

ADVANCED PHOTONIX INC  
Form 10-K  
June 29, 2010

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, 2010  
OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_ .

Commission file number 1-11056

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

Delaware  
(State or Other Jurisdiction of  
Incorporation or Organization)

33-0325826  
(I.R.S. Employer  
Identification No.)

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

(734) 864-5600  
(Registrants' 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, \$0.01 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 Website, 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



Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

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 25, 2009 was approximately \$17,102,302.

Number of shares outstanding of the registrant's Common Stock as of June 24, 2010: 24,463,978 shares of Class A Common Stock and 31,691 shares of Class B Common Stock.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement to be filed pursuant to Regulation 14A promulgated under the Securities Exchange Act of 1934 in connection with the 2010 Annual Meeting of Stockholders of registrant have been incorporated by reference into Part III of this Form 10-K.

# Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

ADVANCED PHOTONIX, INC.  
ANNUAL REPORT ON FORM 10-K  
FISCAL YEAR ENDED MARCH 31, 2010

## TABLE OF CONTENTS

		Page
	<b>Part I</b>	
Item 1.	Business	4
Item 1A.	Risk Factors	12
Item 2.	Properties	21
Item 3.	Legal Proceedings	22
Item 4.	Reserved	22
	<b>Part II</b>	
Item 5.	Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	22
Item 6.	Selected Financial Data	24
Item 7.	Management’s Discussion and Analysis of Financial Condition and Results of Operations	24
Item 7A.	Quantitative and Qualitative Disclosures about Market Risk	36
Item 8.	Financial Statements and Supplementary Data	37
Item 9.	Changes In and Disagreements with Accountants on Accounting and Financial Disclosure	62
Item 9A (T).	Controls and Procedures	62
Item 9B.	Other Information	63
	<b>Part III</b>	
Item 10.	Directors, Executive Officers and Corporate Governance	64
Item 11.	Executive Compensation	64
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	64
Item 13.	Certain Relationships and Related Transactions, and Director Independence	65
Item 14.	Principal Accountant Fees and Services	65
	<b>Part IV</b>	
Item 15.	Exhibits and Financial Statement Schedules	65
Signatures		73
Ex-21.1	List of Subsidiaries of Registrant	
Ex-23.1	Consent of BDO Seidman, LLP	
Ex-31.1	Section 302 Certification of CEO	
Ex-31.2	Section 302 Certification of CFO	
Ex-32.1	Section 906 Certification of CEO	
Ex-32.2	Section 906 Certification of CFO	
Ex-10.59	Second Amendment to Loan Agreement	
Ex-10.60	Amendment to Note – Term Loan	
Ex-10.61	Amendment to Note – Line of Credit	

PART I

The information in this annual report contains certain forward-looking statements, including statements related to our business prospects, the markets for our products, and trends in our business that involve risks and uncertainties. Our actual results may differ materially from the results discussed in these forward-looking statements. Factors that might cause such a difference include those discussed in “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” “Business” and elsewhere in this annual report.

Item 1. Business

General

Advanced Photonix, Inc.® (the Company, we or API) was incorporated under the laws of the State of Delaware in June 1988. The Company is engaged in the development and manufacture of optoelectronic devices and value-added sub-systems and systems. The Company serves a variety of global Original Equipment Manufacturers (OEMs) in a variety of industries. The Company supports its customers from the initial concept and design phase of the product, through testing to full-scale production. API has two manufacturing facilities located in Camarillo, California and Ann Arbor, Michigan.

Products and Technology

Our Business

API is a leading supplier of optoelectronic semiconductors packaged into high-speed optical receivers, custom optoelectronic subsystems and Terahertz instrumentation, serving a variety of global OEM markets. Our patented high-speed optical receivers include Avalanche Photodiode technology (APD) and PIN 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 (positive-intrinsic-negative) photodiode, FILTRODE® detectors and LED assemblies. Our Terahertz sensor product line is targeted at the industrial Non-Destructive Testing (NDT), quality control, 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 application development laboratory to the factory floor.

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,
- 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,
- 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 (THz) 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 (Transceiver). 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 the Company is pursuing is Terahertz (THz) based on our T-Ray® 4000 product platform. THz is a region of the electromagnetic (EM) Spectrum that lies between microwave and infrared waves, which 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 and as a result application/market development of THz technology, led by traditional early adopters such as the military and aerospace markets, is accelerating. 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 and has been determined to have 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 54 patents or patents pending to date. In 2001, we sold the first commercial THz product, the T-Ray®2000, 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, the Company shipped its 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 QA 1000. This system is targeted at the research and industrial NDT quality control market. The T-Ray® 4000 product will also serve as a platform for future industrial process and quality control, homeland security and defense applications. In 2009, the Company entered into a significant application development contract with the U.S. Air Force for use of the T-Ray® 4000 product platform for manufacturing quality control on the next generation joint strike fighter (F-35).

## 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



## Recent Developments

Wafer Fabrication consolidation - The Company completed the consolidation and modernization of its wafer fabrication facilities during Q1 2010. Prior to this consolidation, the Company had excess wafer fabrication capacity at its three locations (including Dodgeville, WI), with the Ann Arbor, MI facility having the most modern infrastructure. The wafer fabrication facilities and equipment in its Wisconsin and California facilities had similar capabilities and both required substantial upgrade and improvement in order to maintain production capabilities. Since the Ann Arbor facility, when equipped, would have the physical capacity to produce all of the Company's current and foreseeable wafer requirements and would not significantly impact current production requirements during any upgrade process, management decided to consolidate all optoelectronic wafer fabrication into the Ann Arbor facility and close the Company's Wisconsin facility.

The Company incurred approximately \$2.4 million in expenses to complete the consolidation. The costs incurred consisted of labor and associated expense of \$1.1 million, travel and relocation costs of \$169,000, accelerated depreciation expense on de-commissioned assets of \$150,000, supplies, consulting and other related costs of \$854,000 and \$40,000 to re-provision the California clean room into a hybrid assembly area. All costs associated with the consolidation were recorded as expenses when incurred. As a result of the completion of the wafer fabrication consolidation, the Company expects to realize cost reductions through elimination of duplicate expenditures and yield improvements as well as an increase in new product development capability. Related costs incurred for the years ended March 31, 2010 and March 31, 2009 were \$40,000 and \$300,000, respectively.

## Raw Materials

The principal raw materials used by the Company in the manufacture of its semiconductor components and sensor assemblies 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 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 a limited number of 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. In the 4th quarter of FY 2010, the Company noticed increasing demand in the HSOR product platform. The Company is closely monitoring supply chain lead times which have been increasing primarily due to rising demand combined with capacity reductions by suppliers during the recession. As is typical in the industry, the Company allows for a significant lead-time (2 months or greater) between order and delivery of raw materials. 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, the Company has incurred material research and development (R&D) expenses, with the intent of commercializing these investments into profitable new standard and custom product offerings. During each of the fiscal years ended in 2010 and 2009, the Company's research and development expenses were \$4.7 million, which we believe was adequate to maintain the necessary investment in our future growth platforms. The Company expects 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 the Company's current product line. The Company has in the past, and will continue to pursue government funded, as well as internally funded, research and development projects when they are in support of the Company's development objectives.

As the Company begins the new 2011 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:
- 1st generation 100G DP-QPSK long haul and metro markets
- 1st generation 100G NRZ short reach market
- 2nd generation integrated 40G DPSK and DQPSK long haul and metro markets
- 4th generation integrated 40G NRZ short reach market
- Cost Reduction and performance enhancements through vertical integration of strategic 40G and 100G components
- THz –
- Application development utilizing the T-Ray® 4000 product platform for industrial quality and process control targeted at the aerospace, industrial and consumer product markets
- T-Ray® 4000 cost reduction, including laser and sub-systems initiatives for high volume markets
- T-Ray® 4000 product platform research and development for homeland security/military markets
- 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 the Company maintain certain environmental permits. The Company believes that it has obtained all necessary environmental permits required to conduct its 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

The Company's 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 costs, direct and indirect, incurred by the Company, as well as a reasonable allowance for anticipated profits. No assurance can be given that the Company will receive these amounts after cancellation.

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

#### Marketing

The Company markets its products in the United States and Canada through its own technical sales engineers and through independent sales representatives. International sales, including Europe, the Middle East, Far East and Asia, are conducted directly by the Company and through foreign distributors and representatives. The Company's products are primarily sold as components or sub-assemblies to OEM's. The Company markets its products and capabilities through industry specific channels, including the Internet, industry trade shows, and in print through trade journals.

#### Competition

In its target markets, the Company competes with different companies in each of its product platforms; custom optoelectronic, high-speed optical receiver and THz systems. The Company believes that its principal competitors for sales of custom optoelectronic products are small private companies and medium size public companies. In the high-speed optical receiver market the Company believes that its competitors are small private companies and medium to large size public companies. Because the THz product offering includes developing technology applications and markets, the Company believes the competition is mainly from small private companies and divisions of large public companies.

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

#### Proprietary Technology

The Company utilizes 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. The Company has a significant number of patents pending and owns the following patents and registered trademarks:

Patent #	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
726,387	TRADEMARK APPLICATION FOR T-RAY	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

## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

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
1,115,504	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
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

## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

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
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
5,311,044	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 AVALANCHE 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
ZL02825106.7	FOCUSING FIBER OPTIC (CHINA)	Apr-09
ZL03803039.X	ENHANCED PHOTODETECTOR (CHINA)	Apr-09

## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

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-09
HK1085841	ENHANCED PHOTODETECTOR (HONGKONG)	Dec-09
HK1086340	FOCUSING FIBER OPTIC (HONGKONG)	Feb-10

There can be no assurance that any issued patents will provide the Company with significant competitive advantages, or that challenges will not be instituted against the validity or enforceability of any patent owned by the Company, 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 the Company's technology will not infringe on patents or rights owned by others, licenses to which might not be available to the Company. Based on limited patent searches, contacts with others knowledgeable in the field of the Company's technology, and a review of the published materials, the Company believes that its competitors hold no patents, licenses or other rights to technology which would preclude the Company from pursuing its intended operations.

In some cases, the Company may rely on trade secrets to protect its 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 Company projects, disputes might arise as to the proprietary rights to such information which may not be resolved in favor of the Company.

### Employees

As of June 24, 2010, the Company had 153 full time employees (including 3 officers). Included are 35 engineering and development personnel, 8 sales and marketing personnel, 94 operations personnel, and 16 general and administrative personnel (including 3 officers). The Company 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 the current 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 recession 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, declining business and consumer confidence and increased 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.

While the Company believes our ongoing cost controls will allow us to generate cash and achieve profitability in the future, there is no assurance as to when or if we will be able to achieve our projections. Our 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. We may need to seek additional credit or access capital markets for additional funds. The recent disruption in credit markets and our recent operating losses make it uncertain whether we will be able to access the credit markets when necessary or desirable. If we are not able to access credit 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 are not in compliance with certain covenants under our Credit Facility.

At March 31, 2010, the Company was not in compliance with the financial covenants under its credit facility. This constituted an event of default under the terms of our credit facility agreement which gave The PrivateBank and Trust Company (our Lender) the ability to provide us with notice that they are exercising their rights under the credit facility by demanding payment in full of the outstanding indebtedness under our credit facility.

In June 2010, the Company and the bank entered into a second amendment to the loan agreement pursuant to which our Lender waived any event of default under the agreement resulting from the covenant violations for the fiscal quarters ended December 31, 2009 and March 31, 2010 (the "covenant violations"). This waiver did not amend or alter in any respect the terms and conditions of the Agreement or any of the other loan documents, or to constitute a waiver or release by the Lender of any right, remedy or event of default under the agreement or any of the other loan documents, except to the extent expressly set forth under the second amendment to the Loan agreement. The agreement is amended to update the financial covenants as defined in the amendment and the notes (See Note 6).

