee. In addition, Mr. Aubrey received three weeks vacation per year on an accrual basis and a relocation allowance of \$15,000, and he is eligible for any bonus awarded for achieving corporate financial and strategic objectives as set forth by our board of directors. If Mr. Aubrey's employment is terminated by us without cause, our agreement with Mr. Aubrey provides that Mr. Aubrey will be entitled to receive 12 months' severance pay. We may terminate our agreement with Mr. Aubrey without paying severance to Mr. Aubrey for cause, which is defined to include his conviction of, or pleading guilty or no contest to, any felony, breach of fiduciary duty involving personal profit, his willful failure or refusal to perform his duties, or his committing fraud or embezzlement or any other act of dishonesty against us. Additionally, the agreement provides for non-equity incentive pay, as more fully described in the Grants of Plan-Based Awards-2007 table.

Gregory R. L. Smith. On December 8, 2006, we entered into an employment agreement with Gregory R. L. Smith, providing that Mr. Smith will serve at will as our Chief Financial Officer beginning on or about January 15, 2007. Under the agreement, Mr. Smith initially was paid an annualized salary of \$140,000, subject to adjustment by our compensation and stock option committee in its sole and absolute discretion, and he received insurance and other benefits in accordance with our standard employee programs. Under our agreement with Mr. Smith, upon commencing employment, Mr. Smith was granted an option to purchase 25,000 shares at an exercise price of \$14.10 per share, which is equal to the closing price on the most recent business day before the grant date. The option vests as to 25% of the option shares on each of the first, second, third and fourth anniversary dates of the date of grant so long as he is then an employee. In addition, Mr. Smith receives three weeks vacation per year on an accrual basis and is eligible for any bonus awarded for achieving corporate financial and strategic objectives as set forth by our board of directors. If Mr. Smith's employment is terminated by us without cause, our agreement with Mr. Smith provides that he will be entitled to receive six months' severance pay. We may terminate our agreement with Mr. Smith without paying severance to Mr. Smith for cause, which is defined to include his conviction of, or pleading guilty or no contest to, any felony, breach of fiduciary duty involving personal profit, his willful failure or refusal to perform his duties, or his committing fraud or embezzlement or any other act of dishonesty against us. Additionally, the agreement provides for non-equity incentive pay, as more fully described in the Grants of Plan-Based Awards-2007 table.

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Potential Payments upon Termination of Employment or Change in Control

The table below reflects the amount of compensation to each of the named executive officers upon termination of employment under the specified circumstances. Mr. Murdakes is not entitled to this compensation. The amounts shown assume that the termination was effective as of December 31, 2007, include amounts earned through that time and are estimates of the amounts which would be paid out to the executives upon their termination. The actual amounts to be paid out can be determined only at the time of separation from our company. Additionally, under

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each executive's respective employment agreement, and in the event the executive voluntarily terminates his employment, we may award, subject to our discretion, a pro-rata portion of incentive-pay such executive would have received had he remained employed by us.

Name	Cash Severance Payment	Accrued Vacation Pay	Total
Kenneth R. Aubrey			
<i>Retirement or resignation</i>	\$	\$2,885	\$2,885
<i>Termination without cause</i>	216,667	2,885	202,885
<i>Termination for cause</i>		2,885	2,885
<i>Death</i>		2,885	2,885
Gregory R. L. Smith			
<i>Retirement or resignation</i>	\$	\$2,602	\$2,602
<i>Termination without cause</i>	70,000	2,602	72,602
<i>Termination for cause</i>		2,602	2,602
<i>Death</i>		2,602	2,602

Other Post-Employment Payments. We generally do not provide pension arrangements or post-retirement health coverage for executive officers or other employees. We do not provide any nonqualified defined contribution or other deferred compensation plans.

Non-Employee Director Compensation

During 2007, each of our non-employee directors received a \$12,000 annual retainer, \$1,000 for each regular board meeting attended in person, \$500 for each committee meeting attended in person, \$500 for each special board meeting attended in person and, in all cases, \$250 for each meeting attended remotely. The non-employee chairman of the board received an additional \$4,000 annual retainer. The committee chairs received the following additional annual retainers: audit committee - \$3,000; compensation and stock option committee - \$2,000; and nominating and corporate governance committee - \$2,000.

For 2008, each of our non-employee directors will receive a \$12,000 annual retainer paid, \$1,000 for each regular board meeting attended in person, \$750 for each committee meeting attended in person, \$500 for each special board meeting attended in person and, in all cases, no fee if attended remotely. The non-employee chairman of the board will receive an additional \$5,000 annual retainer. The committee chairs will receive the following additional annual retainers: audit committee - \$4,000; compensation and stock option committee - \$3,000; and nominating and corporate governance committee - \$3,000.

In connection with their initial appointment or election to the board, non-employee directors are granted a non-incentive stock option to purchase shares of our common stock, the number of which is negotiated with each director, at an exercise price equal to the closing price on the most recent business day before the grant date. The option shares become exercisable in three equal installments on each of the first, second and third anniversary of the date of grant. For 2007 and 2008, annual option awards of 4,000 shares were granted to non-employee directors who have not received an initial option grant that year. All of these grants are made under our 2005 Stock Incentive Plan.

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The following table provides information regarding the compensation earned by the members of the board of directors in 2007, other than Mr. Aubrey, who receives no compensation for being a director:

Name	Fees Earned or Paid in Cash⁽¹⁾	Option Awards⁽²⁾	Total
	(\$)	(\$)	(\$)
James Murdakes ⁽³⁾	\$ 14,000	\$ 10,450	\$ 24,450
Michael G. Eleftheriou	\$ 28,750	\$ 10,450	\$ 39,200
Richard C. Magnuson	\$ 26,750	\$ 10,450	\$ 37,200
Panos G. Michalopoulos	\$ 28,500	\$ 10,450	\$ 38,950
Sven A. Wehrwein	\$ 29,500	\$ 24,780	\$ 54,280

(1) Consists of fees earned for and paid in 2007, and fees earned for 2007 to be paid in 2008.

(2) Represents the compensation costs for financial reporting purposes for 2007 under SFAS No. 123(R). There can be no assurance that the SFAS No. 123(R) amounts will ever be realized. At December 31, 2007, the aggregate number of shares subject to option awards outstanding and held by each non-employee director was as follows: Mr. Murdakes 50,000; Mr. Eleftheriou 30,000; Mr. Magnuson 4,000; Dr. Michalopoulos 46,000; and Mr. Wehrwein 18,000. See note 13 to our financial statements for the assumptions used to determine the valuation of option awards.

(3) Mr. Murdakes retired as our employee effective June 30, 2007 and remained as Chairman of the board of directors. On July 1, 2007, he became eligible for compensation consistent with our pay schedule for our non-employee directors. The amounts in this table relate only to Mr. Murdakes' compensation as a non-employee director. His compensation as our employee is disclosed in the Summary Compensation Table included elsewhere in this prospectus.

Table of Contents**PRINCIPAL SHAREHOLDERS**

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The following table sets forth certain information with respect to beneficial ownership of our common stock as of April 30, 2008 by (i) each person or entity known by us to own beneficially more than five percent of our common stock; (ii) each of our directors; (iii) each of our executive officers; and (iv) all of our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC and includes generally voting power or investment power with respect to our securities. Shares of our common stock issuable under stock options that are exercisable or convertible currently or within 60 days after April 30, 2008 are deemed outstanding for computing the beneficial ownership percentage of the person or member of a group holding the options but are not deemed outstanding for computing the beneficial ownership percentage of any other person. Except as indicated by footnote, the persons named in the table below have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them. The address of each director and executive officer named below is c/o Image Sensing Systems, Inc., 500 Spruce Tree Centre, 1600 University Avenue West, St. Paul, Minnesota 55104.

Name and Address of Beneficial Owner	Shares Beneficially Owned Prior to Offering ⁽¹⁾			Shares Beneficially Owned After Offering ⁽¹⁾		
	Number	Percent	%	Number	Percent	%
<i>Five Percent Shareholders</i>						
Austin W. Marxe and David M. Greenhouse 527 Madison Avenue, Suite 2600 New York, NY 10022	980,848	25.0	%	980,848	18.1	%
Nicusa Capital Partners L.P. 17 State Street, Suite 1650 New York, NY 10004	358,616	9.1		358,616	6.6	
<i>Executive Officers and Directors</i>						
Kenneth R. Aubrey	12,500	*		12,500	*	
Gregory R. L. Smith	6,250	*		6,250	*	
Michael G. Eleftheriou	30,000	*		30,000	*	
Richard C. Magnuson	4,000	*		4,000	*	
Panos G. Michalopoulos	340,298	8.6		340,298	6.2	
James Murdakes	59,525	1.5		59,525	1.3	
Sven A. Wehrwein	6,000	*		6,000	*	
All directors and executive officers as a group (7 persons)	458,573	11.2		458,573	8.5	

*Less than one percent.

- (1) Based on 3,927,806 shares outstanding as of April 30, 2008 and 5,427,806 shares outstanding after the offering, assuming no current shareholders listed above acquire additional shares of our common stock as part of the offering.
- (2) We have relied upon the information supplied by Austin W. Marxe and David M. Greenhouse in a Schedule 13G/A filed with the SEC reporting information as of January 31, 2008. The reported shares are held in discretionary accounts over which Messrs. Marxe and Greenhouse share sole voting and investment power.
- (3) We have relied upon the information supplied by Nicusa Capital Partners L.P. (Nicusa Capital) and Nicusa Investment Advisors, LLC (NIA) in a Schedule 13G/A filed with the SEC reporting information as of February 15, 2008. NIA serves as an advisor for the accounts of various third parties who are otherwise unaffiliated with Nicusa Capital. The Schedule 13G/A pertains to all shares held by both Nicusa Capital and the other accounts managed by NIA.

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- (4) Includes shares issuable pursuant to options exercisable currently or within 60 days after April 30, 2008: for Mr. Aubrey, 12,500 shares; for Mr. Smith, 6,250 shares; for Mr. Eleftheriou, 30,000 shares; for Mr. Magnuson, 4,000 shares; for Dr. Michalopoulos, 46,000 shares; for Mr. Murdakes, 50,000 shares; for Mr. Wehrwein, 6,000 shares; and for all directors and executive officers as a group, 154,750 shares.
- (5) Includes 294,298 shares held by Transatlantic Emporium & Technology Exchange LLC, a company controlled by Dr. Michalopoulos.

