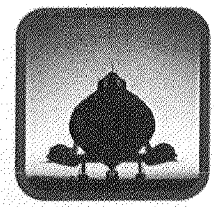
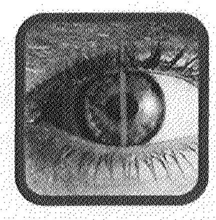
API
Advanced Photonix, Inc.®

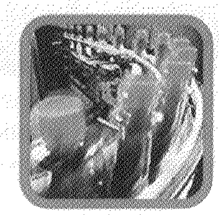


Military

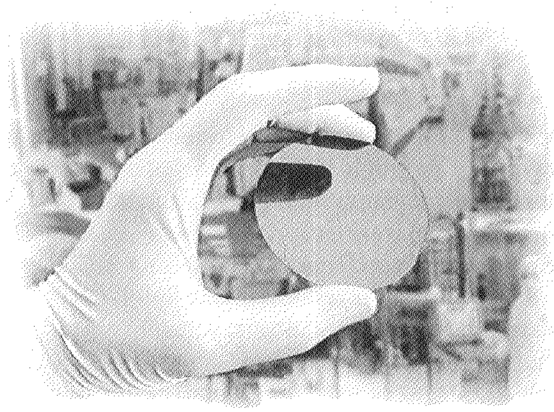


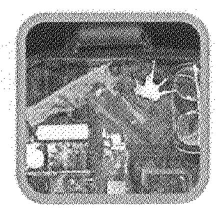
Medical

Annual REPORT 2012



Industrial



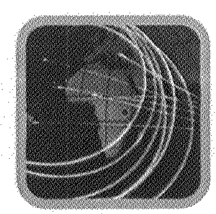


Security

Leading edge

Vertical integration

Patented technology

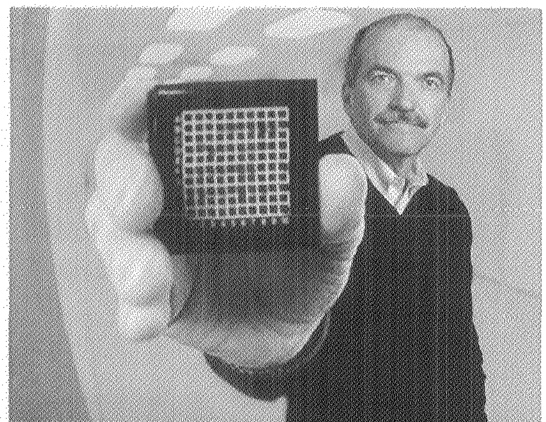


The API Advantage

Telecom

A letter from Richard Kurtz, Chairman and Chief Executive Officer

Our fiscal 2012 was a tale of two different halves, with the 1st half revenues growing to $16.5 million, a growth of 24% year over year, and the second half falling by 21% from the first half. The first half growth would have been even higher but was restrained by the effect of the tsunami in Japan reducing supply from one of our key vendors. In the second half, the floods in Thailand did not disrupt our supply chain, however they did disrupted our telecom customers supply chain which caused them to push out or not place orders. As a result our revenues only grew 2% year over year. Gross margins, while still strong, dropped slightly to 40.2%, mainly due to the product mix, pricing pressure in the telecom market, and capacity underutilization. This is not a reflection on the value of our technology or the viability of our company. While our growth was disappointing, it was primarily due to the impact of external events on our markets rather than any fundamental shift in our growth prospects in high-speed optical receivers (HSOR) and terahertz (THz). We continue to make investments in our future growth, establish second sources for our critical components, reduce costs and look for more value-added resellers (VAR) partners for our terahertz product platform.



"We believe that the company is positioned to respond appropriately to today's challenges and opportunities."

HIGH-SPEED OPTICAL RECEIVERS

The business for our HSOR products grew rapidly the first half of the year at a 94% rate driven by the introduction of our 100G coherent product introduction. Unfortunately it slowed significantly during the second half, shrinking 44% from the 1st half and ending the year only growing 8% from the prior year due primarily to external natural disasters that caused supply chain disruption industry wide. We expect our HSOR product platform to resume growth in the second half of this coming year as the supply chain is fully restored and the carriers accelerate deployment of 40G and 100G coherent systems. Our product development is focusing on next generation, cost reduced coherent receivers for the line side, and product development for the emerging 100G line side and emerging 10G consumer passive optical network market. The network infrastructure is undergoing a significant technological upgrade to higher speeds to support the rapidly growing consumer demand for higher speeds driven primarily by high resolution video, anytime, anywhere.

TERAHERTZ

Our T-Ray® product platform revenue for the past year was been driven mostly by development contracts from the United States Air Force for THz nondestructive quality control to be used in manufacturing F-35 joint strike fighter jets and from In-Q-Tel to develop a THz personnel anomaly detection system (ADS), the Saf-T-Chek ADS™ product, for the homeland security market. The contracts for the F-35 program were extended and we expect to deliver functional units to be deployed to the factory floor at both Lockheed-Martin and Northrop Grumman. The In-Q-Tel contract has been completed, and as a result we don't expect meaningful homeland security market revenue until the Saf-T-Chek ADS™ product has been evaluated. The Saf-T-Chek ADS™ is currently being assessed for effectiveness and suitability by an independent testing facility for the TSA. The goal would be to be placed on the Qualified Product List (QPL) of the TSA. This would open both domestic and international markets for the Saf-T-Chek ADS™ to be used for secondary screening at either airports or building security.

We have recently announced follow on contracts for the F-35 program totaling $3 million. These contracts will run for 18 to 24 month periods and result in the delivery of two systems to Northrop Grumman and one to Lockheed-Martin, both to be used for quality control or non-destructive testing and evaluation systems. We have already started to see inquiries coming in from overseas and tangentially from governments who are participating on the F-35 joint strike fighter program.

To date our terahertz product sales have been to building material and nutraceutical manufacturers. The recent introduction of our new product called T-Gauge® at the National Plastics Exposition in April combined with two new value-added resellers (VAR's) has kick started our product sales for this fiscal year. Our VAR's are in the process of setting up internal application development facilities, introducing the technology to new customers and actively marketing our T-Gauge® product. Our goal this year is to grow the revenues of our product sales in our VAR's markets and expand into new markets both domestically and internationally.

OPTOELECTRONICS SOLUTIONS

Historically this platform has been the largest revenue contributor, but with the growth in our HSOR product platform and the growing THz product sales, combined with a smaller military spending budget, this is changing. We will continue to make an appropriate level of investment in new product development, look for new M&A opportunities, and pursue new markets for high reliability applications this coming fiscal year that support our growth objectives for this product platform.

Summary

In summary, last year was a year in fluctuation for API. Our revenues increased the first half, but dropped during the second half, ending up 2% year over year. Our AEBITDA remained positive, but fell to $258,000 for the year due to the second half weakness in the telecom market. We generated Non-GAAP net income of $785,000, or $.03 per share in fiscal 2011, compared to a Non-GAAP loss of $913,000 or $.03 per share in fiscal 2012.

The new fiscal year looks encouraging, but with some risks. We look forward to a return to growth in our HSOR product platform in the second half of the fiscal year. We expect that our Optosolutions product platform will be flat year over year. We see modest growth in our terahertz T-Gauge® product as we transition from contract to product revenue sales. This is, of course, without any contribution from our Saf-T-Check ADS™ product as it has not yet been placed on the Department of Homeland Security QPL list.

Overall, we expect revenue growth to start after the first quarter, then build sequentially throughout the balance of the year such that the second half is 35% higher than the first half. The focus in HSOR will be in managing the HSOR supply chain at a cost that supports higher gross margins. The build out of our VAR network to expand our vertical markets and leverage application development is our next phase for THz commercialization. Optosolutions will be focused on finding new high reliability market applications to grow the Optosolutions product platform. We believe that the company is positioned to respond appropriately to today's challenges and opportunities.

We would like to thank our customers and shareholders for their continuing confidence, our suppliers for their continuing support, and our employees for their dedication to providing the highest quality products to the market. Despite the disappointment of a slow growth year in 2012, we made substantial progress that positions the company with high value-added products that offer the promise of substantial long term growth.

Sincerely,

Richard Kurtz
Chairman & CEO

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-K

(Mark One)

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended March 31, 2012
OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _________ to _______ .

1-11056
(Commission file number)

ADVANCED PHOTONIX, INC. ®
(*Exact name of registrant as specified in its charter*)

Delaware	**33-0325826**
(*State or other jurisdiction of incorporation or organization*)	(*I.R.S. Employer Identification No.)*

2925 Boardwalk, Ann Arbor, Michigan 48104
(*Address of principal executive offices)*

(734) 864-5600
(*Registrant's telephone number, including area code*)

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

Title of each class	Name of each exchange on which registered
Common Stock, $0.001 par value	NYSE Amex: API

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES ☑ NO ☐

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

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

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☑
(Do not check if a smaller reporting company)

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

The aggregate market value of the voting stock held by non-affiliates of the registrant as of September 30, 2011 was approximately $27,099,000.

Number of shares outstanding of the registrant's Common Stock as of June 22, 2012: 31,161,147 shares of Class A Common Stock.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement to be filed pursuant to Regulation 14A promulgated under the Securities Exchange Act of 1934 in connection with the 2012 Annual Meeting of Stockholders of registrant have been incorporated by reference into Part III of this Form 10-K.

ADVANCED PHOTONIX, INC.
FORM 10-K
FISCAL YEAR ENDED MARCH 31, 2012
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PART I

Except for the historical information contained herein, this report contains forward looking statements that involve a number of risks and uncertainties, including the difficulty of predicting demand for new optoelectronic products, the impact of competitive products and pricing, challenges to our intellectual property, and the uncertainty and timing of the development and launch of new optoelectronic products. This report contains forward-looking statements that are based on Management's current expectations, estimates, and projections. Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates," "forecasts," variations of these words and similar expressions are intended to identify these forward-looking statements. Certain factors, including but not limited to those identified under "Item 1A. Risk Factors" of this report, may cause actual results to differ materially from current expectations, estimates, projections, forecasts and past results. No assurance can be made that any expectation, estimate or projection contained in a forward-looking statement will be achieved or will not be affected by the factors cited above or other future events. We disclaim any obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Item 1. Business

General
Advanced Photonix, Inc. ® (the Company, we, our or API) was incorporated under the laws of the State of Delaware in June 1988. We are engaged in the development and manufacture of optoelectronic devices and value-added sub-systems and systems. We serve a variety of global Original Equipment Manufacturers (OEMs) in five primary markets. We support our customers from the initial concept and design phase of the product, through testing to full-scale production. We have two manufacturing facilities located in Camarillo, California and Ann Arbor, Michigan.

<u>Products and Technology</u>

Our Business
API is a leading supplier of optoelectronic semiconductors packaged into high-speed optical receivers, custom optoelectronic subsystems and Terahertz (THz) instrumentation, serving a variety of global OEMs. Our patented high-speed optical receivers include Avalanche Photodiode (APD) technology and PIN (positive-intrinsic-negative)-photodiode technology based upon III-V materials, including InP, InAlAs, and GaAs. Our optoelectronic subsystems are based on our silicon Large Area Avalanche Photodiode (LAAPD), PIN photodiode, FILTRODE® detectors and LED assemblies. Our Terahertz sensor product line is targeted at the industrial, homeland security and military markets. Using our patented fiber coupled technology and high speed Terahertz generation and detection sensors, we are engaged in transferring Terahertz technology from the laboratory to the factory floor for use in non-destructive testing and real time quality control.

We support the customer from the initial concept and design of the semiconductor, hybridization of support electronics, packaging and signal conditioning or processing from prototype through full-scale production and validation testing. The target markets served by us are Industrial Sensing/NDT, Military/Aerospace, Telecom, Medical and Homeland Security.

Technology & Manufacturing Capabilities
Our basic technologies and manufacturing capabilities include the following:

- Optoelectronic semiconductor design and micro fabrication of III-V compound semiconductor (InP and GaAs) and Silicon (Si) devices including photodetectors and terahertz transmitters/receiver antenna,
- Molecular Beam Epitaxy (MBE) growth of high-speed III-V compound semiconductor material including GaAs, InAlAs and InP,
- High speed semiconductor analog amplifier specification, evaluation and design for outside fabrication,
- Photonic integrated circuits (PIC), Coherent mixer and delay line interferometer (DLI) specification, evaluation and design for outside fabrication for use in 40Gb/s and 100 Gb/s line side optical receivers,
- Opto-electronic hybrid packaging of semiconductor devices combining opto-electronic devices with high-speed electronics and fiber optics,
- Vapor deposition and/or ion implantation for Silicon based PIN & APD photo-detectors,

- Terahertz systems, subsystems, transmitters and receivers, transceivers and motion control hardware and software,
- Femtosecond laser specification, valuation, design and manufacture and
- Chromatic dispersion, polarization dispersion and optical delay management in complex optical systems.

Core Products

The core product technologies used in the majority of our products are opto-electronic semiconductor devices, including photodiodes and antennae made of Si or III-V compound semiconductor material and high speed semiconductor analog amplifiers. Photodiodes and antennae sense light of varying wavelengths and intensity and convert that light and/or Terahertz wave into electrical signals. Analog amplifiers increase the converted electrical signals output power to a level required to communicate with follow on electrical components. We manufacture photodiodes of varying complexity, from basic PIN photodiode to the more sophisticated APD and antennae that transmit and receive Terahertz signals. The APD is a specialized photodiode capable of detecting very low light levels due to an internal gain phenomenon known as avalanching. All photodiode and THz devices are designed by our experienced engineering staff, and fabricated in state-of-the-art clean rooms. Some of our analog amplifiers are specified and tested by our engineering staff, designed by subcontractors and fabricated by outside suppliers. Our products include the following:

- High Speed Optical Receivers (10Gb/s, 40Gb/s & 100Gb/s) which are packaged InP, InAlAs, or GaAs PIN and/or APD photodiodes with amplifiers.
- Packaged PIN and APD photodiodes in Si and III-V materials (InP, InAlAs, GaAs).
- Packaged Si APD components, with and without thermo-electric coolers.
- Packaged Si LAAPD components.
- Packaged Si photodiodes with patented FILTRODE® technology integrating optical filters directly on photodiode chips.
- Terahertz Systems & subsystems utilizing III-V materials for Terahertz transmitters &/or receivers.

Terahertz Technology

One of the high growth technologies we are pursuing is Terahertz (THz) based on our T-Ray® product platforms. THz is a region of the electromagnetic spectrum that lies between microwave and infrared waves and is in the early stages of adoption. While microwaves and infrared waves have been explored and commercialized for decades, THz waves are in the early stages of being explored and commercialized due to the fact that they have historically been very difficult to generate and detect. Recent advances in femtosecond lasers and ultra-fast semiconductor and electro-optic devices combined with fiber-optic packaging technologies have enabled the development of practical T-Ray® instrumentation for the research market with increasing adoption in the industrial, military and aerospace markets as a result of our growing group of value added resellers' application and market development efforts. THz can be used to "look" through and beneath materials with high 2-dimensional (2-D) and 3-dimensional (3-D) spatial resolution roughly equivalent to the resolution of the human eye or better. It can also uniquely identify the chemical composition of many hidden or subsurface objects using non-ionizing radiation, which is not harmful to humans at the power levels commonly used today. THz imaging and spectroscopy market applications include industrial quality control through non-destructive testing (including aerospace and pharmaceutical markets); homeland security and defense screening of people, packages and bags for weapons and weapons of mass destruction; medical imaging and other scientific applications.

We have had significant Terahertz technology and product development since 1997, resulting in over 59 patents or patents pending to date. In 2001, we sold the first commercial-THz product, the T-Ray2000®, as a laboratory bench top instrument for application development with spectroscopy and imaging capabilities targeted at the research and development and off-line diagnostic markets. In 2004, we sold the first T-Ray® Manufacturing Inspection System (QA1000) for on-line, real-time inspection to NASA for the space shuttle fuel tank inspection in the Return to Flight Program. In March 2008, we shipped our next generation THz imaging and spectroscopy system (T-Ray 4000®). The T-Ray 4000® is significantly smaller, lighter, and more powerful than previous THz generations and incorporates significant technological advancements. The system weighs 55 pounds and is the size of a briefcase, which is a significant reduction from the 800 pound refrigerator size QA1000. In 2012, we introduced our fifth generation T-Ray® product platform, which weighs 35 pounds. The first product introduced from this platform is the T-Gauge® product targeted at the industrial, NDT and process quality control market. We are developing a value added reseller (VAR) channel to accelerate adoption in vertical industrial markets, initially targeting the nuclear gauge market. To date, we have entered into agreements with two established industrial control VAR's with experience in the nuclear gauge market.

In November 2010, we entered into a development agreement with In-Q-Tel Inc. (In-Q-Tel) to develop and deliver three (3) Anomaly Detection Systems for evaluation purposes by the Transportation Security Administration (TSA). In 2012, we introduced a second product from the 5th generation platform, the Saf-T-Chek ADS™ (Anomaly Detection System), in satisfaction of the In-Q-Tel contract and are awaiting the results of the TSA evaluation for homeland security applications.

In 2009, we entered into a multi-year application development contracts with the U.S. Air Force for use of the T-Ray® product platform for automated and manual manufacturing quality control on the next generation joint strike fighter (F-35). Contract options totaling $3 million to deliver and demonstrate systems on the manufacturing floor were exercised in the fourth quarter of our fiscal 2012.

Markets

Our products serve customers in a variety of global markets, typically North America, Asia, Europe and Australia. The target markets and applications served by us are as follows:

Military:
- Space
- Defense

Industrial/NDT:
- Manufacturing
- Instrumentation
- Display

Medical:
- Diagnostic & Monitoring
- Ophthalmic Equipment
- Medical Imaging

Telecommunications:
- Telecom Equipment
- Test and Measurement

Homeland Security:
- Baggage/Cargo Scanning
- Passenger Screening

Raw Materials

Our principal raw materials used in the manufacture of our products are silicon and III-V material (InP, GaAs) wafers, chemicals, gases and metals used in processing wafers, gold wire, solders, electronic components, high speed specialized semiconductor amplifiers, planar lightwave circuits, and a variety of packages and substrates, including metal, printed circuit board, flex circuits, ceramic and plastic packages. All of these raw materials can be obtained from several suppliers. However, we depend on suppliers whose components have been qualified into our products and who could disrupt our business if they stop, decrease or delay shipments or if the components they ship have quality or consistency issues. From time to time, particularly during periods of increased industry-wide demand, silicon wafers, III-V wafers (InP, GaAs), certain metal packages and other materials have been in short supply. During fiscal 2012, we or our customers were adversely affected by supply chain disruptions caused by the natural disaster that occurred in Japan and Thailand. In the short term, any significant increase in lead times on critical components could reduce future growth.

Research and Development
Since its inception in June 1988, we have incurred material research and development (R&D) expenses, with the intent of commercializing these investments into profitable new standard and custom product offerings. During the fiscal years ended in 2012 and 2011, research and development expenses were $6.5 million and $5.6 million, respectively, which we believe was adequate to maintain the necessary investment in our future growth platforms. We expect that an increase in research and development funding will be required for new projects/products as well as the continuing development of new derivatives of our current product line. We will continue to pursue government funded, as well as internally funded, research and development projects when they are in support of the our development objectives. During fiscal years 2012 and 2011, approximately $2.9 million and $2.5 million of our R&D spending was government funded, respectively.

As we begin the new 2013 fiscal year, the following research and development projects are currently underway:

- **HSOR** - next generation photodiodes and high-speed optical receivers for both the 40G and 100G telecommunications market:
    - 2nd generation 100G DP-QPSK long haul and metro markets.
    - 1st generation 100G NRZ short reach market.
    - 2nd generation 40G DQPSK long haul and metro markets.
    - 4th generation integrated 40G NRZ short reach market.
    - 1st generation 10G Passive Optical Network (PON) market.
    - Cost Reduction and performance enhancements through vertical integration of strategic 40G and 100G components, including amplifiers and photonic integrated circuits including passive optical components supporting coherent receivers.

- **Terahertz** –
    - Application development utilizing the T-Ray® product platform for industrial quality and process control, defense, and homeland security markets.
    - T-Ray® platform cost reduction, including laser and sub-systems initiatives for high volume markets.
    - THz research and development for the next generation product platform.

- **Custom optoelectronics** - Si PIN and APD photodiode developments to meet unique customer requirements, such as higher speeds, lower electrical noise, and unique multi-element geometries.

Environmental Regulations
The photonics industry, as well as the semiconductor industry in general, is subject to governmental regulations for the protection of the environment, including those relating to air and water quality, solid and hazardous waste handling, and the promotion of occupational safety. Various federal, state and local laws and regulations require that we maintain certain environmental permits. We believe we have obtained all necessary environmental permits required to conduct our manufacturing processes. Changes in the aforementioned laws and regulations or the enactment of new laws, regulations or policies could require increases in operating costs and additional capital expenditures and could possibly entail delays or interruptions of operations.

Backlog and Customers
Our sales are made primarily pursuant to standard purchase orders for delivery of products. A substantial portion of our revenues are derived from sales to OEMs pursuant to individual purchase orders with short lead times. However, by industry practice, orders may be canceled or modified at any time. Accordingly, we do not believe that the backlog of undelivered product under these purchase orders is a meaningful indicator of our future financial performance. When customers cancel an order, they are responsible for all finished goods; all incurred costs, direct and indirect, as well as a reasonable allowance for anticipated profits. No assurance can be given that we will receive these amounts after cancellation.

Customers normally purchase our products and incorporate them into products that they in turn sell in their own markets on an ongoing basis. As a result, our sales are dependent upon the success of our customers' products and our future performance is dependent upon our success in finding new customers and receiving new orders from existing customers.

Marketing
In the United States and Canada, we market our products through a mix of technical sales engineers, salesmen and independent sales representatives. International sales, including Europe, the Middle East, Far East and Asia, are conducted directly by the technical sales engineers and at times in conjunction with foreign distributors and representatives. Our products are primarily sold as components or sub-assemblies to OEMs and we market our products and capabilities through industry specific channels, including the Internet, industry trade shows, and in print through trade journals.

Competition
In our target markets, we compete with different companies in each of our three major product platforms: custom optoelectronic, high-speed optical receiver and THz systems. We believe that our principal competitors for sales of custom optoelectronic products are small and medium size private companies and medium size public companies such as First Sensor, Excelitas, a division of Illinois Tool Works (ITW), and a division of OSI Systems (OSIS). In the high-speed optical receiver market, certain product lines compete against some mix of the following competitors; JDS Uniphase (JDSU), Neophotonix (NPTN), U^2T, a division of Fujitsu and several other smaller companies. Because the THz product offering includes developing technology applications and markets, we believe the competition is mainly from two small private companies, government supported research institutions including Fraunhofer in Germany and the use of alternative technologies, mainly nuclear gauges that are bundled with other process control equipment within divisions of several larger public companies.

Because we specialize in devices requiring a high degree of engineering expertise to meet the requirements of specific applications, we generally do not compete with other large United States, European or Asian manufacturers of standard "off the shelf" optoelectronic components or silicon photodetectors.

Proprietary Technology
We utilize proprietary design rules and processing steps in the development and fabrication of its PIN and APD photodiodes, THz transmitters and receivers, fiber-coupled THz subsystems/systems, and THz applications. We have a significant number of patents pending and own the following patents and registered trademarks:

Patents and Trademarks Issued in FY 2012

Patent/Trademark #	Title	Issue Date
200580041877.4	HIGH SPEED INGASS PHOTOCONDUCTIVE DEVICE (CHINA)	Apr-11
1,034,433	PRECISION FIBER ATTACHMENT (SOUTH KOREA)	May-11
HK1106330	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (HONG KONG)	May-11
4,755,341	HIGHLY DOPED P-TYPE CONTACT FOR HIGH SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (JAPAN)	Jun-11
200580023058.7	TERAHERTZ IMAGING SYSTEM FOR EXAMINING ARTICLES (CHINA)	Jun-11
2,025,077	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (SOUTH KOREA)	Jul-11
2,025,077	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (AUSTRIA)	Jul-11
2,025,077	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (GR BRITAIN)	Jul-11
2,025,077	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (FRANCE)	Jul-11
2,025,077	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (ITALY)	Jul-11
2,025,077	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (NETHERLANDS)	Jul-11
2,025,077	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (SPAIN)	Jul-11
602007015950.4	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (GERMANY)	Jul-11
2,467,400	FOCUSING FIBER OPTIC (CANADA)	Sep-11
4,833,478	METHOD & APPARATUS TO MONITOR PHASE CHANGES IN MATTER WITH TERAHERTZ RADIATION (JAPAN)	Sep-11
4,938,221	PLANAR AVALANCHE PHOTODIODE	Mar-12
	Patents and Trademarks Issued in Prior Years	
Patent/Trademark #	**Title**	**Issue Date**
142,195	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (US)	Apr-05
660,471	HIGHLY-DOPED P-TYPE CONTRACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (KOREA)	Apr-06

Patent/Trademark #	Title	Issue Date
726,387	TRADEMARK APPLICATION FOR T-RAY (CANADA)	Oct-08
765,715	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (AUSTRIA)	Jan-04
766,174	ENHANCED PHOTODETECTOR (KOREA)	Oct-07
809,655	METHOD AND APPARATUS TO MONITOR PHASE CHANGES IN MATTER WITH TERAHERTZ RADIATION (KOREA)	Feb-08
811,365	PLANAR AVALANCHE PHOTODIODE (KOREA)	Feb-08
817,638	FOCUSING FIBER OPTIC (KOREA)	Mar-08
934,665	TRADEMARK APPLICATION FOR T-RAY TRADEMARK (MADRID PROTOCOL)	Aug-07
934,665	TRADEMARK APPLICATION FOR T-RAY TRADEMARK (AUSTRALIA)	Aug-07
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (EUROPE)	Oct-10
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (AUSTRIA)	Oct-10
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (FRANCE)	Oct-10
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (GERMANY)	Oct-10
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (ITALY)	Oct-10
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (NETHERLANDS)	Oct-10
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (SPAIN)	Oct-10
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (GREAT BRITAIN)	Oct-10
1,113,520	PLANAR AVALANCHE PHOTODIODE (HONG KONG)	Mar-10
1,113,604	OPTICAL DELAY (HONG KONG)	Jan-11
1,115,504	PICOSECOND OPTICAL DELAY (HONG KONG)	Nov-09
1,116,280	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (EP)	Oct-07
1,116,280	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (FRANCE)	Oct-07
1,116,280	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (GREAT BRITAIN)	Oct-07
1,116,280	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (ITALY)	Oct-07
1,116,280	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (GERMANY)	Oct-07
1,230,578	COMPACT FIBER PIGTAIL TERAHERTZ IMAGING SYSTEM (EP)	Aug-06
1,230,578	COMPACT FIBER PIGTAIL TERAHERTZ IMAGING SYSTEM (AUSTRIA)	Aug-06
1,230,578	COMPACT FIBER PIGTAIL TERAHERTZ IMAGING SYSTEM (FRANCE)	Aug-06
1,230,578	COMPACT FIBER PIGTAIL TERAHERTZ IMAGING SYSTEM (ITALY)	Aug-06
1,230,578	COMPACT FIBER PIGTAIL TERAHERTZ IMAGING SYSTEM (GREAT BRITAIN)	Aug-06
1,454,173	FOCUSING FIBER OPTIC (EP)	May-09
1,454,173	FOCUSING FIBER OPTIC (FRANCE)	May-09
1,454,173	FOCUSING FIBER OPTIC (GERMANY)	May-09
1,454,173	FOCUSING FIBER OPTIC (ITALY)	May-09
1,454,173	FOCUSING FIBER OPTIC (NETHERLANDS)	May-09
1,454,173	FOCUSING FIBER OPTIC (GREAT BRITAIN)	May-09
1,570,306	PRECISION FIBER ATTACHMENT (EP)	Aug-08
1,570,306	PRECISION FIBER ATTACHMENT (ITALY)	Aug-08
1,570,306	PRECISION FIBER ATTACHMENT (FRANCE)	Aug-08
1,570,306	PRECISION FIBER ATTACHMENT (GREAT BRITAIN)	Aug-08
1,570,306	PRECISION FIBER ATTACHMENT (AUSTRIA)	Aug-08
1,570,306	PRECISION FIBER ATTACHMENT (GERMANY)	Aug-08
1,794,558	PICOSECOND OPTICAL DELAY (EP)	Sep-09
1,794,558	PICOSECOND OPTICAL DELAY (FRANCE)	Sep-09
1,794,558	PICOSECOND OPTICAL DELAY (GERMANY)	Sep-09