While we believe we have good relations with our Lender, we can provide no assurance that we will be able to obtain waivers or amendments if future covenant violations occur under our credit facility. 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.

The Company's 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 excess goodwill value resulting from the 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. 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 and financial condition.

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. 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. For example, during the quarter ended March 31, 2010, we experienced some limitations on the components available from certain of our suppliers, resulting in losses of anticipated sales and the related revenues.

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 the Company.



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 the control of our company 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.

A significant amount 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, the Company utilizes third-party distributors to act as our representative for the geographic region that they have been assigned. Sales through distributors represent approximately 5% 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 by the Company, 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.

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.

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 FY 2010, approximately 30% of our sales were related to products and services purchased by military contractors. Our business depends upon continued federal government expenditures on defense, intelligence, aerospace and other programs that we support. In FY 2010, our sales to military contractors decreased 32%. 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 U.S. defense and military budget 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 the Company.

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

API competes with a range of companies for the custom optoelectronic requirements of customers in our target markets. We believe that our principal competitors for sales of our products are small to medium size companies. Because the Company specializes 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. Recently, we have observed a modest acceleration in the decline of average selling prices. 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, 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.

In the current environment of declining average selling prices we must continually seek ways to reduce our costs to maintain our operating profit and net income. The Company's cost reduction efforts may not allow us to 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 higher on our HSOR and 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.

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 105 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.

Our failure to protect our intellectual property may significantly harm our business.

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. Although a number of patents have been issued to us and we have obtained a number of other patents as a result of our acquisitions, we cannot assure you that our issued patents will be upheld if challenged by another party. Additionally, with respect to any patent applications that we have filed, we cannot assure you that any patents will issue as a result of these applications. 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.

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.

Over the past five years, we have acquired one business and we continually explore opportunities to acquire related businesses, some of which could be material to us. 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.

#### 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 ordinary shares;
- 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 in the Company.

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.

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.

We have never declared or paid any cash dividends on our Class A Common Stock. 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.

## Item 2. Properties

The Company leases all of its executive offices, research, marketing and manufacturing facilities under non-cancellable operating leases. At March 31, 2010, 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. Our facility located in Ann Arbor, Michigan is comprised of the corporate office and the Picometrix LLC manufacturing plant.

In January 2010, The Company's wholly owned subsidiary, Picometrix LLC, entered into a "Fourth Addendum & Extension Agreement" for its lease of the Ann Arbor, MI facility, which extended the lease to May 31, 2021. The 50,000 sq. ft. facility houses the Company's research, development and manufacturing operations for its terahertz and high-speed optical receiver product platforms, API's corporate headquarters, and the semiconductor micro-fabrication facility for all three of Advanced Photonix's product platforms. The state-of-the-art facility was completed in 2001 and was designed to meet the unique requirements of the Company's ultrafast optoelectronic product platforms, 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. Reserved

PART II

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

The Company's 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 27, 2005, through March 31, 2010, which represents the last trading day of the year.

22

---



## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

At June 24, 2010, the Company had 120 holders of record for the Class A Common Stock (including shares held in street name), representing approximately 5,000 beneficial owners of the Class A Common Stock.

### Quarterly Stock Market Data

The following table sets forth the high and low closing prices of the Company's Class A Common Stock by quarter for fiscal years 2010 and 2009.

#### Common Stock Price

	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
	2010	2009	2010	2009	2010	2009	2010	2009
Common Stock <sup>1</sup>								
High	\$ .73	\$ 1.90	\$ .87	\$ 2.00	\$ .90	\$ 2.00	\$ .77	\$ 1.08
Low	\$ .59	\$ 1.01	\$ .55	\$ 1.36	\$ .57	\$ .67	\$ .54	\$ .62

<sup>1</sup> Price ranges on the AMEX.

The Company has never paid any cash dividends on its capital stock. The Company intends to retain earnings, if any, for use in its business and does not anticipate that any funds will be available for the payment of cash dividends on its outstanding shares in the foreseeable future. The holders of Common Stock will not be entitled to receive dividends in any year until the holders of the Class A Redeemable Convertible Preferred Stock receive an annual non-cumulative dividend preference of \$.072 per share. To date, a total of 740,000 shares of Class A Redeemable Convertible Preferred Stock have been converted into 222,000 shares of Class A Common Stock, leaving outstanding 40,000 shares of Class A Redeemable Convertible Preferred Stock. The aggregate non-cumulative annual dividend preference of such Class A Redeemable Convertible Preferred Stock is \$2,880. There is no public market for the Company's Class A Redeemable Convertible Preferred Stock or Class B Common Stock; however, such stock is convertible into Class A Common Stock at the option of the holder and upon transfer by the holder of the Class A Redeemable Convertible Preferred Stock.

## Repurchases of Equity

The Company made no repurchases of our common stock during our fourth fiscal quarter ended March 31, 2010.

## 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." 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.

### 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. Management uses 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. Management has 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.

### 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 systemic impact of potential long-term or widespread recession, energy costs, geopolitical issues, the availability and cost of credit, the global commercial and residential real estate markets and related mortgage markets and reduced consumer confidence have contributed to increased market volatility and diminished expectations for most developed and emerging economies continuing into 2010. 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. 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.

#### Revenue Recognition

Revenue is derived principally from the sales of the Company's products. The Company recognizes revenue when the basic criteria of Staff Accounting Bulletin No. 104, Revenue Recognition, are met. Specifically, the Company recognizes revenue when persuasive evidence of an arrangement exists, usually in the form of a purchase order, when shipment has occurred since its terms are FOB source, or when services have been rendered, title and risk of loss have passed to the customer, 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 its 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 Company accrues the estimated exposure to warranty claims based upon historical claim costs. The Company's management reviews these estimates on a regular basis and adjusts the warranty provisions as actual experience differs from historical estimates or as other information becomes available.

The Company does not provide price protection or general right of return. The Company's 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 discretion of the Company and are recorded when and if determined.

The Company predominantly sells directly to original equipment manufacturers with a direct sales force. The Company sells in limited circumstances through distributors. Sales through distributors represent approximately 5% 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 transfers title to the distributor at the time of shipment by the Company, 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, 2010 and March 31, 2009, 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.

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 common stock over a 10-day period before and a 10-day period after each assessment date. We use this 20-day duration to consider 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 related to our Company—to our market capitalization.

The Company's evaluation as of March 31, 2010 and March 31, 2009, indicated there were no impairments. As of March 31, 2010, our market capitalization calculated as described as above, was \$14.2 million and our carrying value, including goodwill, was \$14.4 million. We applied a 25% control premium to market capitalization to determine a fair value of \$17.8 million. We believe that including a control premium at this level is supported by recent transaction data in our industry. Absent the inclusion of a control premium, our carrying value would have exceeded fair value, requiring a step two analysis which may have resulted in an impairment of goodwill.

As of March 31, 2009, our market capitalization, calculated as described above, was \$17.1 million and our carrying value, including goodwill, was \$17.9 million. We applied a 25% control premium to market capitalization to determine a fair value of \$21.4 million. We believe that including a control premium at this level is supported by recent transaction data in our industry. Absent the inclusion of a control premium, our carrying value would have exceeded fair value, requiring a step two analysis which may have resulted in an impairment of goodwill.

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. Significant turmoil in the financial markets and weakness in macroeconomic conditions globally have recently contributed to volatility in our stock price and a significant decline in our stock price during the fourth quarter of FY 2010. Our stock price has fluctuated from a high of \$0.77 to a low of \$0.54 during the fourth quarter of FY 2010. On most of the trading days during the fourth quarter of FY 2010, our stock price was high enough that our market capitalization exceeded our carrying value without giving effect to a control premium. The current macroeconomic environment, however, continues to be challenging and we cannot be certain of the duration of these conditions and their potential impact on our stock price performance. If our recent stock price decline persists and our market capitalization remains below our carrying value for a sustained period, it is reasonably likely that a goodwill impairment assessment prior to the next annual review in the fourth quarter of fiscal 2011 would be necessary and an impairment of goodwill may be recorded. A non-cash goodwill impairment charge would have the affect of decreasing our earnings or increasing our losses in such period. If we are required to take a substantial impairment charge, our operating results would be materially adversely affected in such period.

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 management's assumptions of cash inflows and outflows directly resulting from the use of that asset in operations. The amount of the impairment loss recognized is equal to the excess of the carrying value of the asset over its then estimated fair value. The Company's evaluation for the fiscal year ended March 31, 2010 indicated there were no impairments.

#### 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. 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. The Company forecasts taxable income through its 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 its design wins, Company 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. The Company has substantial history, more than 10 years in most cases, with its customers and its market on which its forecasts are based.

At March 31, 2010, the Company had net operating loss carry forwards (NOL's) of approximately \$20.8 million for Federal income tax purposes and \$5.6 million for state income tax purposes that expire at various dates through fiscal year 2030. 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, 2010, the Company believes there are no limitations on the use of these Federal NOLs.

At March 31, 2010, the Company's net deferred tax asset before consideration of a valuation allowance was approximately \$7.7 million, mainly consisting of net operating loss carry-forwards. 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. In making this determination, we considered the negative evidence that we had tax losses in each of the last three years and cumulative taxable losses over the past three years, which outweighed 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, 2010 and 2009, the Company recorded a full valuation allowance on its net deferred tax assets.

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 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. 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 2006 to 2009 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, 2010 Compared to Fiscal Year Ended March 31, 2009

#### Revenues

The Company predominantly operates in one industry segment, light and radiation detection devices that it sells to multiple markets including telecommunications, industrial sensing/NDT, military/aerospace, medical, and homeland security. Revenues by market consisted of the following:

	Year ended		March 31, 2009	
	March 31, 2010			
Telecommunications	\$ 5,763,000	27%	\$ 6,003,000	21%
Industrial Sensing/NDT	8,457,000	40%	11,327,000	38%
Military/Aerospace	6,283,000	30%	9,215,000	31%
Medical	411,000	2%	2,107,000	7%
Homeland Security	161,000	1%	1,023,000	3%
Total Revenues	\$ 21,075,000	100%	\$ 29,675,000	100%

The Company's revenues for FY 2010 were \$21.1 million, a decrease of \$8.6 million, or 29%, from revenues of \$29.7 million for the FY 2009. The Company experienced reductions in all five markets during FY 2010.

Telecommunications sales were \$5.8 million, a decrease of \$240,000 or 4% from FY 2009. The Company's telecommunications revenues for FY 2010 continued to reflect the economic slowdown and the reduction in capital expenditures as our customers and service providers responded to the recession. Verizon and AT&T CAPEX were down approximately 10% for the year, with wireline CAPEX down 16%. AT&T, the largest 40G deploying service provider, reduced wireline CAPEX by approximately 21% for calendar year 2009, which included shifting capital expenditures away from 40G deployments in our 3rd quarter of FY 2010 to wireless, primarily for enhanced wireless coverage and 10G wireless backhaul. Current North American customer plans for capital spending are projected to be up approximately 4% in calendar year 2010 over calendar year 2009, which should result in stronger telecommunication revenue in future quarters. North American wireline CAPEX is expected to be stronger in the second half of calendar year 2010. The Company's Telecommunications revenue in the fourth quarter increased approximately 71% (\$560,000) over the prior year fourth quarter and increased approximately 11% from the third quarter of the current year, an indication that our customers are starting to recover from the prior year economic recession. The Company expects telecommunication revenue to grow in fiscal year 2011.

Industrial Sensing/NDT market revenues were \$8.5 million in FY 2010, a decrease of 25% (or \$2.8 million) from FY 2009 revenues of \$11.3 million. This decrease was primarily the result of a slowdown in the Industrial Sensing market due to the recession. The Company's Industrial Sensing/NDT revenue in the fourth quarter of the current year increased approximately 26% (\$538,000) over the prior year fourth quarter, and increased approximately 43% (\$789,000) from the third quarter of the current year. Growth in our comparative and consecutive quarters are reflecting a gradual strengthening in our industrial markets as the economy slowly recovers from the economic recession and the beginning of our Terahertz NDT application development contract to inspect the F-35 Joint Strike Fighter. The Company expects moderate growth in the industrial/NDT market in fiscal year 2011.

