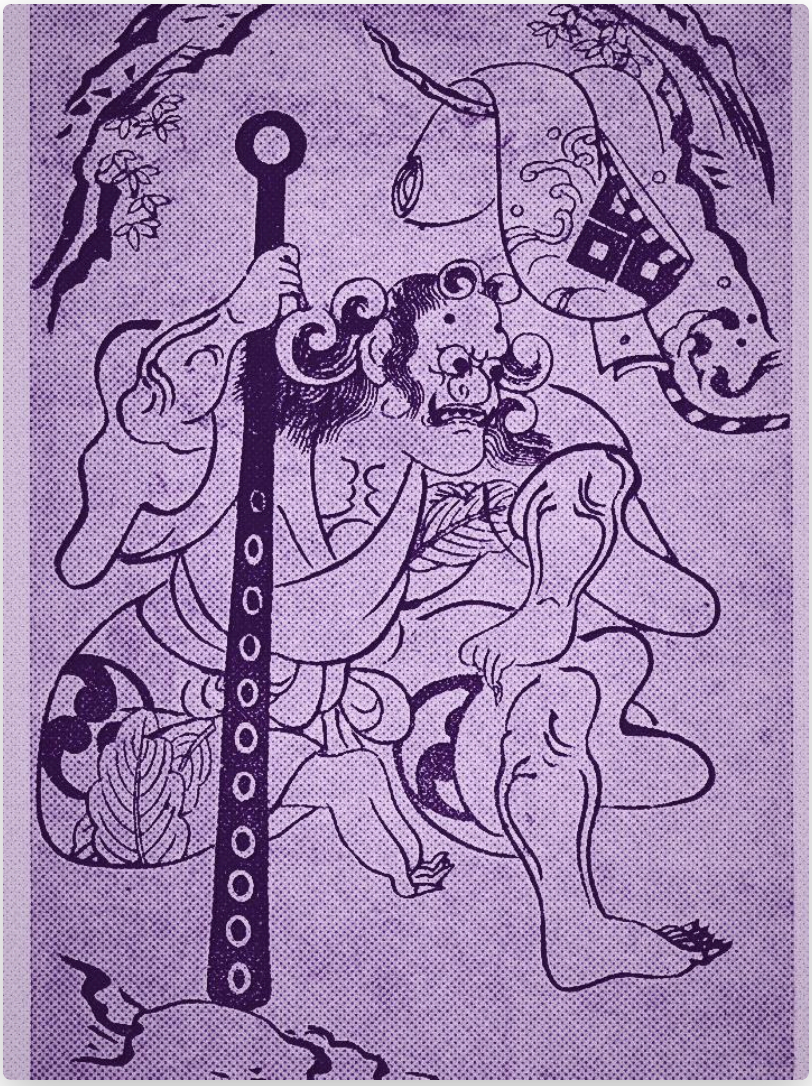
FORM S-1 · REGISTRATION STATEMENT

ONI Systems Corp

IPO priced 2000-06-01 · $25.00 a share · ONIS



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AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON MARCH 10, 2000 REGISTRATION NO. 333- SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549 FORM S-1 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933 ONI SYSTEMS CORP. (EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

Delaware	3661	77046-9657
(State or other jurisdiction of incorporation or organization)	(Primary standard industrial classification code number)	(I.R.S. employer identification no.)

ONI SYSTEMS CORP. 166 BAYPOINTE PARKWAY SAN JOSE, CALIFORNIA 95134-1621 (408) 965-2600 (ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF REGISTRANT'S PRINCIPAL EXECUTIVE OFFICES) HUGH C. MARTIN PRESIDENT, CHIEF EXECUTIVE OFFICER AND CHAIRMAN ONI SYSTEMS CORP. 166 BAYPOINTE PARKWAY SAN JOSE, CALIFORNIA 95134-1621 (408) 965-2600 (NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF AGENT FOR SERVICE)

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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: AS SOON AS PRACTICABLE AFTER THE EFFECTIVE DATE OF THIS REGISTRATION STATEMENT.

IF ANY OF THE SECURITIES BEING REGISTERED ON THIS FORM ARE TO BE OFFERED ON A DELAYED OR CONTINUOUS BASIS PURSUANT TO RULE 415 UNDER THE SECURITIES ACT OF 1933, CHECK THE FOLLOWING BOX. [_] IF THIS FORM IS FILED TO REGISTER ADDITIONAL SECURITIES FOR AN OFFERING PURSUANT TO RULE 462(B) UNDER THE SECURITIES ACT, CHECK THE FOLLOWING BOX AND LIST THE SECURITIES ACT REGISTRATION STATEMENT NUMBER OF THE EARLIER EFFECTIVE REGISTRATION STATEMENT FOR THE SAME OFFERING. [_] IF THIS FORM IS A POST-EFFECTIVE AMENDMENT FILED PURSUANT TO RULE 462(C) UNDER THE SECURITIES ACT, CHECK THE FOLLOWING BOX AND LIST THE SECURITIES ACT REGISTRATION STATEMENT NUMBER OF THE EARLIER EFFECTIVE REGISTRATION STATEMENT FOR THE SAME OFFERING. [_] IF THIS FORM IS A POST-EFFECTIVE AMENDMENT FILED PURSUANT TO RULE 462(D) UNDER THE SECURITIES ACT OF 1933, CHECK THE FOLLOWING BOX AND LIST THE SECURITIES ACT REGISTRATION STATEMENT NUMBER OF THE EARLIER EFFECTIVE REGISTRATION STATEMENT FOR THE SAME OFFERING. [_] IF DELIVERY OF THE PROSPECTUS IS EXPECTED TO BE MADE PURSUANT TO RULE 434, PLEASE CHECK THE FOLLOWING BOX. [_]

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee
COMMON STOCK, $0.0001 PAR VALUE.....	$115,000,000	$30,360

(1) ESTIMATED SOLELY FOR THE PURPOSE OF COMPUTING THE AMOUNT OF THE REGISTRATION FEE PURSUANT TO RULE 457(O) UNDER THE SECURITIES ACT OF 1933.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

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+The information in this preliminary prospectus is not complete and may be   +
+changed. These securities may not be sold until the registration statement   +
+filed with the Securities and Exchange Commission is effective. This   +
+preliminary prospectus is not an offer to sell nor does it seek an offer to   +
+buy these securities in any jurisdiction where the offer or sale is not   +
+permitted.   +
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Subject to Completion. Dated March 10, 2000.

[LOGO OF ONI SYSTEMS]

SHARES

ONI SYSTEMS CORP.

COMMON STOCK

THIS IS AN INITIAL PUBLIC OFFERING OF SHARES OF COMMON STOCK OF ONI SYSTEMS CORP. ALL OF THE SHARES OF COMMON STOCK ARE BEING SOLD BY ONI SYSTEMS.

AT THE REQUEST OF ONI SYSTEMS, THE UNDERWRITERS HAVE RESERVED AT THE INITIAL PUBLIC OFFERING PRICE UP TO SHARES OF COMMON STOCK FOR SALE TO INDIVIDUALS DESIGNATED BY ONI SYSTEMS.

PRIOR TO THIS OFFERING, THERE HAS BEEN NO PUBLIC MARKET FOR OUR COMMON STOCK. ONI SYSTEMS ESTIMATES THAT THE INITIAL PUBLIC OFFERING PRICE PER SHARE WILL BE BETWEEN $ AND $. ONI SYSTEMS HAS APPLIED FOR APPROVAL FOR QUOTATION OF ITS COMMON STOCK ON THE NASDAQ NATIONAL MARKET UNDER THE SYMBOL "ONIS".

SEE "RISK FACTORS" BEGINNING ON PAGE 7 TO READ ABOUT FACTORS YOU SHOULD CONSIDER BEFORE BUYING SHARES OF OUR COMMON STOCK.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY OTHER REGULATORY BODY HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

	PER SHARE	TOTAL
Initial public offering price	$	$
Underwriting discount	$	$
Proceeds, before expenses, to ONI Systems	$	$

To the extent that the underwriters sell more than shares, the underwriters have the option to purchase up to an additional shares from ONI Systems at the initial public offering price, less the underwriting discount.

THE UNDERWRITERS EXPECT TO DELIVER THE SHARES AGAINST PAYMENT IN NEW YORK, NEW YORK ON , 2000.

GOLDMAN, SACHS & CO. BANC OF AMERICA SECURITIES LLC CHASE H&Q ROBERTSON STEPHENS

PROSPECTUS DATED , 2000.

[INSIDE FRONT COVER ARTWORK TO COME]

Prospectus Summary

You should read this summary together with the entire prospectus, including the more detailed information in our financial statements and accompanying notes appearing elsewhere in this prospectus. Unless otherwise indicated, all information contained in this prospectus assumes no exercise of the underwriters' option to purchase additional shares in this offering, gives effect to the automatic conversion of each outstanding share of preferred stock into one share of common stock

upon the closing of this offering. The share numbers presented in this prospectus have been retroactively restated to give effect to all stock splits. Except as otherwise indicated, the information in this prospectus gives effect to our reincorporation in Delaware.

ONI Systems Corp.

We develop, market and sell all-optical networking equipment specifically designed to address the bandwidth and service limitations of regional and metropolitan networks. Communications service providers can cost-effectively deploy our products to relieve the growing traffic bottleneck in these networks and offer new revenue-generating data services. By installing our equipment, service providers can rapidly build high-capacity metro networks that are flexible, scalable and able to support multiple services on a single platform. Our all-optical product offerings include the ONLINE9000, which we began shipping in February 2000, and the ONLINE7000, which we anticipate will be available in the second quarter of 2000. These products incorporate our OPTX network operating system and OLMP inter-network communications protocols to manage and support a diverse mix of service offerings.

In response to demand caused by the proliferation of the Internet and Internet-related services, transmission capacity has grown rapidly in the long distance and enterprise networks over the past several years. The availability of high-speed optical communications solutions, which transmit data using pulses of light rather than electricity, has enabled this growth. However, optical solutions specifically designed to address the challenges faced by metro networks, which bridge long distance and enterprise networks, have not been widely available. This has contributed to a bottleneck in the metro market that impedes service delivery. To date, optical solutions available to metro service providers have been based on technologies originally designed to serve other communications networks, and have been costly, difficult to scale and difficult to manage in the metro environment.

We believe that our product offerings represent the first commercially available, all-optical solution specifically designed for metro networks. The benefits of our solution include:

. Multi-service capability. Our products allow service providers to introduce and support a changing mix of services without deploying dedicated equipment for each service type. Our products are also compatible with existing services based on the Synchronous Optical Network standard, commonly referred to as SONET.

. Manageability and flexibility. Our products enable real time end-to-end management, surveillance, service activation, network inventory management and billing within our OPTX network operating system.

. Cost effectiveness and scalability. Our products eliminate costly optical-to-electrical conversions, and the scalability of our products allows service providers to build metro networks in a pay-as-you-grow fashion.

. Rapid and efficient service restoration. Our products provide for rapid restoration of mission critical services without the need to dedicate network capacity for this capability.

The following are key elements of our strategy:

. leverage our all-optical architecture to achieve early design wins in metro networks;

. work closely with service providers to identify and enable new revenue- generating services for their end-users;

. extend our technology leadership through continued investment in research and development;

. leverage our optical manufacturing expertise and relationships to reduce costs and increase flexibility to meet demand;

. expand our direct sales and service and support capabilities worldwide; and . establish strategic alliances and pursue acquisitions to broaden our product, service and technology portfolios.

Corporate Information We were incorporated in California on October 20, 1997 as Optical Networks, Incorporated. In connection with this offering, we intend to reincorporate in Delaware and change our name to ONI Systems Corp. Our principal executive offices are located at 166 Baypointe Parkway, San Jose, California 95134-1621. Our telephone number is (408) 965-2600. References in this prospectus to "we", "our", and "us" refer to ONI Systems Corp. ONI Systems(TM), ONI(TM), our logo, ONLINE9000(TM), ONLINE7000(TM), OPTX(TM), OLMP(TM), Dynamic Transport System(TM) and DTS(TM) are trademarks of ONI Systems. All other names or trademarks appearing in this prospectus are the property of their holders.

The Offering

Common stock offered..... shares Common stock to be outstanding after this offering..... shares Use of proceeds..... For general corporate purposes, including capital expenditures, working capital and potential acquisitions of, or investments in, complementary technologies or businesses. See "Use of Proceeds". Proposed Nasdaq National Market symbol..... "ONIS" The number of shares of our common stock to be outstanding immediately after this offering is based on the number of shares outstanding as of December 31, 1999. The number of shares to be outstanding excludes, as of December 31, 1999:

. 388,908 shares of common stock subject to options outstanding under our 1997 Stock Option Plan, at a weighted average exercise price of $0.03 per share;

. 15,813,816 shares of common stock subject to options outstanding under our 1998 Equity Incentive Plan, at a weighted average exercise price of $0.24 per share, and 1,824,480 shares of common stock available for future grant under our 1998 Equity Incentive Plan;

. 1,346,000 shares of common stock subject to options outstanding under our 1999 Equity Incentive Plan, at a weighted average exercise price of $0.95 per share, and 18,166 shares of common stock available for future grant under our 1999 Equity Incentive Plan; and . 1,011,394 shares of common stock issuable upon exercise of outstanding warrants, at a weighted average exercise price of $0.69 per share.

In addition, since December 31, 1999 and through March 1, 2000, we have granted options to purchase 5,415,952 shares of our common stock, at a weighted average exercise price of $2.08 per share, and warrants to purchase 223,000 shares of common stock, at a weighted average exercise price of $0.91 per share. We also intend to adopt our 2000 Equity Incentive Plan under which shares of common stock will be available for future grant and our 2000 Employee Stock Purchase Plan under which shares of common stock will be available for future grant.

Summary Consolidated Financial Data

	Period From Inception (October 20, 1997) to December 31, 1997	Year Ended December 31, 1998	1999
	(in thousands, except share and per share data)		
Statement of operations data:			
Revenue	$ --	$1,733	$ 3,034
Gross profit	--	525	2,002
Operating expenses	198	9,559	45,903
Operating loss	(198)	(9,034)	(43,901)
Net loss	(199)	(8,852)	(43,280)
Basic and diluted net loss per share	(0.77)	(0.74)	(2.40)
Weighted average shares outstanding used in computing basic and diluted net loss per share	257,017	11,918,628	18,043,188
Pro forma basic and diluted net loss per share			(0.55)
Shares used in computing pro forma basic and diluted loss per share			78,025,225

Pro forma basic and diluted net loss per share has been calculated assuming the conversion of all outstanding preferred stock into common stock, as if all shares had converted at the beginning of the period or, if later, the date of their issuance.

At December 31, 1999 As Actual Adjusted (in thousands)

Balance sheet data:		
Cash and cash equivalents	$ 80,023	$
Working capital	81,758	
Total assets	100,272	
Capital lease obligations, less current portion	367	
Total stockholders' equity	91,057	

The as adjusted balance sheet data at December 31, 1999 gives effect to the sale of shares of common stock by us in this offering at an assumed initial public offering price of $ per share, after deducting an assumed underwriting discount and estimated offering expenses.

See notes 1 and 11 of notes to our consolidated financial statements for a description of the method that we used to compute our basic and diluted net loss per share. See "Capitalization".

Risk Factors

An investment in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below and the other information in this prospectus before deciding whether to invest in shares of our common stock. The occurrence of any of the following risks could cause the trading price of our common stock to decline and you might lose all or part of your investment.

We have a history of losses, expect to continue to incur losses and may never achieve profitability.

Through December 31, 1999 we incurred cumulative losses of $52.3 million, and we expect to continue to incur losses in the future. If we do not become profitable, the value of our stock will decrease. We have large fixed expenses and we plan to incur significant and increasing sales and marketing, research and development, manufacturing, and general and administrative expenses. In February 2000, we began to ship our first product, the ONLINE9000, and our revenue to date has been limited. In order for us to become profitable, we will need to generate and sustain higher revenue while maintaining reasonable cost and expense levels.

Our limited operating history makes forecasting our future revenue and operating results difficult, which may impair our ability to manage our business and your ability to assess our prospects.

We commenced business as an independent company in December 1997 and introduced our ONLINE9000 product in January 2000. Consequently, we have a limited history upon which we can rely in planning and making the critical decisions that will affect our future operating results. Similarly, because of the relatively immature state of our business, it will be difficult for investors to evaluate our prospects. We will need to make decisions in the immediate future regarding resource allocations for research and development and marketing and sales. If our predictions about the best use of our resources turn out to be inaccurate, we may not make the best use of our resources and we may forego better opportunities. Our limited history makes it difficult for investors to gauge our capability in making these decisions.

The ONLINE9000 is our only currently available product and a significant portion of our future revenue depends on its commercial success.

If our potential customers do not adopt, purchase and successfully deploy our ONLINE9000 product in large numbers, our revenue may not grow and our business, financial condition and results of operations will be seriously harmed. Since the market for our products is relatively new, future demand for our products is uncertain and will depend on the speed of adoption of optical networking, in general, and optical equipment in metro networks, in particular. No communications service provider has fully deployed the ONLINE9000 in large network environments, and they may not choose to do so. Even if service providers do deploy our product fully, it may not operate as expected, which could delay or prevent its adoption.

If we fail to enhance existing products or to develop and achieve market acceptance for new products that meet customer requirements, our sales will suffer.

The communications network equipment market is characterized by rapid technological change, frequent new product introductions, changes in customer requirements and evolving industry standards. The introduction of new technologies could render our existing or future products obsolete. We may not be able to develop new products or product enhancements in a timely manner, or at all. Even if we are able to develop and commercially introduce new products and product enhancements, they may not achieve widespread market acceptance. Any failure of our future products to achieve market acceptance could harm our business and financial results.

For example, we are developing a new product, the ONLINE7000, for metro access applications. We have devoted and expect to continue to devote significant engineering and financial resources to the development and marketing of the ONLINE7000. Unexpected technical challenges could prevent us from successfully developing the ONLINE7000 in a timely manner or at all. In addition, the ONLINE7000 could be more costly to develop and test than we anticipate. Even if we are able to develop and introduce the ONLINE7000, it may not achieve market acceptance.

We expect that substantially all of our revenue will be generated from a small number of customers, and our revenue will not grow if we do not sell products to them in large numbers.

We expect that substantially all of our revenue will depend on sales of our products to a small number of customers and that our revenue will only grow if these customers purchase substantial quantities of our products. We currently have purchase agreements covering five companies, four of which directly or indirectly hold our equity securities. None of these companies is contractually committed to purchase any minimum quantities of our products. If these companies or future customers do not purchase large quantities of our products for any reason, our ability to succeed would be harmed. The decision to purchase substantial quantities of our products will depend, in part, on our customers' and potential customers' desire and ability to introduce or expand commercial services. We cannot be sure that any customer will introduce or expand commercial services utilizing our products on a timely basis, if at all. Any delay in introducing, or failure to introduce, these services would seriously harm our revenue, results of operations and financial condition.

We will not succeed if we do not add customers.

Our future success will depend on attracting new customers. If we fail to do so, our growth will be limited. The growth of our customer base could be limited by:

. unwillingness of potential customers to adopt our optical networking architecture;

. delays or difficulties in completing the development and introduction of our planned products or product enhancements;

. failure of our products to perform as expected;

. difficulties in meeting customers' delivery requirements;

. introductions of new products by our competitors; and . other competitive factors such as aggressive pricing or financing by our competitors.

We face intense competition that could prevent us from growing and could prevent us from becoming profitable.

The market for communications equipment is rapidly evolving and is marked by intense competition and technical innovations. We expect the pace of change to accelerate in the future. We also expect many new competitors to emerge as the market for optical networking equipment expands and evolves in response to technical innovations and increasing demand for new broadband and wavelength- based services. We currently compete with both public and private companies providing solutions for network and bandwidth management in the metropolitan market.

Some of our current and potential competitors are large public companies that have longer operating histories and significantly greater financial, technical and marketing resources, wider customer relationships and a broader product line than we do. Consequently, these competitors are able to devote greater resources to the development, promotion, sale and support of their products. These large public companies are better positioned than we are to acquire companies and new technologies that may displace our products or make them obsolete. Any of these acquisitions could give the acquiring competitor a strategic advantage. Unlike these large public companies, we have limited ability to provide vendor-sponsored financing, which may influence the purchasing decisions of prospective customers. In addition, a number of start- up companies are attracting large amounts of capital and rapidly developing competing technologies in an attempt to market products to communications service providers. These private companies can offer investment opportunities to induce potential customers to purchase their products.

We expect the average selling prices of our products to decline, which may reduce gross margins and revenue.

Our industry has experienced rapid erosion of average product selling prices. We anticipate that the average selling prices of our products will decline in response to competitive pressures, increased sales discounts, new product introductions by our competitors or other factors. If we are unable to achieve sufficient cost reductions and increases in sales volumes, this decline in average selling prices will reduce our gross margins and revenue.

We face risks associated with our international operations that could harm our financial condition and results of operations.

We market and sell our products in the United States and internationally. We intend to expand our international operations substantially and to enter new international markets. This expansion will require significant management attention and financial resources. We may not be able to maintain or increase international market demand for our products.

We have limited experience in marketing and distributing our products internationally. International operations are subject to inherent risks, including:

. currency exchange rate fluctuations;

. tariffs, export controls and other trade barriers;

. longer accounts receivable payment cycles and difficulties in collecting accounts receivable;

. the impact of economic crises outside the United States;

. difficulties and costs of staffing and managing foreign operations;

. the burdens of complying with a wide variety of foreign laws;

. certification requirements with which we may be unfamiliar;

. reduced protection for intellectual property rights in some countries;

. potentially adverse tax consequences, including restrictions on the repatriation of earnings; and . political and economic instability.

If we do not expand our direct sales operations, we may be unable to increase market awareness and sales of our products.

If we are unable to expand our direct sales force, we may not be able to increase market awareness and sales of our products, which may prevent us from achieving and maintaining profitability. Our products and services require a technical sales effort targeted at several key people within each of our prospective customers' organizations. Our sales efforts require the attention of sales personnel and specialized system engineers with extensive experience in networking technologies. Competition for these individuals is intense, and we may not be able to hire sufficient numbers of qualified sales personnel and specialized system engineers.

If we do not expand our customer service and support organization, we may be unable to increase our sales.

We currently have a small customer service and support organization and will need to increase our staff to support new and existing customers. Our products are complex and require highly-trained customer service and support personnel. Hiring customer service and support personnel is difficult in our industry due to the limited number of people available with the necessary technical skills. If we are unable to expand our customer service and support organization, we may not be able to increase sales.

We depend on sole or limited source suppliers for several key components of our products, and if we are unable to buy these components on a timely basis, we will not be able to deliver products to our customers.

If we are unable to buy components on a timely basis, we will not be able to deliver our products to customers, which would harm our sales and revenue. We currently purchase several key components, including optical filters, optical amplifiers, optical switches and electronic microprocessors, from limited sources. In addition, we rely on a sole supplier of variable optical attenuators. These and other optical components are complex, and we may not be able to develop multiple or alternate sources of supply in a timely manner, which could hurt our ability to deliver our products to customers.

We rely on contract manufacturers to produce our products, and our business would be harmed if they were to stop meeting our manufacturing requirements.

We rely on contract manufacturers to complete most of the manufacturing of optical assemblies for our products. If for any reason these manufacturers were to stop satisfying our needs without providing us with sufficient warning to procure an alternate source, our ability to sell our products would be harmed. We have no long term contracts with our manufacturers. As a result, our contract manufacturers are not obligated to supply products to us for any specific period, in any specific quantity or at any certain price, except as may be provided in a particular purchase order.

The process of qualifying a new contract manufacturer for complex products such as our optical assemblies is lengthy and would consume a substantial amount of the time of our technical personnel and management. If we sought to change manufacturers in a short period of time, our business would be disrupted. In addition, we may be unsuccessful in identifying a new manufacturer capable of and willing to meet our needs on terms that we would find acceptable.

If we fail to predict our manufacturing and component requirements accurately, we could incur additional costs or experience manufacturing delays.

We provide forecasts of our demand to our contract manufacturers and component vendors up to six months prior to scheduled delivery of products to our customers. If we overestimate our requirements, we may have excess inventory, which could increase our costs and harm our relationships with our contract manufacturers and component vendors due to reduced future orders. If we underestimate our requirements, we may have an inadequate inventory of components and optical assemblies. Inadequate inventory could interrupt manufacturing of our products and result in delays in shipments. In addition, lead times for materials and components that we order are long and depend on factors such as the procedures of, or contract terms with, a specific supplier and demand for each component at a given time. In the case of some optical components in short supply, component suppliers have imposed strict allocations that limit the number of these components they will supply to a given customer in a specified time period. These suppliers may choose to increase allocations to larger, more established companies, which could reduce our allocations and harm our ability to manufacture our products.

We expect that our revenue and operating results will vary significantly from quarter to quarter, which may cause our stock price to decline.

Our quarterly revenue and operating results are difficult to predict and may fluctuate significantly from quarter to quarter. It is likely that in some future quarters, our operating results may be below the expectations of market analysts and investors, which could cause the trading price of our common stock to fall.

We plan to increase our operating expenses significantly in order to fund more research and development, expand our sales and marketing operations, broaden our customer support capabilities and develop new distribution channels. We also plan to expand our general and administrative functions to address the increased reporting and other administrative demands that will result from being a public company and the expected growth of our business. Our operating expenses are largely based on anticipated revenue trends and a high percentage of our expenses are, and will continue to be,

fixed in the short term. As a result, a delay in generating or recognizing revenue could cause significant variations in our operating results from quarter to quarter and could result in substantial operating losses.

In addition, we expect to experience seasonality in the sales of our products. Historically, the communications equipment market has higher sales in the first and fourth quarters of the year, due in part to purchasers' budgetary cycles. In addition, we expect that sales may decline during summer months, particularly in European markets, which we expect to represent a significant portion of the market for our products for the foreseeable future. These seasonal variations in our sales may lead to fluctuations in our quarterly operating results.

Due to the long sales cycle for our products, the timing of revenue is difficult to predict and may cause our operating results to fluctuate unexpectedly.

The sales and deployment cycle for our products is lengthy; it may extend for six months or more. The length of our sales cycle may cause our revenue and operating results to vary unexpectedly from quarter to quarter. A customer's decision to purchase our products involves a significant commitment of its resources and a lengthy evaluation and product qualification process. Consequently, we may incur substantial expenses and devote senior management attention to potential relationships that never materialize, in which event our investments will largely be lost and we may miss other opportunities. In addition, our lengthy sales cycle makes it difficult to predict the quarter in which we may recognize revenue from any sale.

In order to succeed, we must manage growth, improve existing processes and implement new systems, procedures and controls.

Our ability to sell our products and implement our business plan requires an effective planning and management process. Our processes may not be able to support our growth if our products become widely accepted. We continue to increase the scope of our operations domestically and internationally and have increased the number of our employees substantially. At December 31, 1998, we had 63 employees and at December 31, 1999, we had 202 employees. In addition, we plan to continue to hire a significant number of employees this year. This growth has placed, and our anticipated growth in future operations will continue to place, a significant strain on our management systems and resources. We expect that we will need to continue to improve our financial and managerial controls, reporting systems and procedures, and will need to continue to expand, train and manage our work force worldwide.

If we are unable to hire additional qualified personnel as necessary, or if we lose key personnel, we may be unable to manage or grow our business.