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1,794,558	PICOSECOND OPTICAL DELAY (ITALY)	Sep-09
1,794,558	PICOSECOND OPTICAL DELAY (GREAT BRITAIN)	Sep-09
1,794,558	PICOSECOND OPTICAL DELAY (NETHERLANDS)	Sep-09
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (AUSTRIA)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (FRANCE)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (GERMANY)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (ITALY)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (NETHERLANDS)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (SPAIN)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (GREAT BRITAIN)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (HONG KONG)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (EUROPE)	Jan-11
1,963,580	PICOMETRIX TRADEMARK	Mar-96
2,345,153	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (CANADA)	Mar-04
2,350,065	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (CANADA)	Jan-11
2,396,695	METHOD AND APPARATUS TO MONITOR PHASE CHANGES IN MATTER WITH TERAHERTZ RADIATION (CANADA)	Apr-10
3,561,696	TRADEMARK – T-RAY	Jan-09
3,561,697	TRADEMARK – T-RAY 2000	Jan-09
3,561,698	TRADEMARK – T-RAY 4000	Jan-09
4,180,824	COMPACT FIBER PIGTAIL TERAHERTZ IMAGING SYSTEM (JAPAN)	Sept-08
4,436,915	PRECISION FIBER ATTACHMENT (JAPAN)	Jan-10
4,717,946	THIN LINE JUNCTION PHOTODIODE (by Predecessor Co.)	Jan-88
4,782,382	HIGH QUANTUM EFFICIENCY PHOTODIODE DEVICES (by Predecessor Co.)	Nov-88
5,021,854	SILICON AVALANCHE PHOTODIODE ARRAY	Jun-91
5,057,892	LIGHT RESPONSIVE AVALANCHE DIODE	Oct-91
5,146,296	DEVICES FOR DETECTING AND/OR IMAGING SINGLE PHOTOELECTRON	Sep-92
5,308,989	TRADEMARK APPLICATION FOR T-GAUGE (JAPAN)	Mar-10
5,311,044	AVALANCHE PHOTOMULTIPLIER TUBE	May-94
5,477,075	SOLID STATE PHOTODETECTOR WITH LIGHT RESPONSIVE REAR FACE	Dec-95
5,757,057	LARGE AREA AVALANCHE ARRAY	May-98
5,801,430	SOLID STATE PHOTODETECTOR WITH LIGHT RESPONSIVE REAR FACE	Sep-98
6,005,276	SOLID STATE PHOTODETECTOR WITH LIGHT RESPONSIVE REAR FACE	Dec-99
6,029,988	COMPACT FIBER PIGTAILED TERAHERTZ IMAGING SYSTEM (GREAT BRITAIN)	Aug-06
6,111,299	ACTIVE LARGE AREA AVLANCHE PHOTODIODE ARRAY	Aug-00
6,262,465	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE	Jul-01
6,320,191	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GENERATION AND DETECTION SYSTEM	Nov-01
6,816,647	COMPACT FIBER PIGTAILED TERAHERTZ IMAGING SYSTEM	Nov-04
6,849,852	SYSTEM AND METHOD FOR MONITORING CHANGES IN STATE OF MATTER WITH TERAHERTZ RADIATION	Feb-05
6,936,821	AMPLIFIED PHOTOCONDUCTIVE GATE	Aug-05
7,039,275	FOCUSING FIBER OPTIC	May-06
7,078,741	HIGH-SPEED ENHANCED RESPONSIVITY PHOTO DETECTOR	Jul-06
7,263,266	PRECISION FIBER ATTACHMENT	Aug-07
7,348,607	PLANAR AVALANCHE PHOTODIODE	Mar-08
7,348,608	PLANAR AVALANCHE PHOTODIODE	Mar-08
7,449,695	TERAHERTZ IMAGING SYSTEM FOR EXAMINING ARTICLES	Nov-08
7,468,503	PIN PHOTODETECTOR	Dec-08
7,572,021	TRADEMARK APPLICATION FOR T-GAUGE (CHINA)	Feb-11
8,452,427	TRADEMARK APPLICATION FOR T-GAUGE	Mar-10

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8,493,256	TRADEMARK APPLICATION FOR T-RAY 4000	Feb-10
602005016704.8	PICOSECOND OPTICAL DELAY (GERMANY)	Sep-09
602005026049.8	HIGH SPEED INGASS PHOTOCONDUCTIVE DEVICE (GERMANY)	Jan-11
ZL02825106.7	FOCUSING FIBER OPTIC (CHINA)	Apr-09
ZL03803039.X	ENHANCED PHOTODETECTOR (CHINA)	Apr-09
ZL2003801087.X	PRECISION FIBER ATTACHMENT (CHINA)	Mar-09
ZL200480015226	PIN PHOTODETECTOR (JAPAN)	Jun-09
ZL200480043236	PLANAR AVALANCHE PHOTODIODE (CHINA)	May-09
ZL200580033244	PICOSECOND OPTICAL DELAY (CHINA)	Jan-10
HK1085841	ENHANCED PHOTODETECTOR (HONG KONG)	Dec-09
HK1086340	FOCUSING FIBER OPTIC (HONG KONG)	Feb-10
HK1090282	PIN PHOTODETECTOR (HONG KONG)	Oct-10
HK1095637	PRECISION FIBER ATTACHMENT (HONG KONG)	Apr-10
HK1097957	PIN PHOTODETECTOR (HONG KONG)	Mar-10

There can be no assurance that any issued patents will provide us with significant competitive advantages, or that challenges will not be instituted against the validity or enforceability of any patent, or, if instituted, that such challenges will not be successful. The cost of litigation to uphold the validity and to prevent the infringement of a patent could be substantial. Furthermore, there can be no assurance that our technology will not infringe on patents or rights owned by others, the licenses to which might not be available to us at all or on reasonable terms. Based on limited patent searches, contacts with others knowledgeable in the field of our technology, and a review of the published materials, we believe that our competitors hold no patents, licenses or other rights to technology which would preclude us from pursuing our intended operations.

In some cases, we may rely on trade secrets to protect our innovations. There can be no assurance that trade secrets will be established, that secrecy obligations will be honored or that others will not independently develop similar or superior technology. To the extent that consultants, key employees or other third parties apply technological information independently developed by them or by others to our projects, disputes might arise as to the proprietary rights to such information which may not be resolved in our favor.

Employees

As of June 22, 2012, we had approximately 157 full time employees including 4 officers. Included are 41 engineering and development personnel, 9 sales and marketing personnel, 91 operations personnel, and 16 general and administrative personnel. We may, from time to time, engage personnel to perform consulting services and to perform research and development under third party funding. In certain cases, the cost of such personnel may be included in the direct cost of the contract rather than in payroll expense. None of our employees are covered by a collective bargaining agreement. We believe our relations with our employees are good.

Item 1A. Risk Factors

Investing in our Class A Common Stock involves a high degree of risk and uncertainty. You should carefully consider the risks and uncertainties described below before investing in our Class A Common Stock. Our business, prospects, financial condition and results of operations could be adversely affected due to any of the following risks. In that case, the value of our Class A Common Stock could decline, and you could lose all or part of your investment.

Risks Relating to Our Business

The overall negative economic climate could adversely affect the liquidity and financial condition of our customers and our business.

We believe that many factors affect our industry, including consumer confidence in the economy, interest rates, fuel prices and credit availability. The overall economic climate and changes in Gross National Product growth has a direct impact on our customers and the demand for our products. We cannot be sure that our business will not be adversely affected as a result of an industry or general economic downturn.

Our customers may reduce capital expenditures and have difficulty satisfying liquidity needs because of the continued turbulence in the U.S. and global economies, resulting in reduced sales of our products and harming our financial condition and results of operations.

Recent global market and economic conditions have been unprecedented and challenging with tighter credit conditions and recessions in most major economies. Continued concerns about the systemic impact of potential long-term and wide-spread recession, energy costs, geopolitical issues, the availability and cost of credit, and the global housing and mortgage markets have contributed to diminished expectations for western and emerging economies. These conditions, combined with volatile oil prices, fluctuating business and consumer confidence and high unemployment, have contributed to market volatility of unprecedented levels.

As a result of these market conditions, the cost and availability of credit has been and may continue to be adversely affected by illiquid credit markets and wider credit spreads. Concern about the stability of the markets generally and the strength of counterparties specifically has led many lenders and institutional investors to reduce, and in some cases, cease to provide credit to businesses and consumers. This turbulence in the U.S. and international markets and economies has caused certain of our network subsystem and system customers, as well as their network service provider customers, to delay, reduce or cancel capital expenditures. Continued turbulence in the U.S. and international markets and economies and prolonged declines in business consumer spending may adversely affect our liquidity and financial condition, and the liquidity and financial condition of our customers, including our ability to refinance maturing liabilities and access the capital markets to meet liquidity needs.

We may be unable to obtain financing to fund ongoing operations and future growth.

Our current cash balance of $3.2 million, potential future cash flows from operations, combined with our accessibility to cash and credit, may not be sufficient to allow us to finance ongoing operations or to make required investments for future growth. The recent disruption in credit markets and our recent operating losses make it uncertain whether we will be able to continue to access the credit or capital markets when necessary or desirable. If we are not able to access the credit or capital markets and obtain financing on commercially reasonable terms when needed, our business could be materially harmed and our results of operations could be adversely affected.

We have previously violated certain covenants under our loan agreements and may not be in compliance with future covenants under our new credit facility.

At March 31, 2010, we were not in compliance with the financial covenants under our loan agreement with The PrivateBank and Trust Company (PrivateBank). This constituted an event of default under the terms of our loan agreement with Private Bank (the PrivateBank Loan Agreement) which gave PrivateBank the ability to provide us with notice that it is exercising its rights under the PrivateBank Loan Agreement to demand payment in full of the outstanding indebtedness under the PrivateBank Loan Agreement. On June 25, 2010, we entered into a second amendment to the PrivateBank Loan Agreement pursuant to which PrivateBank waived any event of default under the PrivateBank Loan Agreement resulting from the covenant violations for the fiscal quarters ended December 31, 2009 and March 31, 2010, adjusted certain financial covenants, and required modification to certain terms of the promissory notes issued to Robin Risser, our COO, and Steve Williamson, our CTO, in connection with our acquisition of Picometrix, LLC (Picometrix) in 2005 (the Picometrix Notes). On August 27, 2010, we entered into a third amendment to the PrivateBank Loan Agreement pursuant to which PrivateBank waived any event of default under the PrivateBank Loan Agreement resulting from the our failure to modify the Picometrix Notes as required. On November 30, 2010, we entered into a fourth amendment to the PrivateBank Loan Agreement in which PrivateBank dropped any requirement to amend the Picometrix Notes. On September 23, 2011, we entered into a fifth amendment renewing the PrivateBank Loan Agreement and modifying certain covenants and terms. On January 31, 2012, we entered into a loan and security agreement with Silicon Valley Bank (SVB) (and such other documents which constitute the SVB Loan Agreement) and terminated the PrivateBank Loan Agreement.

While we believe we have good relations with SVB, we can provide no assurance that we will be able to obtain waivers or amendments if future covenant violations occur under the SVB Loan Agreement. Failure to obtain such waivers or amendments, if necessary, could materially affect our business, financial condition and results of operations.

Any impairment of goodwill and other intangible assets, could negatively impact our results of operations.

As of March 31, 2012 and March 31, 2011, our consolidated balance sheet included $4.6 million in goodwill. Goodwill represents the excess purchase price over amounts assigned to tangible or identifiable intangible assets acquired and liabilities assumed from our business acquisitions. Our goodwill is subject to an impairment test on an annual basis and is also tested whenever events and circumstances indicate that goodwill may be impaired. Any goodwill value in excess of fair value as determined in an impairment test must be written off in the period of determination.

Intangible assets (other than goodwill) are generally amortized over the useful life of such assets and aggregated to $4.5 million at March 31, 2012. In addition, from time to time, we may acquire or make an investment in a business which will require us to record goodwill based on the purchase price and the value of the acquired tangible and intangible assets. We may subsequently experience unforeseen issues with such business which adversely affect the anticipated returns of the business or value of the intangible assets and trigger an evaluation of the recoverability of the recorded goodwill and intangible assets for such business. Future determinations of significant write-offs of goodwill or intangible assets as a result of an impairment test or any accelerated amortization of other intangible assets could have a negative impact on our results of operations.

We are dependent upon several suppliers for a significant portion of raw materials used in the manufacturing of our products and any significant interruption could have a material adverse affect on our manufacturing.

The principal raw materials we use in the manufacture of our semiconductor components and sensor assemblies are silicon and III-IV wafers, chemicals and gases used in processing wafers, gold wire, lead frames, specialized semiconductor amplifiers, and a variety of packages and substrates, including metal, printed circuit board, flex circuits, ceramic and plastic packages. All of these raw materials can be obtained from several suppliers. However, we depend on suppliers whose components have been qualified into our products and who could disrupt our business if they stop, decrease or delay shipments or if the components they ship have quality or consistency issues. During the last several years, the number of suppliers of components has decreased significantly and, more recently, demand for components has increased rapidly. Any supply deficiencies relating to the quality or quantities of components we use to manufacture our products could adversely affect our ability to fulfill customer orders and our results of operations. During our fiscal 2012, we continued to experience some limitations on the components available from certain of our suppliers, which reduced our revenue growth for the year.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the Dodd-Frank Act) contains provisions to improve the transparency and accountability concerning the supply of minerals originating from the conflict zones of the Democratic Republic of Congo (DRC) and adjoining countries. As a result, the SEC is required to establish new annual disclosure and reporting requirements for those companies who use "conflict" minerals mined from the DRC and adjoining countries in their products. When these new requirements are implemented, they could affect the sourcing and availability of minerals used in the manufacture of semiconductor devices. As a result, we cannot assure you that we will be able to obtain products at competitive prices and there may be additional costs associated with complying with the new due diligence procedures as required by the SEC. Also, since our supply chain is complex, we may face reputational challenges with our customers and other stakeholders if we are unable to sufficiently verify the origins for all metals used in our products through the due diligence procedures that we implement.

We depend on a limited number of suppliers who could disrupt our business if they stopped, decreased, delayed or were unable to meet our demand for shipments of their products.

Our suppliers, including our sole source suppliers, may experience manufacturing delays or shut downs due to circumstances beyond their control such as earthquakes, floods, fires or other natural disasters. Any supply deficiencies relating to the quality or quantities of materials or equipment we use to manufacture our products could materially adversely affect our ability to fulfill customer orders and our results of operations. Lead times for the purchase of certain materials and equipment from suppliers have increased and in some cases have limited our ability to rapidly respond to increased demand, and may continue to do so in the future. These conditions have been exacerbated by suppliers, customers and companies reducing their inventory levels in response to the recent macroeconomic downturn. We are currently evaluating the capabilities of additional potential contract manufacturing partners to ensure we have a scalable and cost effective manufacturing strategy appropriate for executing our business objectives over a long-term horizon. To the extent we introduce additional contract manufacturing partners, introduce new products with new partners and/or move existing internal or external production lines to new partners, we could experience supply disruptions during the transition process.

Customer acceptance of our products is dependent on our ability to meet changing requirements, and any decrease in acceptance could adversely affect our revenue.

Customer acceptance of our products is significantly dependent on our ability to offer products that meet the changing requirements of our customers, including telecommunication, military, medical and industrial corporations, as well as government agencies. Any decrease in the level of customer acceptance of our products could have a material adverse affect on us.

Our products must meet exacting specifications, and defects and failures may occur, which may cause customers to return or stop buying our products.

Our customers generally establish demanding specifications for quality, performance and reliability that our products must meet. However, our products are highly complex and may contain defects and failures when they are first introduced or as new versions are released. Our products are also subject to rough environments as they are integrated into our customer products for use by the end customers. If defects and failures occur in our products, we could experience lost revenue, increased costs, including warranty expense and costs associated with customer support, delays in or cancellations or rescheduling of orders or shipments, product returns or discounts, diversion of management resources or damage to our reputation and brand equity, and in some cases consequential damages, any of which would harm our operating results. In addition, delays in our ability to fill product orders as a result of quality control issues may negatively impact our relationship with our customers. We cannot assure you that we will have sufficient resources, including any available insurance, to satisfy any asserted claims.

If any of our products are found to have, or suspected to have, security vulnerabilities, then we could incur significant costs and damage to our reputation.

If any of our products are found to have significant security vulnerabilities, then we may need to dedicate engineering and other resources to eliminate the vulnerabilities and to repair or replace products already sold or licensed to our customers. In addition, our customers and potential customers could perceive our products as unreliable, making it more difficult for us to sell our products.

Our inability to find new customers and retain existing customers could have a material adverse affect on our business.

Customers normally purchase our products and incorporate them into products that they in turn sell in their own markets on an ongoing basis. As a result, our sales are dependent upon the success of our customers' products and our future performance is dependent upon our success in finding new customers and receiving new orders from existing customers.

In several of our markets, quality and/or reliability of our products are a major concern for our customers, not only upon the initial manufacture of the product, but for the life of the product. Many of our products are used in remote locations for higher value assembly, making servicing of our products not feasible. Any failure of the quality and/or reliability of our products could have an adverse affect on our business.

If our customers do not qualify our products or if their customers do not qualify their products, our results of operations may suffer.

Most of our customers do not purchase our products prior to qualification of our products and satisfactory completion of factory audits and vendor evaluation. Our existing products, as well as each new product, must pass through varying levels of qualification with our customers. In addition, because of the rapid technological changes in our market, a customer may cancel or modify a design project before we begin large-scale manufacture of the product and receive revenues from the customer. It is unlikely that we would be able to recover the expenses for cancelled or unutilized custom design projects. It is difficult to predict with any certainty whether our customers will delay or terminate product qualification or the frequency with which customers will cancel or modify their projects, but any such delay, cancellation or modification could have a negative effect on our results of operations.

If the end user customers that purchase systems from our customers fail to qualify or delay qualifications of any products sold by our customers that contain our products, our business could be harmed. The qualification and field testing of our customers' systems by end user customers is long and unpredictable. This process is not under our control or our customers, and, as a result, timing of our sales is unpredictable. Any unanticipated delay in qualification of one of our customers' products could result in the delay or cancellation of orders from our customers for products included in their equipment, which could harm our results of operations.

Our sales to overseas markets expose us to additional, unpredictable risks which could have a material adverse affect on our business and to exposure under the Foreign Corrupt Practices Act.

A portion of our sales are being derived from overseas markets. These international sales are primarily focused in Asia, Europe and the Middle East. These operations are subject to unpredictable risks that are inherent in operating in foreign countries and which could have a material adverse affect on our business, including the following:

- foreign countries could change regulations or impose currency restrictions and other restraints;
- changes in foreign currency exchange rates and hyperinflation or deflation in the foreign countries in which we operate;
- exchange controls;
- some countries impose burdensome tariffs and quotas;
- political changes and economic crises may lead to changes in the business environment in which we operate;
- international conflict, including terrorist acts, could significantly impact our financial condition and results of operations; and
- economic downturns, political instability and war or civil disturbances may disrupt distribution logistics or limit sales in individual markets.

In addition, we utilize third-party distributors to act as our representative for the geographic region that they have been assigned. Sales through distributors represent approximately 11% of total revenue. Significant terms and conditions of distributor agreements include FOB source, net 30 days payment terms, with no return or exchange rights, and no price protection. Since the product title transfers to the distributor at the time of shipment, the products are not considered inventory on consignment. Our success is dependent on these distributors finding new customers and receiving new orders from existing customers.

We are subject to the Foreign Corrupt Practice Act (FCPA) and other laws that prohibit improper payments to foreign governments and their officials for the purpose of obtaining or retaining business. Our activities in our overseas markets create the risk of unauthorized payments or offers of payments by one of our employees, consultants, sales agents or distributors, because these parties are not always subject to our control. While it is our policy to implement safeguards to discourage these practices, our existing safeguards and any future improvements may prove to be less than effective, and our employees, consultants, sales agents or distributors may engage in conduct for which we might be held responsible. Violations of the FCPA may result in severe criminal or civil sanctions, and we may be subject to other liabilities, which could negatively affect our business, operating results and financial condition. In addition, certain governmental authorities may seek to hold us liable for successor liability FCPA violations committed by companies in which we invest or that we acquire.

Customer orders and forecasts are subject to cancellation or modification at any time which could result in higher manufacturing costs.

Our sales are made primarily pursuant to standard purchase orders for delivery of products. However, by industry practice, orders may be canceled or modified at any time. When a customer cancels an order, they are responsible for all finished goods, all costs, direct and indirect, incurred by us, as well as a reasonable allowance for anticipated profits. No assurance can be given that we will receive these amounts after cancellation.

Uncertainty in customer forecasts of their demands and other factors may lead to delays and disruptions in manufacturing, which could result in delays in product shipments to customers and could adversely affect our business. Flooding in Thailand in our December quarter resulted in dramatically reduced telecommunication revenues for us as our customers' supply chains were and continue to be disrupted. There can be no assurance that further natural disasters will not affect our revenues.

Fluctuations and changes in our customers' demand are common in our industry. Such fluctuations, as well as quality control problems experienced in our manufacturing operations may cause us to experience delays and disruptions in our manufacturing process and overall operations and reduce our output capacity. As a result, product shipments could be delayed beyond the shipment schedules requested by our customers or could be cancelled, which would negatively affect our sales, operating income, strategic position at customers, market share and reputation. In addition, disruptions, delays or cancellations could cause inefficient production which in turn could result in higher manufacturing costs, lower yields and potential excess and obsolete inventory or manufacturing equipment. In the past, we have experienced such delays, disruptions and cancellations.

The markets for many of our products are characterized by changing technology which could cause obsolescence of our products.

The markets for many of our products are characterized by changing technology, new product introductions and product enhancements, and evolving industry standards. The introduction or enhancement of products embodying new technology or the emergence of new industry standards could render existing products obsolete or result in short product life cycles. Accordingly, our ability to compete is in part dependent on our ability to continually offer enhanced and improved products.

We depend on key in-house manufacturing capabilities and a loss of these capabilities could have an adverse affect on our existing operations and new business growth.

We depend on key in-house manufacturing equipment and assembly processes. We believe that these key manufacturing and assembly processes give us the flexibility and responsiveness to meet our customer delivery schedule and performance specification with a custom product. This value proposition is an important component of our offering to our customers. A loss of these capabilities could have an adverse affect on our existing operations and new business growth.

Changes in the spending priorities of the federal government can materially adversely affect our business.

In fiscal 2012, approximately 27% of our sales were related to products and services purchased by federal government contractors. Our business depends upon continued federal government expenditures on defense, intelligence, homeland security, aerospace and other programs that we support. In fiscal 2012, our sales to federal government contractors increased 9%. In addition, foreign military sales are affected by U.S. government regulations, regulations by the purchasing foreign government and political uncertainties in the U.S. and abroad. There can be no assurance that the federal government budget (including defense and military) will continue to grow or that sales of defense related items to foreign governments will continue at present levels. The terms of defense contracts with the U.S. government generally permit the government to terminate such contracts, with or without cause, at any time. Any unexpected termination of a significant U.S. government contract with a military contractor that we sell our products to could have a material adverse affect on us.

Our industry is highly competitive and fragmented, which can result in future competitors against which we cannot compete.

We compete with a range of companies in our target markets, some of which have more financial and operational resources than we do. Because we specialize in custom high performance devices requiring a high degree of engineering expertise to meet the requirements of specific applications, we generally do not compete to any significant degree with other large United States, European or Pacific Rim high volume manufacturers of standard "off the shelf" optoelectronic components. We cannot assure you that we will be able to compete successfully in our markets against these or any future competitors.

Decreases in average selling prices of our products may reduce operating profit and net income, particularly if we are not able to reduce our expenses commensurately.

The market for optical components and subsystems continues to be characterized by declining average selling prices resulting from factors such as increased price competition among optical component and subsystem manufacturers, excess capacity, the introduction of new products and increased unit volumes as manufacturers continue to deploy network and storage systems. Beginning in the fourth quarter of our fiscal 2012, we have observed a significant acceleration in the decline of average selling prices, primarily in the telecommunications market. We anticipate that average selling prices will continue to decrease in the future in response to product introductions by our competitors or us, or in response to other factors, including price pressures from significant customers. In order to sustain profitable operations, we must, therefore, reduce the cost of our current designs or continue to develop and introduce new products on a timely basis that incorporate features that can be sold at higher average selling prices. Failure to do so could cause our sales and operating profit to decline.

Our cost reduction efforts may not keep pace with competitive pricing pressures. To remain competitive, we must continually reduce the cost of manufacturing our products through design and engineering changes. We may not be successful in redesigning our products or delivering our products to market in a timely manner. We cannot assure you that any redesign will result in sufficient cost reductions enabling us to reduce the price of our products to remain competitive or maintain our operating profit and net income.

Shifts in our product mix may result in declines in operating income and net income.

Our gross profit margins vary among our product platforms, and are generally highest on our Terahertz products. Our overall operating income has fluctuated from period to period as a result of shifts in product mix, the introduction of new products, decreases in average selling prices for older products and our ability to reduce product costs, and these fluctuations are expected to continue in the future. If our customers decide to buy more of our products with low gross profit margins and fewer of our products with high gross profit margins, our total gross profits could be adversely affected.

Environmental regulations could increase operating costs and additional capital expenditures and delay or interrupt operations.

The photonics industry, as well as the semiconductor industry in general, is subject to governmental regulations for the protection of the environment, including those relating to air and water quality, solid and hazardous waste handling, and the promotion of occupational safety. Various federal, state and local laws and regulations require that we maintain certain environmental permits. We believe that we have obtained all necessary environmental permits required to conduct our manufacturing processes. Changes in the aforementioned laws and regulations or the enactment of new laws, regulations or policies could require increases in operating costs and additional capital expenditures and could possibly entail delays or interruptions of operations.

If we are unable to protect our intellectual property rights adequately, the value of our products could be diminished.

Our success and ability to compete is dependent in part on our proprietary technology. We rely on a combination of patent, copyright, trademark and trade secret laws, as well as confidentiality agreements and internal procedures, to establish and protect our proprietary rights. We utilize proprietary design rules and processing steps in the development and fabrication of our PIN photodiodes, APD photodiodes and our THz systems and sensors. In addition, our products rely upon over 193 patents or patents pending. There can be no assurance that any issued patents will provide us with significant competitive advantages, or that challenges will not be instituted against the validity or enforceability of any patent utilized by us, or, if instituted, that such challenges will not be successful. The cost of litigation to uphold the validity and to prevent the infringement of a patent could be substantial and could have a material adverse affect on our operating results. Furthermore, there can be no assurance that our PIN photodiodes, APD photodiodes and THz technology will not infringe on patents or rights owned by others, licenses to which might not be available to us. Based on limited patent searches, contacts with others knowledgeable in the field of PIN photodiodes, APD photodiodes and our THz technology, and a review of the published materials, we believe that our competitors hold no patents, licenses or other rights to the PIN photodiodes, APD photodiodes and our THz technology which would preclude us from pursuing our intended operations.

In some cases, we may rely on trade secrets to protect our innovations. There can be no assurance that trade secrets will be established, that secrecy obligations will be honored or that others will not independently develop similar or superior technology. To the extent that consultants, key employees or other third parties apply technological information independently developed by them or by others to our projects, disputes might arise as to the proprietary rights to such information which may not be resolved in our favor.

Pursuing infringers of our intellectual property rights can be costly.

Pursuing infringers of our proprietary rights could result in significant litigation costs, and any failure to pursue infringers could result in our competitors utilizing our technology and offering similar products, potentially resulting in loss of a competitive advantage and decreased sales. Despite our efforts to protect our proprietary rights, existing patent, copyright, trademark and trade secret laws afford only limited protection. In addition, the laws of some foreign countries do not protect our proprietary rights to the same extent as do the laws of the United States. Protecting our intellectual property is difficult especially after our employees or our third-party contractors end their employment or engagement. We may have employees leave us and go to work for competitors. Attempts may be made to copy or reverse-engineer aspects of our products or to obtain and use information that we regard as proprietary. Accordingly, we may not be able to prevent misappropriation of our technology or prevent others from developing similar technology. Furthermore, policing the unauthorized use of our products is difficult and expensive. Litigation may be necessary in the future to enforce our intellectual property rights or to determine the validity and scope of the proprietary rights of others. The resulting costs and diversion of resources could significantly harm our business. If we fail to protect our intellectual property, we may not receive any return on the resources expended to create the intellectual property or generate any competitive advantage based on it.

Third parties may claim we are infringing their intellectual property rights and we could be prevented from selling our products, or suffer significant litigation expense, even if these claims have no merit.

Our competitive position is driven in part by our intellectual property and other proprietary rights. Third parties, however, may claim that we, or our products, operations or any products or technology we obtain from other parties are infringing their intellectual property rights, and we may be unaware of intellectual property rights of others that may cover some of our assets, technology and products.