Military/Aerospace market revenues were \$6.3 million, a decrease of 32% (or \$2.9 million) from the comparable prior year revenues of \$9.2 million. The Company's military/aerospace market revenue in the fourth quarter of the current year decreased 27% (\$390,000) from the third quarter of the current year and decreased 56% (\$1.4 million) from the prior year fourth quarter. This decrease was attributable primarily to the timing of customer order releases and a slight reduction in customer requirements. The Company's expects military revenues to normalize during the coming year resulting in moderate growth in fiscal year 2011.

Medical market revenues decreased \$1.7 million or 81% from the prior year of \$2.1 million. The Company's medical market revenue in the fourth quarter of the current year decreased 12% (\$9,000) from the third quarter of the current year and decreased 89% (\$592,000) from the prior year fourth quarter. This decrease was primarily a result of the Company's decision to eliminate business at a customer that did not meet its profitability criteria. The Company expects Medical market revenues to grow in fiscal year 2011.

Homeland security revenues decreased 84% (\$862,000) to \$161,000. This decrease was the result of the completion of the Terahertz development contract from the Department of Homeland Security for the Nuclear Gauge feasibility demonstration completed in September 2009. The Company expects Homeland Security revenues for fiscal year 2011 to remain at the current level, absent a significant new development contract.

#### Gross Profit

Gross Profit was \$9.0 million (or 43% of revenue), compared to the prior year of \$12.9 million (or 44% of revenue), a decrease of \$3.9 million (or 30%). The lower gross profit was due primarily to lower revenue, offset partially by cost savings realized through prior years' facilities consolidation activities and our FY 2010 company-wide cost reduction initiative. Despite a 29% drop in revenue (\$8.6 million), the Company's gross margin as a percentage of revenue only dropped to 43% during the current fiscal year, compared to the 44% for the prior fiscal year. This 1% decline in gross margin percentage, on a revenue drop of 29%, demonstrates the efficiencies gained as the result of past consolidation and cost reduction efforts. This positions the Company to realize expanding gross margins as revenue growth resumes in fiscal year 2011 driven by our growth product platforms.

#### Operating Expenses

**Research and Development expenses (R&D)** -- The Company's R&D expenses increased approximately 1% over the prior year. R&D expenses of \$4.7 million for FY 2010 and FY 2009 were 22% and 16% of sales, respectively. The Company maintained its R&D investment of \$4.7 million in its growth products platforms despite the recession. The Company expects to increase investment in the next generation 40G/100G HSOR products and THz application and market development in fiscal year 2011 in order to gain HSOR market share and move THz from the laboratory to the factory floor.

**Sales and Marketing expenses (S&M)** --The Company's S&M expenses decreased \$996,000 (or 38%) to \$1.7 million (8% of sales) in FY 2010 compared to \$2.7 million (9% of sales) in FY 2009. The decrease was primarily attributable to lower compensation, travel expense and sales commissions related to the decline in field sales activity corresponding to the 29% decrease in revenue in FY 2010. As the economy rebounds and revenues improve, the Company will continue to focus its sales and marketing activities in our growth markets. As a result, we expect increases in sales and marketing expenses in fiscal year 2011.

**General and Administrative expenses (G&A)** -- G&A expenses decreased by \$711,000 (15%) to approximately \$4.2 million (20% of sales) for FY 2010 as compared to \$4.9 million (16% of sales) for FY 2009. This decrease was primarily attributable to the Company's cost savings initiatives resulting from labor and other spending reductions. The Company expects an increase in G&A expenses for fiscal year 2011, partially as a result of increased Securities and Exchange Commission reporting requirements related to the application of Section 404 of the Sarbanes-Oxley Act on small cap companies.

Amortization expense remained flat compared to the prior year at approximately \$2.1 million.

Other operating expenses decreased \$260,000 as a result of the completion of our wafer fabrication consolidation. Wafer fabrication consolidation expenses were \$40,000 in FY 2010 compared to \$300,000 in FY 2009.

The Company's evaluations of Intangible assets and Goodwill for the years ended March 31, 2010 and 2009 resulted in no impairment adjustments.

#### Financing and Other Income (Expense), net

Interest income for FY 2010 decreased \$20,000 to approximately \$8,000, compared to \$28,000 in FY 2009, due primarily to lower cash balances available for short-term investment and lower interest rates in FY 2010.

Interest expense for FY 2010 was \$304,000 as compared to \$405,000 in FY 2009, a decrease of \$101,000. This decrease was primarily attributable to lower interest rates and reduced debt obligations.



## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

Net loss for FY 2010 was \$3.7 million, as compared to net loss of \$2.0 million in FY 2009, an increase in loss of \$1.7 million. The increase in losses for the year is primarily attributable to lower revenue resulting in lower gross margins offset by reduced operating expenses.

### Liquidity and Capital Resources

At March 31, 2010, the Company had cash and cash equivalents of \$1.8 million, a decrease of \$310,000 from \$2.1 million as of March 31, 2009. Cash generated from operations in FY 2010 was \$152,000, offset by a reduction in cash from investing activities of \$44,000 and a reduction in cash from financing activities of \$418,000.

### Operating Activities

Net cash provided by operating activities of \$152,000 for the year ended March 31, 2010 was primarily the result of net cash provided by changes in operating assets and liabilities of \$405,000, offset by net cash used in operations of \$254,000. The net cash used in operations included a net loss of \$3.7 million, offset by net cash expenses of \$3.6 million from depreciation, amortization and stock based compensation expense, and non-cash income of approximately \$182,000 to record a change in the fair value of warrants. Changes in operating assets and liabilities were primarily a result of lower revenues which reduced accounts receivable by \$605,000 and lowered accounts payable by \$350,000. Prepaid and other assets were lower by \$63,000 and accrued expenses increased by \$75,000.

Net cash provided by operating activities of \$2.7 million for the year ended March 31, 2009 was primarily the result of net cash provided by operations of \$1.4 million and net cash provided by changes in operating assets and liabilities of \$1.3 million. The net cash provided by operations included a net loss of \$2.0 million, offset by net cash expenses of \$3.4 million from depreciation, amortization and stock based compensation expense. Changes in operating assets and liabilities were primarily a result of reduced inventories of \$462,000 and increased accrued expenses of \$911,000.

### Investing Activities

Net cash used in investing activities was approximately \$44,000 for the year ended March 31, 2010. The amount consisted of capital expenditures of approximately \$130,000 (which includes \$40,000 to complete the conversion of the California clean room to hybrid assembly manufacturing space), and patent expenditures of \$192,000, offset by the elimination of the certificate of deposit of \$278,000 required by the amended operating lease of the Ann Arbor facility.

Net cash provided by investing activities was approximately \$93,000 for the year ended March 31, 2009. The amount consisted of capital expenditures of approximately \$721,000, and patent expenditures of \$186,000, offset by a \$1.0 million lower restricted cash balance required under a new bank loan agreement.

### Financing Activities

The Company used \$418,000 in net cash from financing activities in FY 2010, primarily to reduce \$434,000 in bank debt, offset by proceeds from stock options exercised of \$16,000.

The Company used \$759,000 in net cash from financing activities in FY 2009, primarily to reduce debt, including a net reduction in bank debt and capital lease obligations of \$268,000 and payments to related parties of \$450,000. The net reduction in bank debt included the payoff of the capital lease obligation of \$1.9 million to Fifth Third Bank agreement, financed primarily by the PrivateBank term loan of \$1.7 million.

Debt

Related Party Debt - As a result of the acquisition of Picotronic, Inc. in May 2005, the stockholders of Picometrix received four-year API promissory notes in the aggregate principal amount of \$2.9 million ("Related Party Debt"). The notes bear an interest rate of prime plus 1.0% and are secured by all of the intellectual property of Picometrix. The interest rate at March 31, 2010 was 4.25%. API has the option of prepaying the debt to related parties without penalty. Note holders include Robin Risser and Steve Williamson, the Company's CFO and CTO, respectively.

The Company's only significant related party transactions relate to the payment of principal and interest on the Related Party Debt. On November 30, 2009, the Company and the note holders entered into the fourth amendments to the notes to extend the due date for the remaining principal balance of the notes (in the aggregate amount of \$1,400,500) to March 1, 2011 payable in two installments as follows:

December 1, 2010	\$ 450,000
March 1, 2011	\$ 950,500

Interest payments made to Related Parties during FY 2010 & FY 2009 were approximately \$60,000 and \$94,000, respectively.

Bank Debt - In March 2007, API, as Lessee, entered into a Master Equipment Lease Agreement with Fifth Third Leasing Company, as Lessor, to finance the purchase of new manufacturing equipment up to an aggregate of \$2.3 million (Lease). API purchased equipment under the Lease until June 30, 2007. This lease was accounted for as a capital lease in accordance with FASB accounting literature. On September 25, 2008, the Company retired the Master Equipment Lease Agreement with Fifth Third Leasing Company by paying the remaining principal amount of \$1.7 million.

On September 25, 2008, the Company established a credit facility Agreement with The PrivateBank and Trust Company (the Lender). As part of this banking relationship, the Company established a three year Line of Credit of \$3.0 million at an annual interest rate of prime plus 1%, adjusted quarterly. The interest rate was 4.25% on March 31, 2010. In addition, the Company also established an Equipment Installment Loan of \$1.7 million amortized over a term of four years, at an interest rate of prime plus 1%. The facility contains customary representations, warranties and financial covenants including minimum debt service coverage ratio, adjusted EBITDA level and Net Worth requirements (as defined in the Agreement). The principal loan amount on the Line of Credit is due on December 25, 2011, and the principal loan amount of the term loan is due on September 25, 2011, provided that if existing loans to the Company by the Michigan Economic Development Corporation have not converted to equity on or before August 31, 2011, the outstanding principal shall be due on August 31, 2011. The availability under the Line of Credit is determined by the calculation of a borrowing base that includes a percentage of accounts receivable and inventory.

On May 29, 2009, the Company amended the Agreement effective March 31, 2009. According to the terms of the amended Agreement, the Adjusted EBITDA level is measured on a year to date basis for the June 26, 2009, September 25, 2009, December 25, 2009 and March 31, 2010 test dates and thereafter on a trailing four quarter basis. In addition, the Debt Service Coverage ratio and the Net Worth covenants were amended. The amended minimum Debt Service Coverage ratio was 1.0 to 1.0 for the first quarter of FY 2010, 1.25 to 1.0 for the second quarter of FY 2010 and 1.5 to 1.0 thereafter. The amended minimum Net Worth covenant was \$15.5 million and would increase by 10% of Net Income for each fiscal year that the Company reports net income.

## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

At December 25, 2009 and March 31, 2010, the Company was not in compliance with the financial covenants. This constituted an event of default under the terms of the Agreement which gave the Lender the ability to provide us with notice that they are exercising their rights under the Agreement by demanding payment in full of the outstanding indebtedness under the Agreement.