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CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Since January 1, 2007, we have not entered into any transactions with related parties required to be disclosed under Item 404 of Regulation S-K.

DESCRIPTION OF CAPITAL STOCK

We are authorized to issue 25,000,000 shares of capital stock, consisting of 20,000,000 shares of common stock, par value \$.01 per share, 3,927,806 of which were outstanding as of April 30, 2008, and 5,000,000 shares of undesignated preferred stock, none of which are outstanding. Our board of directors is authorized to issue preferred stock from time to time in one or more class or series, to establish the designation and number of shares of each such class or series, and to fix the relative rights and preferences of the shares of each class or series. There is no cumulative voting by shareholders, and shareholders do not have preemptive rights.

The following summarizes important provisions of our capital stock and describes certain provisions of our articles of incorporation and bylaws. This summary is qualified by our articles of incorporation and bylaws, copies of which have been filed as exhibits to the registration statement of which this prospectus is a part, and by the provisions of applicable law.

Common Stock

All shares of common stock are voting shares and are entitled to one vote per share. Subject to any preferential rights of preferred shareholders, holders of common stock are entitled to a pro rata share, based upon the number of shares held, of any dividends or distributions that are declared by the board of directors, and of any distribution of assets of our company upon its liquidation, dissolution or winding up.

Undesignated Preferred Stock

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In authorizing the issuance and establishing the rights and preferences of one or more class or series of preferred stock, the board is permitted to provide that shares in a class or series of preferred stock: are entitled to cumulative, partially cumulative or non-cumulative dividends; are entitled to preferential dividends over one or more other classes of capital stock; are entitled to a preference with respect to distribution of assets upon liquidation, dissolution or winding up over one or more other classes of capital stock; are redeemable or exchangeable at the option of our company; are entitled to the benefits of a sinking fund; is convertible at the option of the holders into shares of any other class or series of capital stock; are exchangeable at the option of the holders for cash, capital stock or indebtedness; are entitled to certain voting rights at all times or upon the occurrence of specified events; and are subject to restrictions on the issuance of additional shares of preferred stock of such class or series or of any other class or series.

Anti-Takeover Provisions

Minnesota Law. We are subject to the anti-takeover provisions of section 302A.671 of the Minnesota Business Corporation Act, or the MBCA. This provision generally limits the voting rights of a shareholder acquiring at least 20% of the voting shares of a corporation in an attempted takeover or otherwise becoming a substantial shareholder unless holders of a majority of the voting power of the disinterested shares approve full voting rights for such substantial shareholder, with certain exceptions.

Section 302A.673 of the MBCA generally prohibits a public Minnesota corporation from engaging in a business combination with an interested shareholder for a period of four years after the date of the transaction in which the person became an interested shareholder unless before the date of the transaction, a committee of the board of directors of the corporation consisting of one or more disinterested directors, or, if the board has no disinterested directors, by three or more disinterested persons selected by the board, approved either the business combination or the transaction which resulted in the shareholder becoming an interested shareholder. As used in section 302A.673, a business combination includes:

any merger or consolidation involving our company or our subsidiary and the interested shareholder;

any exchange under a plan of exchange of shares or other securities of our company or our subsidiary or money, or other property for shares, other securities, money or property of the interested shareholder;

any sale, lease, exchange, mortgage, pledge, transfer or other disposition involving the interested shareholder of 10% or more of the assets of our company; and

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the receipt by the interested shareholder of the benefit of any loans, advances, guarantees, pledges or other financial assistance provided by or through our company.

In general, as used in section 302A.673, an interested shareholder is any entity or person beneficially owning, directly or indirectly, 10% or more of the outstanding voting stock of our company, or an affiliate or associate of our company that, at any time within the four-year period immediately before the date in question, was the beneficial owner, directly or indirectly, of 10% or more of the outstanding voting stock of our company .

Articles of Incorporation. Certain provisions of our articles of incorporation may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which shareholders might otherwise receive a premium for their shares, or transactions that our shareholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our articles of incorporation:

permit our board of directors to issue up to 5,000,000 shares of preferred stock with any rights, preferences and privileges as they may designate, including the right to approve an acquisition or other change in our control;

provide that the authorized number of directors may be changed by resolution of the board of directors;

provide that all vacancies, including newly-created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum; and

do not provide for cumulative voting rights (therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose).

Limitation on Liability of Directors and Indemnification

Our articles of incorporation limit the liability of our directors to the fullest extent permitted by Minnesota law. Minnesota law provides that a director's personal liability to our company or our shareholders for monetary damages for breach of fiduciary duty may be eliminated, except for liability due to:

breach of the duty of loyalty to our company or our shareholders;

an act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;

unlawful payment of dividends or redemption of shares as provided in section 302A.559 of the MBCA or civil liability for securities violations under section 80A.76 of the Minnesota Statutes; or

transaction from which the directors derived an improper personal benefit.

These limitations of liability do not apply to liabilities arising under federal securities laws and do not affect the availability of equitable remedies such as injunctive relief or rescission.

Our bylaws provide that we will indemnify and advance expenses to our directors, officers and persons serving in any other capacity at our request to the fullest extent permitted by Minnesota law. Section 302A.521 of the MBCA also permits us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in connection with their services to us. We maintain a directors' and officers' liability insurance policy.

At present, there is no pending litigation or proceeding involving any of our directors or officers as to which indemnification is required or permitted, and we are not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

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Insofar as indemnification for liabilities arising under the Securities Act of 1933, or the Securities Act, may be permitted for directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the SEC, this indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. If a claim for indemnification against these liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by the director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether this indemnification by us is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Continental Transfer and Trust Company.

The NASDAQ Capital Market

Our common stock is listed on The NASDAQ Capital Market under the trading symbol ISNS.

SHARES ELIGIBLE FOR FUTURE SALE

Immediately following the consummation of the offering, based on shares outstanding as of April 30, 2008, we will have an aggregate of 5,427,806 shares of common stock outstanding, assuming no exercise of the underwriters' over-allotment option and no exercise of outstanding options. If the underwriters exercise their over-allotment option in full, we will have an aggregate of 5,652,806 shares of common stock outstanding, assuming no exercise of outstanding options. All of the shares that we sell in this offering will be freely tradable without restriction or further registration under the Securities Act, except that any shares purchased by our affiliates, as that term is defined in Rule 144, may generally only be sold in compliance with the limitations of Rule 144, which is summarized below. There are 451,025 shares of our common stock outstanding after this offering that will be restricted shares under the terms of the Securities Act. Approximately 441,025 of these shares will be subject to lock-up agreements as described in Underwriting. Restricted shares may be sold in the public market only if registered or if they qualify for an exemption from registration under Rules 144 or 701 promulgated under the Securities Act, which are summarized below.

Sales of Restricted Securities. Restricted shares may be sold in the public market only if registered or if they qualify for an exemption from registration including under Rule 144 promulgated under the Securities Act, which is summarized below.

In general, under Rule 144, a person who has beneficially owned restricted shares for at least six months and has complied with the requirements described below would be entitled to sell a specified number of shares within any three-month period. Sales under Rule 144 are also restricted by manner of sale provisions, notice requirements and the availability of current public information about us. Rule 144 also provides that our affiliates who are selling shares of our common stock that are not restricted shares must comply with the same restrictions applicable to restricted shares with the exception of the holding period requirement.

Additional Registration Statement. In connection with the EIS asset purchase, we agreed to register the resale of 147,202 shares of our common stock, subject to the receipt of certain information from the selling shareholders, until the selling shareholders are eligible to sell their shares without restriction under Rule 144. We must pay all expenses, except for underwriters' discounts and commissions, incurred in connection with the registration. The shares covered by the registration statement filed for these shareholders will be eligible for sale in the public markets upon effectiveness of the registration statement, subject to the lock-up agreements described in Underwriting.

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UNDERWRITING

The underwriters named below agreed to buy, subject to the terms of the underwriting agreement, the number of shares listed opposite their names below. The underwriters are committed to purchase, from us and pay for all of the shares if any are purchased, other than those shares covered by the over-allotment option described below. The underwriters' obligations are several, which means that each underwriter is required to purchase a specific number of shares, but is not responsible for the commitment of any other underwriter to purchase shares.

Underwriter	Number of Shares
Needham & Company, LLC	
Craig-Hallum Capital Group	
Total	

The underwriters have advised us that they propose to offer the shares of common stock to the public at the public offering price per share set forth on the cover page of this prospectus. The underwriters may offer shares to securities dealers at that public offering price less a concession of up to \$ _____ per share. The underwriters may allow, and these dealers may re-allow, a concession to other securities dealers of up to \$ _____ per share on sales to certain other brokers and dealers. After the offering to the public, the offering price and other selling terms may be changed by the underwriters.

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We have granted to the underwriters an option to purchase up to 225,000 additional shares of common stock at the public offering price per share set forth on the cover page of this prospectus, less the underwriting discount. This option is exercisable during the 30-day period after the date of this prospectus, but only to cover over-allotments, if any. To the extent the underwriters exercise the over-allotment option, each of the underwriters will be obligated, subject to the terms of the underwriting agreement, to purchase approximately the same percentage of the additional shares as the number of shares of common stock to be purchased by that underwriter, as shown in the table above, bears to the total number of shares shown.

The following table shows the per share and total underwriting fees to be paid to the underwriters by us in connection with this offering. These amounts are shown assuming both no exercise and full exercise of the underwriters' over-allotment option.

	No Exercise	Full Exercise
Per share	\$	\$
Total	\$	\$

We estimate that the total expenses for this offering excluding underwriting discounts and commissions will be approximately \$.

The underwriting agreement provides that we will indemnify the underwriters against certain liabilities that may be incurred in connection with this offering, including liabilities under the Securities Act of 1933, or to contribute to payments that the underwriters may be required to make in respect of those liabilities.