In addition, from time to time we receive letters from third parties that allege we are infringing their intellectual property and asking us to license such intellectual property, and we review the merits of each letter. Any litigation regarding patents, trademarks, copyrights or other intellectual property rights, even those without merit, could be costly and time consuming, and divert our management and key personnel from operating our business. The complexity of the technology involved and inherent uncertainty and cost of intellectual property litigation increases our risks. If any third-party has a meritorious or successful claim that we are infringing its intellectual property rights, we may be forced to change our products or manufacturing processes or enter into licensing arrangement with third parties, which may be costly or impractical, particularly in the event we are subject to a contractual commitment to continue supplying impacted products to our customers. This also may require us to stop selling our products as currently engineered, which could harm our competitive position. We also may be subject to significant damages or injunctions that prevent the further development and sale of certain of our products or services and may result in a material decrease in sales.

We face strong competition for skilled workers which could result in our inability to attract and retain necessary personnel.

Our success depends in large part on its ability to attract and retain highly qualified scientific, technical, management, and marketing personnel. Competition for such personnel is intense and there can be no assurance that we will be able to attract and retain the personnel necessary for the development and operation of our business.

We may not be able to successfully integrate future acquisitions, which could result in our not achieving the expected benefits of the acquisition, the disruption of our business and an increase in our costs.

Our ability to continue to grow may depend upon identifying and successfully acquiring attractive companies, effectively integrating these companies, achieving cost efficiencies and managing these businesses as part of our company.

We may not be able to effectively integrate the acquired companies and successfully implement appropriate operational, financial and management systems and controls to achieve the benefits expected to result from these acquisitions. Our efforts to integrate these businesses could be affected by a number of factors beyond our control, such as regulatory developments, general economic conditions and increased competition. In addition, the process of integrating these businesses could cause the interruption of, or loss of momentum in, the activities of our existing business. The diversion of management's attention and any delays or difficulties encountered in connection with the integration of these businesses could negatively impact our business and results of operations. Further, the benefits that we anticipate from these acquisitions may not develop.

Future acquisitions could require us to issue additional indebtedness or equity.

If we were to undertake a substantial acquisition for cash, the acquisition would likely need to be financed in part through bank borrowings or the issuance of public or private debt. This acquisition financing would likely increase our ratio of debt to equity and adversely affect other leverage criteria. Under our existing SVB Loan Agreement, we are required to obtain SVB's consent prior to incurring additional indebtedness. We are also restricted from paying cash dividends on our capital stock. We cannot assure you that the necessary acquisition financing would be available to us on acceptable terms if and when required. If we were to undertake an acquisition for equity, the acquisition may have a dilutive effect on the interests of the holders of our Common Stock.

We may be liable for damages based on product liability claims brought against our customers in our end-use markets.

Many of our products may provide critical performance attributes to our customers' products that will be sold to end users who could potentially bring product liability suits in which we could be named as a defendant. The sale of these products involves the risk of product liability claims. If a person were to bring a product liability suit against one of our customers, this customer may attempt to seek contribution from us. A person may also bring a product liability claim directly against us. A successful product liability claim or series of claims against us in excess of our insurance coverage for payments, for which we are not otherwise indemnified, could have a material adverse effect on our financial condition or results of operations. We have acquired product liability coverage of up to $2 million.

Our current and planned systems, procedures and controls may not be adequate to support our future operations.

The laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act of 2002, the Dodd-Frank Act and the rules adopted or proposed by the SEC, will result in increased costs to us as we evaluate the implications of any new rules and respond to their requirements. New rules could make it more difficult or more costly for us to comply with regulatory requirements, including our reporting obligations under the Exchange Act, and obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. We cannot predict or estimate the amount of the additional costs we may incur or the timing of such costs to comply with any new rules and regulations, or if compliance can be achieved.

We have incurred significant losses in prior periods and may incur losses in the future.

We have incurred significant losses in prior periods. We recorded a net loss of $2.1 million for the year ended March 31, 2012 and ended the period with an accumulated deficit of $39.8 million. In addition, we recorded net losses of $1.9 million and $3.7 million for the years ended March 31, 2011 and 2010 respectively. There can be no assurance that we will have sufficient revenue growth to offset expenses or to achieve profitability in future periods.

We may dispose of or discontinue existing product lines and technology developments, which may adversely impact our future results.

On an ongoing basis, we evaluate our various product offerings and technology developments in order to determine whether any should be discontinued or, to the extent possible, divested. We cannot guarantee that we have correctly forecasted, or will correctly forecast in the future, the right product lines and technology developments to dispose or discontinue or that our decision to dispose of or discontinue various investments, products lines and technology developments is prudent if market conditions change. In addition, there are no assurances that the discontinuance of various product lines will reduce our operating expenses or will not cause us to incur material charges associated with such decision. Furthermore, the discontinuance of existing product lines entails various risks, including the risk that we will not be able to find a purchaser for a product line or the purchase price obtained will not be equal to at least the book value of the net assets for the product line. Other risks include managing the expectations of, and maintaining good relations with, our customers who previously purchased products from our disposed or discontinued product lines, which could prevent us from selling other products to them in the future. We may also incur other significant liabilities and costs associated with our disposal or discontinuance of product lines, including employee severance costs and excess facilities costs.

We are increasingly dependent on information technology systems and infrastructure.

We rely to a large extent on sophisticated information technology systems and infrastructure. The size and complexity of these systems make them potentially vulnerable to breakdown, malicious intrusion, and random attack. Likewise, confidentiality or data privacy breaches by employees or others with permitted access to our systems may pose a risk that trade secrets, personal information, or other sensitive data may be exposed to unauthorized persons or to the public. While we have invested heavily in the protection of data and information technology, there can be no assurance that our efforts will prevent breakdowns or breaches in our systems that could adversely affect our business.

Risks Relating to Our Class A Common Stock

Our share price has been volatile in the past and may decline in the future.

Our Class A Common Stock has experienced significant market price and volume fluctuations in the past and may experience significant market price and volume fluctuations in the future in response to factors such as the following, some of which are beyond our control:

- quarterly variations in our operating results;
- operating results that vary from the expectations of securities analysts and investors;
- changes in expectations as to our future financial performance, including financial estimates by securities analysts and investors;
- announcements of technological innovations or new products by us or our competitors;
- announcements by us or our competitors of significant contracts, acquisitions, strategic partnerships, joint ventures or capital commitments;
- changes in the status of our intellectual property rights;
- announcements by third parties of significant claims or proceedings against us;
- additions or departures of key personnel;
- future sales of our Class A Common Stock or securities exercisable or convertible into shares of Class A Common Stock;
- stock market price and volume fluctuations; and
- general economic conditions.

Stock markets often experience extreme price and volume fluctuations. Market fluctuations, as well as general political and economic conditions, such as a recession or interest rate or currency rate fluctuations or political events or hostilities in or surrounding the United States, could adversely affect the market price of our Class A Common Stock.

In the past, securities class action litigation has often been brought against companies following periods of volatility in the market price of its securities. We may in the future be the target of similar litigation. Securities litigation could result in substantial costs and divert management's attention and resources both of which could have a material adverse affect on our business and results of operations.

Future sales of our Class A Common Stock in the public market could lower our stock price, and conversion of our warrants and any additional capital raised by us may dilute your ownership.

We may sell additional shares of Class A Common Stock in the future. In addition, holders of warrants or stock options may exercise their warrants or stock options to purchase shares of our Class A Common Stock. We cannot predict the size of future issuances of our Class A Common Stock or the effect, if any, that future issuances and sales of shares of our Class A Common Stock will have on the market price of our Class A Common Stock. Sales of substantial amounts of our Class A Common Stock, including shares issued in connection with the exercise of the warrants or stock options, or the perception that such sales could occur, may adversely affect prevailing market prices for our Class A Common Stock.

Shares eligible for public sale in the future could decrease the price of our Class A Common Stock and reduce our future ability to raise capital.

Future sales of substantial amounts of our Class A Common Stock in the public market could decrease the prevailing market price of our Class A Common Stock, which would have an adverse affect on our ability to raise equity capital in the future.

We do not intend to pay dividends and are precluded from doing so while our SVB Loan Agreement is outstanding.

We have never declared or paid any cash dividends on our Class A Common Stock and we are currently precluded from doing so while the SVB Loan Agreement with SVB is outstanding. Even in the event the SVB Loan Agreement is terminated, we currently intend to retain future earnings, if any, to finance operations and expand our business and, therefore, do not expect to pay any dividends in the foreseeable future.

Provisions in our charter documents and Delaware law and our adoption of a stockholder rights plan may delay or prevent a third party from acquiring us, which could decrease the value of our stock.

Our Board of Directors has the authority to issue preferred stock and to determine the price, rights, preferences, privileges and restrictions, including voting and conversion rights, of those shares without any further vote or action by the stockholders. The issuance of our preferred stock could have the effect of making it more difficult for a third party to acquire us. In addition, we are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law, which could also have the effect of delaying or preventing our acquisition by a third party. Further, certain provisions of our Certificate of Incorporation and bylaws could delay or make more difficult a merger, tender offer or proxy contest, which could adversely affect the market price of our common stock.

In September 2002, we adopted a rights agreement, which was amended and restated on February 4, 2005, pursuant to which we distributed one preferred stock purchase right as a dividend on each outstanding share of our Common Stock. Each right entitles the holder to purchase one one-hundredth of a share of our Series B Preferred Stock, par value $0.001 per share, at a purchase price of $5.00 per one one-hundredth of a preferred share, subject to adjustment to reflect stock splits, stock dividends or similar transactions. Because the rights may substantially dilute the stock ownership of a person or group attempting to take us over without the approval of our Board of Directors, the plan could make it more difficult for a third party to acquire us, or a significant percentage of our outstanding capital stock, without first negotiating with our Board of Directors regarding such acquisition. Our rights plan will expire in September 2012.

Item 2. Properties

We lease all of our executive offices, research, marketing and manufacturing facilities under non-cancellable operating leases. At March 31, 2012, those leases consisted of approximately 90,100 square feet in two facilities. The lease for our facility located in Camarillo, California was amended in December 2008 and is now leased through February 2014. In January 2010, our wholly owned subsidiary, Picometrix LLC, entered into a "Fourth Addendum & Extension Agreement" for our lease of the Ann Arbor, MI facility, which extended the lease to May 31, 2021. The 50,000 sq. ft. facility houses our research, development and manufacturing operations for the terahertz and high-speed optical receiver product platforms, corporate headquarters, and the semiconductor micro-fabrication facility for all three of our product platforms. The state-of-the-art facility was completed in 2001 and was designed to meet our unique requirements, including InP and GaAs material growth, semiconductor micro-fabrication, and precision hybrid assembly and high-speed testing. In addition, the facility includes an industry leading HSOR laboratory and three secure user laboratories for collaborative terahertz application development.

Item 3. Legal Proceedings

None

Item 4. Mine Safety Disclosures

Not Applicable

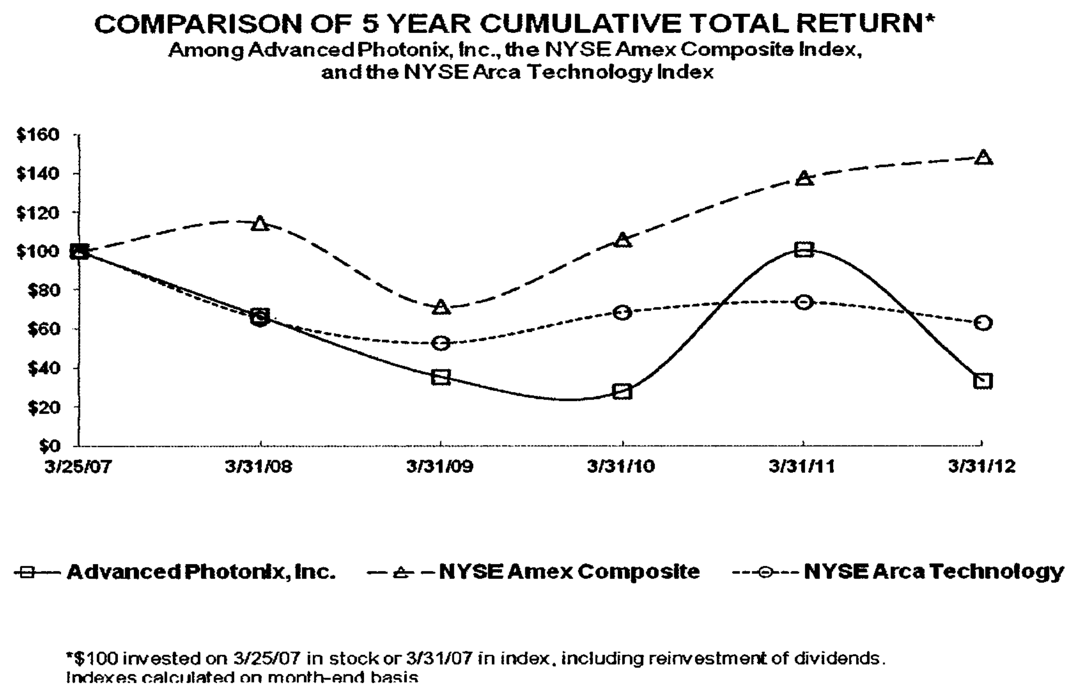
PART II

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

Our Class A Common Stock is traded on the NYSE Amex (AMEX) under the symbol "API".

Stock Performance Graph

The graph below provides an indicator of our cumulative total stockholder return as compared with the AMEX Composite Index and the AMEX Technology Index. The graph assumes an initial investment of $100. The graph covers a period of time beginning in March 25, 2007, through March 31, 2012, which represents the last trading day of the year.



At June 22, 2012, we had 114 holders of record for the Class A Common Stock (including shares held in street name), representing approximately 5,077 beneficial owners of the Class A Common Stock.

Quarterly Stock Market Data

The following table sets forth the high and low closing prices of our Class A Common Stock by quarter for fiscal years 2012 and 2011.

Common Stock Price

	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
	2012	2011	2012	2011	2012	2011	2012	2011
Common Stock[1]								
High	$ 1.96	$ .59	$ 1.30	$ .99	$ 1.03	$ 1.77	$ .88	$ 2.63
Low	$ 1.36	$ .42	$ .90	$ .50	$ .53	$ .88	$ .58	$ 1.51

[1] Price ranges on the NYSE AMEX.

We have never paid any cash dividends on our capital stock and are currently precluded from doing so while the SVB Loan Agreement is outstanding. Even in the event the SVB Loan Agreement is terminated, we intend to retain earnings, if any, for use in our business and do not anticipate that any funds will be available for the payment of cash dividends on our outstanding shares in the foreseeable future.

Repurchases of Equity
We have made no repurchases of our common stock during our fourth fiscal quarter ended March 31, 2012.

Item 6. Selected Financial Data

Advanced Photonix, Inc. is a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and is not required to provide the information required under this item.

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

Forward-Looking Statements
Certain statements contained in this Management's Discussion and Analysis (MD&A), including, without limitation, statements containing the words "may," "will," "can," "anticipate," "believe," "plan," "estimate," "continue," and similar expressions constitute "forward-looking statements." These forward-looking statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. You should not place undue reliance on these forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including risks described in the Risk Factors sections and elsewhere in this filing. Except for our ongoing obligation to disclose material information as required by federal securities laws, we do not intend to update you concerning any future revisions to any forward-looking statements to reflect events or circumstances occurring after the date of this report. The following discussion should be read in conjunction with the Risk Factors as well as our financial statements and the related notes.

Global Economic Conditions
The credit markets and the financial services industry continue to experience a period of significant disruption characterized by the bankruptcy, failure, collapse or sale of various financial institutions, increased volatility in securities prices, severely diminished liquidity and credit availability and a significant level of intervention from the United States and other governments. Continued concerns about the current economic environment, energy costs, geopolitical issues, the availability and cost of credit, the global commercial and residential real estate markets and related mortgage markets and consumer confidence have contributed to increased market volatility and diminished expectations for most developed and emerging economies. As a result of these market conditions, the cost and availability of capital and credit has been and may continue to be adversely affected by uncertain credit markets and wider credit spreads. Continued turbulence in the United States and international markets and economies could restrict our ability to refinance our existing indebtedness, increase our costs of borrowing, limit our access to capital necessary to meet our liquidity needs and materially harm our operations or our ability to implement our business strategy.

Our Business
We are a leading supplier of optoelectronic semiconductors packaged into high-speed optical receivers, custom optoelectronic subsystems and Terahertz instrumentation, serving a variety of global OEMs. Our patented high-speed optical receivers include Avalanche Photodiode (APD) technology and PIN (positive-intrinsic-negative) photodiode technology based upon III-V materials, including InP, InAlAs, and GaAs. Our optoelectronic subsystems are based on our silicon Large Area Avalanche Photodiode (LAAPD), PIN photodiode, FILTRODE® detectors and LED assemblies. Our Terahertz sensor product line is targeted at the industrial, homeland security and military markets. Using our patented fiber coupled technology and high speed Terahertz generation and detection sensors, we are engaged in transferring Terahertz technology from the laboratory to the factory floor for use in non-destructive testing and real time quality control.

We support the customer from the initial concept and design of the semiconductor, hybridization of support electronics, packaging and signal conditioning or processing from prototype through full-scale production and validation testing. The target markets served by us are Industrial Sensing/NDT, Military/Aerospace, Telecom, Medical and Homeland Security.

Critical Accounting Policies and Estimates
The discussion and analysis of our financial condition and results of operations is based on the condensed consolidated financial statements, which have been prepared in conformity with accounting principles generally accepted in the United

States of America. The preparation of these condensed consolidated financial statements requires us to make judgments and estimates that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statement and the reported amount of revenues and expenses during the reporting period. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. Actual results may differ from such estimates under different assumptions or conditions.

Certain prior year balances have been reclassified in the consolidated financial statements to conform to the current year presentation.

Application of Critical Accounting Policies
Application of our accounting policies requires management to make certain judgments and estimates about the amounts reflected in the financial statements. We use historical experience and all available information to make these estimates and judgments, although differing amounts could be reported if there are changes in the assumptions and estimates. Estimates are used for, but not limited to, the accounting for the allowance for doubtful accounts, inventory cost adjustments, impairment costs, depreciation and amortization, warranty costs, taxes and contingencies. We have identified the following accounting policies as critical to an understanding of our financial statements and/or as areas most dependent on management's judgments and estimates.

Revenue Recognition
Revenue is derived principally from the sales of our products. We recognize revenue when the basic criteria of SEC Staff Accounting Bulletin No. 104 are met. Specifically, we recognize revenue when persuasive evidence of an arrangement exists, usually in the form of a purchase order, when shipment has occurred since title and risk of loss passes at that time, or when services have been rendered, the price is fixed or determinable and collection is reasonably assured in terms of both credit worthiness of the customer and there are no post shipment obligations or uncertainties with respect to customer acceptance.

We sell certain of our products to customers with a product warranty that provides warranty repairs at no cost. The length of the warranty term is one year from date of shipment. We accrue the estimated exposure to warranty claims based upon historical claim costs. We review these estimates on a regular basis and adjust the warranty provisions as actual experience differs from historical estimates or as other information becomes available.

We do not provide price protection or a general right of return. Our return policy only permits product returns for warranty and non-warranty repair or replacement and requires pre-authorization by us prior to the return. Credit or discounts, which have been historically insignificant, may be given at our discretion and are recorded when and if determined.

We predominantly sell directly to original equipment manufacturers with a direct sales force with limited sales through representatives, VAR's and distributors. Distributor and VAR sales represented approximately 11% of total revenue for the year ended March 31, 2012. Significant terms and conditions of distributor agreements include FOB source, net 30 days payment terms, with no return and limited exchange rights, and no price protection. Since the product transfers title to the distributor at the time of shipment by us, the products are not considered inventory on consignment.

Revenue is also derived from technology research and development contracts. We recognize revenue from these contracts as services and/or materials are provided.

Impairment of Long-Lived Assets
As of March 31, 2012 and March 31, 2011, our consolidated balance sheet included $4.6 million in goodwill. Goodwill represents the excess purchase price over amounts assigned to tangible or identifiable intangible assets acquired and liabilities assumed from our business acquisitions.

Goodwill and intangible assets that are not subject to amortization are tested for impairment annually or more frequently if events or changes in circumstances indicate that the asset might be impaired. The impairment test consists of a comparison of the fair value of the asset to our carrying amount, as defined. This guidance requires a two-step method for determining goodwill impairment. Step one is to compare the fair value of the reporting unit with the unit's carrying amount, including goodwill. If this test indicates that the fair value is less than the carrying value, then step two is required to compare the implied fair value of the reporting unit's goodwill with the carrying amount of the reporting unit's goodwill. If the carrying amount of the asset exceeds its fair value, an impairment loss will be recognized in an amount equal to that excess. We have selected March 31 as the date for our annual impairment test.

We continue to meet the criteria of operating in a single segment and having a single reporting unit. We determine the fair value of our single reporting unit to be equal to our market capitalization plus a control premium. Market capitalization is determined by multiplying the shares outstanding on the assessment date by the average market price of our Class A Common Stock over a 10-day trading period before and a 10-day trading period after each assessment date. We use this 20-day duration to remove inherent market fluctuations that may affect any individual closing price. We believe that our market capitalization alone does not fully capture the fair value of our business as a whole, or the substantial value that an acquirer would obtain from its ability to obtain control of our business. As such, in determining fair value, we add a control premium, which seeks to give effect to the increased consideration a potential acquirer would be required to pay in order to gain sufficient ownership to set policies, direct operations and make decisions. Our valuation as of March 31, 2012 indicated there were no impairments of Goodwill as the fair value calculated as described above was $26.6 million including a control premium of $5.0 million, while our carrying value including Goodwill was $18.7 million.

As evidenced above, our stock price and control premium are significant factors in assessing our fair value for purposes of the goodwill impairment assessment. Our stock price can be affected by, among other things, changes in industry or market conditions, changes in our results of operations, and changes in our forecasts or market expectations relating to future results. Our stock price has fluctuated from a high of $2.06 to a low of $0.48 on an intra-day basis during fiscal 2012.

The carrying value of long-lived assets, including amortizable intangibles and property and equipment, are evaluated whenever events or changes in circumstances indicate that a potential impairment has occurred relative to a given asset or assets. Impairment is deemed to have occurred if projected undiscounted cash flows associated with an asset are less than the carrying value of the asset. The estimated cash flows include our assumptions of cash inflows and outflows directly resulting from the use of that asset, or group of assets used in conjunction with specific assets, in operations. The amount of the impairment loss recognized is equal to the excess of the carrying value of the asset, or asset groups, over its then estimated fair value. As a result of the current year operating loss, we performed an impairment evaluation and concluded that for the fiscal year ended March 31, 2012 there were no impairments of any amortizing intangibles or property and equipment expected based upon future undiscounted cash flows over the remaining estimated lives.

Accounting for Income Taxes

Income tax provisions and benefits are made for taxes currently payable or refundable, and for deferred income taxes arising from future tax consequences of events that were recognized in the our financial statements or tax returns and tax credit carryforwards. The effects of income taxes are measured based on enacted tax laws and rates applicable to periods in which the differences are expected to reverse. If necessary, a valuation allowance is established to reduce deferred income tax assets to an amount that will more likely than not be realized in accordance with FASB guidance pertaining to accounting for income taxes.

As part our assessment of the need for a valuation allowance, we consider all available evidence, both positive and negative, including our recent operating results and our forecasting process. We forecast taxable income through our budgeting and planning process each year. The process takes into account existing contracts, firm sales backlog, and projected sales based upon customer supplied forecasts of product purchases, resources needed to fulfill these customers' requirements, and extraordinary expenses that may be part of long-term initiatives to increase shareholder value through revenue growth and efficiency improvements leading to profit improvement. We have substantial history, more than 10 years in most cases, with our customers and markets on which our forecasts are based.

At March 31, 2012, we had net operating loss carry forwards (NOL's) of approximately $20.6 million for Federal income tax purposes and $5.9 million for Michigan and California state income tax purposes that expire at various dates through fiscal year 2032. The tax laws related to the utilization of loss carry forwards are complex and the amount of the loss carry forward that will ultimately be available to offset future taxable income may be subject to annual limitations under Internal Revenue Code (IRC) Section 382 resulting from changes in the ownership of our Common Stock.

We performed an analysis to determine whether an ownership change under IRC Section 382 had occurred. The effect of an ownership change would be the imposition of an annual limitation on the use of the net operating loss carry forwards attributable to periods before the change. As of March 31, 2012, we believe there are no limitations on the use of these Federal NOLs.

At March 31, 2012, we had net deferred tax assets before consideration of a valuation allowance of approximately $9.2 million, mainly consisting of net operating loss carry-forwards. In assessing the realizability of deferred tax assets, we have determined that at this time it is "more likely than not" that deferred tax assets will not be realized, primarily due to uncertainties related to our ability to utilize the net operating loss carry-forwards before they expire based on the negative evidence of our recent years' history of losses, including tax losses in two of the last three years and cumulative taxable losses over the past three years, outweighing the positive evidence of taxable income projections in future years. The ultimate realization of these deferred tax assets is dependent upon the generation of future taxable income during those periods in which those temporary differences become deductible or within the periods before NOL carry forwards expire. As of both March 31, 2012 and March 31, 2011, we recorded a full valuation allowance on our net deferred tax.

The calculation of federal income taxes involves dealing with uncertainties in the application of complex tax regulations. We recognize liabilities for uncertain tax positions based on a two-step process. The first step involves evaluating the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step involves estimating and measuring the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement. It is inherently difficult and subjective to estimate such amounts, as we have to determine the probability of various possible outcomes. Our evaluation of uncertain tax positions is based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues under audit, and new audit activity. Such a change in recognition or measurement would result in the recognition of a tax benefit or an additional charge to the tax provision. We have taken no tax positions which would require disclosure. Although the IRS is not currently examining any of our income tax returns, tax years 2008 to 2011 remain open and are subject to examination.

Inventories

Inventories, which include material, labor and manufacturing overhead, are stated at the lower of cost (on a first in–first out basis) or market. Slow moving and obsolete inventories are reviewed throughout the year to assess whether a cost adjustment is required. Our review of slow moving and obsolete inventory begins with a listing of all inventory items which have not moved regularly within the past 12 months. In addition, any residual inventory, which is customer specific and remaining on hand at the time of contract completion, is included in the list. The complete list of slow moving and obsolete inventory is then reviewed by the production, engineering and/or purchasing departments to identify items that can be utilized in the near future. These items are then excluded from the analysis and the remaining amount of slow-moving and obsolete inventory is then further assessed and a write down is recorded when warranted. Additionally, non-cancelable open purchase orders for parts we are obligated to purchase where demand has been reduced may also be written down. Impairments for open purchase orders where the market price is lower than the purchase order price are also recorded. The impairments established for excess, slow moving, and obsolete inventory create a new cost basis for those items. The cost basis of these parts is not subsequently increased if the circumstances which led to the impairment change in the future. If a product that had previously been impaired is subsequently sold, the amount of reduced cost basis is reflected as cost of goods sold.

Results of Operations

Fiscal Year Ended March 31, 2012 Compared to Fiscal Year Ended March 31, 2011

Revenues

We predominantly operate in one industry segment, light and radiation detection devices, and sell to five major markets including telecommunications, industrial sensing/Non-destructive Testing, military and aerospace, medical, and homeland security. Revenues by market consisted of the following:

	Year ended			
	March 31, 2012		March 31, 2011	
Telecommunications	$ 11,865,000	40%	$ 11,000,000	38%
Industrial Sensing/NDT	10,813,000	36%	11,618,000	40%
Military/Aerospace	4,308,000	15%	4,836,000	17%
Medical	1,164,000	4%	828,000	3%
Homeland Security	1,345,000	5%	556,000	2%
Total Revenues	$ 29,495,000	100%	$ 28,838,000	100%

Our total revenues for fiscal 2012 were $29.5 million, an increase of approximately $660,000, or 2%, from revenues of $28.8 million for fiscal 2011. Three of our five market segments showed growth in fiscal 2012 relative to fiscal 2011.

Telecommunications sales were $11.9 million, an increase of $865,000 or 8% from fiscal 2011. This increase in our telecommunications revenues for fiscal 2012 was the result of our product development investment over the past few years and growth in the 40G and emerging 100G markets. Our Telecommunications revenue in the fourth quarter decreased approximately 39% ($1.5 million) from the prior year fourth quarter and increased approximately 23% ($437,000) from the third quarter of the current year. We saw sequential quarterly revenue improvement as some of our customers began to recover from the supply chain disruption caused by the flooding in Thailand, although volumes have not returned to the levels experienced in the comparable quarter last year. In addition, we are seeing price decreases in certain segments which reduced the revenue on a comparable basis.