On June 25, 2010, the Company and the Lender entered into a second amendment to the loan agreement pursuant to which our Lender waived any event of default under the agreement resulting from the covenant violations for the fiscal quarters ended December 31, 2009 and March 31, 2010 (the "covenant violations"). This waiver did not amend or alter in any respect the terms and conditions of the Agreement or any of the other loan documents, or to constitute a waiver or release by the Lender of any right, remedy or event of default under the Agreement or any of the other loan documents, except to the extent expressly set forth under the Second Amendment to the Loan agreement. The agreement is amended to update the financial covenants as defined in the amendment and the notes. In addition, the Second Amendment requires the Company to amend the secured promissory notes issued to our CFO and CTO in connection with the Company's acquisition of Picometrix, Inc. on May 2, 2005 (the notes) to defer the payment of the remaining fourth and fifth installment payments owed under the Notes. Failure to amend the Notes within 60 days of signing the Second Amendment will constitute an event of default under the Agreement. The Second Amendment increased the interest rate from prime plus 1% to prime plus 2%. According to the terms of the amended Agreement, the Adjusted EBITDA level is measured on a quarterly basis for the June 30, 2010, September 30, 2010, December 31, 2010 and March 31, 2011 test dates and thereafter on a trailing twelve months basis. In addition, the Debt Service Coverage ratio and the Net Worth covenants were amended. The amended minimum Debt Service Coverage ratio is 1.0 to 1.0 for the first three quarters of fiscal 2011 and 1.2 to 1.0 thereafter. The amended minimum Net Worth covenant is \$13.0 million for the first quarter of FY 2011, \$12.5 million for the second quarter of FY 2011, \$12.1 million for the third quarter of FY 2011 and \$11.8 million for the fourth quarter of FY 2011. Substantially all of our tangible assets serve as collateral for the debt that is owed our Lender.

Based on the amended loan covenants, the Company anticipates that it is not probable that the Company will fail the new covenants during fiscal 2011 and as a result has classified the current and future maturities in accordance with the second amendment to the loan agreement.

MEDC Debt - The Michigan Economic Development Corporation (MEDC) entered into two loan agreements with Picometrix LLC, 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 4th quarter of fiscal 2010, the Company began negotiations with the MEDC to further amend the MEDC-loan 1 promissory note. The Company and the MEDC agreed 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 would convert the accrued and unpaid interest as of November 30, 2009 totaling \$324,669 into 601,239 unregistered shares of the Class A Common Stock of the Company at a price per share of \$0.54. 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 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 is 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 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 of \$1.2 million 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 4th quarter of fiscal 2010, the Company began negotiations with the MEDC to further amend the MEDC-loan 2 promissory note. The Company and the MEDC agreed 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 would transfer the MEDC-loan 2 promissory note to the MSF which would convert the accrued and unpaid interest as of October 31, 2009 totaling \$237,667 into 440,124 unregistered shares of the Class A Common Stock of the Company at a price per share of \$0.54. In addition, the Company granted the MSF 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 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 believes that current cash levels combined with cash generated from operations, our revolving line of credit and additional debt or equity financing will be sufficient for our 2011 fiscal year.

## Summary of Contractual Obligations and Commitments

The following table sets forth the contractual obligations of the Company at March 31, 2010.

Contractual Obligations	Total	Payments due by period			
		Within 1 year	1 – 3 years	3 – 5 years	More than 5 years
Bank line of credit	\$ 1,394,000	\$ -	\$ 1,394,000	\$ -	\$ -
Bank term loan	1,121,000	434,000	687,000	-	-
Long-term MEDC loans	2,224,000	254,000	1,593,000	377,000	-
Debt to related parties	1,401,000	1,401,000	-	-	-
Subtotal—Balance Sheet	\$ 6,140,000	\$ 2,089,000	\$ 3,674,000	\$ 377,000	\$ -
Expected interest expense on current debt obligations	432,000	234,000	194,000	4,000	-
Operating lease obligations	8,331,000	1,000,000	2,930,000	1,779,000	2,622,000
Purchase obligations	1,756,000	1,730,000	26,000	-	-
Total	\$ 16,659,000	\$ 5,053,000	\$ 6,824,000	\$ 2,160,000	\$ 2,622,000

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, 2010 and March 31, 2009, 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 June 2008, the FASB ratified guidance that addresses how an entity should evaluate whether an instrument is indexed to its own stock. The guidance is effective for fiscal years (and interim periods) beginning after December 15, 2008. The guidance must be applied to outstanding instruments as of the beginning of the fiscal year in which the guidance is adopted and should be treated as a cumulative-effect adjustment to the opening balance of accumulated deficit. The Company adopted this provision on April 1, 2009. See Note 10 to the financial statements for a discussion on the impact that the adoption of this guidance had on the Company's financial statements.

In April 2009, the FASB issued new guidance that enhances consistency in financial reporting by increasing the frequency of disclosures on fair value of financial instruments. The guidance requires these disclosures on a quarterly basis, providing qualitative and quantitative information about fair value estimates for all those financial instruments not measured on the balance sheet at fair value. This guidance is effective for interim and annual periods ending after June 15, 2009. The adoption of this guidance is reflected in Note 15 to the condensed consolidated financial statements.

In July 2009, the FASB issued a new guidance that establishes the "Accounting Standards Codification" (Codification) as the single official source of authoritative U.S. accounting and reporting standards for nongovernmental entities, in addition to guidance issued by the Securities and Exchange Commission (SEC). All other non-grandfathered, non-SEC accounting literature not included in the Codification becomes non-authoritative. The ASC supersedes all existing, non-SEC accounting and reporting standards applied by non-governmental entities in the preparation of financial statements in conformity with generally accepted accounting principles (GAAP). The guidance is effective for interim and annual periods ending after September 15, 2009. As the Codification does not change GAAP, the implementation did not have a material impact on the Company's financial statements.

In August 2009, the FASB issued new guidance related to measuring certain liabilities at fair value which provides clarification that in circumstances in which a quoted price in an active market for the identical liability is not available, an entity is required to measure fair value utilizing one or more of the following techniques: (1) a valuation technique that uses quoted prices for identical or similar liabilities when traded as assets; or (2) another valuation technique that is consistent with the principles of existing guidance, such as a present value technique or market approach. The new guidance became effective for the Company during fiscal 2010 and did not have a material impact on the Company's financial statements.

During fiscal year 2010, the Company adopted various accounting standards related to fair value measurements, non-controlling interests, useful life of intangible assets, accounting for convertible debt instruments that may be settled in cash upon conversion, participating securities, and business combinations. The adoption of these new standards did not have a material effect on the Company's results of operations, financial position, or liquidity.

In April 2010, the FASB issued new guidance concerning revenue recognition related to research and development projects. It clarifies that revenue can be recognized when a milestone is achieved if the milestone meet all criteria to be considered substantive. This guidance is effective for fiscal years beginning on or after June 15, 2010. The guidance will be reviewed to determine if this change will have a material impact on the Company's future financial statements.

#### Item 7A. Quantitative and Qualitative Disclosures About Market Risk

At March 31, 2010, most of the Company's interest rate exposure is linked to the prime rate, subject to certain limitations, offset by cash investment tied to prime rate. As such, we are at risk to the extent of changes in the prime rate and do not believe that moderate changes in the prime rate will materially affect our operating results or financial condition.

All Company sales and purchases are denominated in U.S. dollars. At March 31, 2010, we were not at risk to foreign currency exchange fluctuations.

## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

### 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:

	Page
Report of Independent Registered Public Accounting Firm	38
<b>Financial Statements:</b>	
Consolidated Balance Sheets, as of March 31, 2010 and March 31, 2009	39
Consolidated Statements of Operations for the years ended March 31, 2010 and March 31, 2009	40
Consolidated Statements of Shareholders' Equity for the years ended March 31, 2010 and March 31, 2009	41
Consolidated Statements of Cash Flows for the years ended March 31, 2010 and March 31, 2009	42
Notes to Consolidated Financial Statements	43

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, 2010 and March 31, 2009 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 for the years ended March 31, 2010 and March 31, 2009 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 audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the 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, 2010 and March 31, 2009, 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.

As discussed in Note 10 to the consolidated financial statements, the Company changed its method of accounting for free standing warrants as of April 1, 2009 due to the adoption of new FASB guidance.

/s/ BDO Seidman LLP  
Troy, Michigan  
June 29, 2010



Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

ADVANCED PHOTONIX, INC.  
CONSOLIDATED BALANCE SHEETS

	March 31, 2010	March 31, 2009
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 1,762,000	\$ 2,072,000
Accounts receivable, net of allowance for doubtful accounts of \$51,000 and \$62,000, respectively	2,679,000	3,284,000
Inventories	3,656,000	3,669,000
Prepaid expenses and other current assets	200,000	252,000
<b>Total current assets</b>	<b>8,297,000</b>	<b>9,277,000</b>
Equipment and leasehold improvements, net	3,284,000	4,322,000
Goodwill	4,579,000	4,579,000
Intangibles, net	7,096,000	8,975,000
Restricted cash	500,000	500,000
Certificate of deposit	--	278,000
Security deposits and other assets	99,000	110,000
<b>Total Assets</b>	<b>\$ 23,855,000</b>	<b>\$ 28,041,000</b>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 1,006,000	\$ 1,356,000
Accrued compensation	530,000	1,037,000
Accrued interest	640,000	513,000
Other accrued expenses	1,182,000	615,000
Current portion of long-term debt, related parties	1,401,000	1,401,000
Current portion of long-term debt, MEDC	254,000	353,000
Current portion of long-term debt, bank term loan	434,000	434,000
<b>Total current liabilities</b>	<b>5,447,000</b>	<b>5,709,000</b>
Long-term debt, less current portion - MEDC	1,970,000	1,871,000
Long-term debt – bank line of credit	1,394,000	1,394,000
Long-term debt, less current portion – bank term loan	687,000	1,121,000
<b>Total liabilities</b>	<b>9,498,000</b>	<b>10,095,000</b>
<b>Commitments and contingencies</b>		
<b>Shareholders' equity:</b>		
Class A redeemable convertible preferred stock, \$.001 par value; 780,000 shares authorized, 2010 and 2009 - 40,000 shares issued and outstanding	--	--
Class A Common Stock, \$.001 par value, 100,000,000 authorized; 2010 – 24,463,978 shares issued and outstanding; 2009 – 24,089,726 shares issued and outstanding	24,000	24,000
Class B Common Stock, \$.001 par value; 4,420,113 shares authorized, 2010 and 2009 - 31,691 issued and outstanding	--	--
Additional paid-in capital	50,164,000	52,400,000
Accumulated deficit	(35,831,000)	(34,478,000)
<b>Total shareholders' equity</b>	<b>14,357,000</b>	<b>17,946,000</b>
<b>Total Liabilities and Shareholders' Equity</b>	<b>\$ 23,855,000</b>	<b>\$ 28,041,000</b>

See Notes to Consolidated Financial Statements.

Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

ADVANCED PHOTONIX, INC.  
CONSOLIDATED STATEMENTS OF OPERATIONS  
For the Fiscal Years Ended March 31, 2010 and 2009

	2010	2009
Sales, net	\$ 21,075,000	\$ 29,675,000
Cost of products sold	12,059,000	16,744,000
Gross profit	9,016,000	12,931,000
Operating expenses:		
Research and development expenses	4,738,000	4,676,000
Sales and marketing expenses	1,663,000	2,659,000
General and administrative expenses	4,160,000	4,871,000
Amortization expense – intangible assets	2,071,000	2,081,000
Wafer fabrication consolidation expenses	40,000	300,000
Total operating expenses	12,672,000	14,587,000
Loss from operations	(3,656,000)	(1,656,000)
Other income (expense):		
Interest income	8,000	28,000
Interest expense on bank & MEDC loans	(244,000)	(311,000)
Change in fair value of warrant liability	182,000	--
Interest expense, related parties	(60,000)	(94,000)
Other income (expense)	7,000	(2,000)
Total other income and (expenses)	(107,000)	(379,000)
Loss before benefit for income taxes	(3,763,000)	(2,035,000)
Benefit for income taxes	(85,000)	--
Net loss	\$ (3,678,000)	\$ (2,035,000)
Basic and diluted loss per share	\$ (0.15)	\$ (0.08)
Weighted average common shares outstanding	24,368,000	24,074,000

See Notes to Consolidated Financial Statements.

Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

ADVANCED PHOTONIX, INC.  
 CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY  
 For the Fiscal Years Ended March 31, 2010 and 2009  
 (In thousands, except share data)

	Class A Preferred Shares	Class A Preferred Amount	Class A Common Shares	Class A Common Amount	Class B Common Shares	Class B Common Amount	Additional Paid-in Capital	Accumulated Deficit	Total
<b>BALANCE,</b>									
<b>MARCH 31, 2008</b>	40,000	\$ --	23,977,678	\$ 24	31,691	\$ --	\$ 52,150	\$ (32,443)	\$ 19,731
Exercise of stock options	--	--	56,310	--	--	--	46	--	46
Issuance of restricted shares	--	--	55,738	--	--	--	--	--	--
Stock based compensation	--	--	--	--	--	--	204	--	204
Net loss and comprehensive loss	--	--	--	--	--	--	--	(2,035)	(2,035)
<b>BALANCE,</b>									
<b>MARCH 31, 2009</b>	40,000	--	24,089,726	24	31,691	--	52,400	(34,478)	17,946
ASC 815-40 cumulative adjustment	--	--	--	--	--	--	(2,619)	2,325	(294)
<b>BALANCE,</b>									
<b>APRIL 1, 2009</b>	40,000	--	24,089,726	24	31,691	--	49,781	(32,153)	17,652
Exercise of stock options	--	--	30,000	--	--	--	16	--	16
Issuance of restricted shares	--	--	344,252	--	--	--	--	--	--
Stock based compensation	--	--	--	--	--	--	367	--	367
Net loss and comprehensive loss	--	--	--	--	--	--	--	(3,678)	(3,678)
<b>BALANCE,</b>									
<b>MARCH 31, 2010</b>	40,000	\$ --	24,463,978	\$ 24	31,691	\$ --	\$ 50,164	\$ (35,831)	\$ 14,357

See Notes to Consolidated Financial Statements.

Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

ADVANCED PHOTONIX, INC.  
CONSOLIDATED STATEMENTS OF CASH FLOWS  
For the fiscal years ended March 31, 2010 and 2009

	2010	2009
<b>Cash flows from operating activities:</b>		
Net loss	\$ (3,678,000)	\$ (2,035,000)
Adjustments to reconcile net loss to net cash provided by operating activities		
Depreciation	1,168,000	1,157,000
Amortization	2,071,000	2,081,000
Stock based compensation expense	367,000	204,000
Change in fair value of warrant liability	(182,000)	--
Changes in operating assets and liabilities:		
Accounts receivable	605,000	(82,000)
Inventories	13,000	462,000
Prepaid expenses and other assets	63,000	(59,000)
Accounts payable	(350,000)	17,000
Accrued expenses	75,000	911,000
Net cash provided by operating activities	152,000	2,656,000
<b>Cash flows from investing activities:</b>		
Capital expenditures	(130,000)	(721,000)
Change in certificate of deposit	278,000	--
Change in restricted cash	--	1,000,000
Patent expenditures	(192,000)	(186,000)
Net cash provided by (used in) investing activities	(44,000)	93,000
<b>Cash flows from financing activities:</b>		
Payments on capital lease financing	--	(1,917,000)
Proceeds from bank term loan	--	1,736,000
Payment on bank term loan	(434,000)	(181,000)
Net borrowings on revolving line of credit	--	94,000
Net payments on MEDC term loan	--	(88,000)
Payments on related party debt	--	(450,000)
Proceeds from exercise of stock options	16,000	46,000
Net cash used in financing activities	(418,000)	(759,000)
Net increase (decrease) in cash and cash equivalents	(310,000)	1,990,000
Cash and cash equivalents, beginning of year	2,072,000	82,000
Cash and cash equivalents, end of year	\$ 1,762,000	\$ 2,072,000
<b>Supplemental cash flow information:</b>		
Cash paid for interest	\$ 178,000	\$ 265,000
Cash paid for income taxes	\$ --	\$ 32,000

See Notes to Consolidated Financial Statements.

ADVANCED PHOTONIX, INC.  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
March 31, 2010 and 2009

1. The Company

Advanced Photonix, Inc. ® (the Company, we or API) was incorporated under the laws of the State of Delaware in June 1988. The Company is engaged in the development and manufacture of optoelectronic devices and value-added sub-systems and systems. The Company serves a variety of global Original Equipment Manufacturers (OEMs) in a variety of industries. The Company supports its 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 financial officer, who review financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance. API has one business activity, and there are no segment managers who are held accountable for operations, operating results and plans for levels or components below the consolidated unit level, nor does API track gross margins by product, product line or market served. Accordingly, API considers its business to be in a single reportable segment. The Company's products are 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. Generally, the same engineers with the same qualifications design and manufacture products for all product lines. The types and class of customers are similar across all product lines, and products are distributed through common channels and distributor networks.

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 –During fiscal 2009, the Company established a credit facility with The PrivateBank and Trust Company with a minimum compensating balance requirement of \$500,000. This amount has been separately disclosed on the accompanying balance sheets as restricted cash.

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, 2010, one customer comprised 10% or more of accounts receivable. As of March 31, 2009, one customer comprised 10% or more of accounts receivable. The allowance for doubtful accounts on March 31, 2010 and March 31, 2009 was \$51,000 and \$62,000, respectively.

Concentration of Credit Risk – Financial instruments, which potentially subject the Company to concentrations of credit risk, consist principally of cash equivalents and trade accounts receivable. The Company maintains cash balances at four financial institutions that are insured by the Federal Deposit Insurance Corporation (FDIC) up to \$250,000 each. As of March 31, 2010, the Company had cash at one financial institution in excess of federally insured amounts. As excess cash is available, the Company invests in short-term and long-term investments, primarily consisting of Government Securities Money Market instruments, and Repurchase agreements. As of March 31, 2010, cash deposits held at financial institutions in excess of FDIC insured amounts of \$250,000 were approximately \$1.8 million. As of March 31, 2009, cash deposits held at financial institutions in excess of FDIC insured amounts of \$250,000 were approximately \$2.0 million.

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.

## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

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
Vehicles	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 - In accordance with FASB guidance, 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.

The Company 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 common stock over a 10-day period before and a 10-day period after each assessment date. We use this 20-day duration to consider 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 related to our Company — to our market capitalization.

The Company's evaluation as of March 31, 2010 and March 31, 2009 indicated there were no impairments. As of March 31, 2010, our market capitalization calculated as described above was \$14.2 million and our carrying value, including goodwill, was \$14.4 million. We applied a 25% control premium to market capitalization to determine a fair value of \$17.8 million. We believe that including a control premium at this level is supported by recent transaction data in our industry. Absent the inclusion of a control premium, our carrying value would have exceeded fair value, requiring a step two analysis which may have resulted in an impairment of goodwill.

As of March 31, 2009 our market capitalization, calculated as described above, was \$17.1 million and our carrying value, including goodwill, was \$17.9 million. We applied a 25% to market capitalization to determine a fair value of \$21.4 million. We believe that including a control premium at this level is supported by recent transaction data in our industry. Absent the inclusion of a control premium, our carrying value would have exceeded fair value, requiring a step two analysis which may have resulted in an impairment of goodwill.

In accordance with FASB guidance, the carrying value of long-lived assets, including amortizable intangibles and equipment and leasehold improvements, 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 in operations. The amount of the impairment loss recognized is equal to the excess of the carrying value of the asset over its then estimated fair value. The Company's evaluation for the fiscal year ended March 31, 2010, indicated there were no impairments.

Revenue Recognition – Revenue is derived principally from the sales of the Company's products. The Company recognizes revenue when the basic criteria of Staff Accounting Bulletin No. 104, Revenue Recognition, are met. Specifically, the Company recognizes revenue when persuasive evidence of an arrangement exists, usually in the form of a purchase order, when shipment has occurred since its terms are FOB source, or when services have been rendered, title and risk of loss have passed to the customer, 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 its 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 Company accrues the estimated exposure to warranty claims based upon historical claim costs. The Company's management reviews these estimates on a regular basis and adjusts the warranty provisions as actual experience differs from historical estimates or as other information becomes available.

The Company does not provide price protection or general right of return. The Company's 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 discretion of the Company and are recorded when and if determined.

The Company predominantly sells directly to original equipment manufacturers with a direct sales force. The Company sells in limited circumstances through distributors. Sales through distributors represent approximately 5% 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 transfers title to the distributor at the time of shipment by the Company, 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 the services and/or materials are provided.

Significant Customers – During fiscal years ended March 31, 2010 and March 31, 2009, 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.



## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

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.

The following table presents the movement in the product warranty liability for the years ended March 31, 2010 and March 31, 2009

	Years ended March 31,	
	2010	2009
Beginning balance	\$ 138,000	\$ 85,000
Current period accruals	50,000	76,000
Used for purpose intended	(102,000)	(23,000)
Ending balance	\$ 86,000	\$ 138,000

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 \$56,000 and \$127,000 in FY 2010 and FY 2009, respectively.

Accounting for Stock Based Compensation –The Company estimates the fair value of stock option awards utilizing the Black-Scholes pricing model. 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. 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 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. 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 2006 to 2009 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. The total shares excluded from the computation of diluted earnings per share for the year ended March 31, 2010 totaled 4,734,000 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, 2009 totaled 4,876,000 shares, representing outstanding stock options and warrants exercisable into shares of common stock.

#### Recent Pronouncements and Accounting Changes

In June 2008, the FASB ratified guidance that addresses how an entity should evaluate whether an instrument is indexed to its own stock. The guidance is effective for fiscal years (and interim periods) beginning after December 15, 2008. The guidance must be applied to outstanding instruments as of the beginning of the fiscal year in which the guidance is adopted and should be treated as a cumulative-effect adjustment to the opening balance of accumulated deficit. The Company adopted this provision on April 1, 2009. See Note 10 to the financial statements for a discussion on the impact that the adoption of this guidance had on the Company's financial statements.

In April 2009, the FASB issued new guidance that enhances consistency in financial reporting by increasing the frequency of disclosures on fair value of financial instruments. The guidance requires these disclosures on a quarterly basis, providing qualitative and quantitative information about fair value estimates for all those financial instruments not measured on the balance sheet at fair value. This guidance is effective for interim and annual periods ending after June 15, 2009. The adoption of this guidance is reflected in Note 15 to the financial statements.

On July 1, 2009, the FASB issued new guidance that establishes the "Accounting Standards Codification" (Codification) as the single official source of authoritative U.S. accounting and reporting standards for nongovernmental entities, in addition to guidance issued by the Securities and Exchange Commission (SEC). All other non-grandfathered, non-SEC accounting literature not included in the Codification becomes non-authoritative. The ASC supersedes all existing, non-SEC accounting and reporting standards applied by non-governmental entities in the preparation of financial statements in conformity with generally accepted accounting principles (GAAP). The guidance is effective for interim and annual periods ending after September 15, 2009. As the Codification does not change GAAP, the implementation did not have a material impact on the Company's financial statements.

In August 2009, the FASB issued new guidance related to measuring certain liabilities at fair value which provides clarification that in circumstances in which a quoted price in an active market for the identical liability is not available, an entity is required to measure fair value utilizing one or more of the following techniques: (1) a valuation technique that uses quoted prices for identical or similar liabilities when traded as assets; or (2) another valuation technique that is consistent with the principles of existing guidance, such as a present value technique or market approach. The new guidance became effective for the Company during fiscal 2010 and did not have a material impact on the Company's financial statements.

During fiscal year 2010, the Company adopted various accounting standards related to fair value measurements, non-controlling interests, useful life of intangible assets, accounting for convertible debt instruments that may be settled in cash upon conversion, participating securities, and business combinations. The adoption of these new standards did not have a material effect on the Company's results of operations, financial position, or liquidity.

## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

In April 2010, the FASB issued new guidance concerning revenue recognition related to research and development projects. It clarifies that revenue can be recognized when a milestone is achieved if the milestone meet all criteria to be considered substantive. This guidance is effective for fiscal years beginning on or after June 15, 2010. The guidance will be reviewed to determine if this change will have a material impact on the Company's future financial statements.