Subject to certain exceptions, we have agreed not to offer, sell, contract to sell, grant options to purchase or otherwise dispose of any shares of our common stock or securities exchangeable for or convertible into our common stock for a period of 90 days after the date of this prospectus without the prior written consent of Needham & Company, LLC. Our directors, officers and the holders of 137,202 of the 147,202 shares we issued in connection with the EIS asset purchase have agreed, subject to certain exceptions, not to sell, hedge or otherwise dispose of any shares of common stock, directly or indirectly, options to acquire shares of common stock or securities exchangeable for or convertible into shares of common stock, for a period of 90 days after the date of this prospectus without the prior written consent of Needham & Company, LLC. Notwithstanding the foregoing, if (1) during the last 18 days of the initial 90-day lock-up period we announce earnings or other material news or a material event relating to us occurs or (2) prior to the expiration of the initial 90-day lock-up period we announce that we will release earnings during the 16-day period beginning on the last day of the initial 90-day lock-up, then in each case the initial 90-day lock-up period will be extended until the expiration of the 19-day period beginning on the date of the earnings release or occurrence of the material news or material event, as applicable, unless Needham & Company, LLC waives, in writing, this extension. Needham & Company, LLC may, in its sole discretion and at any time without notice, release all or any portion of the securities subject to these lock-up agreements. In connection with the EIS asset purchase, we agreed to register for resale 147,202 shares of our common stock, subject to the receipt of certain information from the selling shareholders, until the selling shareholders are eligible to sell their shares without restriction under Rule 144. The beneficial owners of the 147,202 shares issued in connection with the EIS asset purchase have agreed not to sell, hedge or otherwise dispose of any shares of common stock, directly or indirectly, for a period of one year from December 6, 2007, the date of the acquisition.

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In connection with this offering, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock. Specifically, the underwriters may over-allot shares of our common stock in connection with this offering by selling more shares than are

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set forth on the cover page of this prospectus. This creates a short position in our common stock for their own account. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase under the over-allotment option. To close out a short position, the underwriters may bid for, and purchase, common stock in the open market. The underwriters may also elect to reduce any short position by exercising all or part of the over-allotment option. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. If the underwriters sell more shares than could be covered by the over-allotment option, a naked short position, the position can only be entirely closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriter is concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase shares in the offering. As a result of such transactions, the price of our shares may be higher than the price that might otherwise exist on the open market.

In addition, the underwriters may stabilize the price of our common stock by bidding for or purchasing shares of common stock in the open market and may impose penalty bids. If penalty bids are imposed, underwriters or dealers must repay selling concessions allowed to them for distributing common stock in this offering because the underwriters repurchase that stock, whether in connection with stabilizing transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of our common stock at a level above that which might otherwise prevail in the open market. The imposition of a penalty bid may also affect the price of common stock to the extent it discourages resales of the common stock. The magnitude or effect of any stabilization transaction is uncertain. These transactions may be effected on The NASDAQ Capital Market or otherwise and, if commenced, may be discontinued at any time.

In connection with this offering, some underwriters and selling group members may also engage in passive market making transactions in the common stock on The NASDAQ Capital Market. Passive market making consists of displaying bids on The NASDAQ Capital Market limited by the prices of independent market makers and effecting purchases limited by those prices in response to order flow. Rule 103 of Regulation M promulgated by the SEC limits the amount of net purchases that each passive market maker may make and the displayed size of each bid. Passive market making may stabilize the market price of the common stock at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

A prospectus in electronic format may be made available on the web sites maintained by one or more of the underwriters or selling group members, if any, participating in this offering, and one or more of the underwriters participating in this offering, may distribute prospectuses electronically.

From time to time in the ordinary course of their respective businesses, certain of the underwriters and their affiliates may in the future engage in investment banking transactions with us and our affiliates.

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LEGAL MATTERS

The validity of the shares being offered hereby is being passed upon for us by Winthrop & Weinstine, P.A., Minneapolis, Minnesota. The underwriters have been represented in connection with this offering by Faegre & Benson LLP, Minneapolis, Minnesota.

EXPERTS

The financial statements as of December 31, 2006 and 2007 and for each of the three years in the period ended December 31, 2007 included in this prospectus and the related registration statement have been audited by Grant Thornton LLP, an independent registered public accounting firm, as indicated in their report with respect thereto, and are included herein in reliance upon the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a Registration Statement on Form S-1 under the Securities Act with respect to the shares of common stock offered by this prospectus. This prospectus does not contain all of the information included in the registration statement, portions of which are omitted as permitted by the rules and regulations of the SEC. For further information pertaining to us and the common stock to be sold in this offering, you should refer to the registration statement and its exhibits. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete, and you should refer to the exhibits attached to the registration statement for copies of the actual contract, agreement or other document filed as an exhibit to the registration statement or such other document, each such statement being qualified in all respects by such reference.

We are subject to the informational requirements of the Securities Exchange Act of 1934 under which we are required to file annual, quarterly and special reports, proxy statements and other information with the SEC. These documents are publicly available, free of charge, on our website at www.imagesensing.com as soon as reasonably practicable after we file such documents with the SEC.

You can read the registration statement and our reports and other information filed with the SEC over the Internet at the SEC's website at <http://www.sec.gov>. You may also read and copy any document that we file with the SEC at its public reference room at Station Place, 100 F Street NE, Washington, DC 20549.

You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at Station Place, 100 F Street NE, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference room.

All information concerning us contained in this prospectus has been furnished by us. No person is authorized to make any representation with respect to the matters described in this prospectus other than those contained in this prospectus and, if given or made, such information must not be relied upon as having been authorized by us or any other person on our behalf.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders
Image Sensing Systems, Inc.

We have audited the accompanying consolidated balance sheets of Image Sensing Systems, Inc. and subsidiaries (the Company) as of December 31, 2007 and 2006, and the related consolidated statements of income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2007. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purposes of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

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In our opinion, the consolidated financial statements referred to above, present fairly, in all material respects, the consolidated financial position of Image Sensing Systems, Inc. and subsidiaries as of December 31, 2007 and 2006, and the consolidated results of their operations and their consolidated cash flows for the each of the three years in the period ended December 31, 2007, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 1 to the consolidated financial statements, the Company changed its method of accounting for share-based payments to adopt Financial Accounting Standards No. 123(R), *Share-Based Payment* effective January 1, 2006.

/s/ Grant Thornton LLP

Minneapolis, Minnesota
March 6, 2008

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IMAGE SENSING SYSTEMS, INC. CONSOLIDATED BALANCE SHEETS (in thousands, except share data)

	December 31	
	2006	2007
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 11,626	\$ 5,613
Restricted cash		5,263
Short-term investments	1,800	
Investment in callable FHLB bonds	2,300	
Accounts receivable, net of allowance for returns and doubtful accounts of \$32 (\$98 in 2006)	2,957	4,997
Inventories	670	1,579
Prepaid expenses	126	228
Deferred income taxes	173	142
Total current assets	19,652	17,822
Property and equipment:		
Furniture and fixtures	293	328
Leasehold improvements	44	27
Equipment	834	1,220
	1,171	1,575
Accumulated depreciation	649	875
	522	700

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Deferred income taxes			1,676
Intangible assets			5,249
Goodwill		1,050	4,891
TOTAL ASSETS	\$	21,224	\$ 30,338
LIABILITIES AND SHAREHOLDERS EQUITY			
Current liabilities:			
Accounts payable	\$	616	\$ 816
Bank debt			5,000
Accrued compensation		587	703
Accrued warranty and other		449	510
Income taxes payable		131	
Total current liabilities		1,783	7,029
Deferred income taxes		8	
Income taxes payable		100	84
Shareholders' equity:			
Preferred stock, \$.01 par value; 5,000,000 shares authorized, none issued or outstanding			
Common stock, \$.01 par value; 20,000,000 shares authorized, 3,927,806 issued and outstanding (3,761,804 in 2006)		38	39
Additional paid-in capital		8,130	11,004
Accumulated other comprehensive income		16	161
Retained earnings		11,149	12,021
Total shareholders' equity		19,333	23,225
TOTAL LIABILITIES AND SHAREHOLDERS EQUITY	\$	21,224	\$ 30,338

See accompanying notes to the consolidated financial statements.

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**IMAGE SENSING SYSTEMS, INC.
CONSOLIDATED STATEMENTS OF INCOME
(in thousands, except share data)**

	Years ended December 31		
	2005	2006	2007
Revenue:			
International sales	\$ 2,407	\$ 2,980	\$ 4,067
North American sales			269
Royalties	8,595	10,136	10,747

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	11,002	13,116	15,083
Cost of revenue:			
International sales	1,042	1,501	1,927
North American sales			60
Royalties	383	220	
	1,425	1,721	1,987
Gross profit	9,577	11,395	13,096
Operating expenses:			
Selling, marketing and product support	2,567	2,850	3,463
General and administrative	1,400	2,382	2,653
Research and development	1,516	2,639	2,299
Amortization of intangible assets			51
In-process research and development			4,500
	5,483	7,871	12,966
Income from operations	4,094	3,524	130
Other income	252	523	543
Income before income taxes	4,346	4,047	673
Income tax expense (benefit)	1,505	942	(199)
Net income	\$ 2,841	\$ 3,105	\$ 872
Net income per share:			
Basic	\$ 0.79	\$ 0.83	\$ 0.23
Diluted	\$ 0.73	\$ 0.80	\$ 0.22
Weighted average number of common shares outstanding:			
Basic	3,602	3,725	3,789
Diluted	3,868	3,891	3,881

See accompanying notes to the consolidated financial statements.