Industrial Sensing/NDT market revenues were $10.8 million in fiscal 2012, a decrease of 7% ($805,000) from fiscal 2011 revenues of $11.6 million. Our Industrial Sensing/NDT revenue in the fourth quarter of the current year decreased 9% ($230,000) from the comparable prior year quarter. These decreases are the result of lower revenue from several of our Optosolutions customers. Revenues in this market during the fourth quarter of the current year also decreased approximately 24%, or $727,000, from the third quarter of the current year as several industrial customers invested in Terahertz research systems in our third quarter and similar sales did not occur in the fourth quarter.

Military/Aerospace market revenues were $4.3 million in fiscal 2012, a decrease of 11% ($528,000) from the comparable prior year revenues of $4.8 million, due to timing on certain government development contracts. Our military/aerospace market revenue in the fourth quarter of the current year increased 32% ($287,000) from the prior year fourth quarter due to timing of orders from our Optosolution customers. Our military/aerospace market revenues increased 3% ($36,000) from the third quarter of the current year. This increase was attributable primarily to the increase in funding of a terahertz development contract.

Medical market revenues increased $336,000 or 41% to $1.2 million from the prior year revenue of $828,000. Our medical market revenue in the fourth quarter of the current year increased 120% ($183,000) from the prior year fourth quarter of $152,000, and increased 8% ($27,000) from the third quarter of the current year. The increases were primarily a result of increased sales from existing customers in fiscal year 2012.

Homeland security revenues increased 142% ($789,000) from the prior year revenue of $556,000. Although our Homeland Security market revenue in the fourth quarter of the current year increased $213,000 (181%) from the third quarter of the current year, our revenue decreased $132,000 (or 29%) over the prior year fourth quarter. All fluctuations were the result of the timing of revenues associated with the In-Q-Tel development contract. We have completed the development phase of this contract and any revenues for our fiscal 2013 will be dependent on a follow-on contract by In-Q-Tel, adoption by the Transportation Security Administration of our Terahertz based anomaly detectors in their security screening process or purchases from other entities to use our Terahertz based anomaly detection screening system.

In looking out to next year, we believe telecom revenues in FY 2013 will be flat to slightly up for the year and heavily weighted to the second half. We expect growth in the industrial/NDT market in fiscal year 2013 driven by the increasing adoption of the of the Terahertz products for use in process control and non-destructive testing. The Military/Aerospace market is expected to be flat to down primarily driven by the wind down of worldwide conflicts and federal deficit reduction efforts curtailing defense spending. We expect Medical market revenues to grow in fiscal year 2013. Our guidance does not include any meaningful homeland security revenue for fiscal year 2013 as our products are currently under evaluation by the TSA. Overall, we expect fiscal year 2013 to be one of transition as the telecom market recovers and THz adoption accelerates.

Gross Profit

Gross Profit was $11.9 million (or 40% of revenue), compared to the prior year of $12.4 million (43% of revenue), a decrease of $501,000. The lower gross profit rate was due primarily to lower gross margin percentage experienced on the THz and Optosolutions products. Gross margin dollars have decreased because of lower sales volumes obtained in our Optosolutions products. Gross profit in the fourth quarter of fiscal 2012 was $2.2 million (34% of revenue) versus $3.5 million (44% of revenue) during the prior year fourth quarter as price pressures in our HSOR product line prior to implementation of cost reductions affected the dollars and rate. We expect to complete cost reductions on our HSOR products in the first half of fiscal 2013 to restore more normal margins in the second half of fiscal 2013. Gross profit was $2.7 million (41% of revenue) in the third quarter of fiscal 2012 and declined by approximately $500,000 in the fourth quarter of fiscal 2012, predominantly due to product mix and the HSOR pricing pressures.

Operating Expenses

Research and Development expenses (R&D) -- Our R&D expenses increased approximately 16%, or $910,000, over the prior year. R&D expenses of $6.5 million for fiscal 2012 compared to $5.6 million in fiscal 2011 were 22% and 20% of sales, respectively. In fiscal 2012, we increased headcount to develop the next generation 40G/100G HSOR products, and accelerate THz application and market development. These investments have allowed us to gain customer acceptance on these new products and move THz from the laboratory to promising applications in security, process control and non-destructive testing.

Sales and Marketing expenses (S&M) – S&M expenses increased $307,000 (or 16%) to $2.2 million (7% of sales) in fiscal 2012 compared to $1.9 million (7% of sales) in fiscal 2011. The increased spending was spread equally between our three product lines including higher HSOR commissions, increased Optosolutions salespeople, and THz market development support.

General and Administrative expenses (G&A) -- G&A expenses increased $380,000 to approximately $4.4 million (15% of sales) for fiscal 2012, as compared to $4.0 million (14% of sales) for fiscal 2011. The increase was primarily attributable to the hiring of a new Chief Financial Officer, related relocation and recruiting fees and stock compensation expense.

Amortization expense decreased approximately $260,000 to $1.3 million compared to the prior year of approximately $1.6 million. We use the cash flow amortization method on the majority of our intangible assets which results in a declining expense profile over the life of the assets.

Financing and Other Income (Expense), net

Interest income for fiscal 2012 was approximately $5,000, the same as in fiscal 2011.

Interest expense for fiscal 2012 was $164,000 as compared to $237,000 in fiscal 2011, a decrease of $73,000, primarily attributable to lower interest rates and reductions in debt obligations with certain related parties and the Michigan Economic Development Corporation.

For the year ended March 31, 2012, there was a reduction in the fair value of the warrant liability that triggered other income of $706,000 which compared to other expense of $491,000 for the year ended March 31, 2011. FASB guidance requires our outstanding warrants to be recorded as a liability at fair value with subsequent changes in fair value recorded in earnings. The fair value of the warrant is determined using a Monte Carlo option pricing model, and is affected by changes in inputs to that model including our stock price, expected stock price volatility and contractual term. The income of $706,000 related to the change in fair value of the warrant liability for fiscal 2012 is primarily due to the decrease in our stock price and declining contractual life.

During fiscal year 2011, we recorded a loss on debt extinguishment of $318,000, as a result of amending the Picometrix Notes, which did not reoccur in fiscal 2012.

Net loss for fiscal 2012 was $2.1 million ($0.07 per share), as compared to net loss of $1.9 million ($0.07 per share) in fiscal 2011, an increase in the loss of approximately $200,000. The increase in losses for the year were primarily attributable to the lower gross margin realized of $501,000, increased R&D and SG&A expenses of $1.6 million, offset by lower interest expense of approximately $100,000 and a net reduction in non-cash charges of $1.8 million which includes lower amortization of intangibles of $300,000, a decrease in the fair value on our warrants causing a change in expense of $1.2 million and no loss on debt extinguishments.

Liquidity and Capital Resources

At March 31, 2012, we had cash and cash equivalents of $3.2 million, a decrease of $1.5 million from $4.7 million as of March 31, 2011 as the proceeds from the equity offering in the fourth quarter of fiscal 2011 were used to pay down certain debt obligations including insider debt in fiscal 2012. Cash generated from operating activities in fiscal 2012 were $130,000, offset by a reduction in cash from investing activities of $281,000 and a reduction in cash from financing activities of $1.3 million.

Operating Activities

Net cash provided by operating activities of $130,000 for the year ended March 31, 2012 was the result of net cash provided by operations of $100,000 and by net cash provided by changes in operating assets and liabilities of $30,000. The net cash provided by operations included a net loss of $2.1 million and non cash income of $706,000 for the change in the fair value of warrants; offset by non-cash expenses of $2.9 million from depreciation, amortization and stock based compensation expense. The net cash provided by changes in operating assets and liabilities of $30,000 primarily resulted from a reduction in inventory offset by decreases in accounts payable as our production levels in fiscal 2012 were lower than the end of fiscal 2011.

Net cash used in operating activities of $473,000 for the year ended March 31, 2011 was primarily the result of net cash provided by operations of $1.7 million offset by net cash used in changes in operating assets and liabilities of $2.2 million. The net cash provided by operations included a net loss of $1.9 million, offset by non-cash expenses of $3.6 million, including $2.8 million from depreciation, amortization and stock based compensation expense; approximately $491,000 for the change in the fair value of warrant liability; and $318,000 from the loss on debt extinguishment. The net use of cash for changes in operating assets and liabilities of $2.2 million was primarily a result of higher revenues which increased accounts receivable by $1.9 million, inventories by $1.1 million and prepaid assets by $323,000, offset by increases in accounts payable of $1.1 million.

Investing Activities

Net cash used in investing activities was $281,000 for the year ended March 31, 2012, consisting of capital expenditures of $583,000 and patent expenditures of $198,000, offset by the elimination of restricted cash of $500,000 required under the PrivateBank Loan Agreement.

Net cash used in investing activities was approximately $1.6 million for the year ended March 31, 2011. The amount consisted of capital expenditures of approximately $1.4 million and patent expenditures of $251,000.

Financing Activities

Net cash used in financing activities was approximately $1.3 million for the year ended March 31, 2012. The amount consisted of a net increase in bank debt of $319,000 offset by the payoff of related party debt of approximately $1.2 million, and the reduction in MEDC/MSF debt of $510,000.

Net cash provided by financing activities was $5.1 million for the year ended March 31, 2011. The amount consisted of net proceeds from the sale of Class A Common Stock of $6.6 million, proceeds from the exercise of stock options of $105,000 and proceeds from the exercise of warrants of $243,000. These were partially offset by a net reduction in debt of $1.8 million.

Debt

Bank Debt

On September 25, 2008, we executed a loan agreement (the PrivateBank Loan Agreement) with The PrivateBank and Trust Company (PrivateBank). The initial PrivateBank Loan Agreement provided us with a term loan and a $3.0 million line of credit. On September 23, 2011, we entered into a fifth amendment to the PrivateBank Loan Agreement (the Fifth Amendment) which established a new $1.0 million term loan and extended the existing $3.0 million line of credit. The term loan was to be repaid in monthly principal payments of $20,833, plus interest at prime plus 0.5%, until maturity on October 1, 2015. The line of credit incurred interest at prime plus 0.5% and any outstanding borrowings were due on September 25, 2014. The availability under the line of credit was determined by a calculation of a borrowing base that includes a percentage of accounts receivable and inventory.

The line of credit was guaranteed by each of our wholly-owned subsidiaries and the term loan was secured by a security agreement among API, our subsidiaries and PrivateBank, pursuant to which PrivateBank received a first-priority security interest in certain described assets.

The PrivateBank Loan Agreement contained financial covenants including minimum debt service coverage ratio, adjusted EBITDA level, and net worth requirements, each as defined in the Loan Agreement.

On January 31, 2012, we entered into a loan and security agreement (and such other documents which constitute the SVB Loan Agreement) with Silicon Valley Bank (SVB) and terminated the PrivateBank Loan Agreement by paying off the outstanding balances. The terms of the SVB Loan Agreement provide for a $5 million line of credit with a $3 million Export-Import (EX-IM) sublimit at an interest rate that ranges from prime plus 50 basis points on up to prime plus 375 basis points depending on our liquidity ratio and adjusted six month rolling EBITDA as defined in the SVB Loan Agreement. The SVB Loan Agreement contains a covenant for an initial minimum six month rolling adjusted EBITDA of negative $1,250,000 which reduces over time to $1 as of April, 2013. There is also a minimum liquidity ratio of 2.25 based on outstanding cash, receivables and debt as defined in the SVB Loan Agreement. The amount that can be drawn on the line of credit is subject to a formula based on our outstanding receivables and inventory. In addition, the SVB Loan Agreement provides for a $1 million term loan with principal payable over three years in equal monthly installments and interest at a rate ranging from prime plus 100 basis points to prime plus 425 basis points dependent on our liquidity ratio and adjusted six month rolling EBITDA as defined in the SVB Loan Agreement. Under the SVB Loan Agreement, we may prepay all, but not less than all, of the term loan by paying a prepayment premium equal to (i) 1.00% of the amount outstanding if prepayment occurs before the first anniversary of the term loan; (ii) 0.50% of the amount outstanding if prepayment occurs after the first, but before the second anniversary of the term loan; and (iii) 0.25% of the amount outstanding if prepayment occurs after the second anniversary of the term loan. In addition, if the term loan becomes due and payable because of the occurrence and continuance of an Event of Default (as defined in the SVB Loan Agreement), we will be required to pay a termination fee equal to 1.00% of the amount outstanding. The interest rate on the SVB term loan and line of credit as of March 31, 2012 were 5.25% and 4.75%, respectively. We had $500,000 outstanding on the SVB line of credit with approximately $2.8 million in additional borrowing capacity as of March 31, 2012.

The EX-IM line of credit with SVB is guaranteed by us and our subsidiaries and all borrowings under the SVB Loan Agreement are secured by a first priority security interest that we and our subsidiaries granted to SVB over substantially all our respective assets. As of March 31, 2012, we have been and expect to be in compliance with the related liquidity and adjusted EBITDA covenant with SVB. The term of the SVB term loan and line of credit is three years and two years, respectively, the latter of which can be extended by mutual consent.

Total interest payments made to our bank lenders' during the years ended March 31, 2012 and March 31, 2011 were approximately $48,000 and $112,000, respectively.

MEDC/MSF Loans

The Michigan Economic Development Corporation (MEDC) entered into two loan agreements with our subsidiary, Picometrix, one in fiscal 2005 (MEDC-loan 1) and one in fiscal 2006 (MEDC-loan 2). Both loans are unsecured.

The MEDC-loan 1 was issued in the original principal amount of $1,025,000. Under the original terms of the MEDC–loan 1, the interest rate was 7% and interest accrued but unpaid through October 2008 would be added to then outstanding principal balance of the promissory note issued pursuant to the MEDC- loan 1 and the restated principal would be amortized over the remaining four years (September 15, 2012). Effective September 23, 2008, the MEDC-loan 1 was amended and restated to change the start date of repayment of principal and interest from October 2008 to October 2009.

During the fourth quarter of fiscal 2010, we began negotiations with the MEDC to further amend the MEDC-loan 1 promissory note. We agreed with MEDC that the payment of restated principal and accrued interest was to be suspended until the negotiations were completed. In May 2010, we entered into a debt conversion agreement with the MEDC whereby the MEDC converted the accrued and unpaid interest as of November 30, 2009 totaling $324,669 into 601,239 unregistered shares of our Class A Common Stock at a price per share of $0.54 (market value of the stock on the day of conversion). In addition we granted the MEDC a put option to sell back to us the shares received pursuant to the debt conversion agreement in the event of a trigger event as defined in the debt conversion agreement. In conjunction with the debt conversion agreement, we amended the MEDC-loan 1 promissory note to retroactively change the interest rate from 7% to 4% beginning in December 2009, and to change the repayment terms of the outstanding principal and interest such that beginning in October 2010, we were to repay the remaining principal and accrued interest on a monthly basis through maturity in November 2014.

MEDC-loan 2, which was assigned to the Michigan Strategic Fund (MSF) in June 2010, was issued in the original principal amount of $1.2 million. Under the original terms of the MEDC – loan 2, the interest rate was 7% and interest accrued, but unpaid in the first two years of this agreement was added to the then outstanding principal of the promissory note issued pursuant to the MEDC-loan 2. During the third year of this agreement, we were to pay interest on the restated principal of the promissory note until October 2008, at which time we were to repay the restated principal over the remaining three years (September 15, 2011). Effective January 26, 2009, the MEDC-loan 2 was amended and restated to change the start date of repayment of principal and interest from October 2008 to November 2009 and to extend the repayment period to October 2012.

During the fourth quarter of fiscal 2010, we began negotiations with the MEDC to further amend the MEDC-loan 2 promissory note. We agreed with MEDC that the payment of restated principal and accrued interest was to be suspended until the negotiations were completed. In May 2010, we entered into a debt conversion agreement with the MEDC whereby the MEDC transferred the MEDC-loan 2 promissory note to the MSF which converted the accrued and unpaid interest as of October 31, 2009 totaling $237,667 into 440,124 unregistered shares of our Class A Common Stock at a price per share of $0.54 (market value of the stock on the day of conversion). In addition, we granted the MSF a put option to sell back to us the shares received pursuant to the debt conversion agreement in the event of a trigger event as defined in the debt conversion agreement. In conjunction with the debt conversion agreement, we amended the MEDC-loan 2 promissory note to retroactively change the interest rate from 7% to 4% beginning in November 2009, and to change the repayment terms of the outstanding principal and interest such that beginning in July 2010, we are to repay the remaining principal and accrued interest on a monthly basis through maturity in September 2014.

We performed an assessment of the amendments made to the MEDC and MSF loans during the second quarter of fiscal 2011 to determine whether or not the amendments constituted a "troubled debt restructuring" or a "substantial modification" in accordance with FASB guidance and concluded that the amendments did not constitute either a troubled debt restructuring or a substantial modification. Furthermore, we performed an assessment of the balance sheet classification of the common shares issued as part of the debt conversion agreements in light of the put options granted and determined that equity classification of the shares was appropriate since the trigger event related to the put option is considered to be in our control.

Interest payments made to the MEDC/MSF were approximately $69,000 and $111,000 during the years ended March 31, 2012 and March 31, 2011, respectively.

Related Parties Debt

As a result of the 2005 acquisition of Picotronix LLC, we issued four year promissory notes (the Picometrix Notes) to Robin Risser, our COO, and Steve Williamson, our CTO (collectively, the Note Holders) in the aggregate principal amount of $2,900,500. API had the option of prepaying the Picometrix Notes without penalty. The maturity date of the Picometrix Notes was subsequently extended in a series of amendments. In particular, on November 29, 2010, we and the Note Holders entered into the fifth amendment to the Picometrix Notes (the Fifth Note Amendment). The Fifth Note Amendment required us to pay the Note Holders a restructuring fee of $156,312 (11%) and extended the due dates for the remaining principal balance payments on the Picometrix Notes through (in the aggregate amount of $1,400,500) September 1, 2012.

As part of the Fifth Note Amendment, the interest rate on the Picometrix Notes was increased from prime plus 1% to prime plus 2%, and interest was to be paid quarterly through the maturity date. We received Board approval to pay both the September 1, 2011 and December 1, 2011 principal payments on September 1, 2011. Pursuant to the terms of the SVB Loan Agreement, on January 31, 2012, we used $728,735 of the proceeds of the term loan to pay all indebtedness (including accrued interest) owed to the Note Holders.

Interest payments made to Related Parties during the twelve month periods ended March 31, 2012 and March 31, 2011 were approximately $57,000 and $61,000, respectively.

In conjunction with the Fifth Note Amendment, on November 15, 2010, we and the Note Holders entered into a security purchase agreement (the SPA), which was subsequently amended and restated on November 29, 2010. Pursuant to the terms of the SPA, we issued the Note Holders for an aggregate purchase price of $78,156, 66,799 Units comprised of (i) 66,799 shares of Class A Common Stock and (ii) warrants (the 2010 Warrants) to purchase an aggregate of 267,196 shares of Class A Common Stock at an exercise price of $1.404 per share. While the exercise price of the 2010 Warrants is subject to adjustment in certain circumstances, such adjustment cannot reduce the exercise price below $1.17 per share.

We performed an assessment of the Fifth Note Amendment in the third quarter of fiscal 2011 and determined that the Fifth Note Amendment constituted a "substantial modification" in accordance with FASB guidance as the present value of future cash flows under the terms of the Fifth Note Amendment, combined with the fair value of the consideration given as part of the SPA, was more than 10% different than the present value of cash flows under the prior amendment to the Picometrix Notes. As a result, we recorded a loss on debt extinguishment of $317,725 during the third quarter of fiscal 2011, which is equal to the $156,312 restructuring fee and the fair value of the 2010 Warrants issued in conjunction with the SPA which was $161,413 at November 30, 2010. See Note 9 to the Consolidated Financial Statements for additional information on the 2010 Warrants.

We believe that current cash levels combined with cash generated from operations, our revolving line of credit and/or additional debt or equity financing will be sufficient for our 2013 fiscal year.

Summary of Contractual Obligations
The following table sets forth our contractual obligations at March 31, 2012.

Contractual Obligations		Payments due by period			
	Total	**FY 2013**	**FY 2014-2016**	**FY 2017-2019**	**FY 2020 & later**
Bank line of credit	$ 500,000	$ 500,000	$ -	$ -	$ -
Bank term loan	1,000,000	333,000	667,000	-	-
Long-term MEDC loans	1,461,000	532,000	929,000	-	-
Subtotal–Balance Sheet	**$ 2,961,000**	**$ 1,365,000**	**$ 1,596,000**	**$ -**	**$ -**
Expected interest expense on current debt obligations	159,000	89,000	70,000	-	-
Operating lease obligations	6,317,000	968,000	2,107,000	1,879,000	1,363,000
Purchase obligations	1,273,000	1,273,000	-	-	-
Total	**$ 10,710,000**	**$ 3,695,000**	**$ 3,773,000**	**$ 1,879,000**	**$ 1,363,000**

Purchase obligations represent an estimate of all open purchase orders and contractual obligations in the ordinary course of business for which we have not yet received the goods or services. We enter into agreements with suppliers that allow them to procure inventory based upon agreements defining our material and services requirements. Although open purchase orders are considered enforceable and legally binding, the terms generally allow us the option to cancel, reschedule and adjust our requirements based on our business needs prior to the delivery of goods or the performance of services.

Off-Balance-Sheet Arrangements
At March 31, 2012 and March 31, 2011, we did not have any off-balance sheet arrangements or relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which are typically established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Recent Accounting Pronouncements
In September 2011, the FASB issued updated guidance that modifies the manner in which the two-step impairment test of goodwill is applied. Under the amendments in this update, we have the option to first assess qualitative factors to determine

whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less that it's carrying amount. If, after assessing the totality of events or circumstances, we determine it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary. However, if we conclude otherwise, then we are required to perform the first step of the two-step impairment test prescribed by existing standards.

The updated guidance is effective for the first quarter of our fiscal year ended March 31, 2013. The adoption of this guidance is not expected to have a material effect on our results of operations, financial position or liquidity.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

At March 31, 2012, most of our interest rate exposure is linked to the prime rate, subject to certain limitations, offset by interest that may be earned on our cash balances. As such, we are at risk to the extent of changes in the prime rate that are not reflected in money market rates. We do not believe that moderate changes in the prime rate will materially affect our operating results or financial condition.

All of our sales and purchases are denominated in U.S. dollars. At March 31, 2012, we were not at risk to foreign currency exchange fluctuations.

Item 8. Financial Statements and Supplementary Data

The following consolidated financial statements of Advanced Photonix, Inc., prepared in accordance with Regulation S-X and the Report of the Independent Registered Public Accounting Firm are included in Item 8:

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders
of Advanced Photonix, Inc.
Ann Arbor, Michigan

We have audited the accompanying consolidated balance sheets of Advanced Photonix, Inc. as of March 31, 2012 and 2011 and the related consolidated statements of operations, shareholders' equity and cash flows for the years then ended. In connection with our audits of the financial statements, we have also audited the financial statement schedule included at Item 15. These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule 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 audits 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 purpose 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 financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements and schedule. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Advanced Photonix, Inc. at March 31, 2012 and 2011, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Also, in our opinion, the financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ BDO USA, LLP
Troy, Michigan
June 29, 2012

ADVANCED PHOTONIX, INC.
CONSOLIDATED BALANCE SHEETS

	March 31, 2012	March 31, 2011
ASSETS		
Current assets:		
Cash and cash equivalents	$ 3,249,000	$ 4,744,000
Restricted cash	--	500,000
Receivables, net of allowance for doubtful accounts of $39,000 and $47,000, respectively	4,539,000	4,587,000
Inventories	3,594,000	4,775,000
Prepaid expenses and other current assets	261,000	349,000
Total current assets	11,643,000	14,955,000
Equipment and leasehold improvements, net	3,301,000	3,730,000
Goodwill	4,579,000	4,579,000
Intangibles, net	4,538,000	5,713,000
Security deposits and other assets	322,000	275,000
Total Assets	$ 24,383,000	$ 29,252,000
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 872,000	$ 2,098,000
Accrued compensation	866,000	953,000
Accrued subcontracting costs	355,000	265,000
Warrant liability	--	389,000
Other accrued expenses	651,000	668,000
Current portion of long-term debt, related parties	--	675,000
Current portion of long-term debt, MEDC/MSF	532,000	511,000
Current portion of long-term debt, bank line of credit	500,000	494,000
Current portion of long-term debt, bank term loan	333,000	687,000
Total current liabilities	4,109,000	6,740,000
Long-term debt, less current portion – related parties	--	500,000
Long-term debt, less current portion – MEDC/MSF	929,000	1,460,000
Long-term debt, less current portion – bank term loan	667,000	--
Warrant liability	26,000	343,000
Total liabilities	5,731,000	9,043,000
Commitments and contingencies		
Shareholders' equity:		
Class A Common Stock, $.001 par value, 100,000,000 authorized; 31,159,431 shares issued and outstanding as of March 31, 2012 and 30,679,046 shares issued and outstanding as of March 31, 2011.	31,000	31,000
Additional paid-in capital	58,446,000	57,891,000
Accumulated deficit	(39,825,000)	(37,713,000)
Total shareholders' equity	18,652,000	20,209,000
Total Liabilities and Shareholders' Equity	$ 24,383,000	$ 29,252,000

See Notes to Consolidated Financial Statements.

ADVANCED PHOTONIX, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
For the Fiscal Years Ended March 31, 2012 and March 31, 2011

	2012	2011
Sales, net	$ 29,495,000	$ 28,838,000
Cost of products sold	17,637,000	16,479,000
Gross profit	11,858,000	12,359,000
Operating expenses:		
Research and development expenses	6,541,000	5,631,000
Sales and marketing expenses	2,195,000	1,888,000
General and administrative expenses	4,412,000	4,032,000
Amortization expense – intangible assets	1,374,000	1,633,000
Total operating expenses	14,522,000	13,184,000
Loss from operations	(2,664,000)	(825,000)
Other income (expense):		
Interest income	5,000	5,000
Interest expense on bank and MEDC/MSF loans	(123,000)	(176,000)
Interest expense, related parties	(41,000)	(61,000)
Change in fair value of warrant liability	706,000	(491,000)
Loss on debt extinguishment	--	(318,000)
Other income (expense)	5,000	(16,000)
Total other income (expense)	552,000	(1,057,000)
Loss before benefit for income taxes	(2,112,000)	(1,882,000)
Benefit for income taxes	--	--
Net loss	$ (2,112,000)	$ (1,882,000)
Basic and diluted loss per share	$ (0.07)	$ (0.07)
Weighted average common shares outstanding	30,873,000	26,366,000

See Notes to Consolidated Financial Statements.

ADVANCED PHOTONIX, INC.
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
For the Fiscal Years Ended March 31, 2012 and March 31, 2011
(In thousands, except share data)

	Class A Common Shares	Class A Common Amount	Class B Common Shares	Class B Common Amount	Additional Paid-in Capital	Accumulated Deficit	Total
BALANCE, MARCH 31, 2010	**24,463,978**	**$ 24**	**31,691**	**$ --**	**$ 50,164**	**$ (35,831)**	**$ 14,357**
Exercise of stock options	194,141	--	--	--	105	--	105
Reclassification of warrant fair value - PIPE	--	--	--	--	32	--	32
Reclassification of Class B Common Stock to Class A Common Stock	31,691	--	(31,691)	--	--	--	--
Conversion of accrued interest on MEDC/MSF loans to common stock	1,041,363	1	--	--	560	--	561
Issuance of common stock	4,308,108	4	--	--	6,285	--	6,289
Issuance of restricted shares	238,844	1	--	--	--	--	1
Stock based compensation	--	--	--	--	225	--	225
In-Q-Tel stock sale	198,524	1	--	--	199	--	200
Exercise of warrants	135,598	--	--	--	243	--	243
Related party stock sale	66,799	--	--	--	78	--	78
Net loss and comprehensive loss	--	--	--	--	--	(1,882)	(1,882)
BALANCE, MARCH 31, 2011	**30,679,046**	**31**	**--**	**--**	**57,891**	**(37,713)**	**20,209**
Exercise of stock options	80,949	--	--	--	23	--	23
Issuance of restricted shares	399,436	--	--	--	--	--	--
Stock based compensation	--	--	--	--	532	--	532
Net loss and comprehensive loss	--	--	--	--	--	(2,112)	(2,112)
BALANCE, MARCH 31, 2012	**31,159,431**	**$ 31**	**--**	**$ --**	**$ 58,446**	**$ (39,825)**	**$ 18,652**

See Notes to Consolidated Financial Statements.