If we are unable to identify, attract or retain qualified personnel or to retain the services of key personnel, especially engineers and sales personnel, it would be difficult for us to manage our business, make timely product introductions and increase sales. We intend to continue to hire many engineering,

sales, marketing and support personnel. Competition for these employees, particularly optical engineers, is intense, especially in the San Francisco Bay area. We may not be successful in attracting and retaining qualified personnel.

Our future success depends upon the continued services of our executive officers and other key engineering, sales, marketing and support personnel, including Hugh C. Martin, our President, Chief Executive Officer and Chairman of our board of directors. None of our officers or key employees is bound by an employment agreement for any specific term, and we do not have "key person" life insurance policies covering any of our employees.

If we become subject to unfair hiring claims, we could be precluded from hiring needed personnel, incur substantial costs in defending ourselves and incur damages.

Companies in our industry frequently claim that their competitors have engaged in unfair hiring practices. As a result of these types of claims, we may incur damages, lose potential employees or encounter disruptions in the operation of our business. We have received claims of this kind in the past and we may receive claims of this kind in the future. In October 1999, Nortel Networks filed suit against us seeking, among other things, an injunction against us and several of our employees that were formerly employed by Nortel Networks, to prevent us from hiring additional Nortel Networks employees. In addition, the former employer of one of our employees is seeking an injunction and has obtained a temporary restraining order against him, which prevents him from working for us. We have agreed to defend him against this claim. We could incur substantial costs, including management time and attention, in defending ourselves and our employees against these types of claims, regardless of their merits.

Our potential customers operate in an intensely competitive business and our success will depend on the success of our customers, which we have limited ability to foresee.

The companies in our target market face an extremely competitive environment. If the companies with whom we establish business relations are not successful in building their systems, promoting their products, receiving requisite approvals and accomplishing the many other requirements for the success of their businesses, our growth will be limited. Many factors in addition to the effectiveness of our products influence the ultimate success of our customers, and we have no control over these factors. In addition, we have limited ability to foresee the competitive success of our customers and to plan accordingly.

If our products do not interoperate with other equipment in our customers' networks, product installations could be delayed, orders cancelled or products returned and our reputation harmed.

Our products are designed to interface with our customers' existing networks, each of which has its own specifications and is based on various industry standards. Many of our customers' networks contain multiple generations of products that were added as their networks grew and evolved. Our products must interoperate with other existing and future products within these networks. When interoperability problems occur, it may be difficult to identify their source. Whether or not these

problems are due to our products, they may cause us to incur significant warranty, support and repair costs, divert the attention of our engineering personnel from our product development efforts and suffer significant customer relations problems.

Our products may have defects that we find only after full deployment, which could seriously harm our business.

To date, the ONLINE9000 has been deployed on only a limited basis. The ONLINE9000 can only be fully tested when deployed for an extended period of time. Consequently, our customers may discover defects in our hardware or software after deployment, and we could experience:

. loss of or delay in revenue and loss of market share;

. loss of customers;

. damage to our reputation;

. failure to achieve market acceptance;

. diversion of development resources;

. increased service and warranty costs;

. legal actions by our customers that could expose us to liability for our products and require us to incur significant expenses; and . increased insurance costs.

Our products may become obsolete if we do not quickly meet industry standards that may emerge.

Our success depends in part on both the adoption of industry standards for new technologies in our market and our products' compliance with industry standards. To date, no industry standard for our products has been adopted. The absence of an industry standard may prevent market acceptance of our products if potential customers delay purchases of new equipment until standards are adopted. In addition, if our products cannot support an industry standard, potential customers may not choose our products. As a result, we may incur significant losses due to lack of customer demand, excess inventory and diversion of our engineers from product development efforts.

If we are unable to protect and enforce our intellectual property rights, we may be unable to compete effectively.

We regard substantial elements of our products and services as proprietary and attempt to protect them by relying on patent, trademark, service mark, copyright and trade secret laws. We also rely on confidentiality procedures and contractual provisions with our employees, consultants and corporate partners. Any steps we take to protect our intellectual property may be inadequate, time consuming and expensive. Furthermore, despite our efforts, we may be unable to prevent third parties from infringing upon or misappropriating our intellectual property, which could harm our business.

It is possible that no patents will be issued from our currently pending or future patent applications. Moreover, any issued patents may not provide us with any competitive advantages over, or may be challenged by, third parties.

Because legal standards relating to the validity, enforceability and scope of protection of intellectual property rights of software are uncertain and still evolving, the future viability or value of any of our intellectual property rights is uncertain. Effective trademark, copyright and trade secret protection may not be available in some countries in which our products are distributed. Furthermore, our competitors may independently develop similar technologies that limit the value of our intellectual property or design around patents issued to us. See "Business--Intellectual Property".

Necessary licenses for third-party software may not be available to us or may be very expensive.

We currently license, and in the future may be required to license, software from third parties that is used in our products or is required to develop new products or product enhancements. Third-party licenses may not be available to us on commercially reasonable terms or at all. If we are unable to obtain any necessary third-party licenses, we would be required to redesign our product or obtain substitute technology, which may perform less well, be of lower quality or be more costly.

If we become involved in an intellectual property dispute, we could be subject to significant liability, the time and attention of our management could be diverted and we could be prevented from selling our products.

In the future, we may be a party to litigation to protect our intellectual property or as a result of an alleged infringement of others' intellectual property. These claims and any resulting lawsuit, if successful, could subject us to significant liability for damages and invalidate our proprietary rights. These lawsuits, regardless of their success, would be time-consuming and expensive to resolve and would divert management time and attention. Any potential intellectual property litigation also could force us to do one or more of the following:

. stop selling, incorporating or using our products that use the challenged intellectual property;

. obtain from the owner of the infringed intellectual property right a license to sell or use the relevant technology, which license may not be available on reasonable terms, or at all; or . redesign those products that use the challenged technology.

If we are forced to take any of these actions, our business may be harmed. Although we carry general liability insurance, our insurance may not cover potential claims of this type or may not be adequate to indemnify us for all liability that may be imposed. For more information concerning our intellectual property rights, see "Business--Intellectual Property".

We may not be able to obtain additional financing to satisfy our future capital needs.

We intend to expand our sales and marketing activities, manufacturing activities and inventory significantly ahead of actual or forecasted revenue. We may need to raise additional capital in order to fund our rapid expansion. We may also need additional capital in order to develop new or enhance existing services or products, to respond to competitive pressures or to acquire complementary services, businesses or technologies. In addition, we may need to raise funds in the future to meet our working capital needs. Additional financing may not be available on terms favorable to us, or at all.

Future debt financing may limit our financial and operating flexibility. If we issue additional equity securities, stockholders may experience additional dilution or the new equity securities may have rights, preferences or privileges senior to those of the then existing holders of common stock.

Any acquisitions we make could disrupt our business and harm our financial condition.

We intend to acquire or invest in complementary businesses, products and technologies. We may not successfully integrate any businesses, products, technologies or personnel that we might acquire in the future, and, as a result, our operating results could suffer. These acquisitions or investments could lead to:

. stock issuances that would dilute our current stockholders' percentage ownership;

. debt that will give rise to interest charges and may impose material restrictions on the manner in which we operate our business;

. responsibility for unanticipated liabilities;

. amortization expenses related to goodwill and other intangible assets;

. large and immediate write-offs;

. problems combining the purchased operations, technologies or products with ours;

. unanticipated costs;

. diversion of management's attention from our core business;

. adverse effects on existing relationships with suppliers and customers;

. risks associated with entering markets in which we have limited prior experience; or . potential loss of key employees, particularly those of the acquired organizations.

Insiders will continue to have substantial control over ONI Systems after this offering and could delay or prevent a change in corporate control, which could prevent you from realizing a premium over the market price for our common stock.

As of December 31, 1999, the executive officers, directors and entities affiliated with them beneficially owned approximately 37.9% of our outstanding common stock. We anticipate that the executive officers, directors and entities affiliated with them will, in the aggregate, beneficially own approximately % of our outstanding common stock following the completion of this offering. These stockholders, if acting together, would be able to influence significantly all matters requiring approval by our stockholders, including the election of directors and the approval of mergers or other business combination transactions. This ability to exercise influence over all matters requiring stockholder approval could prevent or significantly delay another company or person from acquiring or merging with us. See "Principal Stockholders".

We expect to experience volatility in our share price which could negatively affect your investment.

The market price of our common stock may fluctuate significantly in response to a number of factors, some of which are beyond our control, including:

. quarterly variations in operating results;

. changes in financial estimates by securities analysts;

. changes in market valuations of communications and Internet infrastructure-related companies;

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

. loss of a major customer;

. additions or departures of key personnel;

. future sales of our common stock; and . volume fluctuations, which are particularly common among highly volatile securities of Internet related companies.

Further, the stock markets, particularly the Nasdaq National Market on which we have applied to have our common stock listed, have experienced substantial price and volume fluctuations. These fluctuations have particularly affected the market prices of equity securities of many technology, networking and Internet-related companies and have often been unrelated or disproportionate to the operating performance of those companies. The trading prices of many technology companies' stocks are at or near historical highs. These high trading prices may not be sustained. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been instituted against that company. Litigation, if instituted, could result in substantial costs and a diversion of management's attention and resources.

There may be sales of a substantial amount of our common stock after this offering that could cause our stock price to fall.

Our current stockholders hold a substantial number of shares, which they will be able to sell in the public market in the near future. Sales of a substantial number of shares of our common stock after this offering could cause our stock price to fall. In addition, the future sale of shares by existing stockholders could impair our ability to raise capital through the sale of additional stock. See "Shares Eligible for Future Sale".

Provisions of Delaware law, our certificate of incorporation and our bylaws could delay or prevent a takeover of us.

Provisions of Delaware law, our certificate of incorporation and bylaws could have the effect of delaying or preventing a third party from acquiring us, even if a change in control would be beneficial to our stockholders. These provisions include:

. authorizing the issuance of preferred stock without stockholder approval;

. providing for a classified board of directors with staggered, three year terms;

. prohibiting cumulative voting in the election of directors;

. requiring a majority of the stockholders to call stockholders meetings; and . prohibiting stockholder actions by written consent.

These provisions and other provisions of Delaware law could make it more difficult for a third party to acquire us, even if doing so would benefit our stockholders. For a further discussion of these provisions, see "Description of Capital Stock--Anti-Takeover Provisions".

Special Note Regarding Forward-looking Statements

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. These forward-looking statements are not historical facts, but rather are based on current expectations, estimates and projections about our industry, our beliefs and our assumptions. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks" and "estimates", and variations of these words and similar expressions, are intended to identify forward-looking statements. These statements are not guarantees of future performance and are subject to risks, uncertainties and other factors, some of which are beyond our control and difficult to predict and could cause actual results to differ materially from those expressed or forecasted in the forward-looking statements. These risks and uncertainties include those described in "Risk Factors" and elsewhere in this prospectus. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect our management's view only as of the date of this prospectus. Except as required by law, we undertake no obligation to update any forward-looking statement, whether as a result of new information, future events or otherwise.

Use of Proceeds

We estimate that our net proceeds from the sale of the shares of common stock that we are offering will be approximately $ million, based on an assumed initial public offering price of $ per share, after deducting an assumed underwriting discount and estimated offering expenses. If the underwriters' option to purchase additional shares in this offering is exercised in full, we estimate that our net proceeds will be approximately $ million.

The principal purposes of this offering are to obtain additional capital, to create a public market for our common stock, to enhance our ability to acquire other businesses, products or technologies and to facilitate future access to public equity markets. We intend to use the net proceeds for working capital, capital expenditures and other general corporate purposes. We may also use a portion of the net proceeds from this offering to acquire or invest in businesses, technologies or products that are complementary to our business. We currently have no commitments or agreements with respect to any acquisitions or investments. We have not determined the amounts we plan to spend on any of the uses described above or the timing of these expenditures. Pending our use of the net proceeds, we intend to invest them in short-term, interest-bearing, investment-grade securities.

Dividend Policy

We have never declared or paid any cash dividends on our capital stock and do not anticipate paying any cash dividends in the foreseeable future.

Capitalization

The following table sets forth our capitalization as of December 31, 1999:

. on an actual basis;

. on a pro forma basis to reflect our reincorporation in Delaware and the automatic conversion of all outstanding shares of preferred stock into common stock upon the closing of this offering; and . on a pro forma as adjusted basis to reflect the sale of common stock in this offering at an assumed initial public offering price of $ per share after deducting an assumed underwriting discount and our estimated offering expenses.

As of December 31, 1999 Pro Forma Actual Pro Forma As Adjusted (in thousands)

Capital-lease obligation.....	$ 533	$ 533	$
Stockholders' equity:			
Preferred Stock, 80,309,408 shares authorized, 78,855,900 shares issued and outstanding, actual; shares authorized, no shares issued and outstanding, pro forma $0.0001 par value per share; shares authorized, no shares issued and outstanding, pro forma as adjusted.....	123,291	--	
Common stock, 159,690,592 shares authorized, 31,279,590 shares issued and outstanding, actual; shares authorized, 110,135,490 shares issued and outstanding, pro forma, $0.0001 par value per share; shares authorized, shares issued and outstanding, pro forma as adjusted.....	49,295	11	
Additional paid-in capital.....	--	172,575	
Deferred stock compensation.....	(25,289)	(25,289)	
Services receivable from a shareholder.....	(85)	(85)	
Notes receivable from stockholders.....	(3,824)	(3,824)	
Accumulated deficit.....	(52,331)	(52,331)	
Total stockholders' equity.....	91,057	91,057	
Total capitalization.....	$ 91,590	$ 91,590	$

The outstanding share information in the table above excludes:

. 388,908 shares of common stock subject to options outstanding under our 1997 Stock Option Plan, at a weighted average exercise price of $0.03 per share;

. 15,813,816 shares of common stock subject to options outstanding under our 1998 Equity Incentive Plan, at a weighted average exercise price of $0.24 per share, and 1,824,480 shares of common stock available for future grant under our 1998 Equity Incentive Plan;

. 1,346,000 shares of common stock subject to options outstanding under our 1999 Equity Incentive Plan, at a weighted average exercise price of $0.95 per share, and 18,166 shares of common stock available for future grant under our 1999 Equity Incentive Plan; and . 1,011,394 shares of common stock issuable upon the exercise of outstanding warrants, at a weighted average exercise price of $0.69 per share.

Subsequent to December 31, 1999 and through March 1, 2000, we granted options to purchase 5,415,952 shares of common stock under our 1998 Equity Incentive Plan and our 1999 Equity Incentive Plan at a weighted average exercise price of $2.08 per share and we issued warrants to

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purchase 223,000 shares of our common stock at a weighted average exercise
price of $0.91 per share. We also adopted our 2000 Equity Incentive Plan under
which      shares of common stock will be available for future grant and our
2000 Employee Stock Purchase Plan under which      shares of common stock will
be available for future grant.
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You should read this table together with "Management--Director Compensation", "Management--Employee Benefit Plans", "Description of Capital Stock", "Certain Transactions" and notes 7, 8 and 11 of the notes to our consolidated financial statements.

Dilution

If you invest in our common stock, your interest will be diluted to the extent of the difference between the public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock after this offering. Net tangible book is equal to total assets less intangible assets and total liabilities.

Our pro forma net tangible book value as of December 31, 1999 was $86.7 million, or approximately $3.97 per share, assuming the conversion of all outstanding shares of our preferred stock into shares of our common stock. Pro forma net tangible book value per share is determined by dividing the pro forma number of outstanding shares of common stock into our net tangible book value. After giving effect to the receipt of the estimated net proceeds from this offering, based upon an assumed initial public offering price of $ per share and after deducting an assumed underwriting discount and our estimated offering expenses, our pro forma net tangible book value as of December 31, 1999 would have been approximately $ million, or $ per share. This represents an immediate increase in pro forma net tangible book value of $ per share to existing stockholders and an immediate dilution in net tangible book value of $ per share to new investors purchasing shares at the initial public offering price. The following table illustrates the per share dilution:

Assumed initial public offering price per share..... $ Pro forma net tangible book value per share as of December 31, 1999..... $ Increase in net tangible book value per share attributable to new investors..... Pro forma net tangible book value per share after offering..... Dilution per share to new investors..... $ The following table summarizes as of December 31, 1999, on the pro forma basis described above, the number of shares of

common stock purchased from us, the total consideration paid and the average price per share paid by existing stockholders and by investors purchasing shares of our common stock in this offering, before deducting the underwriting discount and our estimated offering expenses:

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders		%	$	%	$
New investors					
Total		100.0%	$	100.0%	

As of December 31, 1999, there were options outstanding to purchase a total of 17,548,724 shares of our common stock at a weighted average exercise price of $0.29 per share and warrants outstanding to purchase a total of 1,011,394 shares of our common stock at a weighted average exercise price of $0.69 per share. Subsequent to December 31, 1999 and through March 1, 2000, we granted options to purchase 5,415,952 shares of our common stock under our 1998 Equity Incentive Plan and our 1999 Equity Incentive Plan at a weighted average exercise price of $2.08 per share and we issued warrants to purchase 223,000 shares of common stock at a weighted average exercise price of $0.91 per share. To the extent that any options or warrants are exercised, there will be further dilution to new public investors. See "Capitalization", "Management--Employee Benefit Plans", "Description of Capital Stock", "Certain Transactions" and notes 1, 7 and 11 of the notes to our consolidated financial statements.

Selected Consolidated Financial Data

The following selected consolidated financial data should be read in conjunction with, and are qualified by reference to, our consolidated financial statements and related notes to our financial statements and Management's Discussion and Analysis of Financial Condition and Results of Operations. The consolidated statement of operations data set forth below for the period from October 20, 1997 (inception) to December 31, 1997, and for the fiscal years ended December 31, 1998 and 1999, and the consolidated balance sheet data as of December 31, 1998 and 1999 have been derived from our financial statements, which have been audited by KPMG LLP, independent auditors, and are included elsewhere in this prospectus. The historical results are not necessarily indicative of results to be expected for any future period. For an explanation of the determination of the shares used to compute net loss per share and pro forma net loss per share, see Notes 1 and 11 of our notes to consolidated financial statements.

	Period From Inception (October 20, 1997) to December 31,	Year Ended December 31,	
	1997	1998	1999
	(in thousands, except share and per share data)		
Revenue	$ --	$ 1,733	$ 3,034
Cost of revenue	--	1,208	1,032
Gross profit	--	525	2,002
Operating expenses:			

Research and development, excluding deferred stock compensation amortization amounts	39	4,009	25,176
Sales and marketing, excluding deferred stock compensation amortization amounts	21	649	4,557
General and administrative, excluding deferred stock compensation amortization amounts	49	1,591	4,756
Amortization of deferred stock compensation.....	89	3,310	8,975
Common stock warrant expense	--		2,269
In-process research and development.....	--	--	170
Total operating expenses.....	198	9,559	45,903
Operating loss.....	(198)	(9,034)	(43,901)
Interest income (expense), net.....	(1)	183	623
Loss before income taxes.....	(199)	(8,851)	(43,278)
Income taxes.....	--	1	2
Net loss.....	$ (199)	$ (8,852)	$ (43,280)
Basic and diluted net loss per share.....	$ (0.77)	$ (0.74)	$ (2.40)
Weighted-average shares outstanding used in computing basic and diluted net loss per share.....	257,017	11,918,628	18,043,188
Pro forma basic and diluted net loss per share.....			(0.55)
Shares used in computing pro forma basic and diluted net loss per share			78,025,225

December 31, December 31, 1998 1999 (in thousands)

Cash and cash equivalents.....	$19,092	$80,023
Working capital.....	19,627	81,758
Total assets.....	21,312	100,272
Long-term obligations, less current portion.....	79	367
Stockholders' equity.....	$20,565	$91,057

Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis together with the "Selected Consolidated Financial Data" and our consolidated financial statements and the related notes, which are included elsewhere in this prospectus. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Risk Factors" and elsewhere in this prospectus.

Overview

From our inception in October 1997 through December 1999, our operating activities consisted primarily of research and development, including the design, development and testing of our first product, the ONLINE9000. We also formed and expanded our administrative, marketing, sales,

manufacturing and customer service and support organizations and commenced sales and marketing activities.

In October 1997, Optical Networks, Incorporated, our California predecessor, was formed as a subsidiary of Optivision, Inc. In December 1997, we were spun out of Optivision and Optivision distributed its holdings of our common stock and preferred stock to Optivision shareholders. In connection with the spin- out, we have reserved, and are obligated to issue, 233,468 shares of our common stock upon the exercise of the warrants to purchase capital stock of Optivision. We will not receive any of the proceeds from the exercise of these warrants. Optivision also retained 8,000,000 shares of our Series A preferred stock. In January 1998, all of the shares of our Series A preferred stock were converted into Series B preferred stock on a one-to-one basis. In January 1998, Optivision sold 2,666,667 shares of our preferred stock to our initial venture investors. In March 1998, we repurchased all outstanding stock owned by Optivision, consisting of 1,333,333 shares of our Series B preferred stock, for an aggregate purchase price of $1.0 million. Optivision does not currently own any shares of ONI Systems. See "Related Party Transactions--Optivision Spin- out" and note 5 of notes to our consolidated financial statements.

In June 1999, we acquired all of the outstanding common shares of Object- Mart, Inc. in exchange for 4,569,276 shares of our common stock and approximately $3.2 million in cash. Object- Mart was located in San Jose, California, and provided software products and services to software development companies, software providers and equipment manufacturers in the telecommunications industry. The combination was accounted for using the purchase method and accordingly, the results of operations of Object-Mart have been included in our consolidated financial statements from June 29, 1999. In connection with this acquisition we recorded goodwill valued at $4.8 million as of December 31, 1999, which is being amortized over a period of two years.

We began beta trials of our ONLINE9000 product in November 1999 and began shipping this product in February 2000. In December 1999, we signed purchase and license agreements for the ONLINE9000 covering potential orders from communications service providers in the United States, United Kingdom, Asia and South America. These agreements do not require these companies to make any minimum purchases and we may never recognize any revenue from these agreements. Since our inception, we have incurred significant losses, and as of December 31, 1999, we had an accumulated deficit of $52.3 million. We have not achieved profitability on a quarterly or annual basis. We expect to incur significant sales and marketing, research and development and general and administrative expenses and, as a result, will need to generate significant revenue to achieve and maintain profitability.

Our policy is to recognize revenue at the time of shipment unless we have future obligations or customer acceptance is required, in which case all or a portion of revenue is deferred until these obligations are met or the customer accepts the product. Revenue from service obligations are deferred and recognized ratably over the service period.

We market our products in the United States and internationally, through our direct sales force, to communications service providers. We expect a significant portion of our future revenue will come from sales of our ONLINE9000 product to North American and international customers. We plan to

introduce new products, including the ONLINE7000, and product enhancements, although we may be unsuccessful in these efforts.

Our cost of revenue primarily consists of raw materials, direct labor, manufacturing overhead and amounts paid to third party manufacturers. Our manufacturing operations are generally outsourced and accordingly a significant portion of our cost of revenue consists of payments to third-party contract manufacturers. We conduct quality assurance, supply chain management, manufacturing engineering, documentation control and product repairs at our manufacturing facility in San Jose, California.

Research and development expenses consist primarily of salaries and related personnel costs, fees paid to outside consultants, non-recurring engineering charges and prototype costs related to design, development, testing and enhancement of our products. We expense all of our research and development costs as they are incurred. We believe that research and development is critical to our strategic objectives, and we devote substantial resources to the development of new products and product features. We also believe that to meet our customers' evolving needs we will need to fund investments in several development projects simultaneously. As a result, we expect our research and development expenses to increase in absolute dollars in the future.

Sales and marketing expenses consist primarily of salaries and related expenses for personnel engaged in marketing, sales, and customer service and support functions, as well as costs associated with trade shows, promotional activities and public relations. We expect that sales and marketing expenses will increase substantially in absolute dollars as we continue to build and expand our direct sales, marketing, and customer service and support organizations in the United States and internationally.

General and administrative expenses consist primarily of salaries and related expenses for executive, finance, legal, facilities and human resources personnel, recruiting expenses, professional fees and other corporate expenses. We expect general and administrative expenses to increase in absolute dollars as we add personnel, improve and expand our information system infrastructure and incur additional expenses as we grow and operate as a public company.

In 1998, we recorded total deferred stock compensation of approximately $8.4 million in connection with stock and stock options granted during 1998 at prices subsequently deemed to be below fair value on the date of grant. Options granted are typically subject to a four year vesting period. We are amortizing the deferred stock compensation over the vesting periods of the applicable options and the repurchase periods for restricted stock purchases. The period over which deferred stock compensation is amortized is determined separately for each 25% portion of the total award, in accordance with Financial Accounting Standards Board Interpretation No. 28. The result of this accounting treatment is that approximately 59% of the unearned deferred compensation will be amortized in the first year, 25% in the second year, 12% in the third year and 4% in the fourth year following the date of the grant. We amortized $3.3 million of deferred stock compensation in the year ended December 31, 1998. In 1999, we recorded approximately $29.0 million in additional deferred stock compensation for stock options granted during 1999 at prices subsequently deemed to be below fair value on the date of grant.

We amortized a total of approximately $9.0 million of deferred stock compensation in the year ended December 31, 1999 leaving a total of $25.3 million related to all prior issuances to be amortized over four years.

Results of Operations Although we were incorporated on October 20, 1997, we did not effectively commence operations until January 1998 when we completed our first preferred stock financing. As a result, we believe that our results of operations prior to 1998 are not meaningful.

We plan to increase our operating expenses significantly in order to fund greater levels of research and development, expand our sales and marketing operations, broaden our customer support capabilities and develop new distribution channels. We also plan to expand our general and administrative functions to address the increased reporting and other administrative demands, which will result from being a publicly traded company and the increasing size of our business. Our operating expenses are largely based on anticipated revenue trends and a high percentage of our expenses are, and will continue to be, fixed in the short term. As a result, a delay in generating or recognizing revenue, could cause significant variations in our operating results from quarter to quarter and could result in substantial operating losses.

In addition, we expect to experience seasonality in the sales of our products. For example, historically, the telecommunications equipment market has experienced increased sales in the first and fourth quarter of the year due in part to purchasers' budgetary cycles. In addition, we expect that sales may decline during summer months, particularly in European markets which we expect to represent a substantial portion of the market for our products for the foreseeable future. These seasonal variations in our sales may lead to fluctuations in our quarterly operating results.

Revenue

In connection with our spinout from Optivision, we inherited several government research and development contracts. Prior to 1999, all of our revenue resulted from these contracts. In 1999, we recognized approximately $1.1 million in revenue from the licensing of our element management solutions software. The remaining revenue of approximately $1.9 million was derived primarily from government research and development contracts and other consulting services. The government research and development contracts were completed in June 1999. We will not continue these activities and they will not contribute to our revenue in the future.

As of December 31, 1999, our ONLINE9000 product was undergoing field trial testing and was not generally available for sale; accordingly, no product revenue was recorded.

Cost of revenue

Cost of revenue for fiscal 1998 and 1999 consisted primarily of salaries, contracted services and materials required in the fulfillment of obligations under government contracts.