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IMAGE SENSING SYSTEMS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year ended December 31		
	2005	2006	2007
Operating activities:			
Net income	\$ 2,841	\$ 3,105	\$ 872
Adjustments to reconcile net income to net cash provided by operating activities:			

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Depreciation	121	226	226
Amortization	258	162	51
In-process research and development			4,500
Tax benefit from disqualifying disposition	377	113	112
Stock option expense	68	177	194
Deferred income taxes	(57)	(203)	(1,653)
Changes in operating assets and liabilities:			
Accounts receivable	(1,338)	557	(2,040)
Inventories	92	(358)	(909)
Prepaid expenses	41	(22)	(102)
Accounts payable	(4)	218	200
Accrued liabilities	(183)	511	177
Income taxes payable	194	137	(147)
Net cash provided by operating activities	2,410	4,623	1,481
Investing activities:			
Purchase of EIS assets			(11,406)
Purchase of short-term investments		(1,800)	
Sale of short-term investments	5,000		1,800
Maturity of callable FHLB bonds			2,300
Purchases of property and equipment	(323)	(419)	(104)
Net cash provided by (used in) investing activities	4,677	(2,219)	(7,410)
Financing activities:			
Proceeds from exercise of stock options	657	200	34
Proceeds from bank borrowing			5,000
Cash restricted for bank borrowing			(5,263)
Net cash provided by (used in) financing activities	657	200	(229)
Effect of exchange rate changes on cash		16	145
Increase (decrease) in cash and cash equivalents	7,744	2,620	(6,013)
Cash and cash equivalents at beginning of year	1,262	9,006	11,626
Cash and cash equivalents at end of year	\$ 9,006	\$ 11,626	\$ 5,613
Supplemental disclosure:			
Income taxes paid	\$ 933	\$ 1,025	\$ 1,352
Supplemental non-cash disclosure:			
Common stock issued in connection with EIS asset purchase	\$	\$	\$ 2,534

See accompanying notes to the consolidated financial statements.

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IMAGE SENSING SYSTEMS, INC.
CONSOLIDATED STATEMENTS OF SHAREHOLDERS EQUITY
(in thousands, except share data)

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	Shares Issued	Common Stock	Additional Paid-In Capital	Accumulated Other Compre- hensive Income	Retained Earnings	Total
Balance at December 31, 2004	3,537,222	\$ 35	\$ 6,541	\$	\$ 5,203	\$ 11,779
Tax benefit from disqualifying disposition			377			377
Common stock issued for options exercised	164,783	2	655			657
Stock option expense			68			68
Net income					2,841	2,841
Balance at December 31, 2005	3,702,005	37	7,641		8,044	15,722
Tax benefit from disqualifying disposition			113			113
Common stock issued for options exercised	59,799	1	199			200
Stock option expense			177			177
Foreign currency translation adjustment				16		16
Net income					3,105	3,105
Comprehensive income						3,121
Balance at December 31, 2006	3,761,804	38	8,130	16	11,149	19,333
Tax benefit from disqualifying disposition			112			112
Common stock issued for options exercised	18,800		34			34
Common stock issued in EIS asset purchase	147,202	1	2,534			2,535
Stock option expense			194			194
Foreign currency translation adjustment				145		145
Net income					872	872
Comprehensive income						1,017
Balance at December 31, 2007	3,927,806	\$ 39	\$ 11,004	\$ 161	\$ 12,021	\$ 23,225

See accompanying notes to the consolidated financial statements.

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Notes to Consolidated Financial Statements

December 31, 2007

1. DESCRIPTION OF BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES

DESCRIPTION OF BUSINESS

Image Sensing Systems, Inc. (referred to herein as we, us and our) develops and markets software based computer enabled detection products for use in advanced traffic management systems and traffic data collection. We sell our products primarily to distributors and also receive royalties under a license agreement with a manufacturer/distributor for one of our product lines. Our products are used primarily by governmental entities.

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include the accounts of Image Sensing Systems, Inc. and its wholly-owned subsidiaries: Flow Traffic Ltd. (Flow Traffic) located in Hong Kong, Image Sensing Systems Europe Ltd. (ISS/Europe), located in the United Kingdom, Image Sensing Systems Europe Limited SP.Z.O.O. (ISS/Poland), located in Poland and ISS Image Sensing Systems Canada Ltd (ISS/Canada) and ISS Canada Sales Corp. (Canada Sales Corp.), both located in Ontario, Canada. All significant inter-company transactions and accounts have been eliminated in consolidation.

REVENUE RECOGNITION

Royalty income is recognized based upon a monthly royalty report provided to us by Econolite Control Products, Inc. (Econolite), a licensee that sells one of our products in North America, the Caribbean and Latin America. The royalty is calculated using a profit sharing model where we split evenly the gross profit on sales of our Autoscope product made by Econolite. The royalty report is prepared by Econolite based on its sales of licensed products delivered and accepted by its customers. Payment of royalties is due after Econolite has received payment from its customer.

We recognize revenue from International and North American sales at the time of delivery and acceptance, the selling price is fixed or determinable and collection of payment is reasonably assured.

CASH AND CASH EQUIVALENTS

We consider all highly liquid investments with an original maturity of three months or less to be cash equivalents. Cash equivalents consist of money market funds. Cash located in foreign banks was \$399,000 and \$1.2 million at December 31, 2006 and 2007, respectively.

INVESTMENTS

From time to time, we have invested excess cash in various investments, including auction rate securities with underlying investments in AAA rated securities with varying maturities and interest rates that reset for periods not exceeding 30 days. Investments in callable Federal Home Loan Bank bonds matured in 2007. At December 31, 2006, cost was equal to fair value, and no amount was included as a separate component of shareholders' equity. We consider short-term investments as available-for-sale.

ACCOUNTS RECEIVABLE

We grant credit to customers in the normal course of business and generally do not require collateral. Management performs on-going credit evaluations of customers. We determine an allowance for doubtful accounts by considering a number of factors, including any on-going technical problems with product in the field, the length of time trade accounts receivable are past due, our previous loss history with the customer and the customer's current ability to pay. We write-off accounts receivable when they become uncollectible, and payments subsequently received on such receivables are credited to the allowance for doubtful accounts.

INVENTORIES

Inventories are primarily electronic components and finished goods and are valued at the lower of cost or market on the first-in, first-out (FIFO) method.

PROPERTY AND EQUIPMENT

Property and equipment are stated at cost. Depreciation is computed by the straight-line method over a three- to seven-year period for financial reporting purposes and by accelerated methods for income tax purposes.

INCOME TAXES

Income taxes are accounted for under the liability method. Deferred income taxes are provided for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and amounts used for income tax purposes. Deferred taxes are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or the entire deferred tax asset will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of the enactment. We recognize tax benefits when we believe the benefit is more likely than not to be sustained upon review from the relevant authorities. We will recognize penalties and interest expense related to unrecognized tax benefits in income tax expense.

INTANGIBLE ASSETS

Intangible assets are stated at their estimated value at the time of acquisition. Amortization is computed by the straight-line method over a five to eight-year period for financial reporting purposes based on their estimated useful lives.

GOODWILL

Goodwill is not amortized but is tested for impairment annually or whenever an impairment indicator arises. Our goodwill related to our Flow Traffic subsidiary is tested for impairment on December 31 of each year. Goodwill related to the EIS asset purchase (see Note 4) will not be tested until 2008. No impairment of goodwill was recorded during the years ended December 31, 2005, 2006 or 2007, respectively.

IMPAIRMENT OF LONG-LIVED ASSETS

Long-lived assets are reviewed for impairment when indicators of impairment are present. Impairment is recognized when the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying amount. No such losses were recorded during the years ended December 31, 2005, 2006 or 2007, respectively.

USE OF ESTIMATES

Preparing financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and reported amounts of revenues and expenses during the reporting periods. Actual results could differ from the estimates.

RESEARCH AND DEVELOPMENT

Research and development costs are charged to operations in the period incurred.

WARRANTY

We provide a standard two-year warranty on International and North American product sales. Warranty expense has been \$21,000, \$190,000 and \$44,000 for the years ended December 31, 2005, 2006 and 2007, respectively, and our warranty reserve was \$168,161 and \$157,149 at December 31, 2006 and 2007, respectively.

ADVERTISING

Advertising costs are charged to operations in the period incurred and totaled \$90,000, \$129,000, and \$247,000 for the years ended December 31, 2005, 2006 and 2007, respectively.

FOREIGN CURRENCY

All assets and liabilities of Flow Traffic, ISS/Europe, ISS/Poland, ISS/Canada and Canada Sales Corp. are translated from their respective foreign currency to United States dollars at period-end rates of exchange, while the statement of income is translated at the average exchange rates during the period. Accumulated translation adjustments are shown in equity under Accumulated Other Comprehensive Income.

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NET INCOME PER SHARE

Our basic net income per share amounts have been computed by dividing net income by the weighted average number of outstanding common shares. Diluted net income per share amounts have been computed by dividing net income by the weighted average number of outstanding common shares and common share equivalents relating to stock options, when dilutive.

For the years ended December 31, 2005, 2006 and 2007, respectively, 266,000, 166,000 and 92,000 common share equivalents were included in the computation of diluted net income per share.

At December 31, 2007, the exercise prices of 66,000 outstanding options were greater than the average market price of the common shares during the period and were excluded from the computation of diluted shares outstanding.

STOCK OPTIONS

In 2006, we adopted Statement of Financial Accounting Standard No. 123R, Share-Based Payment (SFAS No. 123R). Prior to 2006, stock options were accounted for under the intrinsic value method as prescribed by APB 25. No stock-based employee compensation cost was reflected in net income, except for costs related to performance based options, because all options granted had an exercise price equal to the market value of the underlying common stock on the date of grant.

The following table illustrates the effect on net income and net income per share if we had applied the fair value method of accounting for stock-based compensation plans under the provisions of SFAS No. 123, Accounting for Stock-Based Compensation for the year ended December 31, 2005, using the assumptions described in Note 13 (in thousands, except per share amounts).

Net income, as reported	\$ 2,841
Deduct: Total stock-based compensation expense determined under the fair value method for all awards, net of related tax effects	(210)
Pro-forma net income	<u>\$ 2,631</u>
Income per share:	
Basic - as reported	\$.79
Basic - pro forma	\$.73
Diluted - as reported	\$.73
Diluted - pro forma	\$.68

Unrecognized compensation costs are \$725,781 at December 31, 2007, with a weighted average remaining life of 2.9 years.