### 3. Inventories

Inventories consisted of the following at March 31:

	2010	2009
Raw material	\$ 2,375,000	\$ 2,511,000
Work-in-process	867,000	808,000
Finished products	414,000	350,000
Inventories, net	\$ 3,656,000	\$ 3,669,000

### 4. Equipment and Leasehold Improvements

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

	2010	2009
Machinery and equipment	\$ 7,984,000	\$ 8,117,000
Furniture and fixtures	725,000	715,000
Leasehold improvements	1,009,000	969,000
Computer hardware	628,000	611,000
Vehicles	--	26,000
Capitalized software	813,000	808,000
Total assets	11,159,000	11,246,000
Accumulated depreciation	(7,916,000)	(7,148,000)
	3,243,000	4,098,000
Construction-in-process	41,000	224,000
Net equipment and leasehold improvements	\$ 3,284,000	\$ 4,322,000

The estimated cost to complete the construction-in-process is not considered significant.

Depreciation expense was approximately \$1.2 million for both the fiscal years ended March 31, 2010 and 2009.

### 5. Intangible Assets and Goodwill

#### Intangibles

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

Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

	Weighted Average Lives	Amortization Method	March 31, 2010			March 31, 2009		
			Carrying Value	Accumulated Amortization	Intangibles Net	Carrying Value	Accumulated Amortization	Intangibles Net
Non-Compete agreement	3	Cash Flow	\$ 130	\$ 130	\$ --	\$ 130	\$ 130	\$ --
Customer list	15	Straight Line	475	347	128	475	334	141
Trademarks	15	Cash Flow	2,270	653	1,617	2,270	514	1,756
Customer relationships	5	Cash Flow	1,380	1,380	--	1,380	726	654
Technology	10	Cash Flow	10,950	6,460	4,490	10,950	5,231	5,719
Patents pending			535	--	535	502	--	502
Patents	10	Straight Line	454	128	326	295	92	203
<b>Total Intangibles</b>			<b>\$ 16,194</b>	<b>\$ 9,098</b>	<b>\$ 7,096</b>	<b>\$ 16,002</b>	<b>\$ 7,027</b>	<b>\$ 8,975</b>

Amortization expense was approximately \$2.1 million for both the years ended March 31, 2010 and 2009. Patent amortization expense, included above, was approximately \$36,000 and \$19,000 in FY 2010 and 2009, 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		Patents (a)	
2011	\$ 1,584,000	2011	\$ 40,000
2012	1,305,000	2012	40,000
2013	1,088,000	2013	39,000
2014	901,000	2014	39,000
2015	593,000	2015	39,000
2016 & after	764,000	2016 & after	129,000
<b>Total</b>	<b>\$ 6,235,000</b>	<b>Total</b>	<b>\$ 326,000</b>

(a) Patent pending costs of \$535,000 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 sheets of March 31, 2010 and 2009 is net of previously recorded impairment charges of \$954,000.

#### 6. Debt

Bank Debt -In March 2007, API, as Lessee, entered into a Master Equipment Lease Agreement with Fifth Third Leasing Company, as Lessor, to finance the purchase of new manufacturing equipment up to an aggregate of \$2.3 million (Lease). API purchased equipment under the Lease until June 30, 2007. This lease was accounted for as a capital lease in accordance with FASB accounting literature. On September 25, 2008, the Company retired the Master Equipment Lease Agreement with Fifth Third Leasing Company by paying the remaining principal amount of \$1.7 million.



On September 25, 2008, the Company established a credit facility with The PrivateBank and Trust Company. As part of this banking relationship, the Company established a three year Line of Credit of \$3.0 million at an annual interest rate of prime plus 1%, adjusted quarterly. The interest rate was 4.25% at March 31, 2010. In addition, the Company also established an Equipment Installment Loan of \$1.7 million amortized over a term of four years, at an interest rate of prime plus 1%. The facility contains customary representations, warranties and financial covenants including minimum debt service coverage ratio, adjusted EBITDA level and Net Worth requirements (as defined in the agreement). The principal loan amount on the Line of Credit is due on December 25, 2011, and the principal loan amount of the term loan is due on September 25, 2011, provided that if existing loans to the Company by the Michigan Economic Development Corporation have not converted to equity on or before August 31, 2011, the outstanding principal shall be due on August 31, 2011. The availability under the Line of Credit is determined by the calculation of a borrowing base that includes a percentage of accounts receivable and inventory.

On May 29, 2009, the Company amended its credit facility effective March 31, 2009. According to the terms of the amended loan agreement, the Adjusted EBITDA level is measured on a year to date basis for the June 26, 2009, September 25, 2009, December 25, 2009 and March 31, 2010 test dates and thereafter on a trailing four quarter basis. In addition, the Debt Service Coverage ratio and the Net Worth covenants were amended. The amended minimum Debt Service Coverage ratio is 1.0 to 1.0 for the first quarter of FY 2010, 1.25 to 1.0 for the second quarter of FY 2010 and 1.5 to 1.0 thereafter. The amended minimum Net Worth covenant is \$15.5 million and will increase by 10% of Net Income for each fiscal year that the Company reports net income.

The line of credit is guaranteed by each of API's wholly-owned subsidiaries and the term loan is secured by a Security Agreement among API, its subsidiaries and The PrivateBank, pursuant to which API and its subsidiaries granted to The PrivateBank a first-priority security interest in certain described assets.

At December 25, 2009 and March 31, 2010, the Company was not in compliance with the Debt Service Coverage ratio, Net Worth requirements or with the Adjusted EBITDA level. This constitutes an event of default under the terms of our credit facility agreement which gave The PrivateBank the ability to provide us with notice that they are exercising their rights under the credit facility by demanding payment in full of the outstanding indebtedness under our credit facility.

On June 25 2010, the Company and the Lender entered into a second amendment to the loan agreement pursuant to which our Lender waived any event of default under the agreement resulting from the covenant violations for the fiscal quarters ended December 31, 2009 and March 31, 2010 (the "Covenant Violations"). This waiver did not amend or alter in any respect the terms and conditions of the agreement or any of the other loan documents, or to constitute a waiver or release by the Lender of any right, remedy or event of default under the agreement or any of the other loan documents, except to the extent expressly set forth under the second amendment to the loan agreement. The agreement is amended to update the financial covenants as defined in the amendment and the notes. In addition, the second amendment requires the Company to amend the secured promissory notes issued to our CFO and CTO in connection with the Company's acquisition of Picometrix, Inc. on May 2, 2005 (the notes) to defer the payment of the remaining fourth and fifth installment payments owed under the Notes. Failure to amend the notes within 60 days of signing the second amendment will constitute an event of default under the agreement. The second amendment increased the interest rate from prime plus 1% to prime plus 2%. According to the terms of the amended agreement, the Adjusted EBITDA level is measured on a quarterly basis for the June 30, 2010, September 30, 2010, December 31, 2010 and March 31, 2011 test dates and thereafter on a trailing twelve months basis. In addition, the Debt Service Coverage ratio and the Net Worth covenants were amended. The amended minimum Debt Service Coverage ratio is 1.0 to 1.0 for the first three quarters of fiscal 2011 and 1.2 to 1.0 thereafter. The amended minimum Net Worth covenant is \$13.0 million for the first quarter of FY 2011, \$12.5 million for the second quarter of FY 2011, \$12.1 million for the third quarter of FY 2011 and \$11.8 million for the fourth quarter of FY 2011. Substantially all of our tangible assets serve as collateral for the debt that is owed our Lender.

## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

Based on the amended loan covenants, the Company anticipates that it is not probable that the Company will fail the new covenants during fiscal 2011 and as a result has classified the current and future maturities in accordance with the Second amendment to the loan agreement.

MEDC Loans - The Michigan Economic Development Corporation (MEDC) entered into two loan agreements with Picometrix LLC, one in fiscal 2005 (MEDC-loan 1) and one in fiscal 2006 (MSF-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-loan1 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, the Company began negotiations with the MEDC to further amend the MEDC-loan1 promissory note. The Company and the MEDC agreed 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 would convert the accrued and unpaid interest as of November 30, 2009 totaling \$324,669 into 601,239 unregistered shares of the Class A Common Stock of the Company at a price per share of \$0.54. 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 is 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-loan2. 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.

## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

During the fourth quarter of fiscal 2010, the Company began negotiations with the MEDC to further amend the MEDC-loan 2 promissory note. The Company and the MEDC agreed 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 would transfer the MEDC-loan 2 promissory note to the MSF which would convert the accrued and unpaid interest as of October 31, 2009 totaling \$237,667 into 440,124 unregistered shares of the Class A Common Stock of the Company at a price per share of \$0.54. In addition, the Company granted the MSF 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 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.

Related Parties Debt - As a result of the acquisition of Picotronics, Inc., the Company issued four-year promissory notes in the aggregate principal amount of \$2.9 million to the stockholders of Picometrix. The notes bear interest at a rate of prime plus 1.0% and are secured by all of the intellectual property of Picometrix. The interest rate at March 31, 2010 was 4.25%. API has the option of prepaying the notes without penalty. Note holders include Robin Risser and Steve Williamson, the Company's CFO and CTO, respectively.

On November 30, 2009, the Company and the note holders entered into the fourth amendments to the Notes to extend the due date for the remaining principal balance of the Notes (in the aggregate amount of \$1,400,500) to March 1, 2011 payable in two installments as follows:

December 1, 2010	\$ 450,000
March 1, 2011	\$ 950,500

Interest payments made to Related Parties during the FY 2010 and FY 2009 were approximately \$60,000 and \$94,000, respectively.

### Debt Maturity Table (in 000's)

	Balance 3/31/09	Balance 3/31/10	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016 & Beyond
Credit Line - The Private Bank	\$ 1,394	\$ 1,394	--	\$ 1,394	--	--	--	--
Term Loan - The Private Bank	1,555	1,121	434	434	253	--	--	--
Debt to Related Parties	1,401	1,401	1,401	--	--	--	--	--
MEDC loans	2,224	2,224	254	510	531	552	377	--
<b>TOTAL</b>	<b>\$ 6,574</b>	<b>\$ 6,140</b>	<b>2,089</b>	<b>2,338</b>	<b>784</b>	<b>552</b>	<b>377</b>	<b>--</b>

The Company performed an assessment of the amendments made to its related party loans made during FY 2010 to determine whether the amendments constituted a "substantial modification" in accordance with FASB guidance related to the accounting for a modification or exchange of debt instruments and concluded that no substantial modifications were made.

### 7. Capitalization

The Company's Certificate of Incorporation provides for two classes of common stock, a Class A for which 100,000,000 shares are authorized for issuance and a Class B for which 4,420,113 shares are authorized for issuance. The par value of each class is \$.001. Subject to certain limited exceptions, shares of Class B Common Stock are automatically converted into an equivalent number of Class A shares upon the sale or transfer of the Class B Common Stock by the original holder. The holder of each share of Class A and Class B Common Stock is entitled to one vote per share.



## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

The Company has authorized 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 \$.001 per share. At March 31, 2010, 40,000 shares of Class A Redeemable Convertible Preferred Stock (Class A Preferred) were issued and outstanding. The Class A convertible preferred stock is redeemable solely at the option of the Company and can also be mandatorily converted by the Company into Class A Common Stock at a rate of 3.33 shares of Class A Preferred Stock to one share of Class A Common Stock. The Class A Preferred Stock contains a liquidation preference of \$.80 per share, or a total of \$32,000 with respect to all such shares outstanding. The Class A Preferred stockholders do not have voting rights except as required by applicable law.

### 8. Stock Based Compensation

The Company has five stock equity plans: The 1990 Incentive Stock Option and Non-Qualified Stock Option Plan, the 1991 Directors' Stock Option Plan (The Directors' Plan), the 1997 Employee Stock Option Plan, the 2000 Stock Option Plan and the 2007 Equity Incentive Plan. As of March 31, 2010, under all of our plans, there were 7,200,000 Class A common shares authorized for issuance, with 1,880,010 shares remaining available for future grant.