ADVANCED PHOTONIX, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
For the fiscal years ended March 31, 2012 and March 31, 2011

	2012	2011
Cash flows from operating activities:		
Net loss	$ (2,112,000)	$ (1,882,000)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities		
Depreciation	1,012,000	950,000
Amortization	1,374,000	1,633,000
Stock based compensation expense	532,000	225,000
Loss on debt extinguishment	--	318,000
Change in fair value of warrant liability	**(706,000)**	**491,000**
Changes in operating assets and liabilities:		
Accounts receivable	48,000	(1,908,000)
Inventories	1,181,000	(1,119,000)
Prepaid expenses and other assets	41,000	(323,000)
Accounts payable	(1,226,000)	1,092,000
Accrued expenses	(14,000)	50,000
Net cash provided by (used in) operating activities	130,000	(473,000)
Cash flows from investing activities:		
Capital expenditures	(583,000)	(1,396,000)
Change in restricted cash	500,000	--
Patent expenditures	(199,000)	(251,000)
Net cash used in investing activities	(282,000)	(1,647,000)
Cash flows from financing activities:		
Payments on bank term loan	(1,685,000)	(434,000)
Payments on bank line of credit	(494,000)	(900,000)
Proceeds from bank term loan	1,998,000	--
Proceeds from bank line of credit	500,000	--
Payments on MEDC/MSF term loan	(510,000)	(253,000)
Payments on related party debt	(1,175,000)	(226,000)
Net proceeds from sale of class A common stock	--	6,567,000
Proceeds from exercise of warrants	--	243,000
Proceeds from exercise of stock options	23,000	105,000
Net cash provided by (used in) financing activities	(1,343,000)	5,102,000
Net increase (decrease) in cash and cash equivalents	(1,495,000)	2,982,000
Cash and cash equivalents, beginning of year	4,744,000	1,762,000
Cash and cash equivalents, end of year	$ 3,249,000	$ 4,744,000

Supplemental cash flow information:	2012	2011
Cash paid for interest	$ 174,000	$ 256,000
Cash paid for income taxes	$ --	$ --

See Notes to Consolidated Financial Statements.

ADVANCED PHOTONIX, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
March 31, 2012 and March 31, 2011

1. The Company

Advanced Photonix, Inc. ® (the Company, we, our or API), was incorporated under the laws of the State of Delaware in June 1988. The Company is a leading supplier of optoelectronic semiconductors which are packaged into components, sub-systems and full systems for high-speed optical receivers (HSOR), custom optoelectronic products and Terahertz (THz) instrumentation, serving a variety of global markets. The Company supports the customers from the initial concept and design phase of the product, through testing to full-scale production. The Company has two manufacturing facilities located in Camarillo, California and Ann Arbor, Michigan.

2. Basis of Presentation and Summary of Significant Accounting Policies

Principles of Consolidation
The consolidated financial statements include the financial statements of the Company and its wholly-owned subsidiaries (Silicon Sensors Inc. & Picometrix LLC). All significant inter-company balances and transactions have been eliminated in consolidation.

Reclassifications
Certain prior year balances have been reclassified in the consolidated financial statements to conform to the current year presentation.

Operating Segment Information
Financial Accounting Standards Board (FASB) guidance establishes annual and interim reporting standards for operating segments and requires certain disclosures about the products and services an entity provides, the material countries in which it holds assets and reports revenue, and its major customers. Operating segments are defined as components of an enterprise that engage in business activities for which separate financial information is available that is evaluated regularly by the chief operating decision maker, or decision making group, in deciding how to allocate resources and in assessing performance. API's chief operating decision makers are its chief executive officer and chief operating officer, who review financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance. API has one business activity: light and radiation detection devices. The nature of the production process is similar for all product lines, and manufacturing for the different product lines occurs in common facilities. The types and class of customers are in some cases similar across the three product lines.

Pervasiveness of Estimates
The preparation of consolidated 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 financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Fair Value of Financial Instruments
The carrying value of all financial instruments potentially subject to valuation risk (principally consisting of cash equivalents, accounts receivable, accounts payable, and debt) approximates fair value based upon the short term nature of these instruments, and in the case of debt, the prevailing interest rates available to the Company.

Cash and Cash Equivalents
The Company considers all highly liquid investments, with an original maturity of three months or less when purchased, to be cash equivalents.

Compensating Cash Balance
As of March 31, 2011, the Company's credit facility with The PrivateBank and Trust Company had a minimum compensating balance requirement of $500,000. On January 31, 2012, the Company entered into a new term loan and line of credit with

Silicon Valley Bank. This agreement did not require a compensating cash balance, and as such no restricted cash was shown on the balance sheet as of March 31, 2012.

Accounts Receivable

Receivables are stated at amounts estimated by management to be the net realizable value. The allowance for doubtful accounts is based on specific identification. Accounts receivable are charged off when it becomes apparent, based upon age or customer circumstances, that such amounts will not be collected.

Accounts receivable are unsecured and the Company is at risk to the extent such amounts become uncollectible. The Company performs periodic credit evaluations of its customers' financial condition and generally does not require collateral. Any unanticipated change in the customers' credit worthiness or other matters affecting the collectability of amounts due from such customers could have a material effect on the results of operations in the period in which such changes or events occur. As of March 31, 2012, two customers individually comprised 10% or more of accounts receivable (combining for 28.9% of total accounts receivable). As of March 31, 2011, two customers individually comprised 10% or more of accounts receivable (combining for 42.1% of total accounts receivable). The allowance for doubtful accounts was $39,000 and $47,000 on March 31, 2012 and March 31, 2011, respectively.

Concentration of Credit Risk

Cash and cash equivalents are maintained at financial institutions and, at times, balances may exceed federally insured limits. We have never experienced any losses related to these balances. All of the Company's non-interest bearing cash balances were fully insured at March 31, 2012 due to a temporary federal program in effect from December 31, 2010 through December 31, 2012. Under the program, there is no limit to the amount of insurance for eligible accounts. Beginning in calendar year 2013, insurance coverage will revert to $250,000 per depositor at each financial institution, and our non-interest bearing cash balances may again exceed federally insured limits.

Inventories

Inventories, which include material, labor and manufacturing overhead, are stated at the lower of cost (on a first in–first out basis) or market. Slow moving and obsolete inventories are reviewed throughout the year to assess whether a cost adjustment is required. Our review of slow moving and obsolete inventory begins with a listing of all inventory items which have not moved regularly within the past 12 months. In addition, any residual inventory, which is customer specific and remaining on hand at the time of contract completion, is included in the list. The complete list of slow moving and obsolete inventory is then reviewed by the production, engineering and/or purchasing departments to identify items that can be utilized in the near future. These items are then excluded from the analysis and the remaining amount of slow-moving and obsolete inventory is then further assessed and a write down is recorded when warranted. Additionally, non-cancelable open purchase orders for parts we are obligated to purchase where demand has been reduced may also be written down. Impairments for open purchase orders where the market price is lower than the purchase order price are also recorded. The impairments established for excess, slow moving, and obsolete inventory create a new cost basis for those items. The cost basis of these parts is not subsequently increased if the circumstances which led to the impairment change in the future. If a product that had previously been impaired is subsequently sold, the amount of reduced cost basis is reflected as cost of goods sold.

Equipment and Leasehold Improvements

Equipment and leasehold improvements are stated at cost. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets, as follows:

Leasehold improvements	Term of lease or useful life, whichever is less
Machinery and equipment	5 – 7 years
Furniture and fixtures	3 – 7 years
Computer hardware	3 – 7 years
Computer software	3 – 5 years

Patents

Patents represent costs incurred in connection with patent applications. Such costs are amortized using the straight-line method over the useful life of the patent once issued, or expensed immediately if any specific application is unsuccessful.

Impairment of Long-Lived Assets and Goodwill
As of March 31, 2012 and March 31, 2011, our consolidated balance sheet included $4.6 million in goodwill. Goodwill represents the excess purchase price over amounts assigned to tangible or identifiable intangible assets acquired and liabilities assumed from our business acquisitions.

Goodwill and intangible assets that are not subject to amortization shall be tested for impairment annually or more frequently if events or changes in circumstances indicate that the asset might be impaired. The impairment test shall consist of a comparison of the fair value of the asset with its carrying amount, as defined. This guidance requires a two-step method for determining goodwill impairment. Step one is to compare the fair value of the reporting unit with the unit's carrying amount, including goodwill. If this test indicates that the fair value is less than the carrying value, then step two is required to compare the implied fair value of the reporting unit's goodwill with the carrying amount of the reporting unit's goodwill. If the carrying amount of the asset exceeds its fair value, an impairment loss shall be recognized in an amount equal to that excess. The Company has selected March 31 as the date for its annual impairment test.

API determines the fair value of our single reporting unit to be equal to our market capitalization plus a control premium. Market capitalization is determined by multiplying the shares outstanding on the assessment date by the average market price of our Class A Common Stock over a 10-day period before and a 10-day period after each assessment date. The Company uses this 20-day duration to remove inherent market fluctuations that may affect any individual closing price. API believes that the market capitalization alone does not fully capture the fair value of our business as a whole, or the substantial value that an acquirer would obtain from its ability to obtain control of our business. As such, in determining fair value, the Company adds a control premium, which seeks to give effect to the increased consideration a potential acquirer would be required to pay in order to gain sufficient ownership to set policies, direct operations and make decisions. Our valuation as of March 31, 2012 indicated there were no impairments of Goodwill as the fair value calculated as described above was $26.6 million including a control premium of $5.0 million, while our carrying value including Goodwill was $18.7 million

As evidenced above, API's stock price and control premium are significant factors in assessing our fair value for purposes of the goodwill impairment assessment. The stock price can be affected by, among other things, changes in industry or market conditions, changes in our results of operations, and changes in our forecasts or market expectations relating to future results. The stock price has fluctuated from a high of $2.06 to a low of $0.48 on an intra-day basis during fiscal 2012. The current macroeconomic environment continues to be challenging and the Company cannot be certain of the duration of these conditions and their potential impact on our stock price performance. If the Company's market capitalization falls below the current carrying value for a sustained period, it is reasonably likely that an intangible and goodwill impairment assessment would be necessary and a non-cash charge to operating income may be recorded.

The carrying value of other long-lived assets, including amortizable intangibles and property and equipment, are evaluated whenever events or changes in circumstances indicate that a potential impairment has occurred relative to a given asset or assets. Impairment is deemed to have occurred if projected undiscounted cash flows associated with an asset are less than the carrying value of the asset. The estimated cash flows include management's assumptions of cash inflows and outflows directly resulting from the use of that asset, or group of assets used in conjunction with the specific asset, in operations. The amount of the impairment loss recognized is equal to the excess of the carrying value of the asset, or asset group, over its then estimated fair value. As a result of the current year operating loss, the Company performed an impairment evaluation and concluded that for the fiscal year ended March 31, 2012 there were no impairments expected based upon future undiscounted cash flows over the remaining estimated lives.

Revenue Recognition
Revenue is derived principally from the sales of the Company's products. API recognizes revenue when the basic criteria of SEC Staff Accounting Bulletin No. 104 are met. Specifically, revenue is recognized when persuasive evidence of an arrangement exists, usually in the form of a purchase order, when shipment has occurred or when services have been rendered since title and risk of loss typically transfer at shipment, the price is fixed or determinable and collection is reasonably assured in terms of both credit worthiness of the customer and there are no post shipment obligations or uncertainties with respect to customer acceptance.

The Company sells certain of our products to customers with a product warranty that provides warranty repairs at no cost. The length of the warranty term is one year from date of shipment. The estimated exposure is accrued to warranty claims based upon historical claim costs. These estimates are reviewed on a regular basis with adjustments to the warranty provisions as other information becomes available.

API does not provide price protection or a general right of return. The return policy only permits product returns for warranty and non-warranty repair or replacement and requires pre-authorization by the Company prior to the return. Credit or discounts, which have been historically insignificant, may be given at the Company's discretion and are recorded when and if determined.

API predominantly sells directly to original equipment manufacturers with a direct sales force with limited sales through representatives, VAR's and distributors. Distributor and VAR sales represented approximately 11% of total revenue for the year ended March 31, 2012. Significant terms and conditions of distributor agreements include FOB source, net 30 days payment terms, with no return and limited exchange rights, and no price protection. Since the product transfers title to the distributor at the time of shipment, the products are not considered inventory on consignment.

Revenue is also derived from technology research and development contracts. API recognizes revenue from these contracts as services and/or materials are provided. Government contract revenues represent less than 11% of annual sales for both years ended March 31, 2012 and 2011.

Significant Customers
During our fiscal year ended March 31, 2012, one customer accounted for 15% of the Company's net sales. During our fiscal year ended March 31, 2011, no single customer accounted for more than 10% of the Company's net sales.

Product Warranty
The Company generally sells products with a limited warranty of product quality. The Company accrues for known warranty issues if a loss is probable and can be reasonably estimated, and accrues for estimated incurred but unidentified issues based on historical activity. Accrued product warranty liability is included in Other accrued expenses in the Consolidated Balance Sheets.

The following table presents the movement in the product warranty liability for the years ended March 31, 2012 and March 31, 2011.

	Years ended March 31,	
	2012	**2011**
Beginning balance	$ 51,000	$ 86,000
Current period accruals	4,000	(8,000)
Used for purpose intended	(31,000)	(27,000)
Ending balance	**$ 24,000**	**$ 51,000**

Shipping and Handling Costs
The Company's policy is to classify shipping and handling costs as a component of Costs of products sold in the Statements of Operations.

Research and Development Costs
The Company charges all research and development costs, including costs associated with development contract revenues, to expense when incurred. Manufacturing costs associated with the development of a new fabrication process or a new product are expensed until such times as these processes or products are proven through final testing and initial acceptance by the customer. Costs related to revenues on non-recurring engineering services billed to customers are generally classified as cost of product sold. The Company generally retains intellectual property rights related to paid research and development contracts.

Advertising Costs
Advertising costs are expensed as incurred. Advertising expense was approximately $45,000 and $76,000 in fiscal 2012 and fiscal 2011, respectively, and is included in Sales and Marketing expenses in the Consolidated Statements of Operations.

Accounting for Stock Based Compensation
The Company estimates the fair value of stock-based awards utilizing the Black-Scholes pricing model for stock options and

using the intrinsic value for restricted stock. The fair value of the awards is amortized as compensation expense on a straight-line basis over the requisite service period of the award, which is generally the vesting period.

Accounting for Income Taxes
Income tax provisions and benefits are made for taxes currently payable or refundable, and for deferred income taxes arising from future tax consequences of events that were recognized in the Company's financial statements or tax returns and tax credit carry forwards. The effects of income taxes are measured based on enacted tax laws and rates applicable to periods in which the differences are expected to reverse. If necessary, a valuation allowance is established to reduce deferred income tax assets to an amount that will more likely than not be realized.

The calculation of federal income taxes involves dealing with uncertainties in the application of complex tax regulations. The Company recognizes liabilities for uncertain tax positions based on a two-step process. The first step involves evaluating the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step involves estimating and measuring the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement. It is inherently difficult and subjective to estimate such amounts, as the Company has to determine the probability of various possible outcomes. Our evaluation of uncertain tax positions is based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues under audit, and new audit activity. Such a change in recognition or measurement would result in the recognition of a tax benefit or an additional charge to the tax provision. The Company has taken no tax positions which would require disclosure. Although the IRS is not currently examining any of our income tax returns, tax years 2008 to 2011 remain open and are subject to examination.

Earnings per Share
The Company presents both basic and diluted earnings (loss) per share (EPS) amounts. Basic EPS is calculated by dividing net income (loss) by the weighted average number of common shares outstanding during the period. Diluted EPS amounts are based upon the weighted average number of common and common equivalent shares outstanding during the period. The Company uses the treasury stock method to calculate the impact of outstanding stock options and warrants. Common equivalent shares are excluded from the computation in periods in which they have an anti-dilutive effect. All common stock equivalents have been excluded from the calculation of Diluted EPS due to the net loss in both the years ended March 31, 2012 and 2011. The total shares excluded from the computation of diluted earnings per share for the year ended March 31, 2012 totaled 2,891,000 shares, representing outstanding stock options and warrants exercisable into shares of common stock. The total shares excluded from the computation of diluted earnings per share for the year ended March 31, 2011 totaled 3,771,000 shares, representing outstanding stock options and warrants exercisable into shares of common stock.

Recent Pronouncements and Accounting Changes
In September 2011, the FASB issued updated guidance that modifies the manner in which the two-step impairment test of goodwill is applied. Under the amendments in this update, an entity has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less that its carrying amount. If, after assessing the totality of events or circumstances, an entity determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary. However, if an entity concludes otherwise, then it is required to perform the first step of the two-step impairment test prescribed by existing standards.

The updated guidance is effective for the first quarter of our fiscal year ended March 31, 2013. The adoption of this guidance is not expected to have a material effect on the Company's results of operations, financial position or liquidity.

3. Inventories

Inventories consisted of the following at March 31:

	2012	2011
Raw material	$ 2,342,000	$ 3,204,000
Work-in-process	949,000	1,214,000
Finished products	303,000	357,000
Inventories	**$ 3,594,000**	**$ 4,775,000**

4. Equipment and Leasehold Improvements

Equipment and leasehold improvements consisted of the following at March 31:

	2012	2011
Machinery and equipment	$ 9,128,000	$ 8,563,000
Furniture and fixtures	711,000	719,000
Leasehold improvements	1,061,000	1,066,000
Computer hardware	689,000	633,000
Capitalized software	1,024,000	882,000
Total assets	12,613,000	11,863,000
Accumulated depreciation	(9,727,000)	(8,775,000)
	2,886,000	3,088,000
Construction-in-process	415,000	642,000
Net equipment and leasehold improvements	**$ 3,301,000**	**$ 3,730,000**

The estimated cost to complete the construction-in-process is approximately $60,000.

Depreciation expense for the fiscal years ended March 31, 2012 and 2011 was approximately $1.0 million and $950,000, respectively.

5. Intangible Assets and Goodwill

Intangibles

Intangible assets that have definite lives consist of the following (in thousands):

			March 31, 2012		
	Weighted Average Lives in Years	**Amortization Method**	**Carrying Value**	**Accumulated Amortization**	**Intangibles Net**
Customer list	15	Straight Line	$ 475	$ 372	$ 103
Trademarks	15	Cash Flow	2,270	949	1,321
Technology	10	Cash Flow	10,950	9,027	1,923
Patents pending			673	--	673
Patents	10	Straight Line	764	246	518
Total Intangibles			**$ 15,132**	**$ 10,594**	**$ 4,538**

			March 31, 2011		
	Weighted Average Lives in Years	**Amortization Method**	**Carrying Value**	**Accumulated Amortization**	**Intangibles Net**
Customer list	15	Straight Line	$ 475	$ 360	$ 115
Trademarks	15	Cash Flow	2,270	798	1,472
Technology	10	Cash Flow	10,950	7,886	3,064
Patents pending			619	--	619
Patents	10	Straight Line	620	177	443
Total Intangibles			**$ 14,934**	**$ 9,221**	**$ 5,713**

Amortization expense was approximately \$1.4 million and \$1.6 million for the years ended March 31, 2012 and March 31, 2011, respectively. The current patents held by the Company have remaining useful lives ranging from 2 years to 20 years.

The cash flow method of amortization is based upon management's estimate of how the intangible asset contributes to our cash flows and best represents the pattern of how the economic benefits of the intangible asset will be consumed or used up. Such amortization is initially derived from the estimated undiscounted cash flows that were used in determining the original fair value of the intangible asset at the acquisition date and is monitored for significant changes in subsequent periods.

Assuming no impairment to the intangible value, future amortization expense for intangible assets and patents are as follows:

Intangible Assets and Patents (000's)(a)	
2013	\$ 1,159
2014	972
2015	530
2016	258
2017	260
2018 & after	686
Total	**\$ 3,865**

(a) Patent pending costs of \$673,000 are not included in the chart above. These costs will be amortized beginning the month the patents are granted.

Goodwill

Goodwill reflected on the balance sheet as of March 31, 2012 and March 31, 2011 is net of previously recorded impairment charges of \$954,000.

6. Debt

Bank Debt

On September 25, 2008, API executed a loan agreement (the PrivateBank Loan Agreement) with The PrivateBank and Trust Company (PrivateBank). The initial PrivateBank Loan Agreement provided the Company with a term loan and a \$3.0 million line of credit. On September 23, 2011, the Company entered into a fifth amendment to the PrivateBank Loan Agreement (the Fifth Amendment) which established a new \$1.0 million term loan and extended the existing \$3.0 million line of credit. The term loan was to be repaid in monthly principal payments of \$20,833, plus interest at prime plus 0.5%, until maturity on October 1, 2015. The line of credit incurred interest at prime plus 0.5% and any outstanding borrowings were due on September 25, 2014. The availability under the line of credit was determined by a calculation of a borrowing base that includes a percentage of accounts receivable and inventory.

The line of credit was guaranteed by each of the Company's wholly-owned subsidiaries and the term loan was secured by a security agreement among API, the Company's subsidiaries and PrivateBank, pursuant to which PrivateBank received a first-priority security interest in certain described assets.

The PrivateBank Loan Agreement contained financial covenants including minimum debt service coverage ratio, adjusted EBITDA level, and net worth requirements, each as defined in the PrivateBank Loan Agreement.

On January 31, 2012, API entered into a loan and security agreement (and such other documents which constitute the SVB Loan Agreement) with Silicon Valley Bank (SVB) and terminated the PrivateBank Loan Agreement by paying off the outstanding balances. The terms of the SVB Loan Agreement provide for a \$5 million line of credit with a \$3 million Export-Import (EX-IM) sublimit at an interest rate that ranges from prime plus 50 basis points on up to prime plus 375 basis points depending on the Company's liquidity ratio and adjusted six month rolling EBITDA as defined in the SVB Loan Agreement. The SVB Loan Agreement contains a covenant for an initial minimum six month rolling adjusted EBITDA of negative \$1,250,000 which reduces over time to \$1 as of April, 2013. There is also a minimum liquidity ratio of 2.25 based on outstanding cash, receivables and debt as defined in the SVB Loan Agreement. The amount that can be drawn on the line of credit is subject to a formula based on the Company's outstanding receivables and inventory. In addition, the SVB Loan Agreement provides for a \$1 million term loan with principal payable over three years in equal monthly installments and interest at a rate ranging from prime plus 100 basis points to prime plus 425 basis points dependent on the Company's liquidity ratio and adjusted six month rolling EBITDA as defined in the SVB Loan Agreement. Under the SVB Loan Agreement, the Company may prepay all, but not less than all, of the term loan by paying a prepayment premium equal to (i) 1.00% of the amount outstanding if prepayment occurs before the first anniversary of the term loan; (ii) 0.50% of the amount outstanding if prepayment occurs after the first, but before the second anniversary of the term loan; and (iii) 0.25% of the amount outstanding if prepayment occurs after the second anniversary of the term loan. In addition, if the term loan becomes due and payable because of the occurrence and continuance of an Event of Default (as defined in the SVB Loan Agreement), the Company will be required to pay a termination fee equal to 1.00% of the amount outstanding. The interest rate on the SVB term loan and line of credit as of March 31, 2012 were 5.25% and 4.75%, respectively. The Company had $500,000 outstanding on the SVB line of credit with approximately $2.8 million in additional borrowing capacity as of March 31, 2012.

The EX-IM line of credit with SVB is guaranteed by API and its subsidiaries and all borrowings under the SVB Loan Agreement are secured by a first priority security interest that the Company and its subsidiaries granted to SVB over substantially all their respective assets. As of March 31, 2012, the Company has been and expects to be in compliance with the related liquidity and adjusted EBITDA covenant with SVB. The term of the SVB term loan and line of credit is three years and two years, respectively, the latter of which can be extended by mutual consent.

Total interest payments made to the Company's bank lenders' during the years ended March 31, 2012 and March 31, 2011 were approximately $48,000 and $112,000, respectively

MEDC/MSF Loans

The Michigan Economic Development Corporation (MEDC) entered into two loan agreements with the Company's subsidiary, Picometrix, one in fiscal 2005 (MEDC-loan 1) and one in fiscal 2006 (MEDC-loan 2). Both loans are unsecured.

The MEDC-loan 1 was issued in the original principal amount of $1,025,000. Under the original terms of the MEDC–loan 1, the interest rate was 7% and interest accrued but unpaid through October 2008 would be added to then outstanding principal balance of the promissory note issued pursuant to the MEDC- loan 1 and the restated principal would be amortized over the remaining four years (September 15, 2012). Effective September 23, 2008, the MEDC-loan 1 was amended and restated to change the start date of repayment of principal and interest from October 2008 to October 2009.

During the fourth quarter of fiscal 2010, API began negotiations with the MEDC to further amend the MEDC-loan 1 promissory note. The Company agreed with MEDC that the payment of restated principal and accrued interest was to be suspended until the negotiations were completed. In May 2010, the Company entered into a debt conversion agreement with the MEDC whereby the MEDC converted the accrued and unpaid interest as of November 30, 2009 totaling $324,669 into 601,239 unregistered shares of our Class A Common Stock at a price per share of $0.54 (market value of the stock on the day of conversion). In addition the Company granted the MEDC a put option to sell back to the Company the shares received pursuant to the debt conversion agreement in the event of a trigger event as defined in the debt conversion agreement. In conjunction with the debt conversion agreement, the Company amended the MEDC-loan 1 promissory note to retroactively change the interest rate from 7% to 4% beginning in December 2009, and to change the repayment terms of the outstanding principal and interest such that beginning in October 2010, the Company was to repay the remaining principal and accrued interest on a monthly basis through maturity in November 2014.

MEDC-loan 2, which was assigned to the Michigan Strategic Fund (MSF) in June 2010, was issued in the original principal amount of $1.2 million. Under the original terms of the MEDC – loan 2, the interest rate was 7% and interest accrued, but unpaid in the first two years of this agreement was added to the then outstanding principal of the promissory note issued pursuant to the MEDC-loan 2. During the third year of this agreement, the Company was to pay interest on the restated principal of the promissory note until October 2008, at which time the Company was to repay the restated principal over the remaining three years (September 15, 2011). Effective January 26, 2009, the MEDC-loan 2 was amended and restated to change the start date of repayment of principal and interest from October 2008 to November 2009 and to extend the repayment period to October 2012.

During the fourth quarter of fiscal 2010, API began negotiations with the MEDC to further amend the MEDC-loan 2 promissory note. The Company agreed with MEDC that the payment of restated principal and accrued interest was to be suspended until the negotiations were completed. In May 2010, the Company entered into a debt conversion agreement with the MEDC whereby the MEDC transferred the MEDC-loan 2 promissory note to the MSF which converted the accrued and unpaid interest as of October 31, 2009 totaling $237,667 into 440,124 unregistered shares of our Class A Common Stock at a price per share of $0.54 (market value of the stock on the day of conversion). In addition, the Company granted the MSF a put option to sell back the shares received pursuant to the debt conversion agreement in the event of a trigger event as defined in the debt conversion agreement. In conjunction with the debt conversion agreement, the Company amended the MEDC-loan 2 promissory note to retroactively change the interest rate from 7% to 4% beginning in November 2009, and to change the repayment terms of the outstanding principal and interest such that beginning in July 2010, the Company is to repay the remaining principal and accrued interest on a monthly basis through maturity in September 2014.

The Company performed an assessment of the amendments made to the MEDC and MSF loans during the second quarter of fiscal 2011 to determine whether or not the amendments constituted a "troubled debt restructuring" or a "substantial modification" in accordance with FASB guidance and concluded that the amendments did not constitute either a troubled debt restructuring or a substantial modification. Furthermore, the Company performed an assessment of the balance sheet classification of the common shares issued as part of the debt conversion agreements in light of the put options granted and determined that equity classification of the shares was appropriate since the trigger event related to the put option is considered to be in our control.

Interest payments made to the MEDC/MSF were approximately $69,000 and $111,000 during the years ended March 31, 2012 and March 31, 2011, respectively.

Related Parties Debt
As a result of the 2005 acquisition of Picotronix LLC, the Company issued four year promissory notes (the Picometrix Notes) to Robin Risser, the Company's COO, and Steve Williamson, the Company's CTO (collectively, the Note Holders) in the aggregate principal amount of $2,900,500. API had the option of prepaying the Picometrix Notes without penalty. The maturity date of the Picometrix Notes was subsequently extended in a series of amendments. In particular, on November 29, 2010, the Company and the Note Holders entered into the fifth amendment to the Picometrix Notes (the Fifth Note Amendment). The Fifth Note Amendment required the Company to pay the Note Holders a restructuring fee of $156,312 (11%) and extended the due dates for the remaining principal balance payments on the Picometrix Notes through (in the aggregate amount of $1,400,500) September 1, 2012.

As part of the Fifth Note Amendment, the interest rate on the Picometrix Notes was increased from prime plus 1% to prime plus 2%, and interest was to be paid quarterly through the maturity date. The Company received Board approval to pay both the September 1, 2011 and December 1, 2011 principal payments on September 1, 2011. Pursuant to the terms of the SVB Loan Agreement, on January 31, 2012, the Company used $728,735 of the proceeds of the term loan to pay all indebtedness (including accrued interest) owed to the Note Holders.