NEW ACCOUNTING PRONOUNCEMENTS

In June 2006, the FASB issued Interpretation No. 48, Accounting for Uncertainty in Income Taxes - an interpretation of SFAS No. 109, Accounting for Income Taxes (FIN 48), which clarifies the accounting for uncertainty in income taxes. FIN 48 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The interpretation requires that we recognize in the financial statements the impact of a tax position. Recognition is allowed if the tax position is more likely than not of being sustained on audit, based on the technical merits of the position. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods and disclosure. The provisions of FIN 48 were effective for fiscal years beginning after December 15, 2006, with the cumulative effect of the change in accounting principle recorded as an adjustment to opening retained earnings. The implementation of the new standard did not materially affect our financial position or results of operations.

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In September 2006, the FASB issued SFAS No. 157, Fair Value Measurements. SFAS No. 157 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurement but does not require any new fair value measurements. SFAS No. 157 is effective for financial statement issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. At a meeting in November 2007, the FASB decided to issue a proposed staff position to partially defer for one year the implementation of SFAS No. 157. The proposed one-year deferral would apply to all nonfinancial assets and liabilities (nonfinancial items), except those that are recognized or disclosed at fair value in financial statements on a recurring basis (at least annually). The original effective date would continue to apply for items that are not subject to the proposed partial deferral. We currently are evaluating the impact of this standard on our financial position and the results of our operations.

In December 2007, the FASB issued Statement No. 141 (Revised 2007), Business Combinations. Statement 141R will significantly change the accounting for business combinations. Under Statement 141R, an acquiring entity will be required to recognize all the assets acquired and liabilities assumed in a transaction at the acquisition-date fair value with limited exceptions. Statement 141R will change the accounting treatment for certain specific items. Statement 141R also includes a substantial number of new disclosure requirements. Statement 141 applies prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. Earlier adoption is prohibited. This Statement will impact us if we complete an acquisition after the effective date.

Also in December 2007, the FASB issued Statement No. 160, Noncontrolling Interests in Consolidated Financial Statements - An Amendment of ARB No. 51. Statement 160 establishes new accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. Statement 160 also includes expanded disclosure requirements regarding the interests of the parent and its noncontrolling interest. Statement 160 is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008. Earlier adoption is prohibited. We are currently assessing the potential impact that the adoption of this Statement will have on our financial statements.

RECLASSIFICATIONS

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

2. INVESTMENTS

Investments, at cost, consisted of the following (in thousands) :

	December 31,	
	2006	2007
Callable Federal Home Loan Bonds	\$ 2,300	\$
Short-term investments - auction rate securities		1,800
Total	\$ 4,100	\$

As of December 31, 2006, investments were classified as available-for-sale. The cost of investments approximates market value and therefore no amount is recorded in accumulated other comprehensive income. The cost of securities sold is based on the specific identification method.

Proceeds from maturities and sales of investments totaled \$5.0 million, \$ - and \$4.1 million for the years ended December 31, 2005, 2006 and 2007, respectively. There were no realized gains or losses related to sales or unrealized gains or losses during the years ended December 31, 2005, 2006 and 2007.

Table of Contents**3. INVENTORIES**

Inventories, net of lower of cost or market adjustments, consisted of the following (in thousands):

	December 31,	
	2006	2007
Electronic components	\$ 44	\$ 1,092
Finished goods	626	487
Total	\$ 670	\$ 1,579

4. ACQUISITION

On December 6, 2007, we purchased certain assets of EIS Electronic Integrated Systems, Inc. (EIS), including its RTMS radar product line. The purchase price was \$10.9 million in cash plus 147,202 shares of our common stock valued at approximately \$2.5 million. We borrowed \$5.0 million from a bank to partially finance the purchase. In addition to the purchase price, we incurred \$506,000 in direct acquisition costs. As part of the purchase agreement, the sellers are eligible to receive an earn-out based on the performance of the assets for the next three years. Earn-outs will be calculated and paid annually. Based on target achievement, the sellers would receive \$2.0 million annually or a total of \$6.0 million.

Following the purchase, the former operations of EIS were split into two subsidiaries: ISS/Canada and Canada Sales Corp. The purchase price plus direct acquisition costs were allocated on the basis of estimated fair value at the date of the purchase. The purchase price allocation is as follows (in thousands):

Purchase price including direct acquisition costs	\$ 13,941
Less:	
Fixed assets	(300)
In-process research and development expense	(4,500)
Developed technology	(3,900)
Trade names	(1,200)
Other intangibles	(200)
Goodwill	<u>\$ 3,841</u>

Earn-out payments related to the EIS asset purchase will be recorded as additional goodwill when earned.

Prior to the asset purchase, EIS was engaged in research and development activity into its next generation product line, known internally as G4. G4 research activity began in 2006. Because G4 had not yet reached technological feasibility, the value of the G4 program was expensed as in-process research and development at the date of transaction. As of the date of the EIS asset purchase, the program was estimated to be between 50% and 75% complete. G4, when released, is expected to provide new features and functionality and avoid existing patent claims of competitors based upon unique technology. The value of the G4 program was appraised utilizing a multi-period excess earnings cash flow analysis based upon facts and circumstances surrounding the in-process development activities and the expected economic benefits to be derived from the resulting products. Key assumptions for the analysis include revenue from G4 products beginning in mid-2008, achievement of an efficient cost to manufacture and a risk adjusted discount rate of 17.0% on cash flows. At the date of acquisition, EIS was actively selling its G3

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product, which has provided the majority of its revenues in the last two years. If G4 is not commercialized according to plan, our financial projections may not be attained.

EIS was named in a U.S. lawsuit in 2006 for infringement of a patent. On October 31, 2007, the courts entered judgment that EIS had not infringed on the patent. The plaintiff could appeal the decision, which EIS would then continue to defend as provided in the purchase agreement. In addition, EIS must indemnify us for all expenses, claims or judgments related to this lawsuit up to the amount of the purchase price, including any earn-out payments.

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Management believes that the ultimate outcome of this legal action will not have a material adverse effect on our financial statements.

In conjunction with the EIS asset purchase, \$600,000 in cash and 35,328 shares of stock, with a value of approximately \$600,000, issued in connection with the transaction were placed in escrow to secure potential indemnification obligations. Any amounts remaining in escrow on December 6, 2012 will then be released.

The results of ISS/Canada and Canada Sales Corp. operations are included in the accompanying financial statements since the date of the EIS asset purchase. The following pro forma summary presents the results of operations as if the EIS asset purchase had occurred on January 1, 2006. EIS' fiscal year ended on September 30. The table below includes our results for the years ended December 31, 2006 and 2007, respectively, and EIS for the years ended September 30, 2006 and 2007, respectively. During the years ended September 30, 2006 and 2007, respectively, EIS incurred \$2.6 million and \$409,000 of legal fees to defend the patent infringement lawsuit.

The pro forma results are not necessarily indicative of the results that would have been achieved had the EIS asset purchase taken place on that date (in thousands, except per share amounts):

	December 31,	
	2006	2007
Total revenue	\$ 21,187	\$ 23,825
Net income (loss)	(2,170)	3,897
Net income (loss) per share:		
Basic	\$ (0.56)	\$ 0.99
Diluted	\$ (0.56)	\$ 0.97

5. GOODWILL AND INTANGIBLE ASSETS

Goodwill consists of \$1.1 million related to our acquisition of Flow Traffic and \$3.8 million recorded in 2007 for the EIS asset purchase.

Intangible assets consisted of the following at December 31, 2007 (dollars in thousands):

Developed technology (8 year life)	\$ 3,900
Trade names (5 year life)	1,200
Other intangibles (5 year life)	200
Less: Accumulated amortization	(51)
	\$ 5,249
Total identifiable intangible assets, net	\$ 5,249

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We expect to recognize amortization expense for the intangible assets in the above table of \$768,000 in each of our years ending December 31, 2008, 2009, 2010 and 2011 and of \$749,000 in 2012. Goodwill and intangible assets related to the EIS asset purchase are deductible for tax purposes over 15 years.

6. CREDIT FACILITIES

We have two credit agreements with our bank.

The revolving line of credit agreement provides up to \$3.0 million in short-term borrowings at the bank's prime rate (effective rate of 7.25% at December 31, 2007), expiring May 31, 2008. Any loans would be secured by inventories, accounts receivable and equipment, and the bank would have the right of setoff against checking, savings and other accounts. We had no outstanding borrowings under this credit agreement in 2006 or 2007.

The term loan provides up to \$8.0 million in short-term borrowings at the bank's prime rate less 0.50% (effective rate of 6.75% at December 31, 2007), expiring September 30, 2008. Any loans require that securities, cash or investments, or eligible investments, be pledged on a formula basis. In December 2007, we borrowed \$5.0 million on this loan and pledged certain cash equivalents. At December 31, 2007, we had \$5.0 million outstanding on this loan and have pledged \$5.3 million as restricted cash.

7. LEASE COMMITMENTS

We rent office space and equipment under operating lease agreements expiring at various dates through December 2010. The leases provide for monthly payments of \$39,000, and we are responsible for our proportionate share of increases in operating expenses that exceed a base rent factor. Rent expense amounted to \$221,000, \$261,000, and \$319,000, for the years ended December 31, 2005, 2006 and 2007, respectively.

Future minimum annual lease payments under noncancelable operating leases for the years ending December 31, 2008, 2009 and 2010 are \$380,000, \$334,000 and \$194,000, respectively.

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8. INCOME TAXES

Our deferred tax assets (liabilities) are as follows (in thousands):

	December 31,	
	2006	2007
Current deferred tax assets (liabilities):		
Accrued compensation	\$ 20	\$ 25
Allowance for returns and bad debts	131	2
Prepaid expenses	(28)	(39)
Inventories		118
Stock option expense		36
State tax credits	50	
Foreign net operating loss carryforwards	73	86
Less valuation allowance	(73)	(86)
	173	142
Non-current deferred tax assets (liabilities):		

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Intangible asset amortization			1,684
Other		(8)	(8)
			1,676
Net deferred tax assets	\$	165	\$ 1,818

Deferred tax assets have been offset by a valuation allowance as deemed necessary based on our estimates of future sources of taxable income and the expected timing of temporary difference reversals.

There is \$270,000, \$449,000 and \$913,000 in undistributed earnings of our wholly-owned foreign subsidiaries at December 31, 2005, 2006 and 2007, respectively.