Research and development Research and development expenses were $4.0 million in 1998 and $25.2 million in 1999, representing 41.9% of total operating expenses in fiscal 1998 and 54.8% of total operating expenses in fiscal 1999. The increase in research and development expenses was primarily

related to the increase in the number of personnel and an increase in engineering and prototype expenses related to the design, development and testing of our ONLINE9000 product. At December 31, 1998, we had a total of approximately 43 research and development employees and, at December 31, 1999, we had approximately 110 research and development employees.

Sales and marketing

Sales and marketing expenses were $649,000 in 1998 and $4.6 million in 1999, representing 6.8% of total operating expenses in 1998 and 9.9% of total operating expenses in 1999. The increase in sales and marketing expenses was primarily related to the increase in the number of personnel, including the establishment of a direct sales force and customer service and support team, as well as costs associated with tradeshows, promotional activities and public relations. At December 31, 1998, we had a total of approximately three sales and marketing employees and, at December 31, 1999, we had approximately 21 sales and marketing employees.

General and administrative General and administrative expenses were $1.6 million in 1998 and $4.8 million in 1999, representing 16.6% of total operating expenses in fiscal 1998 and 10.4% of total operating expenses in fiscal 1999. The increase in general and administrative expenses was primarily related to the increase in personnel and increased legal, information systems, facilities and consulting services associated with our growing business activities. At December 31, 1998, we had a total of approximately 12 general and administrative employees and, at December 31, 1999, we had approximately 30 general and administrative employees.

Amortization of deferred stock compensation In connection with the grant of stock options to employees with exercise or sales prices subsequently determined to be below the deemed fair value of our common stock on the date of grant, we recorded amortization of deferred stock compensation of $3.3 million in 1998 and $9.0 million in 1999. As of December 31, 1999 our unamortized deferred stock compensation was $25.3 million, of which approximately $18.6 million will be amortized in 2000. In addition, we have granted additional stock-based compensation in 2000 that will result in a substantial increase in deferred stock compensation and amortization expense.

Common stock warrant expense In 1999, we expensed $2.3 million related to the warrant to purchase 500,000 shares of common stock issued to a communications service provider in connection with entering into an agreement under which the service provider may, but is not obligated to, purchase our products.

Interest income (expense), net Interest income and other, net, includes interest income from our cash investments net of interest expense related to our lease financing obligations and amortization of warrants issued in conjunction with our equipment lease and credit facilities. We had interest income, net, of $183,000 in fiscal 1998 and $623,000 in fiscal 1999. The increase was primarily due to the interest income earned on proceeds from preferred stock issuances.

Income taxes

Income taxes for 1998 and 1999 consisted of minimum state taxes. As of December 31, 1999, we had net operating loss carry-forwards for federal and California income tax purposes of $34.0 million and research credit carry- forwards of approximately $1.1 million. These carry-forwards will expire at various dates from 2012 through 2019. Utilization of the net operating losses may be subject to a substantial annual limitation due to the ownership change limitations contained in Section 382 of the Internal Revenue Code. There is sufficient uncertainty regarding the reliability of the deferred tax assets such that a full valuation allowance has been recorded.

Liquidity and Capital Resources Since inception, we have financed our operations primarily through private sales of convertible preferred stock for net proceeds of approximately $122.9 million and common stock for net proceeds of approximately $329,000.

We used $29.6 million in cash from operations in 1999, an increase of $23.8 million from the $5.8 million used in 1998. The increase was primarily due to the increase in our net loss of $34.4 million, an increase in inventory of $9.6 million and other working capital of $10.0 million, offset by increased amortization of deferred stock compensation and common stock warrants of $7.9 million, and depreciation and amortization of $2.3 million.

We used $6.6 million in cash from investing activities in 1999, an increase of $5.6 million from the $1.0 million used in 1998. The increase was primarily related to the net cash portion of our acquisition of Object-Mart of $1.7 million and the purchase of property and equipment.

We generated $97.1 million in cash from financing activities in 1999, an increase of $71.2 million from the $25.9 million generated in 1998, primarily from the private sales of convertible preferred stock and issuance of common stock. We have used leases to partially finance capital purchases of property and equipment. We had $533,000 in capital lease obligations outstanding at December 31, 1999 and $119,000 at December 31, 1998.

At December 31, 1999, cash and cash equivalents totaled $80 million, an increase of $60.9 million from the balance of $19.1 million at December 31, 1998. The increase was due to the receipt of $97.1 million primarily from the sale of convertible preferred stock, offset by $29.6 million of cash used in operating activities and $6.6 million of cash used in investing activities.

We have a lease financing facility for $1.5 million of which $467,000 had been drawn as of December 31, 1999. This facility expires in December 2002.

Our capital requirements depend on numerous factors, including:

. the resources we devote to developing, manufacturing, marketing, selling and supporting our products;

. market acceptance of our products and the timing and extent of sales of our products; and . the timing and extent of capital expenditures required to establish our international operations.

We expect to devote substantial capital resources to continue our research and development activities, to expand our sales, marketing and customer service and support organizations, support our information systems requirements and for other general corporate activities. We believe that our

current cash balances will be sufficient to fund our operations for at least the next 12 months. In addition, we believe that the net proceeds from this offering will provide us with substantial working capital. However, we may require additional financing within that time frame. If needed, additional financing may not be available on terms acceptable to us or at all.

Effect of Year 2000

The year 2000 computer problem refers to the potential for system and processing failures of date-related data as a result of computer controlled systems using two digits rather than four to define the applicable year. For example, software programs that have time-sensitive components may recognize a date represented as "00" as the year 1900 rather than the year 2000. In addition, programs may fail to recognize February 29, 2000, as a leap year date as a result of an exception to the calculation of leap years that will occur in the year 2000 and otherwise occurs only once every 400 years. This problem could result in miscalculations, data corruption, system failures or disruptions of operations.

As of February 29, 2000, we had not experienced any significant disruptions in our business related to year 2000 issues, nor do we expect to experience any year 2000 related disruption in the operation of our systems.

We are not aware of any of the companies to which we have shipped our ONLINE9000 product experiencing any year 2000 related problems with our product or their ability to deploy our product. In addition, we have not received notice from any of our contract manufacturers or our other suppliers that they have experienced any year 2000 problems with the parts supplied by them or that would affect their ability to supply products and services to us. Although most year 2000 problems should have become evident on or shortly after January 1, 2000, additional year 2000 related problems may become evident. We will continue to monitor our mission critical equipment and computer applications and those of our suppliers and vendors throughout the year, in an effort to ensure that any late year 2000 matters that may arise are promptly addressed.

Quantitative and Qualitative Disclosures About Market Risk Interest Rate Sensitivity We do not currently use derivative financial instruments for speculative trading or hedging purposes. In addition we maintain our cash equivalents in money market funds. Accordingly, we are not a party to financial instruments or contracts, and do not have investments that expose us to material interest rate risk.

Exchange Rate Sensitivity Currently, all of our sales and expenses are denominated in United States Dollars. Therefore, we have not engaged in any foreign exchange hedging activities to date. We do expect to conduct transactions in foreign currencies in future periods, so we may engage in foreign exchange hedging activities at that time.

Recent Accounting Pronouncements In June 1998, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards, or SFAS, No. 133, "Accounting for Derivative Instruments and Hedging Activities". The new standard establishes accounting and reporting standards for derivative instruments, including derivative instruments embedded in other contracts, and for hedging activities. SFAS 133 will be effective for our fiscal year ending December 31, 2001. We do not expect SFAS 133 to have a material effect on our financial position or results of operations.

Business

The prospectus contains forward-looking statements that involve risks and uncertainties. Actual results may differ materially from those indicated in such forward-looking statements.

Overview

We develop, market and sell all-optical networking equipment specifically designed to address the bandwidth and service limitations of regional and metropolitan networks. We believe that our product offerings represent the first commercially available, all-optical solution specifically designed for metro networks. Communications service providers can cost-effectively deploy our products to relieve the growing traffic bottleneck in these networks and offer new revenue-generating data services. By installing our equipment, service providers can rapidly build high-capacity metro networks that are flexible, scalable, and able to support multiple services on a single platform.

Industry Background

Increased Demand for Network Capacity Rapid growth in the popularity of the Internet and in the number of Internet-based applications and services has fueled dramatic growth in the volume of data traffic. According to Ryan, Hankin & Kent, Internet traffic will increase from 350,000 terabytes, or trillions of bytes, per month at the end of 1999, to over 15,000,000 terabytes per month in 2003. This growth will increase demand for capacity in the public communications network. This capacity is usually measured in bits of data per second and is commonly known as bandwidth. Bandwidth improvements make it possible for communications service providers to offer new revenue-generating services such as remote data storage and local area network extensions to their customers. As these new bandwidth-intensive services are introduced and gain commercial acceptance, additional network bandwidth and optical infrastructure will be required.

Evolution of Optical Networking The existing communications network infrastructure was designed and built to carry voice calls, based on standards, such as Synchronous Optical Network, or SONET. The rapid adoption of the Internet and resulting growth of data traffic are driving service providers toward deploying equipment and networks designed, built and optimized for both data and voice traffic. Given the scope of existing and projected Internet traffic, many communications service providers are designing and installing networks based on optical technology, which generally enables greater capacity and higher transmission speed.

Optical networking technology transmits data using pulses of light over optical fiber, rather than pulses of electricity over copper wires. Advances in optical technology such as dense wavelength division multiplexing, or DWDM, allow transmission of multiple signals on a single strand of optical fiber, each signal using one wavelength of light. DWDM technology currently enables transmission of up to 160 different wavelengths on a single fiber. This means that today a service provider can multiply the transmission capacity of its existing fibers 160 times.

As shown below, the current communications network infrastructure can be divided into four segments--long-haul, metro core, metro access and enterprise networks. To satisfy the technical, pricing and performance needs of service providers, we believe that optical networking equipment must be specifically designed for each of these segments.

[Graphic--diagram Depicting the Segments of the Communications Network]

Upper Right Quadrant--A map of the continental United States (showing state boundaries) with a network superimposed. The network is formed from approximately forty large dots indicating "nodes" on the network with lines connecting the nodes in a web or dot-to-dot fashion. The words "LONG HAUL NETWORK" appear above the map.

Lower Half--An oval offset to the left of the diagram with figures inside the oval. The oval is connected to one of the dots in the map-network (approximately in the vicinity of Los Angeles) with trace lines indicating that the oval represents a representative node on the network. The words "METRO NETWORK" appear above and to the left of the oval.

Interior of the Oval--The oval is divided into thirds:

The right-hand portion of the oval is a schematic symbol used to represent an optical cross-connect linking the metro network to the long haul network. The words "To Long haul network" appear below the schematic.

The center portion of the oval contains two ellipses or "rings" (one directly above the other) each with for boxes or "nodes" at approximately 12 o'clock, 3 o'clock, 6 o'clock and 9 o'clock on the ring. The bottom-most node of the top ring is shared as the top-most node of the bottom ring. Each ring represents a ring-based fiber optic network. The words "Metro Core" appear inside each ring. The right-most node of each ring is connected by two lines (representing fiber links) to the optical cross-connect schematic in the right-hand portion of the oval. The left-most node of each ring protrudes into the left section of the oval. The words "Metro Core" also appear at the bottom of the center portion with arrows on each side leading to the left and right edges of the center portion.

The left portion of the oval contains diagrams of ten buildings representing enterprises connected to the communications network. Seven of the buildings are connected by a smaller ring (similar to the rings in the center portion of the oval) to each other and to the left-most node of the lower ring in the center portion of the oval. This ring represents a metro access fiber optic ring connecting enterprises to the metro network. Above this ring are three individual buildings, each of which is connected by lines to the left-most node of the upper ring in the center portion of the oval. The lines represent direct fiber links to the metro core. The words "Metro Access" appear at the bottom of this portion of the oval below all of the buildings. The word "Enterprise" appears to the left of the buildings.

Long-haul networks. Long-haul networks connect the communications networks of metropolitan areas around the world. These networks move large amounts of data and voice traffic point-to-point over long distances. The focus of companies designing equipment for this segment has been the ability to provide as much bandwidth as possible between any two points.

Metro core networks. Metro core networks connect long-haul networks to metro access networks over distances of a few miles in dense urban business corridors or a few hundred miles in regional urban and suburban settings. These networks aggregate metro access traffic and distribute it throughout the metropolitan area and to and from long-haul networks. They face a heterogeneous networking environment due to the number and variety of access providers that they serve and service types that they support.

Metro access networks. Metro access networks connect end-users such as enterprises and individuals to the metro core network. These networks are the points at which traffic enters and exits the public communications network. Metro access networks are complex because they must manage a wide variety of services to meet the needs of end-users.

Enterprise networks. Enterprise networks provide data and voice connections among end-users within a building or group of buildings. These networks also connect end-users to the public communications network infrastructure.

Metro Network Bottleneck Optical technologies were first deployed in long-haul networks, where the capacity constraints of the existing infrastructure were first encountered and the simple architecture and homogeneous traffic made it technically feasible and cost effective. At the same time, enterprise networks have also benefited from the deployment of new optical technology, including high-speed data communication services such as Gigabit Ethernet and Fibre Channel.

To date, optical solutions specifically designed to address the challenges faced by metro core and access networks have not been available, which has impeded the growth of bandwidth in metro networks.

We believe that the transmission speed in the metro portion of the network over the last several years has grown at a small fraction of the growth rate seen in long haul and enterprise networks. This has created a bottleneck impeding service delivery.

Challenges Facing Metro Core and Metro Access Network Service Providers Communications network service providers seeking to develop and introduce next generation services to their customers face significant challenges that are not adequately addressed by current metro solutions, including:

Enabling emerging service offerings and supporting existing services. Metro network service providers endeavor to offer business enterprises and consumers a variety of high speed connectivity services, such as:

. access to the public switched telephony network, for voice and fax service;

. Internet access for data services, including high-speed digital subscriber lines;

. access to offsite data facilities, for data backup and storage; and . extension of the local area network to multiple locations within the metro area.

In addition, service providers seek to offer next generation services to create new revenue- generating opportunities. Most current solutions require dedicated equipment and interfaces that are unique for each particular service and transmission rate. Given the dominance of data traffic, next generation equipment must be specifically designed for efficient transmission of data traffic and delivery of emerging services, while accommodating voice traffic. This equipment must also support an unpredictable and changing mix of service offerings on a single platform.

Manageability and Flexibility. As the introduction of new services increases network complexity, service providers will require software and systems that allow for easy and effective end-to-end management of data and voice services. Since the metro network must constantly adapt to changes in the number and location of users, the equipment must be flexible enough to accommodate bandwidth deployment as needed, where needed and when needed.

Low cost and scalability. Service providers need solutions that are cost- effective to deploy initially and easily scale to handle rapid growth. To expand their existing networks, they must add new equipment to their previously deployed infrastructure, which is costly, inefficiently utilizes the limited space in metro service providers' facilities and increases the complexity of network management. Service providers seek new systems that can replace existing systems at a price point that will allow revenue from new services to provide a return on deployment costs and can be deployed in a pay-as-you-grow fashion.

Reliability. Because the applications carried over metro networks are critical to enterprises and users, rapid restoration of service is a key requirement for all metro networks. Communication service providers require equipment that meets existing reliability standards, while improving reliability for higher bandwidth applications.

To date, attempts to solve the problems faced by metro networks have focused on increasing bandwidth. These attempts include using SONET, deploying additional fiber, and adapting long-haul solutions such as point-to-point wavelength division multiplexing, or WDM, to the metro network.

When applied to metro networks, these efforts are costly, time consuming, difficult to scale or difficult to manage. For example, SONET network architecture was originally designed for voice traffic, is not easily scalable and therefore hinders introduction of today's emerging high-speed data services. In addition, SONET requires that at least 50% of network capacity be reserved to provide alternative routing for traffic in the event of a network outage. Similarly, deploying additional fiber in metropolitan areas is expensive and time consuming because it requires permits, rights-of-way and physical installation of fiber. Likewise, WDM was originally designed for long- haul point-to-point applications in a SONET environment. WDM, as designed for long-haul networks, is inefficient and expensive to deploy in metro networks. To be applied in the metro network, currently available point-to-point WDM technologies require additional electrical equipment such as SONET-based equipment to add and drop traffic and to provide rapid service restoration.

In addition, today's networks are not all-optical. Transmitted signals in these networks undergo multiple optical-to-electrical-to-optical conversions. These conversions are costly because they require deployment of additional equipment and are inefficient because they are limited by the bandwidth constraints and inflexibility of existing electronics embedded in today's network.

The ONI Systems Solution We develop, market and sell all-optical communications equipment that enables network service providers to offer new revenue-generating services while fully supporting existing voice and data services. Our data-optimized, scalable solution increases available bandwidth in metropolitan areas and delivers end-to-end manageability and rapid restoration for all services. Our family of products consists of the ONLINE9000 for metro core networks, the ONLINE7000, which is expected to be available in the second quarter of 2000, for metro access networks, our OPTX network operating system and our OLMP inter-network communications protocols.

Our product offerings provide the following benefits to metro network service providers:

Multi-service capability. Our equipment and interfaces support multiple service offerings. As a result, a service provider using our solution can provide a changing mix of services as customer needs evolve, without deploying dedicated equipment for each service. Our solution is compatible with SONET, providing service providers with an evolutionary upgrade path. Our products are also designed for efficient transmission of high-speed data traffic and delivery of emerging services, while supporting voice services. For example, multiple services, including SONET, Gigabit Ethernet and Fibre Channel, are supported on the same platform by our equipment and interfaces.

Manageability and flexibility. As network complexity increases, service providers require software and systems that allow easy end-to-end service management. Our products combine a network operating system, management software and inter-network communications protocols to enable:

. real time control of bandwidth allocation as needed, where needed and when needed;

. real time surveillance of network performance;

. interoperability with third-party management software and data routing and switching equipment; and . point-and-click activation of services.

Cost effectiveness and scalability. Our solution is designed to scale efficiently as demand for bandwidth and new services increases. Our products lower service providers' equipment acquisition and network operation costs by reducing the amount of equipment required, and by allowing them to install their equipment incrementally in a pay-as-you-grow fashion without sacrificing their existing infrastructure investments. In addition, our solution requires less space in service providers' facilities because our products are designed to handle all current networking standards and can readily be upgraded to handle emerging services without the deployment of additional equipment.

Rapid and efficient service restoration. Survivability is a key factor for all metro networking services. Our products provide for restoration of service within the SONET standard of 50 milliseconds, without the need to dedicate bandwidth for restoration, as is required by typical SONET-based

equipment. Since our products do not require dedicated bandwidth, communications service providers can utilize their existing fiber more efficiently by placing more traffic on each fiber route.

The ONI Systems Strategy Our objective is to be the leading provider of all-optical networking solutions for communications service providers worldwide. The key elements of our strategy are to:

Leverage our all-optical approach to achieve early design wins in metro core and metro access networks.

We believe that the challenges facing metro service providers are most efficiently addressed through our all-optical approach. Since service providers are in the early stages of deployment of optical metro networks, we expect that service providers will select vendors with the strongest technology positions. We plan to take advantage of our position as a technology leader to achieve design wins with these service providers, which will position us to grow rapidly as these new networks are deployed.

Enable our customers to offer new revenue-generating services to their end- users.

We intend to continue to develop and provide solutions that will enable our customers to deliver emerging revenue-generating services to end-users. We believe the demand for new services is a key driver of our customers' growth and we intend to ensure that our hardware and software architectures continue to offer the performance and flexibility to allow rapid introduction of new services. We intend to work closely with our customers to help them identify new services that they can deliver using our products.

Extend technology leadership.

Our all-optical architecture and dynamic network operating system are key elements of our technology leadership. We believe that these elements can be incorporated into future product offerings for other segments of the communications network. We intend to extend our technology leadership and to develop new product offerings and future product enhancements through continued investment in research and development.

Leverage optical manufacturing expertise.

Our ability to manufacture complex optical networking products is a key to our success. We believe we have developed a world-class manufacturing capability through a combination of our own manufacturing systems and third- party manufacturing relationships. We believe that this combination gives us a competitive advantage and will enable us to reduce our manufacturing costs, while providing us with manufacturing flexibility to meet changing demand.

Expand direct sales, service and support organizations to address global opportunities.

We intend to expand our direct sales capability into global markets. We believe that sales efforts on a customer-by-customer basis are most effective because deployment of communications equipment involves careful technical evaluation, multiple levels of decision making and significant investments by our customers. While we may consider indirect sales channels where appropriate, we intend to continue to focus our sales and distribution efforts on direct sales. We have developed a direct sales organization

in North America and are expanding into Europe, Asia and Latin America. In addition to our existing teams in the United States, we are also establishing service and support teams internationally to support our major customers.

Establish strategic alliances and pursue acquisitions to extend our leadership in optical networking.

We intend to establish strategic alliances with complementary technology suppliers in order to leverage our technology leadership in providing optical networking solutions. We believe that alliances with companies that provide complementary products to enable new services will bring our customers greater value. In addition, we intend to pursue acquisitions that will enable us to broaden our product, service and technology portfolios.

All-Optical Architecture Rather than processing network signals by converting incoming optical signals to electrical form, our product architecture performs the following functions in an all- optical manner:

. multiplexing and de-multiplexing;

. per channel and grouped wavelength routing;

. switching;

. dynamic channel add/drop;

. restoration switching for routing around fiber failure or equipment failure;

. signal amplification; and . supervisory channels for performance monitoring.

[Graphic--diagram Depicting the Oni Systems' All-optical Architecture]

Centered in the diagram are a stack of six long rectangles representing functional layers within our ONLINE9000 or ONLINE7000 products. Superimposed over the rectangles is a flow chart representing movement of the optical signals through the functional layers.

From top to bottom:

The words "Optical Interface to Client Equipment" appear above the top-most (or first) rectangle in the stack. The portion of the flowchart shown in this rectangle are squares representing interfaces to the client equipment.

The portion of the flowchart shown in each of the second and fourth rectangle are trapezoids representing combination and separation of optical signals on the signal. The words "All Optical Multiplexing, Demultiplexing" appear to the left of these rectangles.

The portion of the flowchart shown in each of the third and fifth rectangle is a smaller rectangle representing optical switching of the signal. The words "Optical Switching" appear in the flowchart rectangle. The words "All-Optical Switching" appear to the right of the third and fifth rectangle in the stack.

The portion of the flowchart shown in the sixth rectangle are triangles representing amplification of signals to and from the network. The words "Optical Amplifiers" appear in the center of this rectangle. The words "To Fiber Network" appear below the bottom-most rectangle of the stack.

Our OPTX operating system software architecture integrates network design tools, operations management software, and end-to-end service management and activation systems as shown in the diagram below. This integrated environment enables automated transfer of data through open interfaces to craft and management terminals as well as local administrative networks for the communications service provider.

Build with software infrastructure based on XML, OPTX also provides standards-based CORBA interfaces to the service provider's operations support systems and network wide service applications including billing, service ordering and activation, and inventory systems. OPTX architecture enables information exchange with data switching and routing equipment through our OLMP inter-network communications protocols. OPTX helps provide comprehensive and integrated network design, operations and service management capabilities by managing networks built with our ONLINE9000 product.

[Graphic--diagram Depicting the Oni Systems' Optx Architecture]

The center of the diagram is a large square. The word "OPTX" appears in the upper right corner of the square. Below this word appear three upright rectangles. The words "Network Design Application" appear in the left rectangle. The words "Network Configuration Application" appear in the center rectangle. The words "Network Operation Applications" appear in the right rectangle. Below these rectangles occupying the bottom quarter of the square is a rectangle with words "ONLINE 9000 Network" inside.

Above the main square is an ellipse with the words "Operations Support Systems (Network Management, Service Management)" inside. To the left of the main square is an upright ellipse with the words "GUI/Users" inside. To the right of the main square is an upright ellipse with the words "Client Equipment" inside. Each of these ellipses is connected to the main square by a two-way arrow.

Products

Online9000

The ONLINE9000 is designed for Metro core networks and delivers cost- effective, scalable capacity for the metro communications service provider. It features dynamic optical add-drop capabilities on all deployed channels and provides rapid restoration faster than the SONET standard of 50 milliseconds. To help service providers deploy large networks, the ONLINE9000 includes optical amplifiers to

extend transmission distances. The ONLINE9000 can be used in conventional ring, ring-mesh and mesh network topologies. In its base configuration, the ONLINE9000 includes the following key features:

. 33 protected or 66 unprotected channels;

. line-based or path-based optical protection switching;

. a universal optical interface supporting multiple bit rates and protocols, including OC-3, OC-12, OC-48, Gigabit Ethernet and Fibre Channel; and . integrated optical amplifiers with sophisticated power management capabilities.

Online7000

We have recently introduced the ONLINE7000, which we anticipate will be available in the second quarter of 2000. The ONLINE7000 is designed to provide metro service providers with a cost-effective solution for metro access applications. Integrated monitoring and surveillance capabilities will ensure managed operation from the operator's perspective across metro core and metro access networks. The ONLINE7000 shares the same management and operating system as the ONLINE9000 and can be deployed as an extension of the ONLINE9000.

The ONLINE7000 includes the functions of a typical SONET and data multiplexer. This capability will allow the carrier to deploy multiple SONET or native-format data services using a single wavelength. The ONLINE7000 is scalable up to 33 protected or 66 unprotected channels. In its base configuration, key features of the ONLINE7000 will include:

. the ability to add or drop multiple SONET or data channels to or from a single wavelength;

. path-based optical protection; and . a 19" shelf form factor suitable for metro access networks.

OPTX Operating System Our optical network operating system, called OPTX, provides a unified environment for metro core and metro access service providers to manage diverse networking resources, hardware and software systems. Analogous to the operating systems of personal computers, OPTX manages all resources in the transmission network, including transmission systems, connections, protection resources and terminals, and allocates resources to various users and applications, based on user-selected policies. OPTX brings the ability to manage, arbitrate and dynamically control network-wide resources to metro network service providers. Multiple application programmer interfaces, or APIs, within OPTX link to other management systems and applications. The OPTX architecture and infrastructure makes extensive use of XML to enable interaction with other network management equipment without developing dedicated interfaces. The key features of the OPTX operating system include:

. OPTXNET, an integrated optical network design tool that provides automatic optical link analysis, link optimization and system configuration calculation for each node in the network;

. Network and service management interface and applications including surveillance, billing, service activation and ordering systems and network inventory reports; and . CORBA based northbound interface to the service provider's network operations support systems.

OLMP (Optical Link Management Protocol) Our inter-network communications protocol, OLMP, enables data routing and switching equipment to exchange information with our optical transmission equipment in metro networks. This information exchange allows data switching and routing equipment to request and receive required resources from optical transmission equipment. Utilizing our OLMP protocols, data equipment can directly request the metro network to set up and drop optical channels when required in real time. For example, OLMP enables Fibre Channel equipment to exchange route-length, latency and bandwidth availability for end-to-end management of storage area networks. We believe that our OLMP is the first network-level internetworking protocol to link the data and switching equipment to optical transmission equipment.

Customers

Our target customers include service providers such as regional Bell operating companies, competitive local exchange carriers, long-distance carriers with local operations, cable operators, Internet service providers, and foreign telephone companies. As of March 6, 2000, we had entered into agreements under which the following communications service providers may, but are not obligated to, purchase our products: COLT Telecom plc, Williams Communications Inc., Marietta Fibernet, KVH Industries Inc. and MetroRED Telecommunicaciones S.A. In addition, we had shipped the ONLINE9000 to Marietta Fibernet and Williams Communications in the United States and COLT Telecom in the United Kingdom.