Non-director options typically vest at the rate of 25% per year over four years and are exercisable up to ten years from the date of issuance. Options granted under the Directors' Plan typically vests at the rate of 50% per year over two years. Under these plans, the option exercise price equals the stock's market price on the date of grant. Options and restricted stock awards may be granted to employees, officers, directors and consultants. Under the 2007 Equity Incentive Plan, restricted stock awards typically vest within one year.

Stock option transactions for fiscal years 2009 and 2010 are summarized as follows:

	Shares (000)	Weighted Average Exercise Price	Weighted Average Term (in years)	Aggregate Intrinsic Value
Outstanding, March 31, 2008	2,619	\$1.92		
Exercisable, March 31, 2008	2,198	\$1.87		
Outstanding, March 31, 2008	2,619	\$1.92		
Granted	292	\$1.52		
Exercised	(57)	\$0.86		
Expired	(108)	\$1.62		
Outstanding, March 31, 2009	2,746	\$1.92	5.97	\$21,000
Exercisable, March 31, 2009	2,374	\$1.93	5.29	\$21,000
Vested & expected to Vest, March 31, 2009	2,676	\$1.92	5.97	\$17,000
Outstanding, March 31, 2009	2,746	\$1.92		
Granted	78	\$0.63		
Exercised	(30)	\$0.52		
Expired	(190)	\$2.44		
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

Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

Information regarding stock options outstanding as of March 31, 2010 is as follows:

Price Range	(in 000s) Shares	Options Outstanding	
		Weighted Average Exercise Price	Weighted Average Remaining Life
\$0.50 - \$1.25	748	\$0.75	6.16
\$1.50 - \$2.50	1,201	\$1.91	5.56
\$2.87 - \$5.34	655	\$3.03	4.75

Price Range	(in 000s) Shares	Options Exercisable	
		Weighted Average Exercise Price	Weighted Average Remaining Life
\$0.50 - \$1.25	706	\$0.75	3.69
\$1.50 - \$2.50	1,041	\$1.96	5.16
\$2.87 - \$5.34	655	\$3.03	4.75

The intrinsic value of options exercised in fiscal years 2010 and 2009 was approximately \$7,000 and \$47,000, respectively.

During FY 2009 and FY 2010, 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, 2008	--	--
Granted	56	\$ 1.68
Vested	(27)	\$ 1.87
Expired	--	--
Unvested, March 31, 2009	29	\$ 1.50

	Shares (000)	Weighted Average Grant Date Fair Value
Unvested, March 31, 2009	29	\$ 1.50
Granted	344	\$ 0.66
Vested	(348)	\$ 0.73
Expired	--	--
Unvested, March 31, 2010	25	\$ 0.63

The total fair value of restricted shares vesting during fiscal years 2010 and 2009 was approximately \$242,000 and \$17,000, respectively.

The Company estimates the fair value of stock options utilizing the Black-Scholes pricing model. 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 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 stock-based 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. As additional evidence develops, the future volatility estimate will be refined to capture the relevant trends.
- A dividend yield of zero has been assumed for awards issued for the years ended March 31, 2010 and March 31, 2009, 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, 2010 and March 31, 2009 on the implied yield available on U.S. Treasury issues with an equivalent expected term.
- The forfeiture rate for awards issued during the year ended March 31, 2010 was approximately 20.5% and March 31, 2009 was approximately 18.7%, and was based on the Company's actual historical forfeiture trend.

	Year Ended	
	March 31, 2010	March 31, 2009
Option Plan Shares:		
Expected term (in years)	6.3	6.3
Volatility	69.0%	42.5%
Expected dividend	0%	0%
Risk-free interest rate	2.2%	2.2%
Weighted-average grant date fair value	\$0.70	\$0.71

The table below lists the classification of the Stock Based Compensation Expense for the years ended March 31, 2010 and March 31, 2009.

	2010	2009
Cost of products sold	\$ 15,000	\$ 12,000
Research and development expense	71,000	48,000
General and administrative expense	264,000	117,000
Sales and marketing expense	17,000	27,000
Total Stock Based Compensation	\$ 367,000	\$ 204,000

At March 31, 2010, 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 \$87,000. This expense will be amortized on a straight-line basis over a weighted-average period of approximately 1.3 years and will be adjusted for subsequent changes in estimated forfeitures.

#### 9. Wafer Fabrication consolidation

During fiscal 2010, the Company finalized the consolidation and modernization of its wafer fabrication facilities. Prior to this consolidation, the Company had excess wafer fabrication capacity at its three locations (including Dodgeville, WI), with the Ann Arbor, MI facility having the most modern infrastructure. The wafer fabrication facilities and equipment in its Wisconsin and California facilities had similar capabilities and both required substantial upgrade and improvement in order to maintain production capabilities. Since the Ann Arbor facility, when equipped, would have the physical capacity to produce all of the Company's current and foreseeable wafer requirements and would not significantly impact current production requirements during any upgrade process, management decided to consolidate all optoelectronic wafer fabrication into the Ann Arbor facility. Even though the Company had excess capacity in its Wisconsin and California production facilities, no abnormally low production levels were experienced. Unallocated overhead costs were recognized as an expense in the period in which they were incurred in accordance with FASB guidance related to inventory costs during the normal course of business.

The Company's total wafer fabrication consolidation expense to complete the consolidation was approximately \$2.4 million. Actual costs consisted of labor and associated expense of \$1.1 million, travel and relocation costs of \$169,000, accelerated depreciation expense on de-commissioned assets of \$150,000 and supplies, consulting and other related costs of \$894,000. In accordance with FASB guidance related to the accounting for cost activities associated with exit or disposal activities, all costs associated with the consolidation were recorded as expenses when incurred. The Company expects the wafer fabrication consolidation to result in cost reduction through elimination of duplicate expenditures and yield improvements as well as an increase in new product development capability. The Company recorded \$40,000 and \$300,000 of expenses related to this project in the years ended March 31, 2010 and 2009, respectively.

#### 10. Equity

##### Shareholders' Equity Transactions

In fiscal years 2005 and 2006, warrants were issued in connection the issuance of convertible debt that has all been subsequently converted into Class A Common Stock. The warrants were issued in two tranches with 1,389,082 still outstanding at March 31, 2010 and March 31, 2009 at an exercise price of \$1.744 per share.

On September 14, 2007, the Company completed a private placement (the "Offering"). Each unit sold by the Company in the Offering consisted of four (4) shares of the Company's Class A Common Stock, par value \$0.001 per share (the "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 "Warrant"). The Company sold a total of 741,332 units (consisting of 2,965,332 Offering Shares and 741,332 Warrants), of which 33,000 units (consisting of 132,000 Offering Shares and 33,000 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 Offering Shares and 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.

## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

The schedule below shows the outstanding warrants at March 31, 2010 and March 31, 2009:

Warrants Outstanding & Exercisable	Shares 2010	Shares 2009	Exercise Price	Remaining Life (in yrs) at 3/31/10
Convertible Note – 1st Tranche	694,541	694,541	\$1.744	0.1
Convertible Note – 2nd Tranche	694,541	694,541	\$1.744	1.1
Private Placement	741,332	741,332	\$1.85	2.5
Total	2,130,414	2,130,414		

During FY 2010 and FY 2009, there was no activity regarding warrants outstanding and exercisable.

The exercise price for the Convertible Note warrants are subject to adjustment, based on a formula contained in the Convertible Note agreement, if common stock is issued in the future below the \$1.744 exercise price. Such adjustments cannot reduce the exercise price below \$1.70 without obtaining shareholder approval. The exercise price for the Private Placement warrants are subject to adjustment based on a formula contained in the Private Placement agreement, if common stock is issued in the future below the \$1.85 exercise price. Such adjustments cannot reduce the exercise price below \$1.79 without obtaining shareholder approval.

As a result of adopting the FASB's guidance, effective April 1, 2009, on how an entity should evaluate whether an instrument is indexed to its own stock, the above mentioned warrants, which previously were treated as equity, are no longer afforded equity treatment because of their exercise price reset features. At the effective date the Company was required to adjust its balance sheet to reflect the incremental impact of treating the warrants as liabilities since their original issuance date. On April 1, 2009, the Company reclassified \$2,619,000 of previously recorded debt discount from additional paid-in-capital, as a cumulative effect adjustment, and recorded the initial recognition of a \$294,000 warrant liability, to reflect the fair value of the warrants on that date. These adjustments resulted in a \$2,325,000 decrease to the accumulated deficit. The fair value liability of these warrants decreased to approximately \$112,000 as of March 31, 2010. As a result, the Company recorded other income of \$182,000, from the change in the fair value of these warrants for the year ended March 31, 2010.

The fair value of the warrants was estimated using the Black-Scholes option pricing model using the following assumptions:

	March 31, 2010	April 1, 2009
Contractual term (in years)	.1 – 2.5	1.1 – 3.5
Volatility	69.8% - 85.46%	72.09% - 97.99%
Expected dividend	--	--
Risk-free interest rate	0.58% - 1.16%	0.58% - 1.16%

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 inputs used to determine the fair value of the warrants are classified as Level 3 inputs. Management classified these as Level 3 measurements as they are based on unobservable inputs and involve management judgment.

#### 11. Foreign Sales

In FY 2010 and FY 2009, the Company had export sales of approximately \$3.5 million and \$5.4 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:

	2010	2009
Canada	3%	5%
Germany	2%	1%
Poland	--	1%
Israel	--	2%
Japan	3%	--
United Kingdom	2%	5%
All other countries	6%	4%
Total export sales	16%	18%

#### 12. 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 401K program was suspended through March 31, 2010 due to the unstable economic environment the country is currently experiencing. The matching program will continue to be suspended until economic conditions improve. The Company contributions and administration costs recognized as expense were approximately \$-0- and \$279,000 in FY 2010 and 2009, respectively.

#### 13. Income Taxes

At March 31, 2010, the Company had net operating loss carry forwards (NOL's) of approximately \$20.8 million for Federal income tax purposes and \$5.6 million for state income tax purposes that expire at various dates through fiscal year 2030. 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 IRC Section 382 resulting from changes in the ownership of the Company's common stock.

## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

The Company performed an analysis to determine whether an ownership change under Section 382 of the Internal Revenue Code 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, 2010, the Company believes there are no limitations on the use of these Federal NOLs.

At March 31, 2010, the Company's net deferred tax asset before consideration of a valuation allowance was approximately \$7.7 million, mainly consisting of net operating loss carry-forwards. 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 each 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, 2010 and 2009, the Company recorded a full valuation allowance on its net deferred tax.

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

Years Ended	March 31, 2010	March 31, 2009
Federal income tax at statutory rates	\$ (1,295,000)	\$ (692,000)
State income taxes, net of federal benefit	(198,000)	20,000
Expiration of NOL carry-forwards	662,000	1,300,000
Change in valuation allowance	369,000	(559,000)
Refundable R&D credits	(85,000)	--
Permanent items	187,000	82,000
Provision to return adjustments and other	275,000	(151,000)
Effective federal income tax	\$ (85,000)	\$ --

The Company's net deferred tax assets (liabilities) consisted of the following components, for fiscal years 2010 and 2009:

	2010	2009
Sec. 263A adjustment	\$ 45,000	\$ 57,000
Inventory reserve	400,000	314,000
Accounts receivable allowance	18,000	22,000
Accruals	197,000	178,000
NOL carry forwards	7,425,000	7,716,000
Basis difference of intangibles	(2,132,000)	(2,172,000)
Basis difference of equipment	(513,000)	(748,000)
R&D credit carry forward	2,036,000	1,561,000
Goodwill amortization	124,000	322,000
Other	74,000	55,000
Total	\$ 7,674,000	\$ 7,305,000
Valuation allowance	(7,674,000)	(7,305,000)
Net deferred tax asset	\$ --	\$ --

At March 31, 2010 the Company's Federal R&D tax credit carry forwards totaled approximately \$2.0 million. These credits will expire annually at March 31 over the next twenty (20) years.