Interest payments made to Related Parties during the twelve month periods ended March 31, 2012 and March 31, 2011 were approximately $57,000 and $61,000, respectively.

In conjunction with the Fifth Note Amendment, on November 15, 2010, the Company and the Note Holders entered into a security purchase agreement (the SPA), which was subsequently amended and restated on November 29, 2010. Pursuant to the terms of the SPA, the Company issued the Note Holders for an aggregate purchase price of $78,156, 66,799 Units comprised of (i) 66,799 shares of Class A Common Stock and (ii) warrants (the 2010 Warrants) to purchase an aggregate of 267,196 shares of Class A Common Stock at an exercise price of $1.404 per share. While the exercise price of the 2010 Warrants is subject to adjustment in certain circumstances, such adjustment cannot reduce the exercise price below $1.17 per share.

The Company performed an assessment of the Fifth Note Amendment in the third quarter of fiscal 2011 and determined that the Fifth Note Amendment constituted a "substantial modification" in accordance with FASB guidance as the present value of future cash flows under the terms of the Fifth Note Amendment, combined with the fair value of the consideration given as part of the SPA, was more than 10% different than the present value of cash flows under the prior amendment to the Picometrix Notes. As a result, the Company recorded a loss on debt extinguishment of $317,725 during the third quarter of fiscal 2011, which is equal to the $156,312 restructuring fee and the fair value of the 2010 Warrants issued in conjunction with the SPA which was $161,413 at November 30, 2010. See Note 9 to the Consolidated Financial Statements for additional info

The current debt principal and maturities are as follows:

Debt Maturity Table (in 000's)

			Debt Maturities					
	Balance 3/31/11	**Balance 3/31/12**	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**FY2017**	**FY2018 & Beyond**
Credit Line – The Private Bank	$ 494	$ --	$ --	$ --	$ - -	$ - -	$ - -	$ - -
Term Loan – The Private Bank	687	--	--	--	--	--	--	--
Credit Line – Silicon Valley Bank	--	**500**	500	--	--	--	--	--
Term Loan – Silicon Valley Bank	--	**1,000**	333	333	334	--	--	--
Debt to Related Parties	1,175	--	--	--	--	--	--	--
MEDC/MSF loans	1,971	**1,461**	532	552	377	--	--	--
TOTAL	**$ 4,327**	**$ 2,961**	**$ 1,365**	**$ 885**	**$711**	**$ --**	**$ --**	**$ --**

7. Capitalization

The Company's Certificate of Incorporation provides for one class of common stock: Class A Common Stock, par value $.001, for which 100,000,000 shares are authorized for issuance. The holder of each share of Class A Common Stock is entitled to one vote per share.

The Company's Certificate of Incorporation also authorizes the issuance of 10,000,000 shares of Preferred Stock, of which 780,000 shares have been designated Class A Redeemable Convertible Preferred Stock with a par value of $0.001 per share.

In prior Annual Reports on Form10-K and Quarterly Reports on Form10-Q, the Company showed 40,000 shares of Class A convertible preferred stock outstanding on the Balance Sheet at zero value. After a review of the historical conversion detail, it was determined that these 40,000 shares of Class A convertible preferred stock were in fact converted to Class A Common Stock and should not be shown as a separate line item in Shareholders' Equity. Beginning in the Company's Quarterly Report on Form10-Q for the period ended June 30, 2011, this line was removed.

8. Stock Based Compensation

The Company has three stock equity plans: The 1997 Employee Stock Option Plan, the 2000 Stock Option Plan and the 2007 Equity Incentive Plan. As of December 30, 2011, no additional awards may be issued under either the 1997 Employee Stock Option Plan or the 2000 Stock Option Plan. There are 2,500,000 shares authorized for issuance under the 2007 Equity Incentive Plan, with 416,615 shares remaining available for future grant.

Options and restricted stock awards may be granted to employees, officers, directors and consultants. Options typically vest over a period of one to four years and are exercisable up to ten years from the date of issuance. The option exercise price equals the stock's market price on the date of grant. Restricted stock awards typically vest over a period of six months to four years, and the shares subject to such awards are generally not transferrable until the awards vest.

Stock option transactions for fiscal years 2012 and 2011 are summarized as follows:

	Shares (000)	**Weighted Average Exercise Price**	**Weighted Average Term (in years)**	**Aggregate Intrinsic Value**
Outstanding, March 31, 2010	2,604	$1.85	5.58	$ 6,000
Exercisable, March 31, 2010	2,402	$1.89	4.98	$ 6,000
Vested & expected to Vest, March 31, 2010	2,537	$1.92	5.58	$ 6,000
Outstanding, March 31, 2010	2,604	$1.85		
Granted	189	$0.60		
Exercised	(226)	$0.80		
Expired	(406)	$2.94		
Outstanding, March 31, 2011	2,161	$1.65	5.90	$ 1,114,000
Exercisable, March 31, 2011	1,933	$1.74	4.89	$ 854,000
Vested & expected to Vest, March 31, 2011	2,101	$1.67	5.90	$ 1,083,000
Outstanding, March 31, 2011	2,161	$1.65		
Granted	538	$1.34		
Exercised	(395)	$0.68		
Expired	(37)	$1.70		
Outstanding, March 31, 2012	2,267	$1.75	5.77	$ 32,000
Exercisable, March 31, 2012	1,994	$1.88	5.18	$ 15,000
Vested & expected to Vest, March 31, 2012	2,199	$1.73	5.77	$ 31,000

Information regarding stock options outstanding as of March 31, 2012 is as follows:

		Options Outstanding	
Price Range	(in 000s) Shares	Weighted Average Exercise Price	Weighted Average Remaining Life
$0.50 - $1.25	455	$0.77	8.12
$1.50 - $2.50	1,499	$1.82	4.74
$2.56 - $5.34	313	$2.83	3.50

		Options Exercisable	
Price Range	(in 000s) Shares	Weighted Average Exercise Price	Weighted Average Remaining Life
$0.50 - $1.25	182	$0.73	7.69
$1.50 - $2.50	1,499	$1.82	4.74
$2.56 - $5.34	313	$2.83	3.50

The intrinsic value of options exercised in fiscal years 2012 and 2011was approximately $59,000 and $357,000, respectively.

During fiscal 2011 and fiscal 2012, restricted shares were issued to certain individuals. The restricted share transactions are summarized below:

	Shares (000)	Weighted Average Grant Date Fair Value
Unvested, March 31, 2010	**25**	**$ 0.63**
Granted	239	$ 0.60
Vested	(194)	$ 0.67
Expired	--	--
Unvested, March 31, 2011	**70**	**$ 0.44**
Granted	399	$ 0.97
Vested	(223)	$ 0.96
Expired	--	--
Unvested, March 31, 2012	**246**	**$ 0.84**

The Company estimates the fair value of stock-based awards utilizing the Black-Scholes pricing model for stock options and using the intrinsic value for restricted stock. The fair value of the awards is amortized as compensation expense on a straight-line basis over the requisite service period of the award, which is generally the vesting period. The Black-Scholes fair value calculations involve significant judgments, assumptions, estimates and complexities that impact the amount of compensation expense to be recorded in current and future periods. The factors include:

- The time period that option awards are expected to remain outstanding has been determined based on the average of the original award period and the remaining vesting period in accordance with the SEC's short-cut approach pursuant to SAB No. 107, "*Disclosure About Fair Value of Financial Statements*". As additional evidence develops from the Company's stock trading history, the expected term assumption will be refined to capture the relevant trends.
- The future volatility of the Company's stock has been estimated based on the weekly stock price from the acquisition date of Picometrix LLC (May 2, 2005) to the date of the latest stock grant.
- A dividend yield of zero has been assumed for awards issued during the years ended March 31, 2012 and March 31, 2011, based on the Company's actual past experience and the fact that Company does not anticipate paying a dividend on its shares in the near future.
- The Company has based its risk-free interest rate assumption for awards issued during the years ended March 31, 2012 and March 31, 2011 on the implied yield available on U.S. Treasury issues with an equivalent expected term.
- The forfeiture rate, for awards issued for the year ended March 31, 2012 was approximately 16.4% and March 31, 2011 was approximately 26.2%, and was based on the Company's actual historical forfeiture history.

	Year Ended	
	March 31, 2012	**March 31, 2011**
Option Plan Shares:		
Expected term (in years)	6.3	6.3
Volatility	67.3%	67.1%
Expected dividend	0.0%	0.0%
Risk-free interest rate	1.05%	1.14%
Weighted-average grant date fair value	$0.83	$0.60

The table below lists the classification of the stock based compensation expense for the years ended March 31, 2012 and March 31, 2011.

	2012	2011
Cost of products sold	$ 55,000	$ 17,000
Research and development expense	157,000	38,000
General and administrative expense	295,000	158,000
Sales and marketing expense	25,000	12,000
Total Stock Based Compensation	**$ 532,000**	**$ 225,000**

At March 31, 2012, the total stock-based compensation expense related to unvested stock awards and restricted shares granted to employees and directors under the Company's stock plans but not yet recognized was approximately $280,000. This expense will be amortized on a straight-line basis over a weighted-average period of approximately 3.0 years and will be adjusted for subsequent changes in estimated forfeitures.

9. Equity

Warrants

The schedule below shows the outstanding warrants at March 31, 2012 and March 31, 2011:

Warrants Outstanding & Exercisable

	Shares 2012	Shares 2011	Exercise Price 2012	Exercise Price 2011	Remaining Life (in yrs) at 3/31/12
Convertible Note – 2^{nd} Tranche *	--	712,682	--	$ 1.700	--
2007 Warrants	629,829	629,829	$ 1.790	$ 1.790	0.7
2010 Warrants	267,196	267,196	$ 1.404	$ 1.404	3.7
Total	**897,025**	**1,609,707**			

* *Expired on September 20, 2011*

In fiscal years 2005 and 2006, warrants (the Convertible Note Warrants) were issued in connection with the issuance of convertible debt. The second and final tranche of the Convertible Note Warrants expired during fiscal 2012 and there were 712,682 of shares related to the warrants outstanding at March 31, 2011. The exercise price for the Convertible Note Warrants was initially $1.744 and subject to adjustment based on a formula contained in the convertible note agreement if common stock was issued below the $1.744 exercise price. Such adjustments could not reduce the exercise price below $1.70 without obtaining shareholder approval. The price was reduced to $1.70 and the number of shares related to the warrants was correspondingly increased to 712,682 in June 2010 as a result of the issuance of Class A Common Stock to the MEDC and MSF at a price of $0.54 per share. As a result of the exercise price reset feature, the fair value of the warrants was recorded as a liability.

On September 14, 2007, the Company completed a private placement (the 2007 Offering). Each unit sold by the Company in the 2007 Offering consisted of four (4) shares of the Company's Class A Common Stock, par value $0.001 per share (the 2007 Offering Shares) and one (1) five year warrant exercisable for one share of Class A Common Stock at an exercise price of $1.85 (each a 2007 Warrant). The Company sold a total of 741,332 units consisting of 2,965,332 (2007) Offering Shares and 741,332 (2007) Warrants, of which 33,000 units consisting of 132,000 (2007) Offering Shares and 33,000 (2007) Warrants were to related parties at the prevailing closing stock price of $1.83 per share, for an aggregate purchase price of $4.5 million. The offer and sale of the 2007 Offering Shares and 2007 Warrants were made pursuant to Rule 506 promulgated pursuant to the Securities Act and each of the investors is an accredited investor as defined by Rule 501 promulgated pursuant to the Securities Act. The exercise price for the 2007 Warrants was subject to adjustment based on a formula contained in the Private Placement agreement if common stock was issued in the future below the $1.85 exercise price. The exercise price was reduced to $1.79 in June 2010 as a result of the issuance of Class A Common Stock to the MEDC and MSF at a price of $0.54 per share. In addition, the number of warrants increased by 24,095 as a result of the change in exercise price. Future adjustments cannot reduce the exercise price below $1.79. Since the exercise price of the 2007 warrants are no longer variable, the fair value of the warrants as of June 2010 (approximately $32,000) were reclassified to equity as Additional Paid in Capital during fiscal 2011.

As described in Note 6, on November 29, 2010, the Company issued 267,196 warrants to Robin Risser and Steve Williamson (the 2010 Warrants). Each 2010 Warrant is exercisable over a five year period for one share of the Company's Class A Common Stock at an exercise price of $1.404 subject to adjustment, based on a formula in the warrants agreement, if Common Stock is issued in the future below $1.404. Future adjustments cannot reduce the exercise price below $1.17. As a result of the exercise price reset feature, the fair values of the warrants are recorded as a liability.

The Company records the change in the fair value of warrants accounted for as liabilities as a charge or credit to its statement of operations. Such amounts were a credit of $706,000 and a charge of $491,000 for the years ended March 31, 2012 and 2011, respectively. The fair value of the Related Party warrants, the only remaining liability warrants, was approximately $26,000 at March 31, 2012.

The fair value of the liability warrants was estimated using the Monte Carlo option pricing model using the following assumptions:

	March 31, 2012	March 31, 2011
Contractual term in years	3.7	0.5 – 4.7
Volatility	73.3%	68.2% - 73.8%
Expected dividend	--	--
Risk-free interest rate	2.0%	0.58% - 2.0%

Expected volatility is based primarily on historical volatility using the weekly stock price for the most recent period equivalent to the term of the warrants. A dividend yield of zero has been assumed based on the Company's actual past experience and the fact that the Company does not anticipate paying a dividend on its shares in the future. The Company has based its risk-free interest on the implied yield available on U.S. Treasury issues with equivalent contractual term.

The Company compared the fair values determined using the Black-Scholes model with that using the Monte Carlo model, which is generally a preferred model when instruments contain non-standard features such as the reset features contained in our warrants, and did not note any significant differences in warrant values resulting from using either method.

The following chart represents the activity in the Company's Level 3 warrants during the years ended March 31, 2012 and 2011.

	Year Ended March 31,	
	2012	2011
Level 3 Warrants, beginning of period	$ 732,000	$ 112,000
Addition – 2010 Warrants, initial fair value	--	161,000
Transfer to Additional Paid in Capital-2007 Warrants	--	(32,000)
Change in fair value of warrant liability	(706,000)	491,000
Level 3 Warrants, end of period	**$ 26,000**	**$ 732,000**

IQT Securities Purchase Agreement
The Company entered into a Securities Purchase Agreement (the IQT SPA) with In-Q-Tel, Inc. (IQT) on November 4, 2010, pursuant to which in exchange for a payment of $200,000 (the IQT Purchase Price) API agreed to issue and IQT agreed to purchase the number of shares of the Company's Class A Common Stock, par value $0.001 per share (Common Stock), determined by dividing the IQT Purchase Price by the volume-weight average price per share of the Company's Common Stock on the NYSE Amex Stock exchange for the five (5) trading days (the 5-Day VWAP) ending on the business day immediately preceding the signing of the IQT SPA. The closing of the purchase and sale transactions contemplated by the IQT SPA was subject to the receipt of NYSE Amex approval of an additional listing application covering the shares issued pursuant to the IQT SPA (the IQT Additional Listing Application) and other closing conditions customary for transactions of this nature. On November 10, 2010, NYSE Amex approved the IQT Additional Listing Application and the parties satisfied the other closing conditions to the transaction on November 12, 2010, the following business day. The 5-Day VWAP calculated in the aforementioned manner was determined to be $1.0074 and accordingly, the Company issued IQT 198,524 shares of Common Stock upon the closing of the IQT SPA on November 12, 2010. In November 2010, the Company entered into a $1.8 million development contract and licensing agreement with IQT to develop an anomaly detector targeted at the homeland security market. Revenues under the development contract were approximately $1.3 million during the year ended March 31, 2012 and approximately $500,000 during the year ended March 31, 2011.

Universal Shelf Registration Statement on Form S-3
On December 23, 2010, the Company filed a universal shelf registration statement on Form S-3 with the SEC (File No. 333-17390 and such registration statement, the Registration Statement). The Registration Statement was declared effective by the

SEC on January 5, 2011, which in turn allowed the Company to sell up to $7.0 million of various securities

On January 6, 2011, the Company entered into an underwriting agreement (the January Underwriting Agreement) with B. Riley & Co., LLC, (the Underwriter) as sole underwriter for the offer and sale in a firm commitment underwritten public offering of 2,702,703 shares of the Company's Class A Common Stock, par value $0.001 per share at a price to the public of $1.48 per share ($1.391 per share, net of underwriting discounts) (the January Offering). Pursuant to the January Underwriting Agreement, the Company also (i) granted to the Underwriter a 30-day option to purchase up to an additional 405,405 shares of Common Stock to cover over-allotments, if any, at the same price and (ii) agreed to reimburse the Underwriter for certain of its out-of-pocket expenses. The January Underwriting Agreement also contained customary (i) representations, warranties, and agreements by the Company, (ii) conditions to closing, and (iii) indemnification provisions of the Company and the Underwriter, including for liabilities under the Securities Act of 1933, as amended (the Security Act).

The January Offering was made pursuant to a prospectus supplement dated January 6, 2011, an additional prospectus supplement dated January 11, 2011 and an accompanying prospectus dated December 23, 2010 pursuant to the Registration Statement.

On January 10, 2011, the Underwriter gave notice to the Company that it was exercising its over-allotment option to purchase an additional 405,405 shares of the Company's Common Stock.

The net proceeds to the Company from the January Offering, completed in the fourth quarter of fiscal 2011, after underwriting discounts and transaction expenses, were approximately $4,154,000. The Company has used the net proceeds of the January Offering for general corporate purposes including, but not limited to, reducing its outstanding indebtedness, increasing its working capital and expanding its products.

On February 25, 2011, the Company entered into an underwriting agreement (the February Underwriting Agreement) with the Underwriter as sole underwriter for the offer and sale in a firm commitment underwritten public offering of 1,200,000 shares of the Company's Class A Common Stock at a price to the public of $1.97 per share ($1.8518 per share, net of underwriting discounts) (the February Offering). Pursuant to the February Underwriting Agreement, the Company also agreed to reimburse the Underwriter for certain of its out-of-pocket expenses. The February Underwriting Agreement also contained customary (i) representations, warranties, and agreements by the Company, (ii) conditions to closing, and (iii) indemnification provisions of the Company and the Underwriter, including for liabilities under the Securities Act of 1933, as amended. The February Offering was made pursuant to a prospectus supplement dated February 25, 2011 and an accompanying prospectus dated December 23, 2010 pursuant to the Registration Statement.

The February Offering was expected to close on or about March 8, 2011, or such earlier date as the Underwriter and the Company agreed to, subject to the satisfaction of customary closing conditions including, but not limited to, NYSE Amex approval of the Company's additional listing application to list the Common Stock issued accordance with the February Underwriting Agreement on NYSE Amex (the February Additional Listing Application). On March 1, 2011, NYSE Amex approved the February Additional Listing Application and the February Offering closed on March 2, 2011, when the Company and Underwriter satisfied the remaining closing conditions.

The net proceeds to the Company from the February Offering, completed in the fourth quarter of fiscal 2011, after underwriting discounts and transaction expenses, were approximately $2,135,000. The Company has used the net proceeds of the Offering for general corporate purposes including, but not limited to, (i) working capital needed to support the rapid growth of the Company's HSOR products in foreign markets, (ii) accelerated development and marketing of Terahertz applications, (iii) capital expenditures needed to further automate the Company's manufacturing processes, and increase the Company's productivity.

Deregistration of Registration Statement

On March 22, 2011, the Company filed a post-effective amendment on Form S-3 (the Post-Effective Amendment) to deregister the remaining securities under our Registration Statement. On March 28, 2011, the Post-Effective Amendment was declared effective by the SEC.

10. Foreign Sales

In fiscal 2012 and fiscal 2011, the Company had export sales of approximately $8.6 million and $6.5 million, respectively, made primarily to customers in North America, Asia and Europe. All foreign sales are denominated in U.S. dollars. Sales to specific countries, stated as a percentage of total sales, consist of the following:

	2012	2011
Canada	2%	3%
China	6%	5%
Germany	2%	2%
Italy	15%	9%
Japan	1%	1%
All other countries	3%	4%
Total export sales	**29%**	**23%**

11. Employees' Retirement Plan

The Company maintains a 401(k) Plan which is qualified under the Internal Revenue Code. All full-time employees are eligible to participate in the plan after six months of full time employment. Employees may make voluntary contributions to the plan, which is matched by the Company at the rate of $1.00 for every $1.00 of employee contribution up to 3% of wages, and $.50 for every $1.00 of employee contributions on the next 2% of wages, subject to certain limitations. Employer contributions are fully vested when earned.

Effective April 1, 2009, the Company match portion of the 401(k) program was suspended through December 31, 2010 due to the unstable economic environment the country experienced during this period. On January 1, 2011, the Company matching program was reinstated. The Company contributions and administration costs recognized as expense in General and Administration expenses were approximately $282,000 and $61,000 for fiscal 2012 and fiscal 2011, respectively.

12. Income Taxes

At March 31, 2012, the Company had net operating loss carry forwards (NOL's) of approximately $20.6 million for Federal income tax purposes and $5.9 million for Michigan and California state income tax purposes that expire at various dates through fiscal year 2032. The tax laws related to the utilization of loss carry forwards are complex and the amount of the Company's loss carry forward that will ultimately be available to offset future taxable income may be subject to annual limitations under Internal Revenue Code (IRC) Section 382 resulting from changes in the ownership of the Company's common stock.

The Company performed an analysis to determine whether an ownership change under IRC Section 382 had occurred. The effect of an ownership change would be the imposition of an annual limitation on the use of the net operating loss carry forwards attributable to periods before the change. As of March 31, 2012, the Company believes there are no limitations on the use of these Federal NOLs.

At March 31, 2012, our net deferred tax asset before consideration of a valuation allowance was approximately $9.2 million, mainly consisting of net operating loss carry-forwards which expire at various amounts over an approximate 20 year period. In assessing the realizability of deferred tax assets, the Company has determined that at this time it is "more likely than not" that deferred tax assets will not be realized , primarily due to uncertainties related to its ability to utilize the net operating loss carry-forwards before they expire based on the negative evidence of its recent years' history of losses, including tax losses in two of the last three years and cumulative taxable losses over the past three years, outweighing the positive evidence of taxable income projections in future years. The ultimate realization of these deferred tax assets is dependent upon the generation of future taxable income during those periods in which those temporary differences become deductible or within the periods before NOL carry forwards expire. As of both March 31, 2012 and 2011, the Company recorded a full valuation allowance on its net deferred taxes.

Below are reconciliations between the provisions for income taxes compared with the amounts at the United States federal statutory rate:

Years Ended	**March 31, 2012**	**March 31, 2011**
Federal income tax at statutory rates	$ (718,000)	$ (640,000)
State income taxes, net of federal benefit	(14,000)	(169,000)
Expiration of NOL carry-forwards	418,000	0
Change in valuation allowance	634,000	843,000
Change in R&D credit carry-forwards	(269,000)	(200,000)
Permanent items	(51,000)	252,000
Other	0	(86,000)
Effective federal income tax	$ 0	$ 0

The Company's net deferred tax assets (liabilities) consisted of the following components for fiscal years 2012 and 2011:

	2012	**2011**
Sec. 263A adjustment	$ 37,000	$ 48,000
Inventory reserve	704,000	556,000
Utility accruals	2,000	2,000
Warranty reserve	9,000	20,000
Accounts receivable allowance	14,000	17,000
Accrued vacation	129,000	131,000
Accrued professional fees	44,000	39,000
Accrued commissions	1,000	0
Charitable contributions	6,000	17,000
NOL carry forwards	7,349,000	7,352,000
Basis difference of intangibles	(1,258,000)	(1,655,000)
Basis difference of equipment	(750,000)	(686,000)
R&D credits	2,681,000	2,412,000
Goodwill amortization	91,000	107,000
California Mfg. credit	39,000	39,000
AMT credit	20,000	20,000
Loss on Debt Extinguishment	33,000	98,000
Total	**9,151,000**	**8,517 ,000**
Valuation allowance	(9,151,000)	(8,517,000)
Net deferred tax asset	$ **0**	$ **0**

At March 31, 2012, the Company's Federal R&D tax credit carry forwards totaled approximately $2.2 million. These will expire annually at March 31 over the next twenty (20) years.

13. Commitments & Contingencies

Leases

The Company leases all of its executive offices, research, marketing and manufacturing facilities under non-cancellable operating leases.

The lease for our facility located in Camarillo, California was amended in December 2008 and is now leased through February 2014. The lease payment adjusts annually based on the change in the Consumer Price Index (CPI).

In 2001, the Company entered into a 10-year lease for its Ann Arbor, MI facility with two 5-year options to renew at a lease rate tied to the CPI, with a minimum increase for each 5-year option. The original lease included the right of first refusal to purchase the facility and was scheduled to expire in May 31, 2011. In January 2010, the Company amended the lease terms and extended the lease to May 31, 2021. The new lease represents a 19% reduction in lease payments over the new lease term, or approximately $1.6 million in savings. The Company retained the right of first refusal to purchase the property during the new lease term. In addition, the Company negotiated an option to purchase the facility on May 31, 2016 for no less than $7.1

million. Rent decreased from $58,689 per month to $50,754 per month commencing January, 2010 through May, 2011, then will decrease to $48,238 per month from June, 2011 through May, 2016 and will increase to $52,432 in June, 2016 through the remainder of the lease term.

Minimum future lease payments under all non-cancellable operating leases are as follows:

2013	$ 968,000
2014	945,000
2015	579,000
2016	583,000
2017	621,000
Thereafter	2,621,000
Total	**$ 6,317,000**

Rent expense was approximately $998,000 and $982,000 in fiscal 2012 and fiscal 2011, respectively.

Legal

The Company is, from time to time, subject to legal and other matters in the normal course of its business. While the results of such matters cannot be predicted with certainty, management does not believe that the final outcome of any pending matters will have a material effect on the financial position and results of operations of the Company.

14. Quarterly Financial Data

The table below lists financial information (unaudited) by quarter for each of the two fiscal years ended March 31, 2012 and 2011.

2012	**First**	**Second**	**Third**	**Fourth**	**Total Year**
Net Sales	$ 8,120,000	$ 8,352,000	$ 6,518,000	$ 6,505,000	$ 29,495,000
Cost of Products Sold	4,742,000	4,785,000	3,828,000	4,282,000	17,637,000
Gross Profit	3,378,000	3,567,000	2,690,000	2,223,000	11,858,000
Research & Development Expenses	1,692,000	1,714,000	1,660,000	1,475,000	6,541,000
Selling, General & Administrative Expenses	2,116,000	2,207,000	1,890,000	1,768,000	7,981,000
Net Income(Loss)	$ 18,000	$ (254,000)	$ (812,000)	$ (1,064,000)	$ (2,112,000)
Basic and diluted Income(Loss) per Common Share	$ 0.00	$ (0.01)	$ (0.03)	$ (0.03)	$ (0.07)
Weighted Average Common Shares Outstanding	30,687,000	30,827,000	30,972,000	31,006,000	30,873,000

2011	**First**	**Second**	**Third**	**Fourth**	**Total Year**
Net Sales	$ 6,253,000	$ 6,999,000	$ 7,720,000	$ 7,866,000	$ 28,838,000
Cost of Products Sold	3,335,000	4,097,000	4,636,000	4,411,000	16,479,000
Gross Profit	2,918,000	2,902,000	3,084,000	3,455,000	12,359,000
Research & Development Expenses	1,288,000	1,303,000	1,362,000	1,678,000	5,631,000
Selling, General & Administrative Expenses	1,891,000	1,784,000	1,892,000	1,986,000	7,553,000
Net Loss	$ (273,000)	$ (398,000)	$ (649,000)	$ (562,000)	$ (1,882,000)
Basic and diluted Loss per Common Share	$ (0.01)	$ (0.02)	$ (0.03)	$ (0.02)	$ (0.07)
Weighted Average Common Shares Outstanding	24,675,000	25,659,000	25,908,000	29,285,000	26,366,000

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None

Item 9A. CONTROLS AND PROCEDURES

Disclosure Controls

Our Chief Executive Officer and Chief Financial Officer (the Certifying Officers) are responsible for establishing and maintaining disclosure controls and procedures for the Company. The Certifying Officers have designed such disclosure controls and procedures to ensure that material information is made known to them, particularly during the period in which this report was prepared. The Certifying Officers have evaluated the effectiveness of the Company's disclosure controls and procedures (as such terms are defined in Exchange Act Rules 13a-15(e) and 15d-15(e) (the Rules) under the Securities Exchange Act of 1934 (or Exchange Act)) as of the end of the period covered by this Annual Report and believe that the Company's disclosure controls and procedures are effective based on the required evaluation.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Exchange Act. Under the supervision and with the participation of our management, including the Certifying Officers, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of March 31, 2012 based on the criteria set forth in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the criteria set forth in *Internal Control – Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of March 31, 2012.