Sales and Marketing

In North America, we have developed a direct sales force and in some limited circumstances may join with other communications equipment providers to bid on major proposals. Our direct sales force consists of sales teams made up of an account manager, systems engineers and technical support and training personnel. Each team is assigned responsibility for specific geographic territories and specific customers within each territory. We are developing a direct sales force to sell to potential customers outside North America.

Our marketing programs are designed to inform existing and potential customers about the capabilities and benefits of our products. We also use our marketing programs to support the sale and distribution of our products through our direct sales force. Our marketing efforts include public relations, participation in industry trade shows and conferences.

Customer Service and Support Our customer service and support organization provides maintenance services and training in the use of our products after they are installed at a customer's site. Installation services are provided by TNS, Inc., a third-party provider of "engineer, furnish and install" services. Our customer service centers, located at our facilities in San Jose, California and London, England, include highly-qualified teams of systems engineers and technical personnel who work closely with our direct sales force and provide 24-hour-a-day, 7-day-a- week support for our customers.

Research and Development We believe that to be successful we must continue to enhance our existing products and develop new products that maintain technological competitiveness. We have assembled a team of 110 highly skilled optical hardware and software engineers, manufacturing and test engineers and system and network architects. Research and development expenses were $4.0 million for the year ended December 31, 1998 and $25.2 million for the year ended December 31, 1999. We will continue to make substantial investments in research and development.

Our product development process is driven by market demand and a close collaboration between our product marketing, sales and product development organizations. Our product development process begins with a detailed set of specifications prepared by our product management organization. We also incorporate feedback from our customers in the product development process. In addition, we participate in industry and standards organizations where appropriate and incorporate information from these contacts throughout the product development process.

Manufacturing

We conduct supply chain management, production engineering, documentation control and quality assurance at our manufacturing facility in San Jose, California. We outsource most of the manufacturing of optical modules used in our products, and we complete the final assembly of these optical modules at our facilities. The majority of our electronic manufacturing and assembly is outsourced. Currently, we use a number of manufacturing vendors for electronic assemblies while E-Tek Dynamics performs the majority of our outsourced optical assembly.

This approach to manufacturing allows us to:

. reduce capital equipment expenditures required for a turnkey manufacturing operation;

. reduce our facilities square footage requirements by limiting the amount of space dedicated to manufacturing and operations;

. conserve working capital by limiting the amount of inventory we must stock; and . respond to market demand flexibly.

Competition

Competition in the communications network infrastructure market is intense. Our existing and potential competitors include Alcatel, Ciena, Cisco Systems, Juniper Networks, Lucent Technologies, Nortel Networks, Siemens, Sycamore Networks and Tellabs. A number of private companies have recently announced plans for new products to address the same problems which our products address and have attracted substantial amounts of venture capital funding.

We believe that to be competitive in the communications network infrastructure market we must deliver products that:

. provide extremely high network reliability;

. provide high performance interfaces and packet processing capabilities;

. scale easily and efficiently with minimum disruption to the network;

. interoperate with existing network designs and equipment vendors;

. reduce the complexity of the network by decreasing the need for multiple layers of equipment; and . provide a cost-effective solution for service providers.

If we are unable to compete successfully against our current and future competitors, we could experience price reductions, reduced gross margins and loss of market share, any one of which could materially harm our business, operating results and financial condition.

Intellectual Property Our success and ability to compete depends on our ability to develop technological expertise internally. We rely on a combination of patent, copyright, trademark and trade secret laws and restrictions on disclosure to protect our intellectual property rights. We have been issued four patents in the United States. However, only one of these patents is currently significant to our products. In addition, we currently have pending 17 patent applications in the United States and internationally. These patents relate to optical architecture, hardware, software and management systems. Any issued patents may not protect our intellectual property or may be challenged by third parties. In addition, others may independently develop similar or competing technology or design around our patents.

We enter into confidentiality or license agreements with our employees, consultants and corporate partners and control access to and distribution of our software, documentation and other proprietary information. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy or otherwise obtain and use our products or technology. These precautions may not prevent misappropriation or infringement of our intellectual property.

Employees

As of December 31, 1999, we had a total of 202 employees:

. 110 in research and development;

. 21 in sales and marketing;

. 7 in customer service and support;

. 34 in manufacturing; and . 30 in finance and administration.

Our future success will depend in part on our ability to attract and retain highly qualified technical and management personnel. Competition for such talent is intense. None of our employees are represented by any collective bargaining unit, and we believe that our relations with our employees are good.

Facilities

Our headquarters are currently located in a leased facility in San Jose, California, consisting of approximately 53,000 square feet under a lease that expires in 2002. We also lease a facility of approximately 58,000 square feet in San Jose, California, under a lease that expires in 2006. We expect to require additional space within the next 12 months.

Legal Proceedings

In October 1999, Nortel Networks filed suit against us and several of our employees who were former employees of Nortel Networks. The suit seeks an injunction to prevent us from hiring additional Nortel Networks employees and prohibiting the use of Nortel Networks' trade secrets by us. In December 1999, a temporary order was issued prohibiting the former Nortel Networks employees from soliciting current Nortel Networks' employees and from using certain Nortel Networks trade secrets.

In addition, the former employer of one of our recently hired employees is seeking an injunction and has obtained a temporary restraining order against him, which prevents him from working for us. We have agreed to reimburse him for the legal costs of defending against this claim.

Management

Executive Officers, Directors and Significant Employees Our executive officers, directors and significant employees and their ages as of December 31, 1999 are as follows:

Name Age Position

Executive Officers and Directors: Hugh C. Martin..... 46 President, Chief Executive Officer and Chairman of the Board of Directors Terrence J. Schmid..... 36 Chief Financial Officer and Vice President, Finance and Administration Hon Wah Chin..... 45 Chief Technology Officer William R. Cumpston..... 38 Senior Vice President, Engineering and Operations Michael A. Dillon..... 41 Vice President, General Counsel and Secretary Robert J. Jandro..... 44 Executive Vice President, Worldwide Sales and Marketing Andrew W. Page..... 34 Vice President, Corporate Development Matthew W. Bross..... 39 Director Kevin R. Compton..... 41 Director Jonathan D. Feiber..... 42 Director James F. Jordan..... 60 Director Gregory B. Maffei..... 39 Director Significant Employees: Kenneth H. Calhoun..... 34 Vice President, Product Marketing Martin Desroches..... 35 Vice President, Operations William S. Jarvis..... 37 Vice President, Worldwide Sales Rohit Sharma..... 31 Vice President, Optical Hardware Development Hugh C. Martin has served as President, Chief Executive Officer of ONI Systems since January 1998. He was appointed Chairman of the Board of Directors in February 2000. From July 1997 to January 1998, he served as Entrepreneur-in- Residence at Kleiner Perkins Caufield & Byers, a venture capital firm. Mr. Martin served as President of The 3DO Company, an entertainment software company, from 1992 to June 1997. He is a member of the board of directors of The 3DO Company. He holds a B.S. in Electrical Engineering from Rutgers University.

Terrence J. Schmid has served as Chief Financial Officer and Vice President, Finance and Administration of ONI Systems since February 1998 and as Secretary of ONI Systems from February 1998 to March 2000. He has informed us that he intends to resign as an employee and an officer of ONI Systems effective April 30, 2000. From April 1996 to February 1998, Mr. Schmid was Vice President, Finance and Chief Financial Officer of The 3DO Company. From 1993 to April 1996, Mr. Schmid worked in the finance division of Electronic Arts, an entertainment software company. He received an M.B.A. from Duke University and a B.A. in Economics from the University of San Francisco.

Hon Wah Chin has served as Chief Technology Officer of ONI Systems since June 1998. Mr. Chin served as Senior Systems Architect at Cisco Systems, Inc., a network equipment company, from 1994 to June 1998 and was a Cisco Distinguished Engineer. He holds a S.B. in Electrical Engineering and Computer Science from the Massachusetts Institute of Technology.

William R. Cumpston has served as Senior Vice President, Engineering and Operations of ONI Systems since June 1999 and as Vice President, Engineering of ONI Systems from September 1998 to June 1999. Prior to joining us, Mr. Cumpston served in various management positions at DSC Communications Corp., a telecommunications company, from 1995 to August 1998. He holds a B.S. in Math Science from the University of North Carolina at Chapel Hill.

Michael A. Dillon has served as Vice President and General Counsel of ONI Systems since October 1999 and as Secretary since March 2000. From August 1995 to October 1999, Mr. Dillon served as Senior Director of Sun Microsystems, Inc., a computer company, and from 1993 to August 1995, he served as Senior Counsel for Sun Microsystems. He holds a J.D. from Santa Clara University and a B.A. in Communications/Sociology from the University of California, San Diego.

Robert J. Jandro has served as Executive Vice President, Worldwide Sales and Marketing since March 2000. Mr. Jandro served as Group Vice President of Oracle Corporation, a database software company, from May 1999 to March 2000. From 1994 to May 1999, he served as Oracle's Vice President, North America Communications and Vice President, United States Central Region, Latin America and Canada. He holds an M.B.A. from the Kellogg Graduate School of Management at Northwestern University and a B.S. in Business from the University of Missouri, St. Louis.

Andrew W. Page has served as Vice President, Corporate Development of ONI Systems since March 2000. Prior to joining us, Mr. Page served as Managing Director and head of the Global Communications Group of FleetBoston Robertson Stephens Inc., an investment bank, from April 1997 to February 2000. He served as Principal of Volpe, Welty & Company from 1993 to March 1997. He holds an M.B.A. from Harvard University Graduate School of Business and a B.A. in English Literature from Princeton University.

Matthew W. Bross has served as a director of ONI Systems since November 1999. Since May 1999 he has served as Senior Vice President and Chief Technology Officer of Williams Communications, Inc., a communications service provider. From March 1997 to May 1999, he served in various management capacities for Williams Communications. From 1991 to March 1997, he served as the founder and Chief Executive Officer of Critical Technologies, Inc., a telecommunications infrastructure company, which was acquired by Williams Communications.

Kevin R. Compton has served as a director of ONI Systems since January 1998. Mr. Compton has served as a general partner at Kleiner Perkins Caufield & Byers since 1990. Mr. Compton serves on the board of directors of Active Software, Inc., Citrix Systems, Inc., Corsair Communications, Inc., Rhythms NetConnections Inc. and VeriSign, Inc. He holds a B.S. in Business Management from the University of Missouri.

Jonathan D. Feiber has served as a director of ONI Systems since January 1998. Mr. Feiber has served as a partner at Mohr Davidow Ventures, a venture capital investment firm, since 1991. From 1983 to 1991, he served in various capacities at Sun Microsystems, most recently as Vice President of Networking. He is a director of several privately-held companies. He holds a B.A. in Computer Science and Mathematics from the University of Colorado.

James F. Jordan has served as a director of ONI Systems since March 1998. Mr. Jordan was one of the founders of Ungermann-Bass Inc. and was President and CEO of Kalpana, Inc. prior to the sale of the company to Cisco Systems in 1994. He holds a B.S. in Business and Marketing from the University of Utah.

Gregory B. Maffei has served as a director of ONI Systems since February 2000. Mr. Maffei served as Chief Executive Officer and a member of the board of directors of 360networks Inc., a communications service provider, since December 1999. From 1993 to December 1999, Mr. Maffei served in various capacities with Microsoft Corporation, a software company, most recently as Senior Vice President, Finance and Administration, and Chief Financial Officer. He serves on the board of directors of Avenue A, Inc., Expedia, Inc. and Starbucks Corporation. He holds a B.A from Dartmouth College and an M.B.A. from Harvard University Graduate School of Business.

Kenneth H. Calhoun has served as Vice President, Product Marketing of ONI Systems since February 1999 and as Senior Director, Product Marketing of ONI Systems from August 1998 to February 1999. Prior to joining us, he served as Senior Manager, Account Marketing and Senior Manager, Product Marketing at Nortel Networks Corporation, a telecommunications company, from March 1997 to August 1998. Prior to then, Mr. Calhoun served as Senior Manager and Manager, Broadband Product Planning with Fujitsu Network Communications, Inc. from September 1995 to March 1997. He holds a Ph.D. in Electrical Engineering and a B.S. in Electrical Engineering from the Georgia Institute of Technology.

Martin Desroches has served as Vice President, Operations of ONI Systems since October 1999. Prior to joining us, Mr. Desroches served as Senior Manager, High Speed Optics Operations for Nortel Optoelectronics, an optical components company, from September 1998 to October 1999. Prior to then, he served as Senior Manager and Manager, OC-192 Manufacturing Engineering for Nortel Networks from June 1994 to September 1998. He holds a B.S. in Electrical Engineering from the University of Sherbrooke.

William S. Jarvis has served as Vice President, Worldwide Sales of ONI Systems since May 1999. Prior to joining us, Mr. Jarvis served as Sales Vice President for NEC America, a telecommunications company, from October 1996 to May 1999 and Director of Sales for NEC America from January 1995 to January 1996. He holds an M.B.A. from Santa Clara University and a B.S. in Business Administration from San Jose State University.

Rohit Sharma founded ONI Systems in our spin-out from Optivision, Inc. and has served as Vice President, Optical Hardware Development since January 1999 and served as Chief Architect from April 1998 to January 1999. Prior to the spin-out, he served as a member of Optivision's technical staff

from October 1996 to April 1998. He holds a Ph.D. and a M.Sc. in Electrical Engineering from the University of Alberta, Canada and a B.Sc. in Electronics and Communications Engineering from R.E.C. Kurukshetra, India.

Board Composition

Our board currently consists of six members. Each director is elected for a period of one year at our annual meeting of stockholders and serves until the next annual meeting or until his successor is duly elected and qualified.

Following this offering, our bylaws will provide that our board of directors will be divided into three classes as nearly equal in size as possible with staggered three-year terms. The term of office of our Class I directors will expire at the annual meeting of stockholders to be held in 2000; the term of office of our Class II directors will expire at the annual meeting of stockholders to be held in 2001; and the term of office of our Class III directors will expire at the annual meeting of the stockholders to be held in 2002. The classification of our board of directors could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from acquiring, control of ONI Systems.

Board Committees

Our board of directors has two committees:

Compensation Committee. The current members of our compensation committee are Messrs. Compton and Feiber. The compensation committee reviews and makes recommendations to our board concerning salaries and incentive compensation for our officers. The compensation committee also administers our stock plans.

Audit Committee. The current members of our audit committee are Messrs. Jordan, Maffei and . Our audit committee reviews and monitors our financial statements and accounting practices, makes recommendations to our board regarding the selection of independent auditors and reviews the results and scope of the audit and other services provided by our independent auditors.

Compensation Committee Interlocks and Insider Participation None of the members of the compensation committee has at any time since our formation been an officer or employee of ours. None of our executive officers currently serves or in the past has served as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board or compensation committee. Prior to the creation of our compensation committee, all compensation decisions were made by our full board.

Director Compensation Our directors do not receive cash compensation for their services as directors but are reimbursed for their reasonable expenses in attending board and board committee meetings. The following directors have been granted options to purchase our common shares. In March 1998 and November 1998, we granted options to purchase 360,000 shares and 180,000 shares of common stock to Mr. Jordan at exercise prices of $0.08 per share and $0.09 per share, respectively. In December 1999, we granted an option to purchase 1,215,834 shares of common stock to Mr. Martin at an exercise price of $1.25 per share in connection with his services as President and Chief Executive

Officer. In November 1999, we granted an option to purchase 180,000 shares of common stock to Mr. Bross at an exercise price of $0.91 per share. In March 2000, we granted an option to purchase 120,000 shares of common stock to Mr. Maffei at an exercise price of $3.20 per share.

Members of the board who are not employees of ONI Systems, or any parent, subsidiary or affiliate of ONI Systems, will be eligible to participate in the 2000 Equity Incentive Plan. The option grants under the plan are automatic and nondiscretionary, and the exercise price of the options is the fair market value of the common stock on the date of grant.

Each non-employee director who becomes a member of the board on or after the effective date of the registration statement of which this prospectus forms a part, will be granted an option to purchase shares. Also, each eligible director who became a member of the board prior to the effective date of the registration statement of which this prospectus forms a part and who did not receive an option grant will receive an option to purchase shares. Immediately following each annual meeting of our stockholders, each eligible director will automatically be granted an additional option to purchase shares if the director has served continuously as a member of the board since the date of the prior annual meeting. The board of directors may make discretionary supplemental grants to an eligible director who has served for less that one year from the date of such director's initial grant, provided that no director may receive more than shares in any calendar year. The options have 10 year terms. They will terminate three months following the date the director ceases to be a director or a consultant or 12 months if the termination is due to death or disability. All options granted under the 2000 Equity Incentive Plan will become exercisable over a four year period at a rate of 25% after one year and 2.083% per month thereafter so long as he or she continues as a member of the board or as a consultant. In the event of our dissolution or liquidation or a "change in control" transaction, options granted to directors under the plan will become 100% vested and exercisable in full.

Executive Compensation The following table presents compensation information for our fiscal year ended December 31, 1999 paid or accrued by our Chief Executive Officer and our three most highly compensated executive officers whose salary and bonus was more than $100,000. The compensation table excludes other compensation in the form of perquisites and other personal benefits that constituted less than 10% of the total annual salary and bonus of each of the named executive officers in the fiscal year ended December 31, 1999.

The table does not include compensation information for two executive officers who commenced employment after December 31, 1999. These two officers would have been among the four most highly compensated executive officers had they been employees of ONI Systems in 1999. Robert Jandro, our Executive Vice President, Worldwide Sales and Marketing, commenced employment with ONI Systems on March 1, 2000. Mr. Jandro's salary on an annualized basis is $295,000, which does not include a $200,000 bonus payable upon the satisfaction of established performance goals. Andrew Page, our Vice President, Corporate Development, commenced employment with ONI Systems on February 29, 2000. Mr. Page's salary on an annualized basis for 2000 is $300,000, which does not include a $30,000 bonus received upon commencement of employment.

Summary Compensation Table

Name and Principal Positions	Annual Compensation Salary	Bonus	Long Term Compensation Awards Restricted Stock Awards	Securities Underlying Options
Hugh C. Martin.....	$270,001	$ --	4,784,164	1,215,834
President, Chief Executive Officer and Chairman of the Board Terrence J. Schmid.....	173,000	--	533,332	320,000
Chief Financial Officer, Vice President, Finance and Administration and Secretary Hon Wah Chin.....	182,820	--	674,000	200,000
Chief Technology Officer William R. Cumpston.....	231,666	45,000	--	1,300,000
Senior Vice President, Engineering and Operations Option Grants in 1999 The following table sets forth grants of stock options to our named executive officers in 1999.				

All options granted are either incentive stock options or nonqualified stock options and generally vest over four years, either (i) at the rate of 25% of the shares subject to the option on the first anniversary of the date of grant and 2.083% each month thereafter, or (ii) at the rate 2.083% of the shares subject to the option each month. Options expire 10 years from the date of grant. Options were granted at an exercise price equal to the fair market value of our common stock, as determined by the board as of the date of grant.

Potential realizable values are computed by (a) multiplying the number of shares of common stock subject to a given option by the assumed initial public offering price of $ per share, (b) assuming that the aggregate stock value derived from that calculation compounds at the annual 5% or 10% rates shown in the table for the entire 10 year term of the option and (c) subtracting from that result the aggregate option exercise price. The 5% and 10% assumed annual rates of stock price appreciation are mandated by the rules of the Securities and Exchange Commission and do not represent our estimate or projection of future common stock prices.

The percentage of total options granted to employees in 1999 is based on options to purchase a total of 20,178,438 shares of common stock of ONI Systems granted during 1999.

Mr. Jandro was granted an option to purchase 900,000 shares of common stock in March 2000 pursuant to our 1999 Equity Incentive Plan. The exercise price per share of the option is $3.20; and it expires in March 2010. The potential realizable values at assumed rates of stock appreciation for the option term are $ at 5% and $ at 10%.

Mr. Page was granted an option to purchase 300,000 shares of common stock in March 2000 pursuant to our 1999 Equity Incentive Plan. The exercise price per share of the option is $3.20 and it expires in March 2010. The potential realizable values at assumed rates of stock appreciation for the option term are $ at 5% and $ at 10%.

Name	Number of Securities Underlying Options Granted	Percentage of Total Options Granted to Employees in 1999	Exercise Price Per Share	Expiration Date	Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term 5%	10%

Hugh C. Martin..... 1,215,834 6.03% $1.25 12/21/09 $ $

Terrence J. Schmid.....	120,000	0.59	0.09	3/4/09
	200,000	0.99	1.25	12/21/09
Hon Wah Chin.....	100,000	0.50	0.09	7/15/09
	100,000	0.50	1.25	12/21/09
William R. Cumpston.....	300,000	1.49	0.09	3/4/09
	200,000	0.99	0.91	9/15/09
	300,000	1.49	1.25	12/21/09

Aggregated Option Exercises in the Fiscal Year Ended December 31, 1999 and Option Values at December 31, 1999 The following table presents the number of shares acquired and the value realized upon exercise of stock options during the fiscal year ended December 31, 1999, and the number of shares of our common stock subject to "exercisable" and "unexercisable" stock options held as of December 31, 1999 by our chief executive officer and each of our named executive officers. Also presented are values of "in-the-money" options, which represent the positive difference between the exercise price of each outstanding stock option and the fair market value of ONI Systems' common stock, as then determined by our board of directors to be $1.25 per share on or about December 31, 1999.

The value realized equals the fair market value of the purchased shares on the option exercise date, less the exercise price paid for those shares. The options are immediately exercisable to the extent they qualify as incentive stock options for federal income tax purposes for all of the option shares, but any shares acquired upon exercise of those options will be subject to repurchase by ONI Systems, at the original exercise price paid per share, if the optionee ceases service with ONI Systems before those shares have vested. The heading "Vested" refers to shares that are no longer subject to repurchase; the heading "Unvested" refers to shares subject to repurchase as of December 31, 1999.

Since their employment with ONI Systems commenced in 2000, neither Mr. Jandro nor Mr. Page acquired or exercised any options during 1999.

Name	Number of Shares Acquired on Exercise	Value Realized	Number of Securities Underlying Unexercised Options at December 31, 1999		Value of Unexercised In-the-Money Options at December 31, 1999	
			Vested	Unvested	Vested	Unvested

Hugh C. Martin..... 1,215,834 $ -- -- -- $ -- $ -- Terrence J. Schmid..... 320,000 98,400 -- -- -- -- Hon Wah Chin..... 200,000 82,000 -- -- -- -- William R. Cumpston..... 1,300,000 656,000 -- -- -- -- Employee Benefit Plans 1997 Stock Option Plan. As of December 31, 1999, options to purchase 388,908 shares of common stock were outstanding under our 1997 Stock Option Plan. The options outstanding as of December 31, 1999 had a weighted average exercise price of $0.03 per share. The board of directors terminated this plan in April 1998. As a result, no options will be granted under our 1997 Stock Plan after this offering. Termination did not affect any outstanding options, all of which will remain outstanding and subject to the terms of our 1997 Stock Option Plan and stock option

agreement until exercise or until they terminate or expire by their terms. Options granted under our 1997 Stock Plan are subject to terms substantially similar to those described below with respect to options granted under our 2000 Equity Incentive Plan.

1998 Equity Incentive Plan. As of December 31, 1999, options to purchase 15,813,816 shares of common stock were outstanding under our 1998 Equity Incentive Plan and 1,824,480 shares of common stock remained available for issuance upon the exercise of options that may be granted in the future. The options outstanding as of December 31, 1999 had a weighted average exercise price of $0.24 per share. Our 1998 Equity Incentive Plan will terminate upon this offering, at which time, our 2000 Equity Incentive Plan will become effective. As a result, no options will be granted under our 1998 Equity Incentive Plan after this offering. However, termination will not affect any outstanding options, all of which will remain outstanding and subject to the terms of our 1998 Equity Incentive Plan and stock option agreement until exercise or until they terminate or expire by their terms. Options granted under our 1998 Equity Incentive Plan are subject to terms substantially similar to those described below with respect to options granted under our 2000 Equity Incentive Plan.

1999 Equity Incentive Plan. As of December 31, 1999, options to purchase 1,346,000 shares of common stock were outstanding under our 1999 Equity Incentive Plan and 18,166 shares of common stock remained available for issuance upon the exercise of options that may be granted in the future. The options outstanding as of December 31, 1999 had a weighted average exercise price of $0.95 per share. Our 1999 Equity Incentive Plan will terminate upon this offering, at which time our 2000 Equity Incentive Plan will become effective. As a result, no options will be granted under our 1999 Equity Incentive Plan after this offering. However, termination will not affect any outstanding options, all of which will remain outstanding and subject to the terms of our 1999 Equity Incentive Plan and stock option agreement until exercise or until they terminate or expire by their terms. Options granted under our 1999 Equity Incentive Plan are subject to terms substantially similar to those described below with respect to options granted under our 2000 Equity Incentive Plan.

Equity Incentive Plan. Our 2000 Equity Incentive Plan will become effective on the date of this prospectus and will serve as the successor to our 1998 Equity Incentive Plan and our 1999 Equity Incentive Plan. We have reserved shares of common stock to be issued under this plan. In addition, shares under the 1998 Equity Incentive Plan and the 1999 Equity Incentive Plan not issued or subject to outstanding grants on the date of this prospectus and any shares issued under these plans that are forfeited or repurchased by us or that are issuable upon exercise of options that become unexercisable for any reason without having been exercised in full will be available for grant and issuance under our 2000 Equity Incentive Plan. Shares will again be available for grant and issuance under our 2000 Equity Incentive Plan that:

. are subject to issuance upon exercise of an option granted under our 2000 Equity Incentive Plan that cease to be subject to the option for any reason other than exercise of the option;

. have been issued upon the exercise of an option granted under our 2000 Equity Incentive Plan that are subsequently forfeited or repurchased by us at the original purchase price;

. are subject to an award granted pursuant to a restricted stock purchase agreement under our 2000 Equity Incentive Plan that are subsequently forfeited or repurchased by us at the original issue price; or
. are subject to stock bonuses granted under our 2000 Equity Incentive Plan that terminates without shares being issued.

On each January 1, the aggregate number of shares reserved for issuance under our 2000 Equity Incentive Plan will increase automatically by a number of shares equal to 5% of our outstanding shares on December 31 of the preceding year. Our board of directors or compensation committee may reduce the amount of the increase in any particular year.

Our 2000 Equity Incentive Plan will terminate after 10 years from the date our board of directors approved the plan, unless it is terminated earlier by our board of directors. The plan will authorize the award of options, restricted stock awards and stock bonuses. No person will be eligible to receive more than 1,000,000 shares in any calendar year under the plan other than a new employee of ONI Systems, who will be eligible to receive no more than 2,000,000 shares in the calendar year in which the employee commences employment.

Our 2000 Equity Incentive Plan will be administered by our compensation committee, all of the members of which are "non-employee directors" under applicable federal securities laws and "outside directors" as defined under applicable federal tax laws. The compensation committee will have the authority to construe and interpret the plan, grant awards and make all other determinations necessary or advisable for the administration of the plan. Also, our non-employee directors are entitled to receive automatic annual grants of options to purchase shares of our common stock, as described under "Management--Director Compensation".