We realize an income tax benefit from the exercise or early disposition of certain stock options. This benefit results in a decrease in current income taxes payable and an increase in additional paid-in capital.

Our wholly-owned subsidiary in Hong Kong has unused tax losses which do not expire of approximately \$477,000 available for offset against future taxable income. The deferred income tax asset has been fully offset by a valuation allowance as we have no assurance that taxable income will be earned in the future.

The components of income tax expense (benefit) are as follows (in thousands):

	Years Ended December 31,		
	2005	2006	2007
Current:			
Federal	\$ 1,411	\$ 1,039	\$ 1,318
State	114	49	20
Foreign	37	57	116
	1,562	1,145	1,454
Deferred:			
Federal	(52)	(173)	(1,638)
State	(5)	(30)	(15)
Foreign			
	(57)	(203)	(1,653)
Total income tax expense (benefit)	\$ 1,505	\$ 942	\$ (199)

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Income before taxes for the foreign operations were \$(230,000), \$236,000 and \$509,000, for the years ended December 31, 2005, 2006 and 2007, respectively.

A reconciliation of income taxes to the statutory federal rate is as follows (in thousands):

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	December 31,		
	2005	2006	2007
Federal tax statutory rate	\$ 1,477	\$ 1,382	\$ 225
State taxes, net of federal benefit	72	13	2
Tax exempt interest	(53)	(124)	(146)
Research and development tax credits	(80)	(135)	(120)
Domestic production activity deduction	(45)	(39)	(61)
Effect of higher (lower) rates on foreign income	115	(23)	(57)
Stock option expense	23	60	32
Prior year tax credits and refunds claimed		(202)	(26)
Other	(4)	10	(48)
Income tax expense (benefit)	\$ 1,505	\$ 942	\$ (199)

In July 2006, the FASB issued Interpretation No. 48, Accounting for Uncertainty in Income Taxes an Interpretation of FASB Statement No. 109, (FIN 48) which clarifies what criteria must be met prior to recognition of the financial statement benefit of a position taken in a tax return. FIN 48 also provides guidance on derecognition of tax benefits, classification on the balance sheet, interest and penalties, accounting in interim periods, disclosure and transition. We adopted FIN 48 effective January 1, 2007. As a result of the implementation of FIN 48, we did not change our tax liability for uncertain tax benefits. A reconciliation of the beginning and ending amount of the tax liability for uncertain tax benefits is as follows (in thousands):

Balance at January 1, 2007	\$ 100
Additions for current year tax positions	50
Reductions	
Balance at December 31, 2007	\$ 150

We are subject to income taxes in the U.S. federal jurisdiction and various state and foreign jurisdictions. Tax regulations within each jurisdiction are subject to the interpretation of the related tax laws and require significant judgment to apply. Generally, we are subject to U.S. federal, state, local and foreign tax examinations by taxing authorities for years after the fiscal year ended December 31, 2004.

9. LICENSING

The United States patent for some aspects of the technology underlying our Autoscope system was issued in 1989 to the University of Minnesota. We had an exclusive worldwide license from the University of Minnesota for that technology and paid royalties to the University of Minnesota in exchange for such license. Our exclusive license, and all related royalty obligations, expired July 2006. Royalty expense under the agreement was \$383,000 and \$220,000 in the years ended December 31, 2005 and 2006, respectively.

We have sublicensed the right to manufacture and market the Autoscope technology in North America, the Caribbean and Latin America to Econolite and receive royalties from Econolite on sales of the Autoscope system in those territories. Econolite also manufactures the Autoscope system on a non-exclusive basis for direct sales by us outside of North America, the Caribbean and Latin America. We may terminate our agreement with Econolite if a minimum annual sales level is not met or Econolite fails to make royalty payments as required by the agreement.

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The initial term of the agreement was 15 years, ended in 2006, and was automatically renewable thereafter for additional one-year periods unless terminated by either party upon 60 days' notice prior to the end of the initial term or any extension term. In 2001, we signed a five-year extension of our agreement with Econolite, thereby extending its original term to 2011.

We recognized royalty income from this agreement of \$8.6 million, \$10.1 million, and \$10.7 million in the years ended December 31, 2005, 2006 and 2007, respectively.

10. REVENUE FROM FOREIGN COUNTRIES

We derived the following percentages of our revenue from the following geographic regions:

	2005	2006	2007
Asia Pacific	6%	10%	11%
Europe	16%	13%	16%
North America	78%	77%	73%

Revenue originating from Poland was 11% of our revenue in the year ended December 31, 2007. The aggregate net book value of long-lived assets held outside of the United States was \$41,000 and \$356,000 at December 31, 2006 and 2007, respectively.

11. SIGNIFICANT CUSTOMERS AND CONCENTRATION OF CREDIT RISK

Royalty income from Econolite comprised 78%, 77% and 71% of revenues in the years ended December 31, 2005, 2006 and 2007, respectively. Accounts receivable from Econolite were \$2.1 million and \$3.3 million at December 31, 2006 and 2007, respectively. One international customer comprised 15% of accounts receivable at December 31, 2007.

12. RETIREMENT PLANS

Substantially all of our employees in the United States are eligible to participate in a qualified defined contribution 401(k) plan in which participants may elect to have a specified portion of their salary contributed to the plan and we may make discretionary contributions to the plan. We made contributions totaling \$60,000, \$87,000 and \$89,000 to the plans for the years ended December 31, 2005, 2006 and 2007, respectively.

13. STOCK OPTIONS

In February 1995 and April 2005, we adopted the 1995 Long-Term Incentive and Stock Option Plan (the 1995 Plan) and the 2005 Stock Incentive Plan (the 2005 Plan), respectively, which provide for the granting of incentive (ISO) and non-qualified (NQO) stock options, stock appreciation rights, restricted stock awards and performance awards to our officers, directors, employees, consultants and independent contractors. The 1995 Plan terminated in February 2005. Options granted under the Plans generally vest over three to five years based on service and have a contractual term of six to ten years and are amortized to expense on a straight-line basis. The following table summarizes stock option activity for 2006 and 2007:

	Plan Options Available For Grant	Plan Options Outstanding		Non-Plan Options Outstanding	Weighted Average Exercise Price Per Share
		ISO	NQO		
Balance at December 31, 2005	281,200	78,400	136,432	42,000	\$ 2.72
Granted	(18,000)		18,000		12.61
Exercised		(7,700)	(52,099)		3.33
Balance at December 31, 2006	263,200	70,700	102,333	42,000	3.38
Granted	(141,000)	68,088	72,912		15.34
Exercised		(18,800)			2.12

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Balance at December 31, 2007	122,200	119,988	175,245	42,000	\$	8.47
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The following table summarizes information about the stock options outstanding at December 31, 2007.

Range of Exercise Price	Options Outstanding				Options Exercisable		
	Number Outstanding	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Aggregate Intrinsic Value	Number Exercisable	Weighted Average Exercise Price	Aggregate Intrinsic Value
\$1.30-1.99	71,100	4.2 years	\$ 1.34	\$ 1,019,818	71,100	\$ 1.34	\$ 1,019,818
2.00-2.99	52,200	2.0 years	2.38	694,170	52,200	2.38	694,170
3.00-3.99	38,933	4.8 years	3.15	487,966	38,333	3.13	480,946
7.00-7.93	16,000	1.3 years	7.77	126,580	16,000	7.77	126,580
12.00-12.99	18,000	8.8 years	12.61	509,220	6,000	12.61	18,420
14.00-14.99	75,000	5.1 years	14.19	111,500			
15.00-15.99	19,000	2.9 years	15.70				
16.00-16.99	15,000	5.4 years	16.00				
17.00-17.99	32,000	4.9 years	17.50				
	<u>337,233</u>		\$ 8.47	\$ 2,949,254	<u>183,633</u>	\$ 2.94	\$ 2,339,934

The weighted average fair value of the 18,000 and 141,000 options granted during the years ended December 31, 2006 and 2007 was \$74,340 and \$851,910, respectively. There were no options granted in 2005.

The total intrinsic value of options exercised during the years ended December 31, 2005, 2006 and 2007 was \$1.3 million, \$607,000 and \$255,000, respectively. The total fair value of shares vested during the years ended December 31, 2005, 2006 and 2007 was \$15,000, \$170,000 and \$25,000, respectively. The fair value of each option granted is estimated on the date of grant using the Black-Scholes option-pricing model with the following weighted-average assumptions used for the year ended December 31, 2007: zero dividend yield; expected volatility of 42%; risk-free interest rate of 4.75%; and expected term of 3.9 years. The assumptions were as follows for the year ended December 31, 2006: zero dividend yield; expected volatility of 40%; risk-free interest rate of 4.27% and expected term of 3 years. The expected life of the options is based on evaluations of historical and expected future exercise behavior. The risk-free interest rate is based on the U.S. Treasury rates at the date of grant with maturity dates approximately equal to the expected life at the grant date. Volatility is based on historical volatility of our stock over the past three years. We have not historically issued any dividends and do not expect to in the foreseeable future. We recognized stock option expense of \$177,000 and \$194,000 in the years ended December 31, 2006 and 2007, respectively, and the expense is included within general and administrative expense on the consolidated statements of income.

There were 213,767 and 195,833 options exercisable at December 31, 2005 and 2006, respectively. The weighted average exercise price of these options was \$2.52 and \$2.53 at December 31, 2005 and 2006, respectively.

14. SUBSEQUENT EVENT

After December 31, 2007, we invested a portion of our excess cash in auction rate securities and as of February 29, 2008 we had \$5.5 million of these securities in our investment portfolio. All of these auction rate securities are AAA rated by one or more of the major credit rating agencies and have contractual maturities from 2031 to 2047. Further, all of these securities are collateralized by student loans, and

approximately 97% of the collateral in the aggregate is guaranteed by the U.S. government under the Federal Family Education Loan Program. In February 2008, we experienced failed auctions for our entire auction rate securities portfolio, resulting in our inability to sell these securities in the short term. A failed auction results in a lack of liquidity in the securities but does not signify a default by the issuer. Upon an auction failure, the interest rates do not reset at a market rate but instead reset based on a formula contained in the security, which generally is higher than the current market rate. If we need to access these funds, we will not be able to do so without the possible loss of principal or until a future auction for these investments is successful, they are redeemed by the issuer or they mature. We cannot predict if or when a successful auction or redemption may take place. We do not believe we need access to these funds for operational purposes for the foreseeable future. We will continue to monitor and evaluate these investments on a quarterly basis for impairment or for the need to reclassify as long-term investments. All of the securities are due for auction in late March 2008.