This Annual Report does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting. We were not required to have, nor have we engaged our independent registered public accounting firm to perform, an audit on our internal control over financial reporting pursuant to the rules of the Securities and Exchange Commission that permit us to provide only managements' report in this Annual Report.

Changes in Internal Controls

During our most recent fiscal quarter, there has not occurred any change in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. OTHER INFORMATION

Not Applicable

PART III

In accordance with General Instruction G (3), and except for certain of the information called for by Items 10 and 12 which is set forth below, the information called for by Items 10 through 14 of Part III is incorporated by reference from the Company's definitive proxy statement (Proxy Statement) to be filed pursuant to Regulation 14A promulgated under the Securities Exchange Act of 1934 in connection with the Company's 2011 Annual Meeting of Stockholders.

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Code of Ethics
The Company has adopted a Code of Ethical Conduct for Senior Financial Officers, pursuant to the Sarbanes-Oxley Act of 2002. The Code of Ethics is published on the Company's web site, www.advancedphotonix.com on the Investor Relations page. The Company will also provide a copy of the Code of Ethics to any person without charge upon his or her request. Any such request should be directed to our Secretary at 2925 Boardwalk, Ann Arbor, Michigan 48104. The Company intends to make all required disclosures concerning any amendments to or waivers from the Code of Ethics on its website.

The response to the remainder of this item is incorporated by reference from the Company's Proxy Statement.

Item 11. EXECUTIVE COMPENSATION

The response to this item is incorporated by reference from the Company's Proxy Statement.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth, as of March 31, 2012, the aggregated information pertaining to all securities authorized for issuance under the Company's equity compensation plans:

Plan Category	Number of Securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance
Equity compensation plans approved by shareholders	**1,993,600**	**$1.75**	**1,045,100 (1)**
Equity compensation plans not approved by shareholders	-	-	-
Total	**1,993,600**	**$1.75**	**1,045,100 (1)**

(1) Represents shares issuable upon the grant of restricted stock and stock options.

The response to the remainder of this item is incorporated by reference from the Company's Proxy Statement.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The response to this item is incorporated by reference from the Company's Proxy Statement.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The response to this item is incorporated by reference from the Company's Proxy Statement.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

The following is a list of the financial statements, schedules and exhibits filed herewith.

(1) Financial Statements: No financial statements have been filed with this Form 10-K other than those listed in Item 8.

(2) Financial Statement Schedules: The following additional financial statement schedule is furnished herewith pursuant to the requirements of Form 10-K.

SCHEDULE II
ADVANCED PHOTONIX, INC.

Valuation and Qualifying Accounts

		Additions			
	March 31, 2011	Charged to Expense	Charged to Other Accounts	Deductions	**March 31, 2012**
Allowance for doubtful accounts	$ 47,000	$ --	$ --	$ 8,000	$ 39,000
Warranty reserves	$ 51,000	$ 4,000	$ (31,000)	$ --	$ 24,000
Deferred tax valuation allowance	$ 8,517,000	$ --	$ 634,000	$ --	$ 9,151,000

		Additions			
	March 31, 2010	Charged to Expense	Charged to Other Accounts	Deductions	**March 31, 2011**
Allowance for doubtful accounts	$ 51,000	$ --	$ --	$ 4,000	$ 47,000
Warranty reserves	$ 86,000	$ (8,000)	$ --	$ 27,000	$ 51,000
Deferred tax valuation allowance	$ 7,674,000	$ --	$ 843,000	$ --	$ 8,517,000

All other schedules for which provisions are made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions, or are disclosed in the accompanying consolidated financial statements, or are inapplicable and, therefore, have been omitted.

(3) Exhibits: The following is a list of the exhibits filed as part of this Form 10-K.

Exhibit Number	**Description**
3.1	Certificate of Incorporation of the Registrant, as amended - incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form S-1, filed on November 23, 1990
3.1.1	Amendment to Certificate of Incorporation of the Registrant, dated October 29, 1992 – incorporated by reference to the Registrant's March 31, 1996 Annual Report on Form 10-K
3.1.2	Amendment to Certificate of Incorporation of the Registrant, dated September 9, 1992 – incorporated by reference to the Registrant's March 31, 1996 Annual Report on Form 10-K
3.1.3	Amendment to Certificate of Incorporation of the Registrant, dated August 22, 2008 – incorporated by reference to Exhibit 3.1.3 to the Registrant's August 16, 2010 Quarterly Report on Form 10-Q

3.2	By-laws of the Registrant, as amended – incorporated by reference to Exhibit 3.(ii) to the Registrant's Form 8-K as filed with the Securities and Exchange Commission on June 14, 2007
4.1	Rights Agreement, by and between the Company and Continental Stock Transfer and Trust Company, as amended – incorporated by reference to Exhibit 4.1 to the Registrant's Form 8-K, filed on February 9, 2005
10.1	Advanced Photonix, Inc. 1991 Special Directors Stock Option Plan – incorporated by reference to Exhibit 10.9 to the Registrant's March 31, 1991 Annual Report on Form 10-K
10.2	Advanced Photonix, Inc. 1997 Employee Stock Option Plan – incorporated by reference to Exhibit 10.13 to the Registrant's March 30, 1997 Annual Report on Form 10-K
10.3	Amendment No. 1 to 1997 Employee Stock Option Plan of Advanced Photonix, Inc. – incorporated by reference to Exhibit 10.14 to the Registrant's December 28, 1997 Quarterly Report on Form 10-Q
10.4	Advanced Photonix, Inc. 2000 Stock Option Plan, as amended – incorporated by reference to Exhibit 10.1 to the Registrant's December 30, 2011 Quarterly Report on Form 10-Q, filed on February 13, 2012
10.5	Advanced Photonix, Inc. 2007 Equity Incentive Plan
10.6	Form of Director Restricted Stock Agreement under the 2007 Equity Incentive Plan – incorporated by reference to Exhibit 4.4 to the Registrant's Form S-8 on Registration Statement No. 333-147012, filed on October 30, 2007
10.7	Form of Employee Restricted Stock Agreement under the 2007 Equity Incentive Plan – incorporated by reference to Exhibit 4.5 to the Registrant's Form S-8 on Registration Statement No. 333-147012, filed on October 30, 2007
10.8	Form of Employee Stock Option Agreement under the 2007 Equity Incentive Plan – incorporated by reference to Exhibit 10.3 to the Registrant's December 30, 2011 Quarterly Report on Form 10-Q, filed on February 13, 2012
10.9	Lease Agreement dated February 23, 1998 between Advanced Photonix, Inc. and High Tech No. 1, Ltd. – incorporated by reference to Exhibit 10.9 to the Registrant's March 29, 1998 Annual Report on Form 10-K
10.10	Form of Indemnification Agreement provided to Directors and Principal Officers of Advanced Photonix, Inc. – incorporated by reference to Exhibit 10.15 to the Registrant's December 28, 1997 Quarterly Report on Form 10-Q
10.11	Securities Purchase Agreement, Registration Rights Agreement, Senior Subordinated Convertible Note, Warrant to Purchase Class A Common Stock, and Additional Investment Right dated October 12, 2004 between Advanced Photonix, Inc. and private investors – incorporated by reference to Exhibits 10.13 through 10.13.4 to the Registrant's Form 8-K, filed on October 12, 2004
10.12	Letters of Agreement amending the Securities Purchase Agreement and Warrant to Purchase Class A Common Stock, dated March 9, 2005, between Advanced Photonix, Inc. and private investors – incorporated by reference to Exhibits 10.2 through 10.5 to the Registrant's Form 8-K, filed on March 14, 2005
10.13	Promissory Note between Picotronix, Inc. and Advanced Photonix, Inc., dated March 10, 2005 – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on March 14, 2005
10.14	Secured Promissory Note between Advanced Photonix, Inc. and Robin Risser, dated May 2, 2005 – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on May 6, 2005
10.15	Amendment dated May 1, 2008 to Secured Promissory Note dated May 2, 2005 by and between Advanced Photonix, Inc. and Robin Risser – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on May 2, 2008

10.16	Second Amendment dated November 26, 2008 to Secured Promissory Note dated May 2, 2005 by and between Advanced Photonix, Inc. and Robin Risser – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on December 1, 2008
10.17	Secured Promissory Note between Advanced Photonix, Inc. and Steven Williamson, dated May 2, 2005 – incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K, filed on May 6, 2005
10.18	Amendment dated May 1, 2008 to Secured Promissory Note dated May 2, 2005 by and between Advanced Photonix, Inc. and Steven Williamson – incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K, filed on May 2, 2008
10.19	Second Amendment dated November 26, 2008 to Secured Promissory Note dated May 2, 2005 by and between Advanced Photonix, Inc. and Steven Williamson – incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K, filed on December 1, 2008
10.20	Convertible Loan Agreement dated September 15, 2004 between Picometrix, LLC and the Michigan Economic Development Corporation – incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K, filed on October 30, 2008
10.21	First Amendment to Convertible Loan Agreement dated December 2, 2004 between Picometrix, LLC and the Michigan Economic Development Corporation – incorporated by reference to Exhibit 10.3 to the Registrant's Form 8-K, filed on October 30, 2008
10.22	Amended and Restated Promissory Note (Line of Credit) dated March 17, 2005 by Picometrix, Inc. in favor of the Michigan Economic Development Corporation – incorporated by reference to Exhibit 10.4 to the Registrant's Form 8-K, filed on October 30, 2008
10.23	Second Amendment to Convertible Loan Agreement dated March 17, 2005 between Picometrix, LLC and the Michigan Economic Development Corporation – incorporated by reference to Exhibit 10.4 to the Registrant's Form 8-K, filed on October 30, 2008
10.24	Second Amended and Restated Promissory Note dated September 23, 2008 by Picometrix, LLC – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on October 30, 2008
10.25	Loan Agreement, dated September 15, 2005, between Picometrix, LLC and the Michigan Economic Development Corporation – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on September 16, 2005
10.26	Amended and Restated Promissory Note dated January 26, 2009 by Picometrix, LLC – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on January 30, 2009
10.27	Loan Agreement dated September 25, 2008 between Advanced Photonix, Inc. and The PrivateBank and Trust Company – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on September 29, 2008
10.28	Promissory Note (Term Loan – Prime) dated September 25, 2008 by Advanced Photonix, Inc. in favor of The PrivateBank and Trust Company – incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K, filed on September 29, 2008
10.29	Promissory Note (Line of Credit – Prime) dated September 25, 2008 by Advanced Photonix, Inc. in favor of The PrivateBank and Trust Company – incorporated by reference to Exhibit 10.3 to the Registrant's Form 8-K, filed on September 29, 2008
10.30	Continuing Security Agreement dated September 25, 2008 between Advanced Photonix, Inc. and The PrivateBank and Trust Company – incorporated by reference to Exhibit 10.4 to the Registrant's Form 8-K, filed on September 29, 2008
10.31	Continuing Guaranty dated September 25, 2008 by Picometrix, LLC and Silicon Sensors, Inc. for the benefit of The PrivateBank and Trust Company – incorporated by reference to Exhibit 10.5 to the Registrant's Form 8-K, filed on September 29, 2008

10.32	Form of Patent, Trademark and Copyright Security Agreement between Advanced Photonix, Inc. and The PrivateBank and Trust Company – incorporated by reference to Exhibit 10.6 to the Registrant's Form 8-K, filed on September 29, 2008
10.33	Form of Third Party Subscription Agreement, dated August 31, 2007 – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on September 7, 2007
10.34	Form of Insiders Subscription Agreement, dated August 31, 2007 – incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K, filed on September 7, 2007
10.35	Form of 2007 Series Warrant to Purchase Class A Common Stock, dated August 31, 2007 – incorporated by reference to Exhibit 10.3 to the Registrant's Form 8-K, filed on September 7, 2007
10.36	Form of Registration Rights Agreement, dated August 31, 2007 – incorporated by reference to Exhibit 10.4 to the Registrant's Form 8-K, filed on September 7, 2007
10.37	Insider Side Letter regarding the Warrant Exercise Price, dated August 31, 2007 – incorporated by reference to Exhibit 10.5 to the Registrant's Form 8-K, filed on September 7, 2007
10.38	Insider Side Letter regarding the Registration Rights Agreement, dated August 31, 2007 – incorporated by reference to Exhibit 10.6 to the Registrant's Form 8-K, filed on September 7, 2007
10.39	Form of Third Party Subscription Agreement, dated September 14, 2007 – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on September 19, 2007
10.40	Advanced Photonix, Inc. Executive Incentive Compensation Plan (amended and restated as of March 6, 2009) – incorporated by reference to Exhibit 10.47 to the Registrant's Form 10-K, filed on June 29, 2009
10.41	Third Amendment dated April 1, 2009 to Secured Promissory Note dated May 2, 2005 by and between Advanced Photonix, Inc. and Robin Risser – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on April 24, 2009
10.42	Third Amendment dated April 1, 2009 to Secured Promissory Note dated May 2, 2005 by and between Advanced Photonix, Inc. and Steven Williamson – incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K, filed on April 24, 2009
10.43	First Amendment to Loan Agreement dated May 29, 2009 between Advanced Photonix, Inc. and The PrivateBank and Trust Company. – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on June 3, 2009
10.44	Employment Agreement dated August 19, 2011 between Advanced Photonix, Inc. and Jeffrey Anderson – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on August 19, 2011
10.45	Employment Agreement dated August 19, 2011, between Advanced Photonix, Inc. and Richard Kurtz – incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K, filed on August 19, 2011
10.46	Employment Agreement dated August 19, 2011, between Advanced Photonix, Inc. and Robin Risser – incorporated by reference to Exhibit 10.3 to the Registrant's Form 8-K, filed on August 19, 2011
10.47	Employment Agreement dated August 19, 2011, between Advanced Photonix, Inc. and Steve Williamson – incorporated by reference to Exhibit 10.4 to the Registrant's Form 8-K, filed on August 19, 2011
10.48	Fourth Amendment dated November 30, 2009 to Secured Promissory Note dated May 2, 2005 by and between Advanced Photonix, Inc. and Robin Risser – incorporated by reference to Exhibit 10.4 to the Registrant's Form 8-K, filed on December 3, 2009
10.49	Fourth Amendment dated November 30, 2009 to Secured Promissory Note dated May 2, 2005 by and between Advanced Photonix, Inc. and Steve Williamson – incorporated by reference to Exhibit 10.5 to the Registrant's Form 8-K, filed on December 3, 2009

10.50	Fourth Addendum & Extension Agreement, dated January 8, 2010, between Picometrix, LLC and Jagar, L.L.C. – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on January 13, 2010
10.51	Debt Conversion Agreement entered into as of May 19, 2010, by and among Picometrix, LLC, Advanced Photonix, Inc. and Michigan Economic Development Corporation incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed on May 25, 2010
10.52	Debt Conversion Agreement entered into as of May 19, 2010, by and among Picometrix, LLC, Advanced Photonix, Inc., Michigan Economic Development Corporation and Michigan Strategic Fund incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K, filed on May 25, 2010
10.53	Second Amendment dated June 25, 2010 to the Loan Agreement between Advanced Photonix, Inc. and The PrivateBank and Trust Company – incorporated by reference to Exhibit 10.59 to the Registrant's March 31, 2010 Annual Report on Form 10-K
10.54	Second Amendment dated June 25, 2010 to the Promissory Note (Term Loan – Prime) by Advanced Photonix, Inc. and The PrivateBank and Trust Company – incorporated by reference to Exhibit 10.60 to the Registrant's March 31, 2010 Annual Report on Form 10-K
10.55	Second Amendment dated June 25, 2010 to the Promissory Note (Line of Credit – Prime) by Advanced Photonix, Inc. and The PrivateBank and Trust Company – incorporated by reference to Exhibit 10.61 to the Registrant's March 31, 2010 Annual Report on Form 10-K
10.56	Securities Purchase Agreement dated November 4, 2010, by and between Advanced Photonix, Inc. and In-Q-Tel, Inc. - incorporated by reference to Exhibit 10.1 to the Registrants Form 10-Q, filed on February 14, 2011
10.57	Letter Agreement dated November 4, 2010, executed by Advanced Photonix, Inc. in favor of In-Q-Tel, Inc. - incorporated by reference to Exhibit 10.2 to the Registrants Form 10-Q, filed on February 14, 2011
10.58	Development Agreement dated November 12, 2010, by and among Advanced Photonix, Inc., Picometrix, LLC and In-Q-Tel, Inc. - incorporated by reference to Exhibit 10.3 to the Registrants Form 10-Q, filed on February 14, 2011
10.59	Royalty Agreement dated November 12, 2010, by and among Advanced Photonix, Inc., Picometrix, LLC and In-Q-Tel, Inc. - incorporated by reference to Exhibit 10.4 to the Registrants Form 10-Q, filed on February 14, 2011
10.60	Amended and Restated Securities Purchase Agreement dated November 29, 2010, by and among Advanced Photonix, Inc., Robin F. Risser and Steven Williamson - incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed December 2, 2010
10.61	Class A Common Stock Purchase Warrant dated November 30, 2010, between Advanced Photonix, Inc. and Robin F. Risser - incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K, filed December 2, 2010
10.62	Class A Common Stock Purchase Warrant dated November 30, 2010, between Advanced Photonix, Inc. and Steven Williamson - incorporated by reference to Exhibit 10.3 to the Registrant's Form 8-K, filed December 2, 2010
10.63	Fifth Amendment dated November 29, 2010 to Secured Promissory Note dated May 2, 2005 by and between Advanced Photonix, Inc. and Robin F. Risser - incorporated by reference to Exhibit 10.4 to the Registrant's Form 8-K, filed December 2, 2010
10.64	Fifth Amendment dated November 29, 2010 to Secured Promissory Note dated May 2, 2005 by and between Advanced Photonix, Inc. and Steven Williamson - incorporated by reference to Exhibit 10.5 to the Registrant's Form 8-K, filed December 2, 2010
10.65	Third Amendment dated August 27, 2010 to the Loan Agreement between Advanced Photonix, Inc. and The PrivateBank and Trust Company – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed August 27, 2010

10.66	Fourth Amendment dated November 30, 2010 to the Loan Agreement between Advanced Photonix, Inc. and The PrivateBank and Trust Company – incorporated by reference to Exhibit 10.6 to the Registrant's Form 8-K, filed December 2, 2010
10.67	Underwriting Agreement dated January 6, 2011 between Advanced Photonix, Inc. and B. Riley & Co., LLC – incorporated by reference to Exhibit 1.1 to the Registrant's Form 8-K, filed January 1, 2011
10.68	Underwriting Agreement dated February 25, 2011 between Advanced Photonix, Inc. and B. Riley & Co., LLC – incorporated by reference to Exhibit 1.1 to the Registrant's Form 8-K, filed March 2, 2011
10.69	Fifth Amendment dated September 23, 2011 to the Loan Agreement between Advanced Photonix, Inc. and The PrivateBank and Trust Company – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed September 26, 2011
10.70	Amendment dated September 23, 2011 to the Promissory Note (Term Loan-Prime) by Advanced Photonix, Inc. in favor of The PrivateBank and Trust Company – incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K, filed September 26, 2011
10.71	Amendment dated September 23, 2011 to the Promissory Note (Line of Credit - Prime) by Advanced Photonix, Inc. in favor of The PrivateBank and Trust Company – incorporated by reference to Exhibit 10.3 to the Registrant's Form 8-K, filed September 26, 2011
10.72	Loan and Security Agreement dated as of January 31, 2012 by and among Silicon Valley Bank, Advanced Photonix, Inc. and Picometrix, LLC – incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, filed February 3, 2012
10.73	Loan and Security Agreement (EX-IM Loan Facility) dated as of January 31, 2012 by and among Silicon Valley Bank, Advanced Photonix, Inc. and Picometrix, LLC – incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K, filed February 3, 2012
10.74	Export-Import Bank of the United States Working Capital Guarantee Program Borrower Agreement dated as of January 31, 2012 made by Advanced Photonix, Inc. and Picometrix, LLC in favor of the Export Import Bank of the United States and Silicon Valley Bank – incorporated by reference to Exhibit 10.3 to the Registrant's Form 8-K, filed February 3, 2012
21.1	List of Subsidiaries of Registrant
23.1.	Consent of BDO USA, LLP
31.1	Certification of the Registrant's Chairman, Chief Executive Officer and Director pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of the Registrant's Chairman, Chief Financial Officer and Director pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

SIGNATURES

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

ADVANCED PHOTONIX, INC.

By: /s/ Richard Kurtz
Chief Executive Officer and President

Date: June 29, 2012

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

Signature	Title	Date
/s/ Richard D. Kurtz Richard D. Kurtz	Chairman of the Board, President, and Chief Executive Officer (principal executive Officer)	June 29, 2012
/s/ Robin Risser Robin Risser	Chief Operating Officer	June 29, 2012
/s/ Jeff Anderson Jeff Anderson	Chief Financial Officer and Director (principal financial and accounting Officer)	June 29, 2012
/s/ M. Scott Farese M. Scott Farese	Director	June 29, 2012
/s/ Lance Brewer Lance Brewer	Director	June 29, 2012
/s/ Donald Pastor Donald Pastor	Director	June 29, 2012
/s/ Stephen P. Soltwedel Stephen P. Soltwedel	Director	June 29, 2012

Exhibit 21.1

LIST OF SUBSIDIARIES OF REGISTRANT

Picometrix, LLC, a Delaware limited liability company

Silicon Sensors, Inc., a Delaware corporation

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders
of Advanced Photonix, Inc.
Ann Arbor, Michigan

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-120317, No. 333-128706, No. 333-132976, No. 333-147802, No. 333-170607 and No. 133-171390) and Form S-8 (No. 333-08972, No. 333-95301, No. 333-57068, No. 333-124708 and No. 333-147012) of Advanced Photonix, Inc. of our report dated June 29, 2012 relating to the consolidated financial statements and schedule which appear in this Form 10-K.

/s/ BDO USA, LLP
Troy, Michigan
June 29, 2012

EXHIBIT 31.1

CERTIFICATIONS

I, Richard Kurtz, certify that:

1. I have reviewed this annual report on Form 10-K of Advanced Photonix, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: June 29, 2012

/s/ Richard Kurtz
Richard Kurtz
Chief Executive Officer

EXHIBIT 31.2

CERTIFICATIONS

I, Jeff Anderson, certify that:

1. I have reviewed this annual report on Form 10-K of Advanced Photonix, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: June 29, 2012

/s/ Jeff Anderson
Jeff Anderson
Chief Financial Officer

Exhibit No. 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE
SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Advanced Photonix, Inc. (the "Company") on Form 10-K for the fiscal year ending March 31, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Richard D. Kurtz, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: June 29, 2012

/s/ Richard Kurtz
Richard Kurtz
Chief Executive Officer

Exhibit No. 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE
SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Advanced Photonix, Inc. (the "Company") on Form 10-K for the fiscal year ending March 31, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jeff Anderson, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: June 29, 2012

/s/ Jeff Anderson
Jeff Anderson
Chief Financial Officer

Exhibit 10.5

ADVANCED PHOTONIX, INC.
2007 EQUITY INCENTIVE PLAN
As amended by the Board of Directors on June 26, 2012

1. The Plan. This 2007 Equity Incentive Plan (the "**Plan**") is intended to encourage ownership of stock of Advanced Photonix, Inc. (the "**Corporation**") by employees and non-employee directors of, and consultants and advisors to, the Corporation and its subsidiaries and to provide additional incentive for them to promote the success of the business of the Corporation.

2. Types of Awards. The following types of awards (each, an "**Award**") may be granted: (a) options intended to qualify as incentive stock options ("**ISOs**") within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the "**Code**"), (b) options not intended to qualify as ISOs ("**NSOs**" and together with ISOs, "**Options**") and (c) restricted stock grants ("**Stock Grants**").

3. Stock Subject to the Plan. Subject to the provisions of Section 10 hereof, the total number of shares of Class A Common Stock, par value $.001 per share, of the Corporation (the "**Stock**") which may be issued pursuant to Awards issued under the Plan is 2,500,000, of which a maximum of 1,500,000 may be issued upon the exercise of ISOs. Shares issued under the Plan may be authorized but unissued shares of Stock or Stock held as treasury stock. The following shares of Stock may be used for further issuance of Awards under the Plan: (i) shares of Stock which have been forfeited under a Stock Grant, (ii) shares of Stock which are allocable to the unexercised portion of an Option which has expired or been terminated, and (iii) shares of Stock withheld upon exercise of an Option to satisfy the exercise price of such Option.

4. Administration. The Plan shall be administered by a committee (the "**Committee**") composed of no fewer than three (3) members of the Board of Directors of the Corporation (the "**Board**") each of whom meets the definition of "outside director" under the provisions of Section 162(m) of the Code and the definition of "non-employee director" under the provisions of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**") or rules and regulations promulgated thereunder. Except as otherwise provided herein, the Committee shall have plenary authority, in its discretion, to determine to whom among the eligible persons Awards shall be granted, the number of shares of Stock subject to each Award, the terms of each Award including the option exercise price and the vesting schedule of each option, and whether any Option is intended to be an ISO or an NSO. The Committee shall have plenary authority, subject to the express provisions of the Plan, to interpret the Plan, to prescribe, amend and rescind any rules and regulations relating to the Plan and to take such other action in connection with the Plan as it deems necessary or advisable. The interpretation, construction and administration by the Committee of any provisions of the Plan or of any Award granted hereunder shall be final and binding on recipients of Awards hereunder and no member of the Board or the Committee shall be liable for any action or determination made in good faith with respect to the Plan or any Award granted thereunder by the Committee.

5. Eligibility. All employees and non-employee directors of, and consultants and advisors to, the Corporation and its subsidiaries (including subsidiaries which become such after adoption of the Plan) shall be eligible for Awards under the Plan. In making the determination as to persons to whom Awards shall be granted and as to the number of shares of Stock to be covered by such Awards, the Committee shall take into account the duties of the respective persons, their present and potential contributions to the success of the Corporation and such other factors as the Committee shall deem relevant in connection with accomplishing the purpose of the Plan. The adoption of the Plan shall not be deemed to give any employee, non-employee director, consultant and/or advisor any right to an Award, except to the extent and upon such terms and conditions as may be determined by the Committee. Neither the Plan nor any Award granted hereunder is intended to or shall confer upon any Awardee any right with respect to continuation of any employment, consulting or advisory relationship with the Corporation or any of its subsidiaries.

6. Stock Grant to Non-Employee Directors.

(a) Grant upon Initial Election. A Stock Grant equal to that number of shares of Stock as determined in accordance with this Section 6(a) shall automatically be granted under the Plan to each non-employee director who is first appointed or elected to the Board on or after the Effective Date (as such term is defined in Section 11 below) and prior to the expiration of the Plan on the date of such appointment or election of such non-employee director. The number of shares of Stock subject to the Stock Grant made pursuant to this Section 6(a) shall be determined by (i) dividing $25,000 by the Fair Market Value of a share of Stock on the date of the grant, and (ii) multiplying such amount by a fraction having a numerator equal to the number of days elapsed between the date of the director's initial appointment or election and the following September 1st and having a denominator equal to 365, and (iii) rounding the resulting number to the nearest whole number of shares.

(b) Annual Grant.

(i) Subject to Section 6(b)(iii) below, commencing September 1, 2008 and annually thereafter on September 1 of each year through September 1, 2011, each then serving non-employee director shall be automatically granted a Stock Grant equal to that number of shares of Stock as determined by dividing $25,000 by the Fair Market Value of a share of Stock on the date of the grant (rounded to the nearest whole number of shares).

(ii)Subject to Section 6(b)(iii) below, commencing September 1, 2012 and annually thereafter on September 1 of each year, each then serving non-employee director shall be automatically granted that number of Options having a value of $25,000 calculated on the grant date in accordance with the Black-Scholes option pricing model (utilizing the same assumptions that the Company utilizes in preparation of its financial statements), with the number of Options rounded up to the nearest whole share.

(iii)Any non-employee director who received an initial option grant under any plan or arrangement of the Corporation or its subsidiaries in effect prior to the Effective Date, which option is not fully vested on the date of the Annual Grant, shall not be entitled to receive an annual Stock Grant pursuant to Section 6(b)(i) or an annual Option grant pursuant to Section 6(b)(ii), as applicable.

(c) Terms of Director Grants. Each Stock Grant made pursuant to this Section 6 shall conform in all respects to the provisions of Section 9 below, provided that (i) Section 9(e)(ii) shall not apply to any such Stock Grant and (ii) the only Condition to which such Stock Grant shall be subject is that the Grantee must continue to serve as a non-employee director of the Corporation for a period of six months following the date of grant.