14. 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 first right of 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 will decrease 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 for the next five years:

2011	\$ 1,000,000
2012	983,000
2013	986,000
2014	961,000
2015	579,000
Total	\$ 4,509,000

Rent expense was approximately \$1.1 million and \$1.2 million in FY 2010 and 2009, 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.



## Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

### 15. Quarterly Financial Data

The table below lists financial information (unaudited) by quarter for each of the two fiscal years ended March 31, 2010 and 2009.

2010	First	Second	Third	Fourth	Total Year
Net Sales	\$ 5,934,000	\$ 5,424,000	\$ 4,588,000	\$5,129,000	\$ 21,075,000
Cost of Products Sold	2,937,000	3,360,000	3,009,000	2,753,000	12,059,000
Gross Profit	2,997,000	2,064,000	1,579,000	2,376,000	9,016,000
Research & Development Expenses	1,063,000	1,167,000	1,183,000	1,325,000	4,738,000
Selling, General & Administrative Expenses	2,179,000	1,917,000	1,896,000	1,942,000	7,934,000
Net Income (Loss)	\$ (296,000)	\$ (1,192,000)	\$ (1,344,000)	\$ (846,000)	\$ (3,678,000)
Basic and diluted Loss per Common Share	\$ (0.01)	\$ (0.05)	\$ (0.05)	\$ (0.03)	\$ (0.15)
Weighted Average Common Shares Outstanding	24,135,000	24,343,000	24,483,000	24,496,000	24,368,000
<b>2009</b>					
Net Sales	\$ 7,770,000	\$ 8,188,000	\$ 7,606,000	\$ 6,111,000	\$ 29,675,000
Cost of Products Sold	4,014,000	4,624,000	4,329,000	3,777,000	16,744,000
Gross Profit	3,756,000	3,564,000	3,277,000	2,334,000	12,931,000
Research & Development Expenses	1,128,000	1,081,000	1,112,000	1,355,000	4,676,000
Selling, General & Administrative Expenses	2,389,000	2,708,000	2,415,000	2,399,000	9,911,000
Net Income (Loss)	\$ 147,000	\$ (326,000)	\$ (359,000)	\$ (1,497,000)	\$ (2,035,000)
Basic and diluted Loss per Common Share	\$ 0.01	\$ (0.01)	\$ (0.01)	\$ (0.06)	\$ (0.08)
Weighted Average Common Shares Outstanding	24,010,000	24,060,000	24,109,000	24,121,000	24,074,000

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

None

#### Item 9A (T). 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, 2010 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, 2010.



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

In June 2010, the Company and the bank entered into a Second Amendment to the Loan agreement pursuant to which our Lender waived any event of default under the Agreement resulting from the covenant violations for the fiscal quarters ended December 31, 2009 and March 31, 2010 (the "Covenant Violations"). This waiver is not deemed to amend or alter in any respect the terms and conditions of the Agreement or any of the other loan documents, or to constitute a waiver or release by the Lender of any right, remedy or event of default under the Agreement or any of the other loan documents, except to the extent expressly set forth under the Second Amendment to the Loan agreement. The agreement is amended to update the financial covenants as defined in the amendment and the notes. In addition, the Second Amendment requires the Company to amend the secured promissory notes issued to our CFO and CTO in connection with the Company's acquisition of Picometrix, Inc. on May 2, 2005 (the notes) to defer the payment of the remaining fourth and fifth installment payments owed under the Notes. Failure to amend the Notes within 60 days of signing the Second Amendment will constitute an event of default under the Agreement. The Second Amendment increased the interest rate from prime plus 1% to prime plus 2%. According to the terms of the amended Agreement, the Adjusted EBITDA level is measured on a quarterly basis for the June 30, 2010, September 30, 2010, December 31, 2010 and March 31, 2011 test dates and thereafter on a trailing twelve months basis. In addition, the Debt Service Coverage ratio and the Net Worth covenants were amended. The amended minimum Debt Service Coverage ratio is 1.0 to 1.0 for the first three quarters of fiscal 2011 and 1.2 to 1.0 thereafter. The amended minimum Net Worth covenant is \$13.0 million for the 1st quarter, \$12.5 million for the 2nd quarter, \$12.1 million for the 3rd quarter and \$11.8 million for the 4th quarter. Substantially all of our tangible assets serve as collateral for the debt that is owed our Lender.

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 2010 Annual Meeting of Stockholders.

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Code of Ethics -- The Company has adopted a Code of Ethics 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](http://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, 2010, 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 warrants and rights	Number of securities remaining available for future issuance
Equity compensation plans approved by shareholders	2,604,000	\$1.85	1,880,000 (1)
Equity compensation plans not approved by shareholders	-	-	-
Total	2,604,000	\$1.85	1,880,000 (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

	March 31, 2009	Additions Charged to Expense	Charged to Other Accounts	Deductions	March 31, 2010
Allowance for doubtful accounts	\$ 62,000	\$ 12,000	\$ --	\$ 23,000	\$ 51,000
Warranty reserves	\$ 138,000	\$ 50,000	\$ --	\$ 102,000	\$ 86,000
Deferred tax valuation allowance	\$ 7,305,000	\$ --	\$ 369,000	\$ --	\$ 7,674,000

	March 31, 2008	Additions Charged to Expense	Charged to Other Accounts	Deductions	March 31, 2009
Allowance for doubtful accounts	\$ 14,000	\$ 48,000	\$ --	\$ --	\$ 62,000
Warranty reserves	\$ 85,000	\$ 76,000	\$ --	\$ 23,000	\$ 138,000
Deferred tax valuation allowance	\$ 7,864,000	\$ --	\$ --	\$ 559,000	\$ 7,305,000

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
2.1	Stock Purchase Agreement dated December 21, 2004 between Advanced Photonix, Inc. and Photonic Detectors, Inc. – incorporated by reference to Exhibit 2.1 to the Registrant’s Form 8-K, filed on December 23, 2004
2.2	Agreement and Plan of Merger between Advanced Photonix, Inc. and Michigan Acquisition Sub, LLC, Picotronics, Inc., Robin Risser and Steven Williamson, dated March 8, 2005 – incorporated by reference to Exhibit 2.1 to the Registrant’s Form 8-K, filed on March 14, 2005
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

Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

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
3.2	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 8, 2005
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. 1990 Incentive Stock Option and Non-Qualified Stock Option Plan – incorporated by reference to Exhibit No. 10.11 to the Registrant's Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 23, 1990
10.3	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
10.4	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
10.5	Advanced Photonix, Inc. 2000 Stock Option Plan, as amended – incorporated by reference to Exhibit 99.1 to the Registrant's Form 8-K, filed on November 19, 2004
10.6	Advanced Photonix, Inc. 2007 Equity Incentive Plan – incorporated by reference to the Registrant's Exhibit A to the Proxy Statement relating to its 2007 Annual Meeting of Stockholders, as filed July 16, 2007 on Form 14A
10.7	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
10.8	Form of Employee Restricted Stock Agreement under the 2007 Equity Incentive Plan -- incorporated by reference to Exhibit 4. to the Registrant's Form S-8 on Registration Statement No. 333-147012, filed on October 30, 2007

Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

10.9	Form of Employee Stock Option Agreement under the 2007 Equity Incentive Plan -- incorporated by reference to Exhibit 4.6 to the Registrant's Form S-8 on Registration Statement No. 333-147012, filed on October 30, 2007
10.10	Advanced Photonix, Inc. Executive Incentive Compensation Plan -- incorporated by reference to Exhibit 10.1 to the Registrant's December 28, 2007 Quarterly Report on Form 10-Q
10.11	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
10.12	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
10.13	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
10.14	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
10.15	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
10.16	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
10.17	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
10.18	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



Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

10.19	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
10.20	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 March 2, 2008
10.21	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 10.1 to the Registrant’s Form 8-K, filed on December 1, 2008
10.22	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
10.23	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
10.24	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
10.25	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
10.26	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
10.27	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
10.28	Loan Agreement between Advanced Photonix, Inc. and Fifth Third Bank, dated March 6, 2007 – incorporated by reference to Exhibit 10.1 to the Registrant’s Form 8-K, filed on March 9, 2007
10.29	Promissory Note by Advanced Photonix, Inc. in favor of Fifth Third Bank, for \$2,000,000 dated March 6, 2007 – incorporated by reference to Exhibit 10.2 to the Registrant’s Form 8-K, filed on March 9, 2007
10.30	Security Agreement among Advanced Photonix, Inc., Silicon Sensors, Inc., Picometrix, LLC, and Fifth Third Bank – incorporated by reference to Exhibit 10.3 to the Registrant’s Form 8-K, filed on March 9, 2007

Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

10.31	Master Equipment Lease Agreement between Advanced Photonix, Inc. and Fifth Third Leasing Company dated March 6, 2007 – incorporated by reference to Exhibit 10.4 to the Registrant’s Form 8-K, filed on March 9, 2007
10.32	Interim Funding Schedule between Advanced Photonix and Fifth Third Leasing Company – incorporated by reference to Exhibit 10.5 to the Registrant’s Form 8-K, filed on March 9, 2007
10.33	First Amendment dated November 13, 2007 between Advanced Photonix, Inc. and Fifth Third Bank to that certain Business Loan Agreement dated as of March 6, 2007 – incorporated by reference to Exhibit 10.4 to the Registrant’s Form 10-Q/A, filed on June 17, 2008
10.34	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
10.35	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
10.36	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
10.37	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
10.38	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
10.39	Form of Patent, Trademark and 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
10.40	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
10.41	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
10.42	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

Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

10.43	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
10.44	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
10.45	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
10.46	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
10.47	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
10.48	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
10.49	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
10.50	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 2, 2009
10.51	Employment Agreement dated November 30, 2009, between Advanced Photonix, Inc. and Richard Kurtz – incorporated by reference to Exhibit 10.1 to the Registrant’s Form 8-K, filed on December 3, 2009
10.52	Employment Agreement dated November 30, 2009, between Advanced Photonix, Inc. and Robin Risser – incorporated by reference to Exhibit 10.2 to the Registrant’s Form 8-K, filed on December 3, 2009
10.53	Employment Agreement dated November 30, 2009, between Advanced Photonix, Inc. and Steve Williamson – incorporated by reference to Exhibit 10.3 to the Registrant’s Form 8-K, filed on December 3, 2009
10.54	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 10.1 to the Registrant’s Form 8-K, filed on December 3, 2009

Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

10.55	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 10.2 to the Registrant’s Form 8-K, filed on December 3, 2009
10.56	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
10.57	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
10.58	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
10.59	Second Amendment dated June 25, 2010 to the Loan Agreement between Advanced Photonix, Inc. and The PrivateBank and Trust Company
10.60	Second Amendment dated June 25, 2010 to the Promissory Note (Term Loan – Prime) by Advanced Photonix, Inc. and The PrivateBank and Trust Company
10.61	Second Amendment dated June 25, 2010 to the Promissory Note (Line of Credit – Prime) by Advanced Photonix, Inc. and The PrivateBank and Trust Company
21.1	List of Subsidiaries of Registrant
23.1	Consent of BDO Seidman, 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

# Edgar Filing: ADVANCED PHOTONIX INC - Form 10-K

## 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, 2010

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	June 29, 2010
s/ Robin Risser Robin Risser	Chief Financial Officer and Director	June 29, 2010
/s/ M. Scott Farese M. Scott Farese	Director	June 29, 2010
/s/ Lance Brewer Lance Brewer	Director	June 29, 2010
/s/ Donald Pastor Donald Pastor	Director	June 29, 2010
/s/ Stephen P. Soltwedel Stephen P. Soltwedel	Director	June 29, 2010