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Notes to Unaudited Pro Forma Condensed Combined Statement of Operations

Basis of Pro Forma Presentation

The unaudited pro forma condensed combined statement of operations for year ended December 31, 2007 is based on the historical financial statements of Image Sensing Systems, Inc. (the Company) and EIS Electronic Integrated Systems Inc. (EIS) after giving effect to the asset purchase and the assumptions and adjustments described in these notes to the unaudited pro forma condensed combined statement of operations. EIS has a fiscal year that ends September 30. As such, for purposes of the pro forma statement of operations, EIS results for its fiscal year ended September 30, 2007 have been combined with the Company's results for the year ended December 31, 2007 to create the pro forma year ended December 31, 2007 statement.

The unaudited pro forma condensed combined statement of operations is presented as if the asset purchase had occurred on January 1, 2007.

The pro forma information is presented solely for informational purposes and is not necessarily indicative of the combined results of operations or financial position that might have been achieved for the period or date indicated, nor is it necessarily indicative of the future results of the combined company. The pro forma information is based on estimates and assumptions set forth in the notes to such information. It does not reflect cost savings, operating synergies or revenue enhancements expected to result from the asset purchase or the costs to achieve these cost savings, operating synergies and revenue enhancements. The pro forma adjustments and the allocation of the consideration are based on management's estimates of the fair value of the assets acquired.

The Acquisition

On December 6, 2007, Image Sensing Systems, Inc. (the Company) entered into and closed on an Asset Purchase Agreement (the Purchase Agreement) with EIS Electronic Integrated Systems Inc. (EIS), Dan Manor (Manor), Faye Manor, Donald D. Drewell, Mendel M. Greenberg, the Faye and Dan Manor Family Trust, the MMG Trust and the Drewell Family Trust. EIS is based in Toronto, Ontario, Canada. Under the Purchase Agreement, the Company purchased certain assets from EIS and Manor, including EIS RTMS radar traffic sensor product line. Under the Purchase Agreement, the Company made a \$13,400,000 initial payment, consisting of \$10,160,000 in cash paid directly to EIS, \$140,000 in cash paid directly to Manor, and 111,874 shares of common stock of the Company with a value of approximately \$1,900,000 that were issued directly to EIS. The Company placed an additional \$600,000 in cash and 35,328 shares of its common stock with a value of approximately \$600,000 in escrow (the Escrowed Consideration). The Company borrowed \$5,000,000 from its bank to fund part of the initial cash consideration.

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EIS is a party to a lawsuit brought by a third party in 2005 alleging patent infringement. EIS has rejected the allegation and counter-sued. The lawsuit has gone to trial and the amount disclosed in the period's statement of operations is attorneys' fees incurred by EIS in defense of the lawsuit. In October 2007, the District Court that heard the case dismissed the third party claim. The third party filed notice of its appeal of the dismissal in November 2007.

The following table summarizes the components of the estimated total consideration determined for accounting purposes of the pro forma condensed combined financial statement (in thousands):

Fair value of 147,202 shares of Image Sensing Systems, Inc. common stock issued to EIS	\$2,535
Cash	5,900
Bank debt borrowed	5,000
Direct transaction costs (a)	506
Total purchase price	\$13,941

- (a) Direct acquisition costs of \$506,000 consist of legal, appraisal and accounting fees and other external costs directly related to the asset purchase.

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The purchase consideration was allocated based on the estimated fair value of the tangible and identifiable intangible assets acquired. An allocation of the purchase price has been made to major categories of assets based on management's best estimates. The excess of the purchase price over the estimated fair value of tangible and identifiable intangible assets acquired has been allocated to goodwill.

The allocation of the purchase consideration based on a valuation is presented below (in thousands):

Fair value of EIS net tangible assets acquired	\$300
In-process research and development expense	4,500
Identifiable intangible assets:	
Existing technology	3,900
Trade names	1,200
Other	200
Total identifiable intangible assets	5,300
Goodwill	3,841
Total purchase price	\$13,941

In-process research and development expense Prior to the asset purchase, EIS was engaged in research and development activity into its next-generation product line, known internally as G4. Because G4 had not yet reached technological feasibility, the value of the G4 program was expensed at the date of transaction.

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Identifiable intangible assets The fair value of the existing technology was based on a valuation that considered, among other factors, the expected income and discounted cash flows to be generated from the existing technology, taking into account risks related to the characteristics and applications of the technology and assessments of the life cycle state of the technology. The value of the existing technology is being amortized over an eight year period. The fair value of the trade names was based on a valuation that considered, among other factors, the expected income and discounted cash flows to be generated from the trade names, also taking into account the expected period in which the Company intends to utilize the trade names. The value of the trade names is being amortized over a five year period. Other identifiable intangible assets are being amortized over a five year period.

Goodwill Goodwill represents the excess of the estimated purchase price over the estimated fair value of tangible and identifiable intangible assets acquired and liabilities assumed. Goodwill is not amortized but rather is tested for impairment at least annually. In the event that the Company determines that the value of goodwill has become impaired, it will incur a charge for the amount of impairment at the time in which such determination is made.

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Unaudited Pro Forma Condensed Combined Statement of Operations

(in thousands, except per share amounts)

	For the Year Ended			
	December 31, 2007			
	Historical		Pro forma	
	Image			
	Sensing			
	Systems, Inc.	EIS	Adjustments	Combined
Revenues				
Product sales	\$4,336	\$8,742	\$	\$13,078
Royalties	10,747			10,747
	15,083	8,742		23,825
Cost of revenue				
Cost of product sales	1,987	2,752		4,739
Gross Profit	13,096	5,990		19,086
Operating expenses				
Selling, marketing and product support	3,463	1,003		4,466
General and administrative	2,653	2,289		4,942
Research and development	2,299	462		2,761
Amortization of intangible assets	51		717	(1) 768
In-process research and development	4,500			4,500
Legal expense - lawsuit		409		409
	12,966	4,163	717	17,846
Income from operations	130	1,827	(717)) 1,240
Other income (expense)	543	(360)	(511)	(328))
Income before income taxes	673	1,467	(1,228)) 912
Income tax expense (benefit)	(199)) 188	266	(3) 255
Net income	\$872	\$1,279	\$(1,494)) \$657
Net income per common share				

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Basic	\$0.23	\$0.17
Diluted	\$0.22	\$0.16
Weighted average shares outstanding		
Basic	3,789	N/A
Diluted	3,881	N/A
		147
		(4)
		3,936
		(4)
		4,028

See accompanying notes to unaudited pro forma condensed combined financial statement

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Pro Forma Adjustments

The unaudited pro forma condensed combined statement of operations gives effect to the asset purchase as if it had occurred on January 1, 2007.

Explanations of the adjustments to the unaudited pro forma condensed combined statement of operations are as follows (in thousands):

- (1) To adjust amortization expense on intangible assets purchased in transaction to full years.
- (2) Adjustments to other income (expense) (in thousands):

	Year Ended
	December 31, 2007
To eliminate EIS interest expense on line of credit	\$ 44
To adjust for reduced interest income on Image Sensing cash	(192)
To record interest expense on Image Sensing bank debt	(363)
Total	\$ (511)

- (3) To adjust income taxes to the Company's estimated effective rate of 28%.
- (4) The pro forma number of shares used in per share calculations reflects the 147,202 common shares of Image Sensing issued to EIS upon closing as partial consideration for the assets purchased.

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Table of Contents**PART II****INFORMATION NOT REQUIRED IN PROSPECTUS****Item 13. Other Expenses of Issuance and Distribution**

The following table sets forth the costs and expenses payable by us in connection with the sale and distribution of the shares of common stock being registered. All of such expenses, except for the SEC registration fee and the FINRA fee, are estimated.

SEC registration fee	\$1,070
FINRA fee	3,222
Blue Sky fees and expenses	10,000
Legal fees and expenses	*
Accountant's fees and expenses	*
Registrar's and transfer agent's fees and expenses	*
Printing expenses	*
Miscellaneous	*
Total	\$*

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers

Section 302A.521 of the Minnesota Statutes provides that unless prohibited or limited by a corporation's articles of incorporation or bylaws, we must indemnify our current and former officers, directors, employees and agents against expenses (including attorneys' fees), judgments, penalties, fines and amounts paid in settlement and which were incurred in connection with actions, suits, or proceedings in which such persons are parties by reason of the fact that they are or were an officer, director, employee or agent of our company, if they (i) have not been indemnified by another organization, (ii) acted in good faith, (iii) received no improper personal benefit, (iv) in the case of a criminal proceeding, had no reasonable cause to believe the conduct was unlawful, and (v) reasonably believed that the conduct was in the best interests of our company. Section 302A.521 also permits our company to purchase and maintain insurance on behalf of our officers, directors, employees and agents against any liability which may be asserted against, or incurred by, such persons in their capacities as officers, directors, employees and agents of our company, whether or not we would have been required to indemnify the person against the liability under the provisions of such section.

Section 7 of Article III of our bylaws provides that we shall indemnify our officers, directors, employees and agents and other persons to the fullest extent authorized or permitted by the Minnesota Business Corporation Act.

We maintain directors' and officers' liability insurance for the benefit of our directors and certain of our officers.

Before the closing of this offering, we plan to enter into an underwriting agreement, which will provide that the underwriters are obligated, under some circumstances, to indemnify our directors, officers and controlling persons against specified liabilities.

Item 15. Recent Sales of Unregistered Securities.