(d) Termination of Previous Automatic Option Grants. From and after the Effective Date no options or stock grants shall be made to any non-employee director pursuant to any plan or arrangement of the Corporation or its subsidiaries in effect prior to the Effective Date.

7. Certain Limits on Awards.

(a) Limit on ISOs. The aggregate Fair Market Value (determined as of the date of the Option grant) of Stock with respect to which ISOs granted to an employee (whether under the Plan or under any other stock option plan of the Corporation or its subsidiaries) become exercisable for the first time in any calendar year may not exceed $100,000 (or such other amount as the Internal Revenue Service may decide from time to time for purposes of Section 422 of the Code). If any grant of Options is made to an Awardee in excess of the limits provided in the Code, the excess shall automatically be treated as an NSO. Only employees of the Corporation or any of its subsidiaries shall be eligible to receive the grant of an ISO.

(b) Limit on all Awards. The number of shares of Stock for which an Awardee may be granted Awards under the Plan during any calendar year shall not exceed 500,000 subject to the provision of Section 10.

8. Terms and Conditions of Options. Options shall be granted subject to the following terms and conditions and such other terms and conditions as the Committee may prescribe:

(a) Form of Option. Each Option granted pursuant to the Plan shall be evidenced by an agreement (the "**Option Agreement**") which shall clearly identify the status of the Option granted (i.e., whether an ISO or an NSO) and which shall be in such form as the Committee shall from time to time approve. The Option Agreement shall comply in all respects with the terms and conditions of the Plan and may contain such additional provisions, including, without limitation, provisions for permitting the exercise of the Option over time or subject to performance conditions, and other restrictions upon the exercise of the Option, as the Committee shall deem advisable.

(b) Stated Term. The term of each Option granted shall be for a maximum of ten years from the date of granting thereof, or a maximum of five years in the case of an ISO granted to a 10% Holder (as such term is defined in Section 15), but may be for a lesser period or be subject to earlier termination as provided by the Committee or the provisions of the Plan or the Option Agreement.

(c) Option Exercise Price. Each Option shall state a per share option exercise price, which shall be not less than 100% of the Fair Market Value of a share of Stock on the date of the Option grant, nor less than 110% of such Fair Market Value in the case of an ISO granted to a 10% Holder. The Fair Market Value of shares of Stock shall be determined by the Committee based upon (i) the closing price of the Stock on the NYSE Amex Exchange (or such other exchange on which the Stock is listed) on the date of the granting of the Award, or (ii) such other measure of Fair Market Value as may reasonably be determined by the Board (but consistent with the rules under Section 409A of the Code). Except as otherwise set forth in this Plan, "**Fair Market Value**" as used throughout the Plan shall mean the fair market value as determined in accordance with this Section 8(c).

(d) Exercise of Options. An Option may be exercised from time to time as to any part or all of the Stock as to which it is then exercisable in accordance with its terms, provided, however, that an Option may not be exercised as to fewer than 100 shares at any time (or for the remaining shares then purchasable under the Option, if fewer than 100 shares). In addition, except as otherwise permitted by the Committee, Options granted hereunder may not be exercised prior to the expiration of six months from the date of Option grant. The Option exercise price shall be paid in full at the time of the exercise thereof (i) in cash, (ii) by the transfer to the Corporation of shares of its Stock (including by withholding shares of Stock deliverable upon exercise of the Option) with a Fair Market Value equal to the purchase price of the Stock issuable upon exercise of such Option, (iii) if permitted under the Corporation's policies then in effect (including, but not limited to, the Corporation's Securities Trading Policy), by authorizing the Corporation to arrange a sale on behalf of the Optionee of some or all of the shares to be acquired upon the exercise of the Option and the remittance to the Corporation of a sufficient portion of the sale proceeds to pay the exercise price for all of the shares as to which the Option is being exercised, any withholding or employment taxes and all applicable fees, including brokerage fees, resulting from such exercise and sale, or (iv) by a combination of cash and the transfer of shares of Stock pursuant to clause (ii) above; *provided, however*, that with respect to the method of payment set forth in clause (ii) above, (A) the withholding of shares of Stock deliverable upon exercise of the Option shall not be permitted with respect to the exercise of any Option intended to qualify as an ISO, and (B) "**Fair Market Value**" shall mean the closing price of the Stock on the NYSE Amex Exchange (or such other exchange on which the Stock is listed) on the trading date (which, for purposes of this Section 8(d), means a day on which the NYSE Amex Exchange (or such other exchange on which the Stock is listed) is open for trading) immediately preceding the date the Option is exercised. The holder of an Option shall not have any rights as a stockholder with respect to the Stock issuable upon exercise of an Option prior to the date of exercise. Notwithstanding anything to the contrary contained therein, the methods of exercise set forth in this Section 8(d) shall apply to any Options covered by any Option Agreement issued prior to January 17, 2012.

(e) Non-Transferability of Options. Except as provided in the following sentence, an Option shall not be transferable other than by will or the laws of descent and distribution and shall be exercisable during the lifetime of the Optionee only by him or his legal representative. If permitted by the Committee in its sole discretion, NSOs may be transferred by the Optionee by gift to members of the Optionee's immediate family, including trusts for the benefit of such family members and partnerships or limited liability companies in which such family members are the only owners. A transferred NSO shall be subject to all of the same terms and conditions of the Plan and the Option Agreement as if such NSO had not been transferred.

(f) Cessation of Service.

(i) Cessation of Service. For purposes of this Section 8(f) and Section 9(e), the phrase "cessation of service" or any variation thereof shall mean (A) with respect to an employee of the Corporation, such employee's ceasing to be employed by the Corporation or any of its subsidiaries, (B) with respect to a non-employee director, such director's ceasing to be a member of the Board, or (C) with respect to a consultant or an advisor, termination of the contractual relationship between such consultant or advisor and the Corporation, in each instance for any reason, including in the case of employees, termination as a result of Retirement or Disability. The phrase "**Termination Date**" shall mean the date of any cessation of service.

(ii) Treatment of Employee Options.

(A) Death or Disability. In the event an employee ceases to provide services to the Corporation or any of its subsidiaries as a result of Disability, Options granted to such employee which are subject solely to time based conditions shall continue to vest in accordance with their terms as if such employee continued to provide services to the Corporation and shall continue to be exercisable for their stated term, provided that such employee was employed by the Corporation or any of its subsidiaries for a period of at least one year following the grant of the Option and prior to the Termination Date. In the event of an employee's death (1) while providing services to the Corporation or any of its subsidiaries or (2) following a cessation of service due to Disability, the Option shall become fully exercisable by the employee's estate and shall remain exercisable for the remainder of the Option term as set forth in the Option Agreement, provided that such employee was employed by the Corporation or any of its subsidiaries for a period of at least one year following the grant of the Option and prior to the Termination Date.

(B) Other Cessation of Service. Except as otherwise set forth in Section 8(f)(ii)(A) or in the Option Agreement, the number of shares of Stock which may be purchased upon the exercise of an Option shall not exceed the number of shares of Stock as to which such Option was exercisable pursuant to the Plan and the Option Agreement as of the Termination Date. If the employee's cessation of service was as a result of the employee's Retirement, the Option shall remain exercisable for the balance of its stated term, provided that such employee was employed by the Corporation or any of its subsidiaries for a period of at least one year following the grant of the Option and prior to the Termination Date. Except as otherwise set forth in this Section 8(f) or in the Option Agreement, an Option granted to an employee shall remain exercisable for three (3) months following the Termination Date (or, if shorter, the remainder of the Option term as set forth in the Option Agreement). For purposes of the previous sentence only, with respect to NSO grants only, an employee who continues to provide services to the Corporation as a non-employee director of the Corporation or as a consultant to the Corporation following termination of his employment by the Corporation or any of its subsidiaries shall be deemed to continue to be an employee of the Corporation for the period during which he provides services as a director or consultant. Notwithstanding anything to the contrary herein, the Committee may, in its sole discretion when it finds that such an action would be in the best interests of the Corporation, accelerate or waive in whole or in part any or all remaining time based restrictions with respect to all or part of an Option Grant.

(C) Definitions. The term "**Retirement**" as used in this Section 8(f)(ii) means the termination of the employment of an Optionee with the Corporation or its subsidiary on or after (A) the Optionee's 65th birthday or (B) the Optionee's 55th birthday if the Optionee has completed ten years of service with the Corporation or a subsidiary of the Corporation. The term "**Disability**" as used in this Section 8(f) shall have the meaning set forth in Section 22(e)(3) of the Code.

(iii) Treatment of Consultant and Advisor Options. Except as otherwise set forth in the Option Agreement, in the event of a cessation of service of a consultant or advisor, the number of shares of Stock which may be purchased upon the exercise of an Option shall not exceed the number of shares of Stock as to which such Option was exercisable pursuant to the Plan and the Option Agreement as of the Termination Date. Except as otherwise set forth in the Option Agreement, an Option granted to a consultant or advisor shall remain exercisable by such consultant or advisor for a period of three (3) months following the Termination Date (or, if shorter, the remainder of the Option term as set forth in the Option Agreement).

(iv) Other Limitations. Notwithstanding anything to the contrary in this Section 8(f), if the cessation of service is as a result of gross misconduct, including without limitation, violations of applicable Corporation policies or legal or ethical standards, as determined by the Corporation, all rights under the Option shall terminate on the Termination Date. In addition to the foregoing, the Committee may impose such other limitations and restrictions on the exercise of an Option following the Termination Date as it deems appropriate, including a provision for the termination of an Option in the event of the breach by the Optionee of any of his contractual or other obligations to the Corporation.

9. Terms and Conditions of Stock Grants. The Committee may in its discretion grant Stock Grants, which shall be made subject to the following terms and conditions and such other terms and conditions as the Committee may prescribe:

(a) Form of Grant. Each Stock Grant shall be evidenced by an agreement (the "**Restricted Stock Agreement**") executed by the Corporation and the Grantee, in such form as the Committee shall approve, which Agreement shall be subject to the terms and conditions set forth in this Section 9 and shall contain such additional terms and conditions not inconsistent with the Plan as the Committee shall prescribe.

(b) Number of Shares Subject to an Award; Consideration. The Restricted Stock Agreement shall specify the number of shares of Stock subject to the Stock Grant. A Stock Grant shall be issued for such consideration as the Committee may determine appropriate and may be issued for no cash consideration or for such minimum cash consideration as may be required by applicable law.

(c) Conditions. Each Stock Grant shall be subject to such conditions as the Committee shall establish (the "**Conditions**"), which may include, but not be limited to, conditions which are based upon the continued employment or service of the Grantee over a specified period of time, or upon the attainment by the Corporation of one or more measures of the Corporation's operating performance, such as earnings, revenue, operating or net cash flows, financial return ratios, total shareholder return or such other measures as may be determined by the Committee (the "**Performance Conditions**"), or upon a combination of such factors. Measures of performance may be based upon the performance of the Corporation or upon the performance of a defined business unit or function for which the Grantee has responsibility or over which the Grantee has influence. The Grantee shall have a vested right to the Stock subject to the Stock Grant to the extent that the Conditions applicable to such Stock Grant have been satisfied. A Grantee shall forfeit all of his right, title and interest in and to any Stock subject to a Stock Grant in the event that (and to the extent that) such Conditions are not satisfied.

(d) Limitations on Transferability. As used herein, the term "**Restricted Period**" means, with respect to any shares of Stock subject to a Stock Grant, the period beginning on the Award Date and ending on the date on which the Conditions applicable to the Stock Grant have been satisfied. During the Restricted Period, the Grantee will not be permitted to sell, transfer, exchange, pledge, assign or otherwise dispose of any shares of Stock subject to the Stock Grant (except for shares of Stock as to which the Grantee's rights have vested); provided, however, that the Committee in its discretion may permit the transfer by the Grantee by gift of shares of Stock to members of the Grantee's immediate family, including trusts for the benefit of such family members and partnerships or limited liability companies in which such family members are the only owners, it being understood that any shares of Stock so transferred shall remain subject to all of the terms and conditions of the Plan and the applicable Restricted Stock Agreement as if the shares of Stock had not been transferred. Except as provided in the preceding sentence, any attempt to transfer shares of Stock subject to a Stock Grant prior to the Conditions applicable to such Stock Grant being satisfied shall be ineffective.

(e) Cessation of Service.

(i) Upon cessation of service for any reason during the Restricted Period, all shares of Stock subject to a Stock Grant as to which the Conditions have not lapsed or been satisfied or waived shall be forfeited by the Grantee and will be treated as owned by the Corporation.

(ii) In the event of the Grantee's cessation of service for any reason, the Committee may, in its sole discretion when it finds that such an action would be in the best interests of the Corporation, accelerate or waive in whole or in part any or all time-based or continuous service Conditions or Performance Conditions with respect to all or part of such Grantee's Stock Grant, except as to any Stock Grant that is intended to constitute "performance-based compensation" under Section 162(m) of the Code.

(f) Rights as a Stockholder. Except as otherwise provided herein or as the Committee may otherwise determine, a Grantee shall have all of the rights of a stockholder of the Corporation, including the right to vote the shares subject to a Stock Grant and to receive dividends and other distributions thereon, provided that distributions in the form of stock shall be subject to all of the terms and conditions of the Plan and the Restricted Stock Agreement.

10. Changes in Capitalization, Liquidations and Mergers.

(a) Changes in Capitalization. In the event of a stock dividend, recapitalization, reclassification, split-up or combination of shares, any extraordinary cash dividend or other similar corporate transaction or event, the Committee shall have the power to make appropriate adjustments of the exercise price under Options and of the number and kind of shares as to which such Options are then exercisable, to the end that the Grantee's proportionate interest shall be maintained as before the occurrence of such event. An appropriate adjustment shall also be made in the total number and kind of shares of Stock reserved for the future granting of Awards under this Plan (and to the maximum number of Awards, including ISOs, that may be granted). Any such adjustment made by the Committee pursuant to this Plan shall be binding upon the holders of Awards hereunder for all purposes under the Plan.

(b) Mergers, Consolidation, Reorganization, Etc. In the event of a sale of all or substantially all of the assets of the Corporation or in the event of a merger or consolidation of the Corporation into or with another company (a "**Merger**") in circumstances in which the shareholders of the Corporation immediately prior to the Merger do not own a majority of the securities of the successor entity entitled to vote generally in the election of the directors, board of managers, or persons performing similar functions, for the successor entity, the Board at its election shall as of a date not later than ten days prior to the date of any such Merger: (i) with respect to outstanding Options, make such arrangements as it determines appropriate (A) to cause each Option to be exchanged or converted into an award of options to purchase securities of the successor entity having an equivalent value as the Option to be converted, or (B) to provide that all then outstanding Options shall become exercisable in full, or (C) to take such other action as it determines appropriate; (ii) with respect to outstanding Stock Grants which are not fully vested and are subject solely to continuous service Conditions, make arrangements as it determines appropriate (A) to cause each Stock Grant to be exchanged or converted into a restricted stock grant covering securities of the successor entity having an equivalent value to the unvested portion of the Stock Grant to be converted, or (B) to provide that all such Conditions to which such Stock Grants are subject are satisfied; and (iii) with respect to Stock Grants which are not fully vested and are subject to Performance Conditions, make arrangements as it determines appropriate (A) to cause each such Stock Grant to be exchanged or converted into a restricted stock grant covering securities of the successor entity having an equivalent value of the unvested portion of the Stock Grant and to amend the applicable Performance Conditions as appropriate, including by converting such Performance Conditions to continuous service Conditions, or (B) to provide that all such Conditions to which such Stock Grants are subject are satisfied or waived.

(c) Dissolution of the Corporation.

(i) In the event of the dissolution of the Corporation, whether voluntary or otherwise, (A) all Stock Grants to the extent the applicable Conditions have not been met by the date specified in subsection (ii) below shall be forfeited, and (B) all Options outstanding under the Plan shall be exercised, if at all, within the ninety day period commencing on the date specified in subsection (ii) below and shall be exercisable to the extent only of, and with respect to, any or all shares of Stock for which they could have been exercised immediately prior to the date specified in subsection (ii). All Options not exercisable immediately prior to the date specified in subsection (ii) shall terminate upon such date, and all Options exercisable immediately prior to such date shall, to the extent not exercised within the ninety-day period commencing on such date, terminate at the end of such ninety-day period.

(ii) The date specified in this subsection (ii) is the date of the earliest to occur of the following events: (A) The entry, in a court having jurisdiction, of an order that the Corporation be liquidated or dissolved; (B) Adoption by the shareholders of the Corporation of a resolution resolving that the Corporation be dissolved voluntarily; or (C) Adoption by the shareholders of the Corporation of a resolution to the effect that the Corporation cannot, by reason of its liabilities, continue its business and that it is advisable to dissolve the Corporation.

(d) No Constraint on Corporate Action. Nothing in the Plan shall be construed (i) to limit or impair or otherwise affect the Corporation's right or power to make adjustments, reclassifications, reorganizations or changes of its capital or business structure, or to merge or consolidate, dissolve or sell or transfer all or any part of its business or assets, or (ii) except as provided in Section 13, to limit the right or power of the Corporation or any subsidiary to take any action which such entity deems to be necessary or appropriate.

(e) Limitation on Adjustments to Awards. Notwithstanding anything to the contrary in this Section 10, (i) no adjustments shall be made with respect to an Award to an employee covered under Section 162(m) of the Code to the extent such adjustment would cause an Award intended to qualify as "performance-based compensation" under that Section of the Code to fail to so qualify; and (ii) no adjustment pursuant to this Section 10 shall be made with respect to any Option which is an ISO without the consent of the Optionee, if such adjustment would be a modification of such Option within the meaning of Section 424(h) of the Code.

11. Stockholder Approval. The Plan is subject to the approval by the affirmative vote of a majority of the shares of Stock present in person or represented by proxy at a duly held meeting of the stockholders of the Corporation within twelve months after the date of the adoption of the Plan by the Board (the date of which approval is the "**Effective Date**"). No Award granted under the Plan shall vest prior to the Effective Date. If the Effective Date shall not occur on or before July 8, 2008, the Plan and all then outstanding Awards made hereunder shall automatically terminate and be of no further force and effect.

12. Term of Plan. The Plan, if approved by the Corporation's stockholders, will be effective July 9, 2007. The Plan shall terminate on July 8, 2017 and no Awards shall be granted after such date, provided that the Board may at any time terminate the Plan prior thereto. Except as provided in Section 10, the termination of the Plan shall not affect the rights of Awardees under Awards previously granted to them and all Awards shall continue in full force and effect after termination of the Plan, except as such Awards may lapse or be terminated by the terms of the Plan, the Option Agreement or the Restricted Stock Agreement.

13. Amendment of the Plan. The Board shall have complete power and authority to modify or amend the Plan (including the forms of Option Agreement and Restricted Stock Agreement) from time to time in such respects as it shall deem advisable; provided, however, that the Board shall not, without approval by the affirmative vote of a majority of the shares of Stock present in person or represented by proxy at a duly held meeting of the stockholders of the Corporation, (i) increase the maximum number shares of Stock which in the aggregate are subject to Awards or which may be granted pursuant to Options under the Plan (except as provided by Section 10), (ii) extend the term of the Plan or the period during which Awards may be granted or Options exercised, (iii) reduce the Option exercise price below 100% (110% in the case of an ISO granted to a 10% Holder) of the Fair Market Value of the Stock issuable upon exercise of the Option at the time of the granting thereof, other than to change the manner of determining the Fair Market Value thereof (consistent with the rules under Section 409A of the Code), (iv) except as provided by Section 10, increase the maximum number of shares of Stock for which an Awardee may be granted an Award during any calendar year under the Plan pursuant to Section 7(b), (v) materially increase the benefits accruing to participants under the Plan, (vi) modify the requirements as to eligibility for participation in the Plan, or (vii) with respect to Options which are intended to qualify as ISOs, amend the Plan in any respect which would cause such Options to no longer qualify for ISO treatment pursuant to the Code. No amendment of the Plan shall, without the consent of the Awardee, adversely affect the rights of such Awardee under any outstanding Option Agreement or Restricted Stock Agreement.

The Plan is intended to comply with the requirements of Section 409A of the Code, without triggering the imposition of any tax penalty thereunder. To the extent necessary or advisable, the Board may amend the Plan or any Award Agreement to delete any conflicting provision and to add such other provisions as are required to fully comply with the applicable provisions of Section 409A of the Code and any other legislative or regulatory requirements applicable to the Plan.

14. Taxes. The Corporation may make such provisions as it deems appropriate for the withholding of any income, employment or other taxes which it determines is required in connection with any Award made under the Plan, including requiring the Awardee to make a cash payment to the Corporation equal to the Corporation's withholding obligation or deducting such amount from any payment of any kind otherwise due to the Awardee. The Corporation may further require notification from the Optionee upon any disposition of Stock acquired pursuant to the exercise of Options granted hereunder.

15. Code References and Definitions. Whenever reference is made in the Plan to a section of the Code, the reference shall be to said section as it is now in force or as it may hereafter be amended. The term "subsidiary" shall have the meaning given to the term "subsidiary corporation" by Section 424(f) of the Code. The terms "Incentive Stock Option" and "ISO" shall have the meanings given to them by Section 422 of the Code. The term "10% Holder" shall mean any person who, for purposes of Section 422 of the Code, beneficially owns more than 10% of the total combined voting power of all classes of Stock of the Corporation or of any subsidiary of the Corporation. The term "Optionee" means the holder of an Option granted hereunder, the term "Grantee" means the recipient of a Stock Grant made hereunder, and the term "Awardee" means an Optionee or a Grantee.

BOARD OF DIRECTORS

Richard D. Kurtz
Chairman of the Board, President and CEO

Robin Risser
COO and Director

M. Scott Farese
President of Chelsea Investments
CEO of Memacin

Lance Brewer
Partner
Brewer & Brewer Law Firm

Donald Pastor
Executive Vice President and CFO
Telephonics Corporation

Stephen P. Soltwedel
Former President of Filtertek, Inc

CORPORATE OFFCERS

Richard D. Kurtz
President, Chief Executive Officer and Director

Robin Risser
Chief Operating Officer and Director

Jeffrey Anderson
Chief Financial Officer

Steven Williamson
Chief Technology Officer

CORPORATE INFORMATION

STOCK LISTING & SYMBOL
NYSE Amex: API

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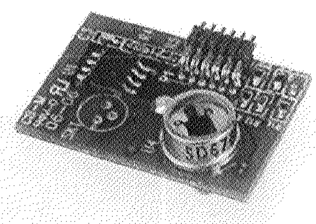
Ann Arbor, MI 48104
734-864-5688

WEBSITE
http://www.advancedphotonix.com

ANNUAL REPORT ON FORM 10-K
Shareholders may obtain without charge a copy of the Company's Annual Report on Form 10-K including the financial statements and schedules thereto filed with the Securities and Exchange Commission for its most recent fiscal year by written request to the Secretary of the Company at 2925 Boardwalk, Ann Arbor, Michigan 48104.

Where Custom Solutions Are Standard

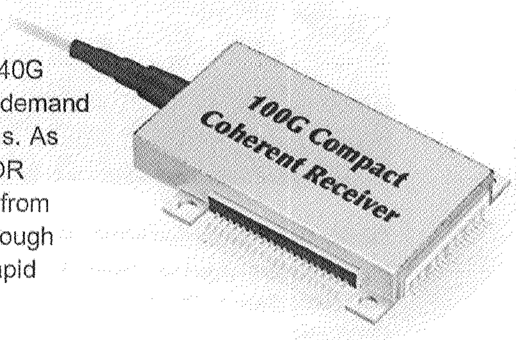
From custom-designed mask sets for silicon photodiodes and LED displays to hybrid assemblies, a collaborative design process with our customers is followed to create optimal solutions for each application. API's comprehensive design abilities and hybridization capabilities allow us to meet the demand for high reliability industrial sensors in harsh manufacturing environments and military requirement for smart sensors for improved battlefield surveillance and munitions guidance.



Leaders in Optical Optical Receivers

API has built a strong position in Telecom components through its wholly owned subsidiary, Picometrix, LLC. Since 1992 Picometrix, has focused on developing and manufacturing the fastest, most sensitive, and broadest-wavelength high-speed optical receivers on the market. Our products are found inside optical equipment from service provider systems to test equipment for the lab and manufacturing floor.

Products address the entire range of 10G, 40G and 100G to support increasing bandwidth demand driven by consumer connectivity applications. As a vertically integrated manufacture the HSOR product line delivers system improvements from superior components while saving costs through yield improvements. It also allows for the rapid development of new products.



The Innovator and Leader in Terahertz Instrumentation

API has been the leader in terahertz instrumentation since it's subsidiary, Picometrix, introduced the world's first commercial terahertz instrument in 2001, the T-Ray 2000®. Today, API's T-Ray® product platform enables our industrial and aerospace customers to solve a multitude of nondestructive testing challenges in manufacturing process and quality control. It shows promise in weapons and explosive detection for the homeland security and defense markets as well as topical imaging for the medical market.

The newly introduced T-Gauge® system is targeted at industrial web processing and converting markets. It provides a non-nuclear solution that enables manufacturers to obtain more real-time information about their processes than current instrumentation can provide, which can substantially improve quality and reduce costs.

Technical Leadership

Customers gain a competitive edge through API's innovative, high-speed, best-in-class products.

Faster Time to Market

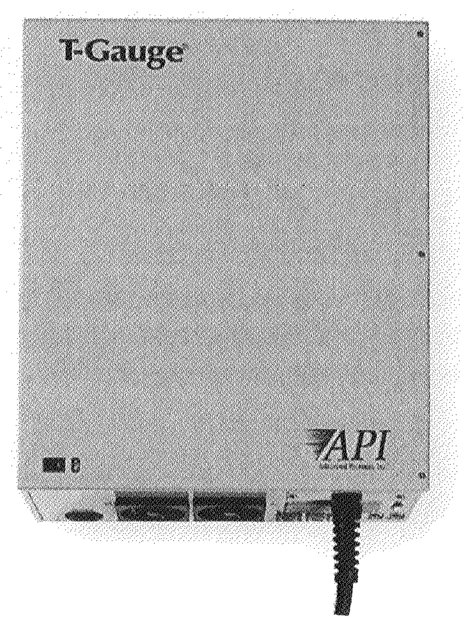
API helps customers accelerate product development cycles by leveraging its vertical integration, from material growth through packaging.

Standard and Customized Products

API provides the most cost-effective solutions to enhance customers' specific system requirements.

Broad Product Offerings

From optoelectronic devices to components and subsystems, API products cover virtually all the wavelengths.



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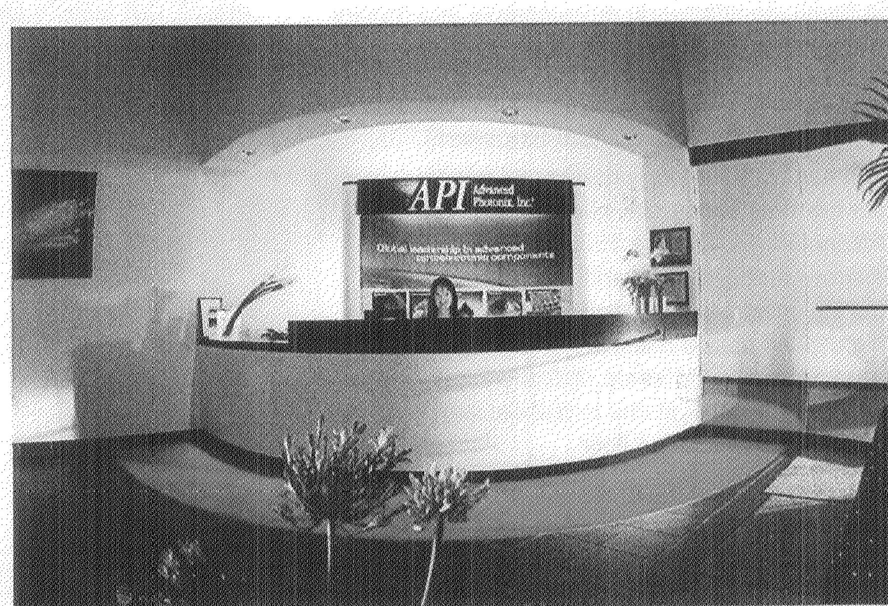

Quality Certifications/Industrial Standards

ISO 9001:2000—Approved Quality System
SSP 30312 Space—Space Station Quality System Certification
MIL-STD-45662—Calibration
MIL-I-45208—Quality Systems
MIL-Q-9858—Quality Planning
MIL-PRF-19500—Product Qualification
NHB-5300.4 NASA—Quality Systems
Telcordia GR-468

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