Our 2000 Equity Incentive Plan will provide for the grant of both incentive stock options that qualify under Section 422 of the Internal Revenue Code and nonqualified stock options. Incentive stock options may be granted only to employees of ONI Systems or of a parent or subsidiary of ONI Systems. All other awards other than incentive stock options may be granted to employees, officers, directors and consultants of ONI Systems or any parent or subsidiary of ONI Systems, provided the consultants render bona fide services not in connection with the offer and sale of securities in a capital-raising transaction. The exercise price of incentive stock options must be at least equal to the fair market value of our common stock on the date of grant. The exercise price of incentive stock options granted to 10% stockholders must be at least equal to 110% of that value. The exercise price of nonqualified stock options must be at least equal to 85% of the fair market value of our common stock on the date of grant.

Options may be exercised only as they vest or may be immediately exercisable with the shares issued subject to our right of repurchase that lapses as the shares vest. In general, options will vest over a four-year period. The maximum term of options granted under our 2000 Equity Incentive Plan is 10 years.

Awards granted under our 2000 Equity Incentive Plan may not be transferred in any manner other than by will or by the laws of descent and distribution. They may be exercised during the lifetime of the optionee only by the optionee. The compensation committee may determine otherwise and provide for these provisions in the award agreement, but only with respect to awards that are not incentive stock

options. Options granted under our 2000 Equity Incentive Plan generally may be exercised for a period of time after the termination of the optionee's service to ONI Systems or a parent or subsidiary of ONI Systems. Options will generally terminate immediately upon termination of employment for cause.

The purchase price for restricted stock will be determined by our compensation committee. Stock bonuses may be issued for past services or may be awarded upon the completion of certain services or performance goals.

2000 Employee Stock Purchase Plan. Our 2000 Employee Stock Purchase Plan will become effective on the first day on which price quotations are available for our common stock on the Nasdaq National Market. We have initially reserved 1,000,000 shares of common stock under this plan. On each January 1, the aggregate number of shares reserved for issuance under our 2000 Employee Stock Purchase Plan will increase automatically by a number of shares equal to 1% of our outstanding shares on December 31 of the preceding year. Our board of directors or compensation committee may reduce the amount of the increase in any particular year. The aggregate number of shares reserved for issuance under our 2000 Employee Stock Purchase Plan may not exceed shares.

Our 2000 Employee Stock Purchase Plan will be administered by our compensation committee. Our compensation committee will have the authority to construe and interpret the plan, and its decisions will be final and binding.

Employees generally will be eligible to participate in our 2000 Employee Stock Purchase Plan if they are employed before the beginning of the applicable offering period and they are customarily employed by us, or our parent or any subsidiaries that we designate, for more than 20 hours per week and more than five months in a calendar year and are not, and would not become as a result of being granted an option under the plan, 5% stockholders of us or our designated parent or subsidiaries. Participation in our 2000 Employee Stock Purchase Plan will end automatically upon termination of employment for any reason.

Under our 2000 Employee Stock Purchase Plan, eligible employees will be permitted to acquire shares of our common stock through payroll deductions. Eligible employees may select a rate of payroll deduction between 1% and 15% of their compensation and are subject to maximum purchase limitations.

Except for the first offering period, each offering period under our 2000 Employee Stock Purchase Plan will be for two years and consist of four six- month purchase periods. The first offering period is expected to begin on the first business day on which price quotations for common stock are available on the Nasdaq National Market. Offering periods and purchase periods will begin on February 1 and August 1 of each year. However, because the first day on which price quotations for our common stock will be available on the Nasdaq National Market may not be February 1 or August 1, the length of the first offering period may be more or less than two years, and the length of the first purchase period may be more or less than six months.

Our 2000 Employee Stock Purchase Plan will provide that, in the event of our proposed dissolution or liquidation, each offering period that commenced prior to the closing of the proposed event will continue for the duration of the offering period, provided that the compensation committee may fix a different date for termination of the plan. The purchase price for common stock purchased under the plan will be 85% of the lesser of the fair market value of common stock on the first day of the applicable offering period or the last day of the applicable purchase period. The compensation committee will have the power to change the offering dates, purchase dates and duration of offering periods without stockholder approval, if the change is announced prior to the beginning of the affected date or offering period.

Our 2000 Employee Stock Purchase Plan is intended to qualify as an "employee stock purchase plan" under Section 423 of the Internal Revenue Code. The plan will terminate 10 years from the date the plan was adopted by our board of directors, unless it is terminated earlier under the terms of the plan. The board of directors will have the authority to amend, terminate or extend the term of the plan, except that no action may adversely affect any outstanding options previously granted under the plan.

Except for the automatic annual increase of shares described above, stockholder approval will be required to increase the number of shares that may be issued or to change the terms of eligibility under our 2000 Employee Stock Purchase Plan. The board of directors will be able to make amendments to the plan as it determines to be advisable if the financial accounting treatment for the plan is different from the financial accounting treatment in effect on the date the plan was adopted by the board of directors.

401(k) Plan. We sponsor a defined contribution plan intended to qualify under Section 401 of the Internal Revenue Code, or a 401(k) plan. Employees who are at least 21 years old are generally eligible to participate. Participants may make pre-tax contributions to the plan of up to 15% of their eligible earnings, subject to a statutorily prescribed annual limit. Each participant is fully vested in his or her contributions and the investment earnings. There are no matching contributions under the plan. Contributions by the participants to the plan, and the income earned on these contributions, are generally not taxable to the participants until withdrawn. Participant contributions are held in trust as required by law. Individual participants may direct the trustee to invest their accounts in authorized investment alternatives.

Employment-Related Agreements Hugh C. Martin. In January 1998, we entered into an at-will employment agreement with Mr. Martin. Mr. Martin initially received a base salary of $200,000 per year. Mr. Martin's current salary is $240,000 per year. He is also eligible to receive an annual performance bonus of up to 25% of his salary, which was guaranteed at $50,000 in 1998. In addition, we granted Mr. Martin a stock award to purchase 8.5% of our total capital stock, subject to vesting requirements. We also granted Mr. Martin a stock award to purchase 1.5% of our total capital stock, which vested according to attainment of 1998 and 1999 milestones. In the event of a change in control of ONI Systems, 50% of the then-unvested shares subject to Mr. Martin's stock award will become fully vested.

Terrence J. Schmid. In February 1998, we entered into an at-will employment agreement with Mr. Schmid. Mr. Schmid initially received a base salary of $140,000 per year. Mr. Schmid's current salary is $180,000 per year. He is also eligible to receive an annual performance bonus up to 15% of his base salary, which was guaranteed at $20,000 in 1998. In addition, we granted Mr. Schmid a stock award to purchase 533,332 shares of common stock, subject to vesting requirements. In the event of a change in control of ONI Systems, 50% of the then-unvested shares subject to Mr. Schmid's stock option will become fully vested.

Hon Wah Chin. In June 1998, we entered into an at-will employment agreement with Mr. Chin. Mr. Chin initially received a base salary of $160,000 per year. Mr. Chin's current salary is $200,000 per year. He is also eligible to receive an annual performance bonus, which was guaranteed at $40,000 in 1998. In addition, we granted Mr. Chin a stock award to purchase 674,000 shares of common stock, subject to vesting requirements. In the event of a change in control of ONI Systems, 50% of the then-unvested shares subject to Mr. Chin's stock award and 50% of any other then unvested securities granted to Mr. Chin by us will become fully vested.

If we terminate Mr. Chin's employment without cause, he will be entitled to receive six months severance pay, plus any shares that would have vested had Mr. Chin remained employed during the six months following termination.

William R. Cumpston. In August 1998, we entered into an at-will employment agreement with Mr. Cumpston. Mr. Cumpston initially received a base salary of $175,000 per year. Mr. Cumpston's current salary is $225,000 per year. He also received a signing bonus of $45,000 and is eligible to receive an annual performance bonus of at least $40,000. In addition, we granted Mr. Cumpston an option to purchase 500,000 shares of common stock, subject to vesting requirements.

Michael A. Dillon. In October 1999, we entered into an at-will employment agreement with Mr. Dillon. Mr. Dillon's initial and current salary is $200,000 per year. In addition, Mr. Dillon received a signing bonus of $50,000 and we granted Mr. Dillon an option to purchase 300,000 shares of our common stock, subject to vesting requirements. We also granted Mr. Dillon an option to purchase an additional 20,000 of common stock, which is not subject to any vesting requirements. In the event of a change in control of ONI Systems, 25% of the then-unvested shares subject to Mr. Dillon's stock option and 25% of the then-unvested shares of any other securities granted to Mr. Dillon by us will become fully vested.

If we terminate Mr. Dillon's employment without cause during his first twelve months of employment, then he is entitled to receive six months of his then current salary, benefits and vesting of options.

Robert J. Jandro. In February 2000, we entered into an at-will employment agreement with Mr. Jandro. Mr. Jandro's initial and current salary is $295,000 per year. He is also eligible to receive an incentive bonus of up to $200,000. We also granted Mr. Jandro an option to purchase 900,000 shares of common stock, subject to vesting requirements. In the event of a change in control of ONI Systems, 25% of the then-unvested shares subject to Mr. Jandro's stock option and 25% of the then-unvested shares of any other securities granted to Mr. Jandro by us will become fully vested.

If we terminate Mr. Jandro's employment without cause during his first twelve months of employment, then he is entitled to receive six months of his base salary.

Andrew W. Page. In February 2000, we entered into an at-will employment agreement with Mr. Page. Mr. Page's initial and current salary is $300,000 per year. He also received a signing bonus of $30,000 and we granted him an option to purchase 300,000 shares of common stock, subject to vesting requirements. In the event of a change in control of ONI Systems, 50% of the then-unvested shares subject to Mr. Page's stock option and 50% of the then-unvested shares of any other securities granted to Mr. Page by us will become fully vested.

Indemnification of Directors and Executive Officers and Limitation of Liability Our certificate of incorporation and bylaws provide that a director shall not be personally liable for monetary damages resulting from breach of his fiduciary duty as a director, except for liability:

. for any breach of the director's duty of loyalty to us or our stockholders;

. for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;

. under section 174 of the Delaware General Corporation Law regarding unlawful dividends and stock purchases; or . for any transaction from which the director derived an improper personal benefit.

Our bylaws provide that:

. we are required to indemnify our directors and officers to the fullest extent permitted by the Delaware General Corporation Law, subject to very limited exceptions;

. we may indemnify our employees and agents to the fullest extent permitted by the Delaware General Corporation Law, subject to very limited exceptions;

. we are required to advance expenses, as incurred, to our directors and executive officers in connection with a legal proceeding;

. we may advance expenses, as incurred, to our employees and agents in connection with a legal proceeding; and . the rights conferred in the bylaws are not exclusive.

In addition to the indemnification required in our certificate of incorporation and bylaws, before the completion of this offering, we entered into indemnity agreements with each of our current directors and executive officers. These agreements provide for the indemnification of our officers and directors for all expenses and liabilities incurred in connection with any action or proceeding brought against them by reason of the fact that they are or were our agents. We also intend to obtain directors' and officers' insurance to cover our directors, officers and some of our employees for liabilities, including liabilities under securities laws. We believe that these indemnification provisions and agreements and this insurance are necessary to attract and retain qualified directors and officers.

The limitation of liability and indemnification provisions in our certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against directors and officers, even

though an action, if successful, might benefit us and other stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions. At present, there is no pending litigation or proceeding involving any of our directors, officers or employees regarding which indemnification by us is sought, nor are we aware of any threatened litigation that may result in claims for indemnification.

Related Party Transactions

Other than compensation agreements and other arrangements, which are described as required in "Management", and the transactions described below, since we were formed, there has not been, nor is there currently proposed, any transaction or series of similar transactions to which we were or will be a party:

. in which the amount involved exceeded or will exceed $60,000, and . in which any director, executive officer, holder of more than 5% of our common stock on an as-converted basis or any member of their immediate family had or will have a direct or indirect material interest.

Optivision Spin-Out

In October 1997, Optical Networks, Incorporated, our California predecessor, was formed as a subsidiary of Optivision, Inc. In exchange for assets related to the photonics business and related liabilities, Optivision received 11,565,752 shares of our common stock and 8,000,000 shares of our Series A preferred stock. In addition to the shares of capital stock delivered to Optivision, we executed and delivered a $90,000 promissory note in favor of Optivision that was subsequently cancelled by Optivision upon payment.

In December 1997, we were spun out of Optivision and Optivision distributed some of its holdings of our common stock and preferred stock to Optivision shareholders. Holders of Optivision common stock and Series A preferred stock received one share of our common stock for every share of Optivision common stock or Series A preferred stock held. Holders of Optivision Series B preferred stock received one share of our Series A preferred stock for every share of Optivision Series B preferred stock held. Optivision also retained 4,000,000 shares of our Series A preferred stock. In January 1998, all of the shares of our Series A preferred stock were converted into Series B preferred stock on a one-for-one basis.

In connection with the spin-out, we have reserved, and are obligated to issue for no additional consideration, shares of our common stock upon the exercise of the warrants to purchase capital stock of Optivision. In October 1997, ADC Telecommunications, Inc., a holder of Optivision Series B preferred stock, entered into an agreement with Optivision that granted ADC registration, information and other rights related to the Series A preferred stock distributed to ADC as part of the spin-out. These rights were amended upon conversion of its Series A preferred stock to Series B preferred stock.

In January 1998, as a condition to the closing of our Series B and C financings, we entered into agreements with Optivision granting us certain additional assets, related liabilities and a license to technology and assigning technology to us. In July 1998, we completed an agreement with Optivision, under which it transferred contracts between the United States government and Optivision to us.

In January 1998, Optivision sold 2,666,666 shares of our preferred stock to Kleiner Perkins Caufield & Byers and its affiliates and Mohr, Davidow Ventures and its affiliates, for an aggregate purchase price of $2 million. In March 1998, we repurchased the remaining shares of our stock owned by Optivision, consisting of 1,333,333 shares of our Series B preferred stock, for an aggregate purchase price of $1 million. Optivision does not currently own any shares of ONI Systems.

Preferred Stock Financings Since our inception, we have issued shares of preferred stock in private placement transactions as follows:

. from December 1997 to March 1998, we sold 18,128,843 shares of Series B preferred stock for approximately $0.24 per share, issued 8,000,000 shares of Series B preferred stock upon conversion of all outstanding shares of Series A preferred stock and repurchased 1,333,333 shares of Series B preferred stock;

. from December 1997 to March 1998, we sold 2,733,332 shares of Series C preferred stock for approximately $0.75 per share;

. in April 1998, we sold 4,969,148 shares of Series D preferred stock for approximately $0.88 per share;

. from December 1998 to May 1999, we sold 26,284,024 shares of Series E preferred stock for approximately $0.91 per share;

. in September 1999, we sold 8,249,468 shares of Series F preferred stock for approximately $1.82 per share; and . from December 1999 to March 2000, we sold 12,163,418 shares of Series G preferred stock for approximately $6.32 per share.

Purchasers of our preferred stock include, among others, the following executive officers, directors and holders of more than 5% of our outstanding stock or entities affiliated with them. The following table presents the number of shares and price per share for each of these purchasers. The number of total shares on an as-converted basis reflects a one-to-one conversion to common stock ratio for each share of Series B, Series C, Series D, Series E, Series F and Series G preferred stock. The shares held by Mr. Bross includes 1,582,904 shares of our Series G preferred stock held by Williams Communications, Inc. Mr. Bross disclaims beneficial ownership of shares held by Williams Communications.

Purchaser	Series B Preferred	Series C Preferred	Series E Preferred	Series F Preferred	Series G Preferred	Total Shares of Preferred Stock on an As-Converted Basis
Kleiner Perkins Caufield & Byers and affiliates (Kevin R. Compton).....	9,824,680	666,666	1,917,808	1,256,668	--	13,665,822
Mohr, Davidow Ventures and affiliates						

(Jonathan D. Feiber)...	9,824,680	666,666	1,917,808	1,256,668	1,266,322	14,932,144
Hon Wah Chin.....	--	--	44,000	33,000	8,000	85,000
Michael A. Dillon.....	--	--	--	--	4,000	4,000
Andrew W. Page					150,000	150,000
Mathew W. Bross.....	--	--	--	--	1,725,364	1,725,364
James F. Jordan.....	--	1,333,334	--	--	--	1,333,334
Gregory B. Maffei					160,000	160,000
Price Per Share.....	$ 0.24	$ 0.75	$ 0.91	$ 1.82	$ 6.32	

Registration Rights

We have entered into an investors' rights agreement with each of the purchasers of preferred stock set forth above. Under this agreement, these and other stockholders are entitled to registration rights with respect to their shares of common stock issuable upon conversion of their preferred stock upon the closing of this offering. Holders of 79,127,796 shares of our common stock are entitled to registration rights with respect to the shares of common stock that they will hold following this offering. See "Description of Capital Stock--Registration Rights".

Loans to Executive Officers and Directors in Connection with Exercise of Options In connection with the option exercises described under Executive Compensation and Director Compensation, the following officers and directors delivered full recourse promissory notes, in the amounts and bearing interest as indicated below:

In December 1999, we made a loan to Hugh C. Martin, our Chairman, President and Chief Executive Officer, in connection with his exercise of an option to acquire 1,215,834 shares of common stock, for an aggregate purchase price of $1,519,793. The loan is evidenced by a promissory note in the principal amount of $1,519,793, with interest compounded annually on the unpaid balance at a rate of 6.20% per year.

In November and December 1999, we made two loans to Terrence J. Schmid, our Chief Financial Officer and Vice President, Finance and Administration, in connection with his exercise of options to acquire 120,000 shares and 200,000 shares, respectively, of common stock, for an aggregate purchase price of $260,800. The loans are evidenced by a promissory note in the principal amount of $10,800, with interest compounded annually on the unpaid balance at a rate of 6.08% per year, and a promissory note in the principal amount of $250,000, with interest compounded annually on the unpaid balance at a rate of 6.20% per year.

In November 1999, we made three loans to William R. Cumpston, our Senior Vice President, Engineering and Operations, in connection with his exercise of options to acquire 1,000,000 shares of common stock, for an aggregate purchase of $254,000. The loans are evidenced by a promissory note in the principal amount of $45,000, with interest compounded annually on the unpaid balance at a rate of 6.08% per year, a promissory note in the principal amount of $182,000, with interest compounded annually on the unpaid balance at a rate of 6.08% per year and a promissory note in the principal amount of $27,000, with interest compounded annually on the unpaid balance at a rate of 6.08% per year. In December 1999, we made another loan to Mr. Cumpston, in connection with his

exercise of an option to acquire 300,000 shares of common stock, for an aggregate purchase price of $375,000. The loan is evidenced by a promissory note in the principal amount of $375,000, with interest compounded annually on the unpaid balance at a rate of 6.20% per year.

In November 1999, we made a loan to Hon Wah Chin, our Chief Technical Officer, in connection with his exercise of options to acquire 100,000 shares of common stock, for an aggregate purchase price of $9,000. The loan is evidenced by a promissory note in the principal amount of $9,000, with interest compounded annually on the unpaid balance at a rate of 6.08% per year. In December 1999, we made another loan to Mr. Chin in connection with his exercise of an option to acquire 100,000 shares of common stock, for an aggregate purchase price of $125,000. The loan is evidenced by a promissory note in the principal amount of $125,000, with interest compounded annually on the unpaid balance at a rate of 6.20% per year.

In November 1999, we made a loan to Michael A. Dillon, our Vice President and General Counsel, in connection with his exercise of an option to acquire 300,000 shares of common stock, for a purchase price of $273,000. The loan is evidenced by a promissory note in the principal amount of $273,000, with interest compounded annually on the unpaid balance at a rate of 6.08% per year.

In March 2000, we made a loan to Robert J. Jandro, our Executive Vice President, Worldwide Sales and Marketing, in connection with his exercise of an option to acquire 900,000 shares of common stock, for a purchase price of $2,880,000. The loan is evidenced by a promissory note in the principal amount of $2,880,000, with interest compounded annually on the unpaid balance at a rate of 6.80% per year.

In March 2000, we made a loan to Andrew W. Page, our Vice President, Corporate Development, in connection with his exercise of an option to acquire 300,000 shares of common stock for a purchase price of $960,000. The loan is evidenced by a promissory note in the principal amount of $960,000, with interest compounded annually on the unpaid balance at a rate of 6.80% per year.

Sales of Restricted Common Stock and Any Related Loans to Executive Officers and Directors We made the following additional sales of securities to executive officers and directors. Unless otherwise noted, (i) shares vest over a four year period and we have a repurchase option for unvested shares, and (ii) in the event of mergers or other transactions by us, our repurchase option will lapse as to fifty percent of the shares.

In January 1998, Hugh C. Martin, our Chairman, President and Chief Executive Officer, purchased 4,066,540 shares of common stock for $0.005 per share. Mr. Martin paid for the shares with a full recourse promissory note in the principal amount of $19,696 with interest compounded annually on the unpaid balance at a rate of 6.13% per year.

In January 1998, Hugh C. Martin purchased 717,624 shares of common stock for $0.005 per share. Mr. Martin paid for the shares with a full recourse promissory note in the principal amount of $3,476 with interest compounded annually on the unpaid balance at a rate of 6.13% per year. The shares under the agreement vest based on achievement of 1998 milestones and 1999 milestones. The milestones were achieved and our repurchase option has lapsed.

In February 1998, Terrance J. Schmid, our Chief Financial Officer, purchased 533,332 shares of our common stock for $0.08 per share. Mr. Schmid paid for the shares with a full recourse promissory note in the principal amount of $40,000 with interest compounded annually on the unpaid balance at a rate of 5.93% per year.

In November 1998, Hon Wah Chin, our Chief Technical Officer, purchased 674,000 shares for $0.09 per share. Mr. Chin paid for the shares with a full recourse promissory note in the principal amount of $59,413 with interest compounded semi-annually on the unpaid balance at a rate of 4.46% per year.

In December 1999, Michael A. Dillon, our Vice President and General Counsel, purchased 20,000 shares for $0.91 per share. Mr. Dillon paid for the shares with a full recourse promissory note in the principal amount of $18,200 with interest compounded annually on the unpaid balance at a rate of 6.20% per year. We have no repurchase right for these shares.

Persons or Entities Related to Our Officers and Directors In addition to the sales of securities previously described, we have entered into agreements with affiliates of our officers and directors.

Williams Communications, Inc. is a stockholder of ONI Systems. Mathew W. Bross, one of our directors, serves as Senior Vice President and Chief Technology Officer of Williams Communications, Inc. In March 2000, we entered into a purchase and license agreement with Williams Communications. In December 1999, we also executed a redemption and repurchase agreement with Williams Communications, which provides us with repurchase rights for the 1,582,904 shares of our stock owned by Williams Communications and provided Williams Communications with the right to require us to redeem the shares held by it at $8.50 per share, which right lapses upon completion of field trials for our ONLINE9000 product.

Principal Stockholders

The following table presents information as to the beneficial ownership of common stock as of December 31, 1999 and as adjusted to reflect the sale of common stock in this offering by:

. each stockholder known by us to be the beneficial owner of more than 5% of our common stock;

. each of our directors;

. each of our executive officers; and . all of our directors and executive officers as a group.

Beneficial ownership is determined under the rules of the Securities and Exchange Commission and generally includes voting or investment power with respect to securities. Unless indicated below, to our knowledge, the persons and entities named in the table have sole voting and sole investment power with respect to all shares beneficially owned, subject to community property laws where applicable. Shares of common stock subject to options that are currently exercisable or exercisable within 60 days of December 31, 1999 are deemed to be outstanding and to be beneficially owned by the person holding the options for the purpose of computing the percentage ownership of that person but are not

treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless indicated below, the address for each listed stockholder is c/o ONI Systems Corp., 166 Baypointe Parkway, San Jose, California 95134-1621.

The percentage of common stock outstanding as of December 31, 1999 is based on 110,135,490 shares of common stock outstanding on that date, assuming that all outstanding preferred stock has been converted into common stock. The table does not include shares held by Messrs. Jandro, Page and Maffei who purchased subsequent to December 31, 1999.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Outstanding Shares Beneficially Owned Before Offering	After Offering
Jonathan D. Feiber..... Mohr, Davidow Ventures and affiliates (1)	14,932,144	13.56	
Kevin R. Compton..... Kleiner Perkins Caufield & Byers and affiliates (2)	13,665,822	12.41	
Hugh C. Martin (3).....	5,999,998	5.45	
Terrence J. Schmid (4).....	853,332	*	
Hon Wah Chin (5).....	956,000	*	
William R. Cumpston (6).....	1,252,000	1.14	
Michael A. Dillon (7).....	324,000	*	
Matthew W. Bross (8).....	1,905,364	1.73	
James F. Jordan (9).....	1,873,334	1.70	
All executive officers and directors as a group.....	41,761,994	37.92	

* Represents beneficial ownership of less than 1% (1) Represents 13,443,608 shares held by held by Mohr, Davidow Ventures V, L.P., 222,214 shares held by Mohr, Davidow Ventures V, L.P. as nominee for MDV Entrepreneurs' Network Fund II (A), L.P. and MDV Entrepreneurs' Network Fund II (B), L.P. and 1,266,322 shares held by Mohr, Davidow Ventures V-L, L.P. The shares represented exclude 366,348 shares held by the Mohr Family Trust UTA dated 8/5/1985. Mohr, Davidow Ventures disclaims beneficial ownership of the shares held by the Mohr Family Trust, and the Mohr Family Trust disclaims beneficial ownership of the shares held by the Mohr, Davidow Ventures entities. Jonathan D. Feiber, a director of ONI Systems, is also a general partner of Mohr, Davidow Ventures. Mr. Feiber disclaims beneficial ownership of shares held by Mohr, Davidow Ventures and affiliates except to the extent of his interest in Mohr, Davidow Ventures and affiliates. The address of Mohr, Davidow Ventures and Mr. Feiber is 2775 Sand Hill Road, Suite 240, Menlo Park, California 94025.

(2) Represents 614,350 shares held by KPCB VIII Founders Fund, 341,644 shares held by KPCB Information Sciences Zaibatsu Fund II and 12,709,828 shares held by Kleiner Perkins Caufield & Byers VIII, L.P. Kevin R. Compton, a director of ONI Systems, is also a general partner of Kleiner Perkins Caufield & Byers. Mr. Compton disclaims beneficial ownership of shares held by KPCB and affiliates except to the extent of his interest in KPCB and affiliates. The address of Kleiner Perkins Caulfield & Byers and Mr. Compton is 2750 Sand Hill Road, Menlo Park, California 94025.

(3) Includes 2,118,003 shares of common stock subject to a repurchase right that lapses at a rate of 84,719 shares per month until January 2002. Includes 1,215,834 shares of common stock subject to repurchase right that lapses at a rate of 25,329 shares per month until December 2003.

(4) Includes 288,888 shares of common stock subject to a repurchase right that lapses at a rate of 11,111 shares per month until February 2002. Includes 120,000 shares of common stock subject to a repurchase right that lapses at a rate of 30,000 shares in January 2000 and 2,500 shares per month thereafter until January 2003. Includes 200,000 shares of common stock subject to a repurchase right that lapses at a rate of 4,166 shares per month until December 2003.