In the three years preceding the filing of this registration statement, we issued the securities described below that were not registered under the Securities Act of 1933, as amended (the "Securities Act"). None of the transactions involved any underwriters, underwriting discounts, or commissions or any public offering, and we believe each transaction, if deemed to be a sale of a security, was exempt from the registration requirements of the Securities Act by virtue of Section 4(2) thereof, Regulation D promulgated thereunder, or Rule 701 pursuant to compensatory benefit plans and contracts relating to compensation as provided under Rule 701 based on the limited number of offerees in any such offering, representations and warranties made by such offerees in the particular transactions, or the identity of such offerees as either accredited investors or our executive officers.

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1. In October 2006, we granted options to purchase 18,000 shares of our common stock to one director with an exercise price of \$12.61 per share; and in January 2007, we granted options to one executive officer to purchase 50,000 shares of our common stock at an exercise price of \$14.24 per share and options to another executive officer to purchase 25,000 shares at an exercise price of \$14.10 per share. All of these options were granted under the Image Sensing Systems, Inc. 2005 Stock Incentive Plan, or Plan. We received no proceeds upon making these grants. The grants were made in reliance on the exemption provided by Section 4(2) of and Rule 506 of Regulation D under the Securities Act. On and after April 30, 2007, grants of options under the Plan were registered under our Registration Statement on Form S-8 filed with the Securities and

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Exchange Commission on that date.

2. In December 2007, we issued 147,202 shares of our common stock to EIS Electronic Integrated Systems, Inc. in connection with our purchase of certain radar-based detection assets from EIS, including the assets related to EIS's Remote Traffic Microwave Sensor system. Of these shares, 35,328 shares are being held in escrow to secure potential indemnification obligations. This sale was made in reliance on the exemption provided by Section 4(2) of the Securities Act based on representations made to us by EIS and its shareholders in connection with the EIS asset purchase agreement.

Item 16. Exhibits and Financial Statement Schedules

The exhibits filed with this registration statement are set forth on the Exhibit Index filed as part of this registration statement immediately following the signatures.

Item 17. Undertakings

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of these securities at that time shall be deemed to be the initial *bona fide* offering.

Table of Contents**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of St. Paul, State of Minnesota, on May 12, 2008.

IMAGE SENSING SYSTEMS, INC.

/s/ GREGORY R. L. SMITH
 Gregory R. L. Smith
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Each person whose signature appears below hereby constitutes and appoints Kenneth R. Aubrey and Gregory R. L. Smith, or either of them, such person's true and lawful attorney-in-fact and agent with full power of substitution and resubstitution for such person and in such person's name, place and stead, in any and all capacities, to sign the Registration Statement on Form S-1 of Image Sensing Systems, Inc. and any or all amendments (including post-effective amendments) to the Registration Statement, and to sign any registration statement for the same offering covered by the Registration Statement that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, and to file the same, with all exhibits hereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or either of them, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Kenneth R. Aubrey Kenneth R. Aubrey	President, Chief Executive Officer and Director (Principal Executive Officer)	May 12, 2008
/s/ Gregory R. L. Smith Gregory R. L. Smith	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	May 12, 2008
/s/ James Murdakes James Murdakes	Chairman of the Board of Directors	May 12, 2008
/s/ Panos G. Michalopoulos Panos G. Michalopoulos	Director	May 12, 2008
/s/ Richard C. Magnuson Richard C. Magnuson	Director	May 12, 2008
/s/ Michael G. Eleftheriou Michael G. Eleftheriou	Director	May 12, 2008
/s/ Sven A. Wehrwein Sven A. Wehrwein	Director	May 12, 2008

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EXHIBIT INDEX

Exhibit No.	Description of Exhibit
1.1	Form of Underwriting Agreement by and among Image Sensing Systems, Inc. (ISS), Needham & Company, LLC, and Craig-Hallum Capital Group LLC.
2.1	Asset Purchase Agreement dated December 6, 2007 by and among ISS, EIS Electronic Integrated Systems Inc., Dan Manor and the other parties named therein, incorporated by reference to Exhibit 2.1 to ISS Annual Report on Form 10-K for the year ended December 31, 2007 (portions of this exhibit are treated as confidential pursuant to a request for confidential treatment filed by ISS with the SEC).
3.1	Restated Articles of Incorporation of ISS, incorporated by reference to Exhibit 3.1 to ISS Registration Statement on Form SB-2 (Registration No. 33-90298C) filed on March 14, 1995, as amended (Registration Statement).
3.2	Articles of Amendment to Articles of Incorporation of ISS, incorporated by reference to Exhibit 3.2 to ISS Quarterly Report on Form 10-QSB for the quarter ended June 30, 2001.
3.3	Bylaws of ISS, incorporated by reference to Exhibit 3.3 to ISS Registration Statement.
4.1	Specimen form of ISS common stock certificate, incorporated by reference to Exhibit 4.1 to ISS Registration Statement.
5.1	Opinion of Winthrop & Weinstine, P.A.
10.1	Form of Distributor Agreement, incorporated by reference to Exhibit 10.1 to ISS Registration Statement.
10.2*	1995 Long-Term Incentive and Stock Option Plan, amended and restated through May 17, 2001, incorporated by reference to Exhibit 10.10 to ISS Annual Report on Form 10-KSB for the year ended December 31, 2001.
10.3*	Employment Agreement between ISS and Kenneth R. Aubrey, dated December 12, 2006, effective on or about January 15, 2007 (in capacity as President) and effective June 1, 2007 (in capacity of President and Chief Executive Officer), incorporated by reference to Exhibit 10.1 to ISS Current Report on Form 8-K dated December 14, 2006.
10.4*	Employment Agreement between ISS and Gregory R. L. Smith, dated December 8, 2006, effective on or about January 2, 2007, incorporated by reference to Exhibit 10.1 to ISS Current Report on Form 8-K dated December 8, 2006.
10.5*	Employment Agreement between ISS and James Murdakes, dated March 9, 2007, effective retroactively to January 1, 2007, incorporated by reference to Exhibit 10.1 to ISS Current Report on Form 8-K dated March 13, 2007.
10.6	Manufacturing, Distributing and Technology License Agreement dated June 11, 1991 by and between ISS and Econolite Control Products, Inc. (Econolite), incorporated by reference to Exhibit 10.1 to the Registration Statement.
10.7	Modification to Manufacturing, Distributing and Technology License Agreement dated September 1, 2000 by and between ISS and Econolite, incorporated by reference to Exhibit 10.12 to ISS Annual Report on Form 10-K for the year ended December 31, 2007 (2007 Form 10-K).
10.8	Extension and Second Modification to License Agreement dated July 13, 2001 by and between ISS and Econolite, incorporated by reference to Exhibit 10.12 to ISS Annual Report on Form 10-KSB for the year ended December 31, 2001.

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Exhibit No.	Description of Exhibit
10.9	Distribution Agreement dated January 1, 2001 by and between ISS and Wireless Technology, Inc., incorporated by reference to Exhibit 10.1 to ISS Quarterly Report on Form 10-QSB for the quarter ended June 30, 2001.
10.10	Business Loan Agreement dated December 4, 2007 by and between ISS and Wells Fargo Bank, N.A. (Wells Fargo), incorporated by reference to Exhibit 10.6 to the 2007 Form 10-K.
10.11	Promissory Note dated December 4, 2007 in the original principal amount of \$3,000,000 issued by ISS to Wells Fargo, incorporated by reference to Exhibit 10.7 to the 2007 Form 10-K.
10.12	Business Loan Agreement dated December 4, 2007 by and between ISS and Wells Fargo, incorporated by reference to Exhibit 10.8 to the 2007 Form 10-K.
10.13	

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- Promissory Note dated December 4, 2007 in the original principal amount of \$8,000,000 issued by ISS to Wells Fargo, incorporated by reference to Exhibit 10.9 to the 2007 Form 10-K.
- 10.14 Commercial Security Agreement dated January 8, 2002 by and between ISS and Wells Fargo, incorporated by reference to Exhibit 10.10 to the 2007 Form 10-K.
- 10.15 Office Lease Agreement dated November 24, 1998 by and between ISS and Spruce Tree Centre L.L.P., incorporated by reference to Exhibit 10.18 to ISS Annual Report on Form 10-KSB for the year ended December 31, 1998.
- 10.16 Amendment VII to Office Lease Agreement dated April 26, 2007 by and between ISS and Spruce Tree Centre L.L.P., incorporated by reference to Exhibit 10.11 to the 2007 Form 10-K.
- 10.17 Production Agreement dated February 14, 2002 by and among ISS, Wireless Technology, Inc. and Econolite, incorporated by reference to Exhibit 10.20 to ISS Annual Report on Form 10-KSB for the year ended December 31, 2001.
- 10.18* Image Sensing Systems, Inc. 2005 Stock Incentive Plan, incorporated by reference to Appendix A to ISS proxy statement filed with the SEC on April 19, 2005.
- 10.19 Loan Agreement dated May 1, 2008 by and between ISS and Associated Bank, National Association (Associated Bank).
- 10.20 Security Agreement dated May 1, 2008 by and between ISS and Associated Bank.
- 10.21 Promissory Note (Line of Credit) dated May 1, 2008 in the original principal amount of \$5,000,000 issued by ISS to Associated Bank.
- 10.22 Promissory Note (Loan) dated May 1, 2008 in the original principal amount of \$3,000,000 issued by ISS to Associated Bank.
- 21.1 List of subsidiaries of ISS, incorporated by reference to Exhibit 21.1 to the 2007 Form 10-K.
- 23.1 Consent of Grant Thornton LLP.
- 23.2 Consent of Winthrop & Weinstine, P.A., included in Exhibit 5.1.
- 24.1 Power of Attorney (included on signature page).
- 99.1* Employment Agreement dated December 6, 2007 by and between ISS Image Sensing Systems Canada Ltd. and Dan Manor, incorporated by reference to Exhibit 99.1 to the 2007 Form 10-K.
- 99.2 Extension of Modification to Manufacturing, Distributing and Technology License Agreement dated May 31, 2002 by and between ISS and Econolite, incorporated by reference to Exhibit 99.2 to the 2007 Form 10-K.
- 99.3 Letter agreement dated June 19, 1997 by and between ISS and Econolite, incorporated by reference to Exhibit 99.3 to the 2007 Form 10-K.

* Indicates a management contract or compensatory plan or arrangement.