(5) Includes 421,262 shares of common stock subject to a repurchase right that lapses at a rate of 14,041 shares per month until June 2002. Includes 100,000 shares of common stock subject to a repurchase right that lapses at a rate of 25,000 shares in July 2000 and 2,083 shares per month thereafter until July 2003. Includes 100,000 shares of common stock subject to a repurchase right that lapses at a rate of 2,083 shares per month until December 2003.

(6) Represents 1,252,000 shares held by William Cumpston and Christine Cumpston. Includes 343,750 shares of common stock subject to a repurchase right that lapses at a rate of 10,416 shares per month until September 2002. Includes 300,000 shares of common stock subject to a repurchase right that lapses at a rate of 75,000 shares in January 2000 and 6,250 shares per month thereafter until January 2003. Includes 200,000 shares of common stock subject to a repurchase right that lapses at a rate of 50,000 shares in September 2000 and 4,166 shares per month thereafter until September 2003. Includes 300,000 shares of common stock subject to a repurchase right that lapses at a rate of 6,250 shares per month until December 2003.

(7) Includes 300,000 shares of common stock subject to a repurchase right that lapses at a rate of 75,000 shares in October 2000 and 6,250 shares per month thereafter until October 2003.

(8) Represents 142,460 shares held by Matthew W. Bross Revocable Trust and 1,582,904 shares held by Williams Communications Inc. Mr. Bross serves as Chief Technology Officer of Williams Communications and disclaims beneficial ownership of shares held by it. Includes 180,000 shares of common stock subject to a repurchase right that lapses at a rate of 45,000 shares in November 2000 and 3,750 shares per month thereafter until November 2003.

(9) Includes 202,500 shares of common stock subject to a repurchase right that lapses at a rate of 7,500 shares per month until March 2002. Includes 105,000 shares of common stock subject to a repurchase right that lapses at a rate of 5,000 shares per month until October 2001.

Description of Capital Stock

Immediately following the closing of this offering, our authorized capital stock will consist of shares of common stock, $0.0001 par value per share, and 10,000,000 shares of preferred stock, $0.0001 par value per share. As of December 31, 1999, and assuming the conversion of all outstanding preferred stock into common stock, there were outstanding 110,135,490 shares of common stock held by

approximately 262 stockholders, of which 8,587,699 shares were subject to our right of repurchase, options to purchase 17,548,724 shares of our common stock and warrants to purchase 1,011,394 shares of common stock.

Common Stock

Dividend rights. Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of common stock are entitled to receive dividends out of assets legally available at the times and in the amounts as our board of directors may determine.

Voting rights. Each holder of common stock is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders. Cumulative voting for the election of directors is not provided for in our certificate of incorporation. In addition, our certificate of incorporation and bylaws require the approval of two-thirds, rather than a majority, of the shares entitled to vote for certain matters. For a description of these matters, see "--Anti-Takeover Provisions".

Cisco Systems, Inc., a holder of preferred stock, which will convert into 4,969,148 shares of common stock upon the closing of this offering, is subject to voting restrictions that provide that Cisco and its affiliates must vote, in certain transactions, all shares owned by them (a) in the same proportion as other shares voted in the same class in a class vote, or (b) in the same proportion as all shares voted in a vote in which common stock and preferred stock vote together as a single class. These transactions include mergers, reorganizations, ONI Systems being acquired, or an underwritten public offering of our securities. In addition, Cisco may not exercise any dissenter's or appraisal rights.

No preemptive or similar rights. Our common stock is not entitled to preemptive rights and is not subject to conversion or redemption.

Right to receive liquidation distributions. Upon a liquidation, dissolution or winding-up of ONI Systems, the holders of our common stock are entitled to share ratably among themselves in all assets remaining after payment of all liabilities and the liquidation preferences of any outstanding preferred stock. Each outstanding share of our common stock is, and all shares of common stock to be outstanding upon completion of this offering will be, fully paid and nonassessable.

Preferred Stock

Upon the closing of this offering, each outstanding share of our preferred stock will be converted into shares of common stock. See note 7 of notes to our consolidated financial statements for a description of preferred stock.

Following the offering, we will be authorized, subject to limitations imposed by Delaware law, to issue preferred stock in one or more series, to establish from time to time the number of shares to be included in each series, and to fix the rights, preferences and privileges of the shares of each wholly unissued series and any of its qualifications, limitations or restrictions. Our board of directors can also increase or decrease the number of shares of any series, but not below the number of shares of such series then outstanding, without any further vote or action by the stockholders. Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely

affect the voting power or other rights of the holders of the common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of ONI Systems and may adversely affect the market price of our common stock and the voting and other rights of the holders of common stock. We have no current plan to issue any shares of preferred stock.

Warrants

Warrants to purchase 1,011,394 shares of common stock were outstanding as of December 31, 1999. All warrants to purchase preferred stock will automatically convert to warrants to purchase common stock upon the closing of the public offering.

In December 1999, we issued to a customer a warrant to purchase 500,000 shares of common stock at an exercise price of $0.91 per share. If not sooner exercised, this warrant will remain outstanding until six years from the date of the warrant agreement.

In February 1999, we issued to an equipment finance company warrants to purchase 277,926 shares of Series B preferred stock at an exercise price of $0.88 per share. If not sooner exercised, these warrants will remain outstanding for the lesser of five years after the completion of this offering or ten years from the date of the warrant agreements.

In February 2000, we issued to a customer a warrant to purchase 223,000 shares of common stock at an exercise price of $0.91 per share. If not sooner exercised, this warrant will remain outstanding until five years from the date of the warrant agreement.

In connection with our spin-out from Optivision in December 1997 we are obligated to issue 233,468 shares of common stock, to an equipment finance company upon the exercise by the finance company of its warrants to purchase capital stock of Optivision. See "Related Party Transactions--Optivision Spin- out". We will not receive any proceeds from the exercise of these warrants. If not sooner exercised, 88,890 shares subject to the warrants will remain outstanding until January 2002 and 144,578 shares subject to the warrants will remain outstanding until September 2003.

Registration Rights

Following this offering, the holders of 79,127,796 shares of our common stock will be entitled to rights with respect to the registration of these shares under the Securities Act, as described below.

Demand registration rights. At any time after six months following the expiration of the Lock-up Agreements in connection with this offering, the holders of at least 50% of the shares having registration rights can request that we register all or a portion of their shares, so long as such registration covers at least 33% of their shares or the total offering price of the shares to the public is at least $5 million. See "Share Eligible for Future Sale-- Lock-Up Agreements". We will only be required to file two registration statements in response to their demand registration rights if both such registration statements have been declared effective. We may postpone the filing of a registration statement for up to 120 days if we determine that the filing would be seriously detrimental to us and our stockholders.

Piggyback registration rights. If we register any securities for public sale, the stockholders with registration rights will have the right to include their shares in the registration statement. The managing underwriter of any underwritten offering will have the right to limit the number of shares registered by these holders to be included in the registration statement due to marketing reasons.

Form S-3 registration rights. The holders of the shares having registration rights can request that we register their shares if we are eligible to file a registration statement on Form S-3 or any successor form and if the total price of the shares offered to the public is at least $1 million. We may postpone the filing of a Form S-3 registration statement for up to 120 days once in a 12 month period if we determine that the filing would be seriously detrimental to us and our stockholders. We may also postpone the filing of a Form S-3 registration statement if within the preceding six months, we have already effected a registration on Form S-3.

We will pay all expenses incurred in connection with the registrations described above, except that we shall not be required to pay for expenses incurred under exercise of stockholders' demand registration rights if the holders of such rights subsequently withdraw their request for registration.

Holders of these registration rights have waived the exercise of these registration rights for 180 days following the date of this prospectus.

In addition to these registration rights, Venture Lending & Leasing, Inc. and COLT Telecom Group plc will have registration rights of the shares of common stock issuable upon the exercise of their warrants. See "--Warrants".

Anti-Takeover Provisions The provisions of Delaware law, our certificate of incorporation and our bylaws may have the effect of delaying, deferring or discouraging another person from acquiring control of our company.

Delaware Law

We will be subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. This section prevents some Delaware corporations from engaging, under some circumstances, in a "business combination", which includes a merger or sale of more than 10% of the corporation's assets with any "interested stockholder", meaning a stockholder who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of the corporation's outstanding voting stock, unless:

. the transaction is approved by the board of directors prior to the date the interested stockholder attained that status;

. upon consummation of the transaction that resulted in the stockholder's becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or . on or subsequent to such date the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders by at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

This section may have an anti-takeover effect with respect to transactions not approved in advance by the board of directors, including discouraging attempts to acquire us that might result in a premium over the market price for the shares of stock held by stockholders.

Charter and Bylaw Provisions Our certificate of incorporation and bylaws provide that:

. following the completion of this offering, no action shall be taken by stockholders except at an annual or special meeting of the stockholders called in accordance with our bylaws and that stockholders may not act by written consent;

. following the completion of this offering, the approval of holders of two-thirds of the shares entitled to vote at an election of directors shall be required to adopt, amend or repeal our bylaws or amend or repeal the provisions of our certificate of incorporation regarding the election and removal of directors and ability of stockholders to take action;

. stockholders may not fill vacancies on the board, unless the board of directors determines by resolution that any such vacancies shall be filled by the stockholders;

. following the completion of this offering, our board of directors will be divided into three classes, each serving staggered three-year terms, which means that only one class of directors will be elected at each annual meeting of stockholders, with the other classes continuing for the remainder of their respective terms. For more information on the classification of our board, please see "Management--Board Composition"; and . we will indemnify officers and directors against losses that they may incur in investigations and legal proceedings resulting from their services to us, which may include services in connection with takeover defense measures.

These provisions of our certificate of incorporation and bylaws may have the effect of delaying, deferring or discouraging another person from acquiring control of our company.

California Foreign Corporation Law Section 2115 of the California Corporations Code provides that under some circumstances several provisions of the California Corporations Code may be applied to foreign corporations qualified to do business in California notwithstanding the law of the jurisdiction where the corporation is incorporated. These corporations are referred to in this prospectus as "quasi-California" corporations. Section 2115 applies to foreign corporations that have more than half of their voting stock held by stockholders residing in California and more than half of their business deriving from California, measured on or after the 135(th) day of the corporation's fiscal year. If we were determined to be a quasi-California corporation, we would have to comply with California law with respect to, among other things, elections of directors and distributions to stockholders. Under the California Corporations Code, a corporation is prohibited from paying dividends unless:

. the retained earnings of the corporation immediately prior to the distribution equals or exceeds the amount of the proposed distribution; or . (a) the assets of the corporation, exclusive of specific non-tangible assets, equal or exceed 1 1/4 times its liabilities, exclusive of specific liabilities; and (b) the current assets of the corporation at least equal its current liabilities. If the average pre-tax net earnings

of the corporation before interest expense for the two years preceding the distribution was less than the average interest expense of the corporation for those year, however, the current assets of the corporation must exceed 1 1/4 times its current liabilities.

Following this offering, we will be exempt from the application of Section 2115 until , 2000, and after that if our voting stock is held by more than 800 stockholders of record.

Transfer Agent and Registrar The transfer agent and registrar for our common stock is ChaseMellon Shareholder Services, L.L.C.

Listing

We will apply to list our common stock on the Nasdaq National Market under the trading symbol "ONIS".

Shares Eligible for Future Sale

Prior to this offering, there has been no public market for our common stock, and we cannot predict the effect, if any, that market sales of shares of our common stock or the availability of shares of our common stock for sale will have on the market price of our common stock prevailing from time to time. Nevertheless, sales of substantial amounts of our common stock in the public market could adversely affect the market price of our common stock and could impair our future ability to raise capital through the sale of our equity securities.

Upon the completion of this offering, we will have shares of common stock outstanding, assuming no exercise of the underwriters' over-allotment option and no exercise of outstanding options. Of the outstanding shares, all of the shares sold in this offering will be freely tradable, except that any shares held by our "affiliates", as that term is defined in Rule 144 promulgated under the Securities Act, may only be sold in compliance with the limitations described below. The remaining shares of common stock will be deemed "restricted securities" as defined under Rule 144. Restricted shares may be sold in the public market only if registered or if they qualify for an exemption from registration under Rule 144, 144(k) or 701 promulgated under the Securities Act, which rules are summarized below. Subject to the lock-up agreements described below and the provisions of Rules 144, 144(k) and 701, additional shares will be available for sale in the public market as follows:

Number of Shares Comment After the date of this prospectus, freely tradable shares sold in this offering and shares saleable under Rule 144(k) that are not subject to the 180-day lock-up.

After 180 days from the date of this prospectus, the 180-day lock- up terminates and these shares are saleable under Rule 144 (subject in some cases to volume limitations), Rule 144(k) or Rule 701 (subject in some cases to a right of repurchase by ONI Systems).

After 180 days from the date of this prospectus, restricted securities that are held for less than one year and are not yet saleable under Rule 144.

Some of the shares in the table above, including shares held by executive officers and directors, listed as not being salable until 180 days after the date of this prospectus may become salable at a sooner date, as described further below.

Lock-up Agreements

ONI Systems, each of our officers and directors and holders of approximately % of our securities holders have agreed, subject to specified exceptions, not to, without the prior written consent of Goldman, Sachs & Co., offer, sell, contract to sell, grant any option to purchase or otherwise dispose of any shares of our common stock or options to acquire shares of our common stock during the 180-day period following the date of this offering. Goldman, Sachs & Co. may, in its sole discretion and at any time without notice, release all or any portion of the securities subject to lock-up agreements. See "Underwriting".

Except for shares held by executive officers, the 180-day restriction will expire as to 10% of the shares subject to the restriction, or shares, on the later of (i) September 6, 2000 or (ii) the 90th day after the date of this prospectus, if the reported last sale price of our common stock on the Nasdaq National Market for 20 of the 30 trading days ending on the last trading day preceding that date is at least twice the initial public offering price per share. The 180-day restriction will also expire as to an additional 25% of the shares subject to the restriction, or shares, on the date that is two days after we have made our financial statements for the fiscal quarter ended September 30, publicly available, if the reported last sale price of our common stock on the Nasdaq National Market for 20 of the 30 trading days ending on the last trading day preceding that date is at least twice the initial public offering price per share.

Rule 144

In general, under Rule 144 as currently in effect, a person, or group of persons whose shares are required to be aggregated, who has beneficially owned shares for at least one year is entitled to sell within any three-month period commencing 90 days after the date of this prospectus, a number of shares that does not exceed the greater of one percent of the then outstanding shares of our common stock, which will be approximately shares immediately after this offering, or the average weekly trading volume in our common stock during the four calendar weeks preceding the date on which notice of the sale is filed. In addition, a person who is not deemed to have been an affiliate at any time during the three months preceding a sale and who has beneficially owned the shares proposed to be sold for at least two years would be entitled to sell these shares under Rule 144(k) without regard to the requirements described above. To the extent that shares were acquired from one of our affiliates, a person's holding period for the purpose of effecting a sale under Rule 144 would commence on the date of transfer from the affiliate.

Rule 701

In general, under Rule 701 of the Securities Act, any of our employees, officers, directors, consultants or advisors who purchased shares from us in connection with a compensatory stock or option plan or other written agreement is eligible to resell those shares in reliance on Rule 144, but without

compliance with certain restrictions, including the holding period contained in Rule 144. However, all shares issued pursuant to Rule 701 are subject to lock- up agreements and will only become eligible for sale at the expiration of such agreements.

Stock Options

As of December 31, 1999, options to purchase a total of 17,548,724 shares of common stock were outstanding. We intend to file a Form S-8 registration statement under the Securities Act to register all shares of common stock subject to outstanding options, all shares of our common stock issued upon exercise of stock options and all shares of our common stock issuable under our stock option and employee stock purchase plans. Accordingly, shares of our common stock issued under these plans will be eligible for sale in the public markets, subject to vesting restrictions and the lock-up agreement described below. See "Management--Benefit Plans".

Registration Rights

Following this offering, subject to specified blackout periods, holders of 79,127,796 shares of outstanding common stock will have two demand registration rights with respect to their shares of our common stock, subject to the 180-day lock-up arrangement described above, to require us to register their shares of our common stock under the Securities Act, or rights to participate in any future registration of securities by us. If the holders of these registrable securities request that we register their shares, and if the registration is effected, these shares will become freely tradable without restriction under the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock. See "Description of Capital Stock--Registration Rights".

Underwriting

ONI Systems and the underwriters named below (the "Underwriters") have entered into an underwriting agreement with respect to the shares being offered. Subject to some conditions, each Underwriter has severally agreed to purchase the number of shares indicated in the following table. Goldman, Sachs & Co., FleetBoston Robertson Stephens Inc., Banc of America Securities LLC and Chase Securities Inc. are the representatives of the Underwriters.

Number of Underwriters Shares Goldman, Sachs & Co..... FleetBoston Robertson Stephens Inc..... Banc of America Securities LLC..... Chase Securities Inc..... Total.....

If the Underwriters sell more shares than the total number set forth in the table above, the Underwriters have an option to buy up to an additional shares from ONI Systems to cover such sales. They may exercise that option for 30 days. If any shares are purchased pursuant to this option, the Underwriters will severally purchase shares in approximately the same proportion as set forth in the table above.

The following table shows the per share and total underwriting discounts and commissions to be paid to the Underwriters by ONI Systems. Such amounts are shown assuming both no exercise and full exercise of the Underwriters' option to purchase additional shares.

Paid by ONI Systems	No Exercise	Full Exercise
Per share	$	$
Total	$	$

Shares sold by the Underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any shares sold by the Underwriters to securities dealers may be sold at a discount of up to $ per share from the initial public offering price. Any such securities dealers may resell any shares purchased from the Underwriters to other brokers or dealers at a discount of up to $ per share from the initial public offering price. If all the shares are not sold at the initial public offering price, the representatives may change the offering price and the other selling terms.

ONI Systems and its directors, officers, employees and other stockholders have agreed with the Underwriters not to dispose of or hedge any of their common stock or securities convertible into or exchangeable for shares of common stock during the period from the date of this prospectus continuing through the date 180 days after the date of this prospectus, except with the prior written consent of Goldman, Sachs & Co. and except as described in "Shares Eligible for Future Sale". This restriction does not apply to any issuances under ONI Systems' existing employee benefit plans. See "Shares Eligible for Future Sale" for a discussion of transfer restrictions.

Prior to this offering, there has been no public market for the shares. The initial public offering price will be negotiated among ONI Systems and the representatives. Among the factors to be considered in determining the initial public offering price of the shares, in addition to prevailing market conditions, will be ONI Systems' historical performance, estimates of the business potential and earnings prospects of ONI Systems, an assessment of the management of ONI Systems and the consideration of the above factors in relation to market valuation of companies in related businesses.

ONI Systems will apply for approval for quotation of its common stock on the Nasdaq National Market under the symbol "ONIS".

In connection with this offering, the Underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the Underwriters of a greater number of shares than they are required to purchase in the offering. Stabilizing transactions consist of bids or purchases made for the purpose of preventing or retarding a decline in the market price of the common stock while the offering is in progress.

The Underwriters may also impose a penalty bid. This occurs when a particular Underwriter repays to the Underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of this Underwriter in stabilizing or short covering transactions.

These activities by the Underwriters may stabilize, maintain or affect the market price of the common stock. As a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued by the Underwriters at any time. These transactions may be effected on the Nasdaq National Market, in the over-the-counter market or otherwise.

At the request of ONI Systems, the Underwriters are reserving up to shares of common stock for sale, at the initial public offering price, to individuals designated by ONI Systems who have expressed an interest in purchasing the shares of common stock in the offering through a directed share program. The number of shares available for sale to the general public in the pubic offering will be reduced to the extent these persons purchase these reserved shares. Any shares not so purchased will be offered by the Underwriters to the general public on the same basis as the other shares offered hereby.

The underwriters do not expect sales to discretionary accounts to exceed five percent of the total number of shares offered.

ONI Systems estimates that its share of the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately $.

ONI Systems has agreed to indemnify the several Underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

Chase Venture Capital Associates, L.P., an entity affiliated with Chase Securities Inc., beneficially owns 3,287,672 shares of Series E preferred stock and 329,978 shares of Series F preferred stock. Paul Johnson, a managing director of FleetBoston Robertson Stephens Inc., one of the Underwriters, beneficially owns 54,796 shares of Series E preferred stock and 54,996 shares of Series F preferred stock.

Validity of Common Stock

The validity of the issuance of the shares of common stock offered by this prospectus will be passed upon for ONI Systems by Fenwick & West LLP, Palo Alto, California. As of the date of this prospectus, Fenwick & West LLP and its affiliates beneficially owned or has the right to purchase an aggregate of 309,996 shares of our common stock. The validity of the issuance of the shares of common stock offered by this prospectus will be passed upon for the underwriters by Sullivan & Cromwell, Los Angeles, California.

Experts

The consolidated financial statements and schedule of ONI Systems Corp. as of December 31, 1998 and 1999 and for the period from October 20, 1997 (inception) to December 31, 1997, and for each of the years in the two year period ended December 31, 1999 and the financial statements of Object-

Mart, Inc. for the six months ended June 29, 1999, have been included in this registration statement in reliance upon the report of KPMG LLP, independent certified public accountants, appearing elsewhere herein, and upon the authority of said firm as experts in accounting and auditing.

Where You Can Find Additional Information

We have filed with the Securities and Exchange Commission, a registration statement on Form S-1 under the Securities Act with respect to the common stock. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules to the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, we refer you to the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The registration statement, including exhibits and schedules, may be inspected without charge at the principal office of the Securities and Exchange Commission in Washington, D.C., and copies of all or any part of it may be obtained from that office after payment of fees prescribed by the Securities and Exchange Commission. The Securities and Exchange Commission maintains a web site that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Securities and Exchange Commission at http://www.sec.gov.

We intend to provide our stockholders with annual reports containing financial statements audited by an independent public accounting firm and quarterly reports containing unaudited financial data for the first three quarters of each year.

Oni Systems Corp.

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Statements Introduction to Unaudited Pro Forma Combined Consolidated Financial Statements..... F-28 Unaudited Pro Forma Combined Condensed Statement of Operations..... F-29 Notes to Unaudited Pro Forma Combined Statement of Operations..... F-30 Independent Auditors' Report The Board of Directors ONI Systems Corp.:

We have audited the accompanying consolidated balance sheets of ONI Systems Corp. as of December 31, 1998 and 1999, and the related consolidated statements of operations, stockholders' equity (deficit), and cash flows for the period from October 20, 1997 (inception) to December 31, 1997 and for each of the years in the two-year period ended December 31, 1999. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of ONI Systems Corp. as of December 31, 1998 and 1999, and the results of its operations and its cash flows for the period from October 20, 1997 (inception) to December 31, 1997 and for each of the years in the two-year period ended December 31, 1999 in conformity with generally accepted accounting principles.

Kpmg Llp

Mountain View, California March 9, 2000

Oni Systems Corp.

Consolidated Balance Sheets

December 31, 1999 December 31, ---------- 1998 Actual Pro Forma (unaudited)

ASSETS			
Current assets:			
Cash and cash equivalents.....	$ 19,091,688	$ 80,022,591	$ 80,022,591
Accounts receivable.....	1,092,853	163,434	163,434
Inventory.....	--	9,648,856	9,648,856
Prepaid expenses and other current assets.....	110,503	770,979	770,979
Total current assets.....	20,295,044	90,605,860	90,605,860
Property and equipment.....	1,016,698	5,314,990	5,314,990
Other assets.....	500	24,246	24,246

Intangibles	--	737,500	737,500
Goodwill	--	3,589,257	3,589,257
Total assets	$ 21,312,242	$100,271,853	$100,271,853

Liabilities and Stockholders' Equity

Current liabilities:			
Accounts payable	$ 201,647	$ 2,594,555	$ 2,594,555
Accrued liabilities	426,365	6,086,784	6,086,784
Current portion of capital lease obligations	40,002	166,612	166,612
Total current liabilities	668,014	8,847,951	8,847,951
Capital lease obligations, less current portion	79,322	366,704	366,704
Total liabilities	747,336	9,214,655	9,214,655
Commitments			

Stockholders' equity: Convertible preferred stock, no par value; 61,786,664 and 80,309,408 shares authorized at December 31, 1998 and 1999, respectively; 50,580,190 and 78,855,900 shares issued and outstanding at December 31, 1998 and 1999, respectively; aggregate liquidation preference of 28,770,616 and 125,955,511 at December 31, 1998 and 1999, respectively..... 26,015,177 123,290,546 -- Common stock, no par value; 112,000,000 and 159,690,592 shares authorized at December 31, 1998 and 1999, respectively; 18,001,248 and 31,279,590 shares issued and outstanding at December 31, 1998 and 1999, respectively..... 8,947,113 49,295,326 172,585,872 Notes receivable from stockholders.. (122,585) (3,824,079) (3,824,079) Services receivable from stockholders..... -- (85,164) (85,164) Deferred stock compensation..... (5,223,575) (25,288,593) (25,288,593) Accumulated deficit..... (9,051,224) (52,330,838) (52,330,838) Total stockholders' equity..... 20,564,906 91,057,198 91,057,198 Total liabilities and stockholder's equity..... $ 21,312,242 $100,271,853 $100,271,853 See accompanying notes to consolidated financial statements.

Oni Systems Corp.

Consolidated Statements of Operations

Period from October 20, 1997 (inception) to Year ended December 31, December 31, ---------- ---- 1997 1998 1999

Revenue	$ --	$ 1,732,730	$ 3,033,995
Cost of revenue	--	1,207,897	1,032,144
Gross profit	--	524,833	2,001,851
Operating expenses:			
Research and development, excluding deferred stock compensation amortization amounts	38,865	4,008,489	25,176,187
Sales and marketing, excluding deferred stock compensation amortization amounts	20,430	649,176	4,557,245
General and administrative, excluding deferred stock			

compensation amortization amounts	49,060	1,590,847	4,755,582
Amortization of deferred stock compensation *	89,249	3,310,368	8,975,323
Common stock warrant expense	--	--	2,268,500
In-process research and development	--	--	170,000
Total operating expenses	197,604	9,558,880	45,902,837
Operating loss	(197,604)	(9,034,047)	(43,900,986)
Interest income (expense), net	(1,452)	182,705	622,972
Loss before income taxes	(199,056)	(8,851,342)	(43,278,014)
Income taxes	--	826	1,600
Net loss	$(199,056)	$(8,852,168)	$(43,279,614)
Basic and diluted net loss per share.	$ (0.77)	$ (0.74)	$ (2.40)
Weighted-average shares outstanding used in computing basic and diluted net loss per share	257,017	11,918,628	18,043,188
(*) Amortization of deferred stock compensation:			
Research and development	$ 32,012	$ 2,509,473	$ 6,398,250
Sales and marketing	16,828	160,179	1,244,104
General and administrative	40,409	640,716	1,332,969
	$ 89,249	$ 3,310,368	$ 8,975,323

See accompanying notes to consolidated financial statements.

Oni Systems Corp.

Consolidated Statements of Cash Flows

Period from October 20, 1997 (inception) to Year ended Year ended December 31, December 31, December 31, 1997 1998 1999 Cash flows from operating activities: Net loss..... $(199,056) $(8,852,168) $(43,279,614) Adjustments to reconcile net loss to net cash used in operating activities: Depreciation and amortization..... -- 289,265 2,582,506 Amortization of deferred stock compensation..... 89,249 3,310,368 8,975,323 Loss on disposal of property and equipment..... -- -- 164,094 Value of leased facilities received in exchange for preferred stock..... -- -- 97,336 Purchased in-process research and development..... -- -- 170,000 Amortization of debt financing costs..... -- -- 54,572 Common stock warrant expense..... -- -- 2,268,500 Stock based compensation for non- employees..... -- -- 73,065 Changes in operating assets and liabilities: Accounts receivable..... (91,162) (1,001,691) 1,569,976 Inventory..... -- -- (9,648,856) Prepaid expenses and other current assets..... -- (111,003) (533,915) Accounts payable..... 29,440 172,207 2,392,876 Accrued liabilities..... 43,760 382,605 5,527,511 Net cash used in operating activities..... (127,769) (5,810,417) (29,586,626) Cash flows used in investing activities: Purchase of property and equipment.. -- (1,016,205) (4,858,824) Acquisition of Object-Mart, net of cash acquired..... -- -- (1,744,645) Net cash used in investing activities..... -- (1,016,205) (6,603,469) Cash flows from financing activities: Repayment of short-term borrowings.. -- (130,000) -- Proceeds from issuance of notes..... 130,000 -- -- Payments under capital lease obligations..... -- (13,651) (52,589) Proceeds from issuance of preferred stock, net of issuance costs..... -- 27,015,177 96,889,288 Repurchase of

preferred stock..... -- (1,000,000) -- Payment on shareholder notes receivable..... -- -- 12,000 Proceeds from issuance of common stock..... 10,000 34,553 272,299 Net cash provided by financing activities..... 140,000 25,906,079 97,120,998 Net increase in cash and cash equivalents..... 12,231 19,079,457 60,930,903 Cash and cash equivalents at beginning of year/period..... -- 12,231 19,091,688 Cash and cash equivalents at end of year/period..... $ 12,231 $19,091,688 $ 80,022,591 Supplemental disclosures of cash flow information: Interest paid during year/period.... $ -- $ 4,065 $ 15,747 Noncash investing and financing activities: Equipment recorded under capital leases..... $ -- $ 132,975 $ 466,581 Contribution of property and equipment by common stockholder.. $ 14,716 $ 142,067 $ -- Issuance of common stock upon exercise of options in exchange for notes receivable..... $ -- $ 122,585 $ 3,713,494 Issue of preferred stock in exchange for leased facilities... $ -- $ -- $ 182,500 Issue of common stock in relation to Object-Mart, Inc. acquisition. $ $ $ 4,980,514 Issuance of warrants in connection with debt financing..... $ $ $ 203,581 See accompanying notes to consolidated financial statements.

Oni Systems Corp.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' (DEFICIT) EQUITY Period from October 20, 1997 (inception) to December 31, 1997 and years ended December 31, 1998, 1999

	Convertible preferred stock		Common stock		Notes receivable from stockholders	Services receivable from stockholder	Deferred stock compensation	Accumulated deficit
	Shares	Amount	Shares	Amount				
Balances as of October 20, 1997 (inception).....	--	$ --	--	$ --	$ --	$ --	$ --	Issuance of common stock....
--	--	11,565,752	24,716	--	--	--	Deferred stock compensation....	--
--	--	190,875	--	--	(190,875)	--	Amortization of deferred stock compensation....	--
--	--	--	--	--	89,249	--	Issuance of Series A preferred stock.	8,000,000
--	--	--	--	--	--	--	Net loss.....	--
--	--	--	--	--	(199,056)	Balances as of December 31, 1997.....	8,000,000	--
11,565,752	215,591	--	--	(101,626)	(199,056)	Issuance of common stock for notes receivable.....	--	--
5,991,496	122,585	(122,585)	--	--	--	Exercise of stock purchase rights for cash.	--	--
440,000	27,387	--	--	--	--	Exercise of options for cash.....	--	--
4,000	7,166	--	--	--	--	Contribution of property and equipment by common stockholder.....	--	--
--	142,067	--	--	--	--	Exchange of Series A preferred stock for Series B preferred stock.	(8,000,000)	--
--	--	--	--	--	--	Issuance of Series B preferred stock, net of $50,058 in issuance costs.....	26,128,843	4,208,803
--	--	--	--	--	--	Repurchase and cancellation of Series B preferred stock.	(1,333,333)	(1,000,000)
--	--	--	--	--	--	Issuance of Series C preferred stock, net of $61,823 in issuance costs.....	2,733,332	1,988,177
--	--	--	--	--	--	Issuance of Series D preferred stock, net of $45,632 in issuance costs.....	4,969,148	4,334,797
--	--	--	--	--	--	Issuance of Series E preferred stock, net of $16,609 in issuance costs.....	18,082,200	16,483,400
--	--	--	--	--	--	Deferred stock compensation....	8,432,317	(8,432,317)
Amortization of deferred stock compensation....	--	--	--	--	--	3,310,368	--	Net loss.....
--	--	--	--	--	--	(8,852,168)	Balances as of December 31, 1998.....	50,580,190
$ 26,015,177	18,001,248	$ 8,947,113	$ (122,585)	$ --	$			

(5,223,575) $ (9,051,224) Total stockholders' (deficit) equity Balances as of October 20, 1997 (inception)..... $ -- Issuance of common stock.... 24,716 Deferred stock compensation.... -- Amortization of deferred stock compensation.... 89,249 Issuance of Series A preferred stock. -- Net loss..... (199,056) Balances as of December 31, 1997..... (85,091) Issuance of common stock for notes receivable..... -- Exercise of stock purchase rights for cash. 27,387 Exercise of options for cash..... 7,166 Contribution of property and equipment by common stockholder..... 142,067 Exchange of Series A preferred stock for Series B preferred stock. -- Issuance of Series B preferred stock, net of $50,058 in issuance costs..... 4,208,803 Repurchase and cancellation of Series B preferred stock. (1,000,000) Issuance of Series C preferred stock, net of $61,823 in issuance costs..... 1,988,177 Issuance of Series D preferred stock, net of $45,632 in issuance costs..... 4,334,797 Issuance of Series E preferred stock, net of $16,609 in issuance costs..... 16,483,400 Deferred stock compensation.... -- Amortization of deferred stock compensation.... 3,310,368 Net loss..... (8,852,168) Balances as of December 31, 1998..... $ 20,564,906 See accompanying notes to consolidated financial statements.

Oni Systems Corp

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' (DEFICIT) EQUITY--(Continued) Period from October 20, 1997 (inception) to December 31, 1997 and years ended December 31, 1998 and 1999

	Convertible preferred stock		Common stock		Notes receivable from	Services receivable	Deferred	
	Shares	Amount	Shares	Amount	stockholders	from stockholder	stock compensation	Accumulated deficit

Exercise of stock options for cash..... -- $ -- 3,023,220 $ 272,299 $ -- $ -- $ -- $ -- Issuance of Series E preferred stock, net of $37,471 in issuance costs..... 8,001,824 7,264,193 -- -- -- -- -- -- Issuance of Series E preferred stock in exchange for services..... 200,000 182,500 -- -- -- (182,500) -- -- Performance of services..... -- -- -- -- -- 97,336 -- -- Issuance of common stock for acquisition of Object-Mart..... -- -- 4,569,276 4,980,514 -- -- -- -- Issuance of Series F preferred stock, net of $20,607 in issuance costs..... 8,249,468 14,969,401 -- -- -- -- -- -- Exercise of options for notes receivable..... -- -- 5,685,846 3,713,494 (3,713,494) -- -- -- Payment on stockholder notes..... -- -- -- -- 12,000 -- -- -- Issuance of warrants in connection with debt financing.. -- 203,581 -- -- -- -- -- -- Issuance of Series G preferred stock, net of $44,668 in issuance costs..... 11,824,418 74,655,694 -- -- -- -- -- -- Issuance of warrants in connection with purchase and license agreement..... -- -- -- 2,268,500 -- -- -- -- Stock based compensation to non-employees... -- -- -- 73,065 -- -- -- -- Deferred stock compensation.... -- -- -- 29,040,341 -- -- (29,040,341) -- Amortization of deferred stock compensation.... -- -- -- -- -- -- 8,975,323 -- Net loss..... -- -- -- -- -- -- -- (43,279,614) Balances as of December 31, 1999..... 78,855,900 $ 123,290,546 31,279,590 $ 49,295,326 $ (3,824,079) $ (85,164) $ (25,288,593) $ (52,330,838) Total stockholders' (deficit) equity Exercise of stock options for cash..... $ 272,299

Issuance of Series E preferred stock, net of $37,471 in issuance costs..... 7,264,193 Issuance of Series E preferred stock in exchange for services..... -- Performance of services..... 97,336 Issuance of common stock for acquisition of Object-Mart..... 4,980,514 Issuance of Series F preferred stock, net of $20,607 in issuance costs..... 14,969,401 Exercise of options for notes receivable..... -- Payment on stockholder notes..... 12,000 Issuance of warrants in connection with debt financing.. 203,581 Issuance of Series G preferred stock, net of $44,668 in issuance costs..... 74,655,694 Issuance of warrants in connection with purchase and license agreement..... 2,268,500 Stock based compensation to non-employees... 73,065 Deferred stock compensation.... -- Amortization of deferred stock compensation.... 8,975,323 Net loss..... (43,279,614) Balances as of December 31, 1999..... $ 91,057,198 See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

Period from October 20, 1997 (inception) to December 31, 1997 and years ended December 31, 1998 and 1999 (1) Summary of the Company and Significant Accounting Policies (a) Description of Business ONI Systems Corp. (the Company) develops, markets and sells optical communications equipment to networking and internet service providers in the regional and metropolitan area markets.

The Company was incorporated in California, as Optical Networks, Incorporated, on October 20, 1997, and through November 1999, was considered to be in the development stage, principally engaged in research and development, raising capital and building its management team. The Company recognized its first commercial sale in the fourth quarter of 1999 with the licensing of its network operating system. Historically the Company has also recognized revenue derived from contracts with agencies of the United States government. These contracts were completed in June 1999. The Company changed its name to ONI Systems Corp. in March 2000.

(b) Principles of Consolidation The accompanying consolidated financial statements include the financial statements of the Company and its wholly-owned subsidiary. All significant intercompany balances and transactions have been eliminated on consolidation.

(c) Stock Splits

Share information for all periods has been retroactively adjusted to reflect a one-for-three reverse split of common stock effected in March 1998, a two- for-three reverse split of Series B and Series C preferred stock effected in August 1999, a two-for-one split of common stock, Series D and Series E preferred stock effected in August 1999 and a two-for-one common and preferred stock split effected in February 2000.

(d) Use of Estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires the Company to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and to disclose contingent assets and liabilities at the date of

the consolidated financial statements and the reported results of operations during the reporting period. Actual results could differ from those estimates.

(e) Cash and Cash Equivalents The Company considers all highly liquid investments with remaining maturities of three months or less at the date of purchase to be cash equivalents. As of December 31, 1998 and 1999 cash equivalents totaled $19,091,688 and $79,004,976, respectively. Cash equivalents consisted primarily of money market funds.

(f) Inventory

Inventories are stated at the lower of average cost or market. Primarily all inventory as of December 31, 1999 consisted of raw materials.

Oni Systems Corp.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(Continued) (g) Property and Equipment Property and equipment are stated at cost and are depreciated using the straight-line method over the estimated useful lives of the related assets, ranging from one to five years. Leasehold improvements and assets recorded under capital leases are amortized on a straight-line basis over the lesser of the related asset's estimated useful life or the remaining lease term.

(h) Intangibles

The Company has capitalized the cost of identifiable intangibles associated with the acquisition of Object-Mart, Inc. These intangibles are amortized over their estimated useful lives, not exceeding two years.

(i) Research and Development Costs The Company's products are technical in nature and require a significant and continuing research and development effort. All research and development costs are expensed as incurred. Statement of Financial Accounting Standards (SFAS) No. 86, Accounting for the Costs of Computer Software to Be Sold, Leased, or Otherwise Marketed, requires the capitalization of certain software development costs incurred subsequent to the date technological feasibility is established and prior to the date the product is generally available for sale. The capitalized cost is then amortized over the estimated life of the product. To date, the Company has not capitalized any software development costs because capitalizable costs meeting the requirements of SFAS No. 86 have not been significant.

(j) Revenue Recognition Historically, the Company has derived most of its revenue from contracts with agencies of the United States government. These contracts include cost- plus and fixed price contracts, and revenue is recorded as earned as defined within the specific agreements. Revenue from cost-plus contracts is billed and recognized at the time the costs are incurred. Revenue for fixed price contracts is recognized when milestones are completed and product or reports, if any, committed for the milestones are shipped, which approximates the percentage-of-completion method. Amounts designated as withholdings are not recognized until completion of the contract.

Revenue from the sale of the software license was accounted for in accordance with Statement of Position ("SOP") 97-2, Software Revenue Recognition, SOP 98-4, Deferral of Effective Date of SOP 97-2, and SOP 98-9, Software Revenue Recognition with Respect to Certain Arrangements.

(k) Income Taxes

The Company utilizes the asset and liability method of accounting for income taxes. Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected

Oni Systems Corp.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(Continued) to be recovered or settled. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

(l) Fair Value of Financial Instruments Concentration of Credit Risk The fair values of the Company's cash and cash equivalents, accounts receivable, prepaid expenses and other current assets, accounts payable and accrued liabilities approximates their carrying values due to the short-term nature of those instruments.

The fair value of short-term and long-term capital lease obligations is estimated based on current interest rates available to the Company for debt instruments with similar terms, degrees of risk and remaining maturities. The carrying values of these obligations approximate their respective fair values.

Financial instruments, which potentially subject the Company to concentrations of credit risk, consist primarily of cash and cash equivalents. The Company's cash and cash equivalents are maintained with a highly accredited financial institution. In 1998, accounts receivable were due from agencies of the United States government, resulting in minimal collection risks.

(m) Stock-Based Compensation The Company accounts for stock-based awards to employees using the intrinsic value method. Expense associated with stock-based compensation is being amortized on an accelerated basis over the vesting period of the individual award consistent with the method described in Financial Accounting Standards Board ("FASB") Interpretation No. 28. Pursuant to SFAS No. 123, the Company discloses the pro-forma effect of using the fair value method of accounting for employee stock-based compensation arrangements.

For non-employees, the Company computes the fair value of stock based compensation in accordance with SFAS No. 123, and Emerging Issues Task Force ("EITF") 96-18, Accounting for Equity Instruments that are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services.

(n) Impairment of Long-Lived Assets The Company evaluates its long-lived assets, including certain intangibles, for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets.

(o) Comprehensive Loss Other comprehensive income refers to revenues, expenses, gains and losses that are not included in net income, but rather are recorded directly in shareholders' (deficit) equity. For the period from October 20, 1997 (inception) to December 31, 1997, and for the years ended December 31, 1998 and 1999 and for the Company had no items of other comprehensive loss and, accordingly, comprehensive loss is the same as net loss.

Oni Systems Corp.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(Continued) (p) Net Loss Per Share Basic net loss per share is computed using the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed using the weighted-average number of common shares and dilutive potential common shares outstanding during the period, using the as-if-converted method for convertible preferred shares and the treasury stock method for options and warrants. All potential shares have been excluded from the computation of diluted net loss per share for all periods presented because the effect would be antidilutive. Pursuant to SEC Staff Accounting Bulletin No. 98, common shares and convertible preferred shares issued for nominal consideration and options and warrants granted for nominal consideration prior to the anticipated effective date of the initial public offering are included in the calculation of basic and diluted net loss per share as if they were outstanding for all periods presented. To date, the Company has not had any issuances of stock, options or warrants for nominal consideration. Diluted net loss per share does not include the effects of the following potential common shares:

	Period from October 20 (inception) to December 31, 1997	Year ended December 31 1998	1999
Shares issuable under stock options....	1,078,220	8,789,776	17,548,724
Shares of unvested stock subject to repurchase.....	--	5,992,684	8,587,699
Shares issuable pursuant to warrants to purchase common stock.....	233,468	233,468	733,468
Shares issuable pursuant to warrants to purchase convertible preferred stock..	--	--	277,926
Shares issuable related to convertible preferred stock on an "as-if-converted" basis.....	8,000,000	50,580,190	78,855,900

The weighted-average exercise price of stock options outstanding was $0.005, $0.08 and $0.29 as of December 31, 1997, 1998 and 1999, respectively. The weighted-average purchase price of shares of common stock subject to the Company's right of repurchase was $0.02 and $0.44 as of December 31, 1998 and 1999, respectively. The exercise price of warrants to purchase shares of convertible preferred stock was $0.88 as of December 31, 1999. The weighted- average exercise price of warrants to purchase shares of common stock was $0.62 as of December 31, 1999. Each share of preferred stock is convertible into one share of common stock.

(q) Segment Reporting The Company adopted SFAS No. 131, Disclosures About Segments of an Enterprise and Related Information, for the year ended December 31, 1999. Based on definitions contained within SFAS 131, the Company has determined that it operates in one segment. For the year ended December 31, 1999, there were two customers that represented 46% and 24% of total revenue.

(r) Recent Accounting Pronouncements In June 1998, the FASB issued Statement of Financial Accounting Standards (SFAS) No. 133, Accounting for Derivative Instruments and Hedging Activities. SFAS No. 133 establishes accounting and reporting standards for derivative financial instruments and hedging activities related to those instruments, as well as other hedging activities. Because the Company does not currently hold any

Oni Systems Corp.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(Continued) derivative instruments and does not engage in hedging activities, the Company expects that the adoption of SFAS No. 133 will not have a material impact on its financial position, results of operations or cash flows. The Company will be required to adopt SFAS No. 133 for the year ended December 31, 2001 in accordance with SFAS No. 137, which delayed implementation of SFAS No. 133.

(2) Business Combination On June 29, 1999, the Company acquired all of the outstanding common shares of Object-Mart, Inc. ("Object-Mart") in exchange for 4,569,276 shares of the Company's common stock and approximately $3,222,000 in cash for a total purchase price of approximately $8,203,000. Object-Mart was located in San Jose, California, and provided software products and services to software development companies, software providers and equipment manufacturers in the telecommunications industry. The combination was accounted for using the purchase method and, accordingly, the results of operations of Object-Mart have been included in the Company's consolidated financial statements from June 29, 1999. The excess of the purchase price over the fair value of the net identifiable assets acquired of $4,785,676 has been recorded as goodwill and is being amortized on a straight line basis over two years. Identifiable intangibles are amortized on a straight-line basis over periods not exceeding two years.

The amount of $170,000 allocated to purchased research and development was determined through established valuation techniques in the high-technology communications industry and was expensed upon acquisition because technological feasibility had not been established and no future alternative uses existed.

The following unaudited pro forma financial information presents the combined results of operations of the Company and Object-Mart as if the acquisition had occurred as of the beginning of 1998, after giving effect to certain adjustments, including amortization of goodwill and other intangibles, additional depreciation expense, and related income tax effects. The pro forma financial information does not necessarily reflect the results of operations that would have occurred had the Company and Object-Mart constituted a single entity during such periods.

Year ended December 31, 1998 1999 (unaudited) Revenue..... $ 3,701,811 $ 4,625,795 Net loss..... $(8,376,985) $(44,264,006) Basic and diluted net loss per share..... $ (0.70) $ (2.45) (3) Property and Equipment Property and equipment as of December 31, 1998 and 1999, consisted of the following:

1998 1999

Computers and equipment.....	$1,050,541	$5,569,889
Furniture and fixtures.....	204,734	714,592
Leasehold improvements.....	50,688	273,663
	1,305,963	6,558,144
Less accumulated depreciation and amortization.....	289,265	1,243,154
	$1,016,698	$5,314,990

Oni Systems Corp.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(Continued) Equipment recorded under capital leases was $132,975 and $541,580 as of December 31, 1998 and 1999, and the related accumulated amortization was $13,651 and $57,976 as of December 31, 1998 and 1999. There was no equipment recorded under capital leases as of December 31, 1997.

(4) Intangibles

A summary of intangibles is as follows:

1999

Purchased technology and workforce.....	$ 530,000
Assembled workforce and non-compete agreements.....	630,000
	1,160,000
Less accumulated amortization.....	422,500
	$ 737,500

(5) Related Party Transactions On October 20, 1997, the Company was incorporated as a wholly-owned subsidiary of Optivision, Inc. ("Optivision") and in connection therewith issued 11,565,752 shares of common stock, 8,000,000 shares of Series A preferred stock and a $90,000 promissory note to Optivision in exchange for cash of $100,000, property and equipment of $14,716, and certain intellectual property and technology rights. On December 22, 1997, the Company was spun-out from Optivision. In conjunction with the spin-out, the Company reserved 233,468 shares of common stock issuable to a third party holding warrants to purchase common shares of Optivision. In January 1998, a further $142,067 of property and equipment was provided by Optivision to the Company for no additional consideration.

In 1998, in conjunction with the issuance of the Series B and Series C preferred stock, 8,000,000 shares of Series A preferred stock were converted to Series B preferred stock, and the Company repurchased and canceled 1,333,333 shares of Series B preferred stock from Optivision, Inc. in exchange for $1,000,000 in cash.

During 1999 and 1998, the Company received $3,713,494 and $122,585, respectively, in promissory notes from certain officers in exchange for common stock. As of December 31, 1999, $12,000 had been repaid by the shareholders. The notes are repayable over a period of five to ten years and bear interest at rates ranging from 4.46% to 6.20%. The notes are secured by the underlying common shares.

(6) Financing Arrangements In February 1999, the Company entered into a Loan and Security Agreement with a financing company which allowed the Company to borrow up to $2,000,000. The loan bears interest at the prime rate, is repayable in 36 equal monthly installments of principal and interest and is secured by certain assets of the Company. The Company also entered into a Subordinated Loan and Security Agreement with the same financing company, which allowed the Company to borrow up to $1,000,000. The subordinated loan bears interest at 12% per annum, is repayable in 36 equal monthly installments of principal and interest and is secured by certain assets of the Company. As of December 31, 1999, the Company had not borrowed any amounts under these agreements. These agreements expired on February 10, 2000, unutilized.

Oni Systems Corp.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(Continued) In connection with the loan and security agreement and subordinated loan and security agreement the Company issued warrants to purchase 90,750 and 119,116 shares of Series B convertible preferred stock, respectively, at $0.88 per share. The warrants expire on the earlier of February 10, 2009, or 5 years from the effectiveness of the Company's initial public offering. No warrants had been exercised as of December 31, 1999. The fair value of the warrants was determined to be $66,474 and $87,252, respectively, calculated using the Black- Scholes option pricing model, using the following assumptions: no dividends; contractual term of ten years; risk-free interest rate of 5.5%; and expected volatility of 70%. The fair value of the warrants has been recorded as additional capital and was amortized to interest expense over the term of the loan agreements.

(7) Stockholders' Equity (a) Preferred Stock As of December 31, 1999, the Company had 80,309,408 shares of preferred stock authorized. As of December 31, 1998 and 1999, the Company had designated and issued preferred stock as follows:

		December 31			
		1998		1999	
	1999 Designated shares	Shares outstanding	Liquidation preference	Shares outstanding	Liquidation preference
Series B.....	25,073,436	24,795,510	$ 5,840,181	24,795,510	$ 5,840,181
Series C.....	2,733,332	2,733,332	2,049,999	2,733,332	2,049,999
Series D.....	4,969,148	4,969,148	4,380,428	4,969,148	4,380,428
Series E.....	26,284,024	18,082,200	16,500,008	26,284,024	23,984,172

Series F.....	8,249,468	--	--	8,249,468	15,000,008
Series G.....	13,000,000	--	--	11,824,418	74,700,723
	80,309,408	50,580,190	$28,770,616	78,855,900	$125,955,511

In January 1998 the Company raised $4,208,803, net of issuance costs of $50,058, through the sale of 18,128,843 shares of Series B preferred stock for cash of $0.24 per share. In addition the Company issued 8,000,000 shares of Series B preferred stock in exchange for the redemption and cancellation of 8,000,000 shares of Series A preferred stock and repurchased 1,333,333 shares of Series B preferred stock for cash consideration of $1,000,000. Concurrently, the Company raised $1,988,177, net of issuance costs of $61,823, from the sale of 2,733,332 shares of Series C preferred stock for cash of $0.75 per share.

In April 1998, the Company raised $4,334,797, net of issuance costs of $45,632, from the sale of 4,969,148 shares of Series D preferred stock for cash of $0.88 per share.

In December 1998, the Company raised $16,483,400, net of issuance costs of $16,609, from the sale of 18,082,200 shares of Series E preferred stock for cash of $0.91 per share. In March 1999, the Company closed a second round of Series E preferred financing, raising $7,264,193, net of issuance costs of $37,471, from the sale of 8,001,824 shares of Series E preferred stock. In addition the Company issued 200,000 shares of Series E preferred stock in exchange for additional lease space at its 166 Baypointe Parkway location. The value of $182,500 ascribed to the Series E preferred stock was recorded as a reduction of stockholders' equity and is being amortized to rent expense over the period of the lease agreement.

Oni Systems Corp.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(Continued) In September 1999, the Company raised $14,969,401, net of issuance costs of $20,607, from the sale of 8,249,468 shares of Series F preferred stock for cash of $1.82 per share.

In December 1999, the Company completed another round of private financing, raising $74,655,694, net of issuance costs of $44,668, form the sale of 11,824,418 shares of Series G preferred stock for cash of $6.32 per share.

The rights, preferences and restrictions of the Series B, C, D, E, F and G preferred stock are as follows:

. Each share of Series B, C, D, E, F and G preferred stock is convertible at the option of the holder at any time after the date of issuance on a one-for-one basis subject to certain antidilution provisions. Conversion of all Series B, C, D, E, F and G preferred stock is automatic upon the earlier of (1) the closing of a firm underwritten commitment with respect to an initial public offering of shares of common stock of the Company, in which the Company receives cash proceeds of at least $20,000,000 (net of underwriters commissions and expenses or (2) the written consent of the holders of 66 -2/3% of the outstanding shares of preferred stock, voting together as a single class.

. Holders of Series B, C, D, E, F and G preferred stock are entitled to receive dividends equal to 10% of their respective liquidation preference in preference to any dividend on common stock when, as and if declared by the Board of Directors out of legally available funds. These preferential dividends are noncumulative. In addition the holders of Series B, C, D, E, F and G preferred stock are entitled to receive dividends on a basis equal to common stockholders out of funds legally available therefor, when, as and if declared by the Board of Directors. No dividends have been declared through December 31, 1999.

. Series B, C, D, E, F and G preferred stock have liquidation preferences of $0.24, $0.75, $0.88, $0.91, $1.82 and $6.32, respectively, plus all declared but unpaid dividends on such shares.

. Series B, C, D, E, F and G preferred stock have the same voting rights as the number of shares of common stock issuable upon conversion of such shares. Four directors are elected by the holders of record of the Series B, C, and E preferred stock voting as a separate class; one director is elected by the holders of record of the common stock voting as a separate class; and two directors are elected by the holders of record of the Series B, C, D, E, F and G preferred stock and common stock voting together as a single class.

(b) Common Stock

As of December 31, 1999, the Company had 159,690,592 shares of common stock authorized.

In 1998, the Company issued 6,431,496 shares of restricted common stock at prices ranging from $0.0016 to $0.0882 per share, 5,991,496 of which were issued in exchange for notes receivable of $122,585. In 1999, the Company issued an additional 513,332 shares of restricted common stock at prices ranging from $0.09 to $0.91, 20,000 of which were issued in exchange for notes receivable of $18,200. The restricted shares of common stock vest 25% within 12 months of issuance with the remainder vesting in 36 equal monthly amounts. On the occurrence of a change in control event, as defined, 50% of the unvested shares of common stock becomes vested. Upon termination of employment, the Company may repurchase all unvested shares at an amount equal to the original purchase price.

Oni Systems Corp.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(Continued) The Company maintains a right of first refusal with respect to restricted common stock. A shareholder must notify the Company prior to selling these shares to a third-party. Upon notification, the Company may purchase the shares from the holder at the price offered by the third-party.

In December 1999, in connection with the signing of a Purchase and License Agreement with a customer to provide certain Company products in the future, the Company issued a warrant to purchase 500,000 shares of common stock at an exercise price of $0.91 per share. The value of

$2,268,500 ascribed to the warrant was estimated using the Black-Scholes option valuation model with the following assumptions: no expected dividend yield; risk free interest rate of 5.50%; expected volatility of 70%; and contractual term of 6 years. The warrant was expensed in 1999.

(c) Stock Option Plans 1997 Stock Option Plan On October 29, 1997, the Company's Board of Directors adopted the 1997 Stock Option Plan (1997 Plan) and reserved a total of 7,638,508 shares of the Company's common stock for issuance thereunder. The Company did not file a timely notice of Issuance of Shares pursuant to California securities law and consequently any options to purchase shares or restricted stock purchase offers issued under the 1997 Plan did not qualify for an exemption from qualification under California securities law. As a result, the Board of Directors terminated the 1997 Plan in April 1998 and approved a repurchase offer for any holder of options of shares under the 1997 Plan. The repurchase offer expired without any shares being repurchased.

Options granted under the 1997 Plan may be designated as "Incentive Stock Options" or "Nonstatutory Stock Options" at the discretion of the Company, with exercise prices not less than the fair market value at the date of grant. Options generally vest 25% on the first anniversary of the vesting start date and then monthly over the next three years. Options expire 10 years from the date of grant.

1998 Equity Incentive Plan In 1998, the Board of Directors of the Company adopted the 1998 Equity Incentive Plan (the 1998 Plan) and reserved a total of 23,407,604 shares of the Company's common stock for issuance thereunder.

Under the 1998 Plan, the Board of Directors may grant incentive stock options, nonqualified stock options and restricted stock awards. Options granted under the 1998 Plan generally vest 25% on the first anniversary of the vesting start data and then monthly over the next three years. Options granted under the 1998 Plan expire 10 years from the date of grant.

1999 Equity Incentive Plan In 1999, the Board of Directors of the Company adopted the 1999 Equity Incentive Plan (the 1999 Plan) and reserved a total of 4,200,000 shares of the Company's common stock for issuance thereunder. The terms of the 1999 plan are substantially similar to those of the 1998 plan.

Oni Systems Corp.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(Continued) A summary of the status of the Company's option plans is as follows:

			Outstanding Options	
	Shares available for grant	Number of shares	Weighted average exercise price	Weighted average grant date fair value
Authorized.....	29,751,768	--	$	$
Granted.....	(1,078,220)	1,078,220	0.005	0.19
Exercised.....	--	--		
Cancelled.....	--	--		
Balance as of December 31, 1997...	28,673,548	1,078,220	0.005	
Granted.....	(10,885,796)	10,885,796	0.08	$0.69

Exercised	--	(1,651,332)	0.08	
Cancelled	1,522,908	(1,522,908)	0.07	
Balance as of December 31, 1998	19,310,660	8,789,776	0.08	
Granted	(20,178,438)	20,178,438	0.42	$1.90
Exercised	--	(8,709,066)	0.46	
Cancelled	2,710,424	(2,710,424)	0.08	
Balance as of December 31, 1999	1,842,646	17,548,724	$ 0.29	

The following table summarizes information with respect to stock options outstanding as of December 31, 1999:

Exercise price	Options outstanding	Contractual life (years)	Exercisable Options
$0.005	209,904	7.96	76,444
0.010	20,834	7.89	8,034
0.075	158,170	8.11	33,950
0.09	12,912,866	9.23	205,724
0.91	4,076,950	9.80	--
1.25	150,000	9.97	--
0.456	20,000	9.57	--
$0.290	17,548,724	9.34	324,152

Accounting for Stock-Based Compensation The Company uses the intrinsic-value method prescribed by APB No. 25 in accounting for its stock-based compensation arrangements for employees whereby compensation cost is recognized to the extent the fair value of the underlying common stock exceeds the exercise price of the stock options at the date of grant. Deferred stock compensation of $190,875 for the period from October 20, 1997 (inception) to December 31, 1997, and $8,432,317, and $29,040,341 in 1998 and 1999, respectively, has been recorded for the excess of the fair value of the common stock underlying the options at the grant date over the exercise price of the options. These amounts are being amortized on an accelerated basis over the vesting period, generally four years, consistent with the method described in FASB Interpretation No. 28. Amortization of deferred compensation was $89,249 for the period from October 20, 1997 (inception) to December 31, 1997, $3,310,368 in 1998, and $8,975,323 in 1999. Had compensation cost for the Company's stock-based compensation plan

Oni Systems Corp.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(Continued) been determined consistent with the fair value approach set forth in SFAS No. 123, the Company's net losses would have been as follows:

	Period from October 20, 1997 (inception) to December 31, 1997	Year ended December 31 1998	1999
Net loss--as reported	$199,056	$8,852,168	$43,279,614
Net loss--pro forma	$199,056	$8,900,007	$43,625,765
Basic and diluted net loss per share--as reported	$ (0.77)	$ (0.74)	$ (2.40)
Basic and diluted net loss per share--pro forma	$ (0.77)	$ (0.75)	$ (2.42)

The fair value of options granted are estimated on the date of grant using the minimum value method with the following weighted-average assumptions: no dividend yield; risk-free interest rates of 5.75% and 5.5% in 1998 and 1999, respectively, and an expected life of five years.

(8) Lease Obligations and Commitments In February 1999, the Company entered into a leasing agreement with a financing company which allows the Company to draw up to $1,050,000 for the lease of certain equipment and $450,000 for the lease of software and tenant improvements. The leases are accounted for as capital leases. The lease obligations under this agreement are repayable in 42 equal monthly installments of principal plus interest commencing on the individual lease inception dates and are secured by the leased assets.

In connection with the equipment leasing agreement, the Company issued to the financing company warrants to purchase 68,062 shares of Series B preferred stock at a price of $0.88 per share. The warrants expire on February 10, 2009, or 5 years from the effectiveness of the Company's initial public offering, if earlier. No warrants have been exercised as of December 31, 1999. The fair value of the warrants was determined to be $49,855, calculated using the Black- Scholes option pricing model, using the following assumptions: no dividends; contractual term of ten years; risk-free interest rate of 5.5%; and expected volatility of 70%. The fair value of the warrants has been recorded as additional paid-in capital and is being amortized as interest expense over the term of the lease agreement.

Oni Systems Corp.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(Continued) The Company leases its headquarters facility under a noncancelable operating lease, and has acquired furniture and other equipment through capital leases. Future minimum payments for both operating and capital leases as of December 31, 1999, are as follows:

Year ending December 31,	Capital leases	Operating leases
2000	$204,256	$ 2,027,015
2001	186,525	1,498,050
2002	151,060	1,568,586
2003	62,941	1,639,122
2004	--	1,709,658
Thereafter	--	3,630,925
Future minimum lease payments	604,782	$12,073,356
Less amount representing interest	71,466	
Present value of future minimum lease payments	533,316	
Less current portion	166,612	
Long-term portion	$366,704	

Total rent expense under the operating leases was $494,308 and $908,115 for the years ended December 31, 1998 and 1999 respectively and $0 for the period from October 20, 1997 (inception) to December 31, 1997.

In connection with the Series G preferred stock financing, the Company entered into a redemption and repurchase agreement with a shareholder. In the event of an unsuccessful field trial of our ONLINE9000 product, the shareholder has the right to demand redemption of 1,582,904 shares of

Series G preferred stock at a price of $8.50 per share.

(9) Income Taxes

Income tax expense is comprised of current state tax of $826 and $1,600 for the years ended December 31, 1998 and 1999, respectively.

Oni Systems Corp.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(Continued) The reconciliation between the amount computed by applying the U.S. federal statutory tax rate of 34% to pretax income and the actual provision for income taxes is a follows:

Period ended December 31 1997 1998 1999

Income tax (benefit) at statutory rate.	$(67,679)	$(3,009,456)	$(14,714,524)
State taxes net of federal income tax benefit	--	826	1,600
Permanent differences, primarily non-deductible compensation	67,578	421,801	2,383,320
Current year net operating loss and temporary differences for which no benefit is recognized	101	2,587,655	12,331,204
Total income tax expense	$ --	$ 826	$ 1,600

The effects of temporary differences that give rise to significant portions of deferred tax assets as of December 31, 1998 and 1999 are as follows:

December 31 1998 1999

Deferred tax assets:		
Deferred state taxes	$ --	$ 1,000
Fixed assets	39,000	141,000
Capitalized start-up and organizational expense	343,000	236,000
Net operating loss carryforwards	2,011,000	14,586,000
Goodwill and other Intangibles	--	679,000
Deferred stock compensation	930,000	3,140,000
Research and other credit carryforwards	394,000	2,047,000
Accrual amounts	12,000	117,000
Total gross deferred tax assets	3,729,000	20,947,000
Valuation allowance	(3,729,000)	(20,947,000)
Total deferred tax assets	$ --	$ --

Management has established a valuation allowance for the portion of deferred tax assets for which realization is uncertain. The change in the valuation allowance for deferred tax assets was an increase of $3,729,000 in 1998 and an increase of $17,218,000 in 1999.

The Company also has research credit carryforwards as of December 31, 1999 for federal and California income tax return purposes of approximately $1,125,000 and $864,000, respectively, available to reduce future income taxes. The federal research credit carryforward will expire in various years beginning in 2012 through 2019. The California research credit carryfoward carries forward indefinitely until realized. The Company also has a California manufacturing investment credit carryforward of $59,000 which will expire in various years beginning in 2007 through 2008.

The Company has net operating loss carryforwards for federal and California income tax purposes of approximately $34,000,000 available to reduce future income subject to incomes taxes. The net operating loss carryforwards for federal income tax purposes expire in various years beginning in 2012 through 2019. The net operating loss carryforwards for California purposes expire in 2005.

The Company's ability to use net operating loss and credit carryforwards may be subject to limitations pursuant to the ownership change rule of the Internal Revenue Code, Section 382 and corresponding state tax law.

Oni Systems Corp.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(Continued) (10) Employee Benefit Plan The Company has an Employee Savings and Retirement Plan (the Benefit Plan) under Section 401(k) of the Internal Revenue Code for its eligible employees. The Benefit Plan is available to all of the Company's employees who meet minimum age and service requirements, and provides employees with tax deferred salary deductions and alternative investment options. Employees may contribute up to 15% of their salary, subject to certain limitations. The Benefit Plan allows for contributions by the Company at the discretion of the Company's Board of Directors. The Company has not contributed to the Benefit Plan since its inception.

(11) Subsequent Events Initial Public Offering and Unaudited Pro Forma Balance Sheet In February 2000, the Board of Directors authorized the filing of a registration statement with the Securities and Exchange Commission that would permit the Company to sell shares of the Company's common stock in connection with a proposed initial public offering (IPO). If the offering is consummated under the terms presently anticipated, all of the outstanding shares of the Company's convertible preferred stock will automatically convert into shares of common stock upon the closing of the IPO. The conversion of the convertible preferred stock has been reflected in the accompanying unaudited pro forma consolidated balance sheet.

Pro forma basic and diluted net loss per share data assuming conversion of the shares of Series B, C, D, E, F and G preferred stock into shares of common stock had occurred at the beginning of the period (or date of issuance if later) are as follows:

	Period from October 20, 1997 (inception) to December 31, 1997	Year ended December 31, 1998	Year ended December 31, 1999
Pro forma net loss	$(199,056)	$(8,852,168)	$(43,279,614)
Pro forma basic and diluted net loss per share	$ (0.46)	$ (0.25)	$ (0.55)
Shares used in calculation of pro forma basic and diluted net loss per share	434,794	35,643,177	78,025,225

Common Stock Warrants In February 2000, in connection with a purchase and license agreement, the Company, issued warrants to purchase 223,000 shares of common stock at an exercise price of $0.91 per share.

Independent Auditors' Report The Board of Directors Object-Mart, Inc.:

We have audited the accompanying statements of operations, stockholders' equity and cash flows of Object-Mart, Inc. for the six months ended June 29, 1999. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the results of operations and cash flows of Object- Mart, Inc. for the six months ended June 29, 1999, in conformity with generally accepted accounting principles.

Kpmg Llp

Mountain View, California March 9, 2000

Object-mart, Inc.

Statement of Operations

Six month period ended June 29, 1999

Revenue	$1,744,600
Cost of revenue	509,013
	1,235,587
Operating expenses:	
Research and development	582,927
Sales and marketing	52,888
General and administrative	105,524
Amortization of deferred stock compensation	466,507
Total operating expenses	1,207,846
Operating income	27,741
Interest income, net	14,286
Income before income taxes	42,027
Income taxes	109,023
Net loss	$ (66,996)

See accompanying notes to financial statements.

Object-mart, Inc

Statement of Cash Flows

Six months ended June 29, 1999

Cash flows from operating activities:	
Net loss	$ (66,996)
Deferred tax expense	28,543
Adjustments to reconcile net loss to net cash used in operating activities:	
Depreciation and amortization	20,811
Amortization of deferred stock compensation	466,507
Changes in operating assets and liabilities:	
Accounts receivable	(206,400)
Prepaid expenses and other current assets	(198,000)
Accounts payable	(15,836)
Accrued liabilities	154,010
Deferred revenue	1,000,000
Net cash provided by operating activities	1,182,639
Cash flows used in investing activities:	
Purchase of property and equipment	(58,951)
Net cash used in investing activities	(58,951)
Cash flows from financing activities:	
Proceeds from issuance of common stock	255,638
Net cash provided by financing activities	255,638
Net increase in cash and cash equivalents	1,379,326
Cash and cash equivalents at beginning of period	54,568
Cash and cash equivalents at end of period	$1,433,894

See accompanying notes to financial statements.

Object-mart, Inc.

STATEMENT OF SHAREHOLDERS' EQUITY Six months ended June 29, 1999

	Common Stock			Total
	Shares	Amount	Retained earnings	shareholders' equity
Balances as of December 31, 1998	2,751,000	$ 2,700	$476,506	$ 479,206
Exercise of options for cash	877,500	255,638	--	255,638
Deferred stock compensation	--	466,507	--	466,507
Net loss	--	--	(66,996)	(66,996)
Balances as of June 29, 1999	3,628,500	$724,845	$409,510	$1,134,355

See accompanying notes to financial statements.

Notes to Financial Statements

Six months ended June 29, 1999 (1) Summary of the Company and Significant Accounting Policies (a) Description of Business Object-Mart, Inc. (the Company) was incorporated in California on February 27, 1997. The company provided telecommunications software products and services to telecommunications software development companies, service providers and equipment manufacturers.

(b) Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires the Company to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and to disclose contingent assets and liabilities at the date of the financial statements and the reported results of operations during the reporting period. Actual results could differ from those estimates.

(c) Property and Equipment Property and equipment are stated at cost and are depreciated using the straight-line method over the estimated useful lives of the related assets, ranging from one to three years. Depreciation expense for the six month period ended June 29, 1999 was $20,811.

(d) Software Development Costs Statement of Financial Accounting Standards No. 86, "Accounting for the Costs of Computer Software to be Sold, Leased or Otherwise Marketed," requires the capitalization of certain software development costs incurred subsequent to the date technological feasibility is established and prior to the date the product is generally available for sale. The capitalized cost is then amortized over the estimated life of the product. To date, the Company has not capitalized any software development costs because capitalizable costs meeting the requirements SFAS No. 86 have not been significant.

(e) Revenue Recognition The Company derives its revenue from software license agreements and consulting services. Software license revenues are recognized upon execution of the license agreement and delivery of the software. In all cases, however, no significant post-contract obligations of the Company shall be remaining. Otherwise, software license fees are deferred until all of the requirements for revenue recognition have been satisfied. Consulting services contracts include both hourly service-based contracts and milestone based contracts. Hourly service-based contracts are billed and recognized as the services are performed. Milestone-based contracts are billed and recognized when the milestones are completed and when product, if any, committed for the milestones is shipped and accepted.

Revenue from the sale of software was accounted for in accordance with Statement of Position ("SOP") 97-2, Software Revenue Recognition, SOP 98-4, Deferral of Effective Date of SOP 97-2, and SOP 98-9, Software Revenue Recognition with Respect to Certain Arrangements.

The Company had three customers that comprised 42%, 22% and 16% of total revenue for the six month period ended June 29, 1999.

(f) Research and Development All research and development costs are expensed as incurred.

Object-mart, Inc.

NOTES TO FINANCIAL STATEMENTS--(Continued) Six months ended June 29, 1999 (g) Income Taxes The Company utilizes the asset and liability method of accounting for income taxes. Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

Income tax expense for the period ended June 29, 1999 consisted of:

June 29, 1999

Current:	
Federal	$ 63,363
State	17,117
Total current tax expense	$ 80,480
Deferred:	
Federal	18,370
State	10,173
Total deferred tax expense	28,543
Total tax expense	$109,023

The June 29, 1999 income tax expense differed from the amounts computed by applying the U.S. federal income tax rate of 34% to pretax income as a result of the following:

June 29, 1999

Federal tax at statutory rate	$ 14,289
State taxes, net of federal income tax benefit	18,011
Deferred stock compensation	79,362
Other	(2,639)
Total tax expense	$109,023

(h) Stock-Based Compensation The Company accounts for stock-based awards to employees using the intrinsic value method. Expense associated with stock-based compensation is being amortized on an accelerated basis over the vesting period of the individual award consistent with the method described in Financial Accounting Standards Board ("FASB") Interpretation No. 28. Had compensation expense for the Company's plan been determined consistent with the fair value approach enumerated in SFAS No. 123, the Company's pro forma net loss for the six months ended June 29, 1999, would not have been materially different from the reported net loss.

Oni Systems Corp.

Unaudited Pro Forma Combined Condensed Statement of Operations

The following unaudited pro forma combined condensed statement of operations is presented for illustrative purposes only and is not necessarily indicative of the combined results of operations for future periods or the results of operations that actually would have been realized had ONI Systems and Object- Mart, Inc. been a combined company during the specified periods. The unaudited pro forma combined condensed statement of operations, including the related notes, is qualified in its entirety by reference to, and should be read in conjunction with, the historical financial statements and related notes thereto of ONI Systems and Object-Mart, Inc., included elsewhere in this prospectus. The following unaudited pro forma combined condensed statement of operations gives effect to the acquisition of Object-Mart, Inc. by ONI Systems using the purchase method of accounting. The unaudited pro forma combined condensed statement of operations is based on the respective historical audited financial statements and related notes of ONI Systems and Object-Mart, Inc.

The unaudited pro forma combined condensed statement of operations assumes that the acquisition took place on January 1, 1999 and combines ONI Systems, audited consolidated statement of operations for the year ended December 31, 1999 which includes Object-Mart's results of operations subsequent to June 29, 1999, the date of acquisition, with Object-Mart's audited consolidated statement of operations for the six months ended June 29, 1999.

Oni Systems Corp.

UNAUDITED PRO FORMA COMBINED CONDENSED STATEMENT OF OPERATIONS Year ended December 31, 1999

	Historical		Pro forma	
	ONI Systems	Object-Mart	Adjustments	Combined
Revenue	$ 3,033,995	$1,744,600	$ (152,800)(a)	$ 4,625,795
Cost of revenues	1,032,144	509,013	(64,384)(b)	1,476,773
	2,001,851	1,235,587	(88,416)	3,149,022
Operating expenses:				
Research and development	25,176,187	582,927	(101,108)(c)	25,658,006
Sales and marketing	4,557,245	52,888	12,692 (d)	4,622,825
General and administrative	4,755,582	105,524	1,196,419 (e)	6,057,525
Amortization of deferred stock compensation	8,975,323	466,507	--	9,441,830
Amortization of common stock warrants	2,268,500	--	--	2,268,500
In-process research and development	170,000	--	(170,000)(f)	--
Total operating				

expenses.....	45,902,837	1,207,846	938,003	48,048,686
Operating loss.....	(43,900,986)	27,741	(1,026,419)	(44,899,664)
Interest income, net...	622,972	14,286	--	637,258
Income (loss) before income taxes.....	(43,278,014)	42,027	(1,026,419)	(44,262,406)
Income taxes.....	1,600	109,023	(109,023)(g)	1,600
Net income (loss)...	$(43,279,614)	$ (66,996)	$ (917,396)	$(44,264,006)
Basic and diluted net loss per share.....	$ (2.40)			$ (2.45)
Shares used to compute basic and diluted net loss per share.....	18,043,188			18,043,188

See accompanying notes to unaudited pro forma combined condensed financial statements.

Oni Systems Corp.

Notes to Unaudited Pro Forma Combined Condensed Financial Statements

(1) Unaudited Pro Forma Combined Condensed Statements of Operations The pro forma combined condensed statements of operations give effect to the acquisition as if it had occurred on January 1,1999.

The following adjustments have been reflected in the unaudited pro forma combined condensed statement of operations:

(a) Adjustment to eliminate intercompany revenue (b) Adjustment to eliminate cost of revenue related to intercompany revenue (c) Adjustment to eliminate intercompany expense of $152,800 netted against reclassification of cost of revenue of $51,692 (d) Adjustment to reclassify cost of revenue (e) Adjustment to record additional amortization of goodwill for the six month period ended June 29, 1999.

(f) Adjustment to reverse the value of purchased in-process research and development as this is a non-recurring charge.

(g) Adjustment to reverse income tax expense for the amount of the combined Company.

No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. You must not rely on any unauthorized information or representations. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

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Through and including , 2000 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Shares

ONI Systems Corp.

Common Stock

Goldman, Sachs & Co.

Banc of America Securities LLC Chase H&Q Robertson Stephens Representatives of the Underwriters

Part Ii

Information Not Required in Prospectus

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses to be paid by the Registrant in connection with the sale of the shares of common stock being registered hereby. All amounts are estimates except for the Securities and Exchange Commission registration fee, the NASD filing fee and the Nasdaq National Market listing fees.

Securities and Exchange Commission registration fee	$30,360
NASD filing fee	12,000
Nasdaq National Market initial filing fee	*
Accounting fees and expenses	*

Legal fees and expenses	*
Road show expenses	*
Printing and engraving expenses	*
Blue Sky qualification fees and expenses	*
Transfer agent and registrar fees and expenses	*
Miscellaneous expenses	*
Total	$

*To be filed by amendment

Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933, as amended (the "Securities Act").

As permitted by the Delaware General Corporation Law, the Registrant's Certificate of Incorporation includes a provision that eliminates the personal liability of its directors for monetary damages for breach of fiduciary duty as a director, except for liability:

. for any breach of the director's duty of loyalty to the Registrant or its stockholders;

. for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;

. under section 174 of the Delaware General Corporation Law regarding unlawful dividends and stock purchases; or . for any transaction from which the director derived an improper personal benefit.

As permitted by the Delaware General Corporation Law, the Registrant's Bylaws provide that:

. the Registrant is required to indemnify its directors and officers to the fullest extent permitted by the Delaware General Corporation Law, subject to certain very limited exceptions;

. the Registrant may indemnify its other employees and agents as set forth in the Delaware General Corporation Law;

. the Registrant is required to advance expenses, as incurred, to its directors and officers in connection with a legal proceeding to the fullest extent permitted by the Delaware General Corporation Law, subject to certain very limited exceptions; and . the rights conferred in the Bylaws are not exclusive.

The Registrant has entered into Indemnification Agreements with each of its current directors and officers to give such directors and officers additional contractual assurances regarding the scope of the indemnification set forth in the Registrant's Certificate of Incorporation and to provide additional procedural protections. At present, there is no pending litigation or proceeding involving a director, officer or employee of the Registrant regarding which indemnification is sought, nor is the Registrant aware of any threatened litigation that may result in claims for indemnification.

Reference is also made to Section 8 of the Underwriting Agreement, which provides for the indemnification of officers, directors and controlling persons of the Registrant against certain liabilities. The indemnification provision in the Registrant's Certificate of Incorporation, Bylaws and the Indemnification Agreements entered into between the Registrant and each of its directors and officers may be sufficiently broad to permit indemnification of the Registrant's directors and officers for liabilities arising under the Securities Act.

The Registrant maintains directors' and officers' liability insurance and expects to obtain a rider to such coverage for securities matters.

See also the undertakings set out in response to Item 17.

Reference is made to the following documents filed as exhibits to this Registration Statement regarding relevant indemnification provisions described above and elsewhere herein:

Exhibit Document Number Form of Underwriting Agreement (draft dated , 1999)..... 1.01 Registrant's Certificate of Incorporation..... 3.01 Registrant's Bylaws..... 3.03 Form of Indemnification Agreement..... 10.01

Item 15. Recent Sales of Unregistered Securities.

In the three years prior to the effective date of this Registration statement, the Registrant has issued and sold the following unregistered securities:

1. In October 1997, in connection with Registrant's formation as a subsidiary of Optivision, Inc., Optivision received 11,565,752 shares of Registrant's common stock and 8,000,000 shares of Registrant's Series A preferred stock. In December 1997, Registrant was spun out of Optivision and Optivision distributed part of its holdings of Registrant's common stock and preferred stock to Optivision shareholders. In January 1998, all of the shares of Registrant's Series A preferred stock were converted into Series B preferred stock on a one-for-one basis. In January 1998, Optivision sold 2,666,666 shares of Registrant's Series B preferred stock to a group of investors for an aggregate purchase price of $2 million. In March 1998, Registrant repurchased of 1,333,333 shares of its Series B preferred stock from Optivision, for an aggregate purchase price of $1 million.

2. From December 1997 through March 1998, the Registrant offered, and in January 1998 issued and sold, 18,128,843 shares of Series B preferred stock and 2,733,332 shares of Series C preferred stock to a group of founding investors for aggregate consideration of $5,197,980 in cash.

3. In April 1998, the Registrant issued and sold 4,969,148 shares of Series D preferred stock to an investor for aggregate consideration of $4,380,428.20 in cash.

4. From December 1998 to May 1999, the Registrant issued and sold 26,284,024 shares of Series E preferred stock to a group of investors for aggregate consideration of $23,801,671.90 in cash.

. In May 1999, in connection with its acquisition of Object-Mart, Inc., the Registrant issued 2,284,638 shares of common stock to a group of 25 former shareholders of Object-Mart.

6. In September 1999, the Registrant issued and sold 8,249,468 shares of Series F preferred stock to a group of investors for an aggregate consideration of $15,000,007.75 in cash.

7. From December 1999 to March 2000, the Registrant issued and sold 12,163,418 shares of Series G preferred stock to a group of investors for an aggregate consideration of $76,842,393.21 in cash.

8. In March 2000, Registrant issued and sold a warrant to purchase 200,000 shares of common stock at an exercise price of $15 per share to a service provider in exchange for services rendered.

9. From Registrant's inception on October 20, 1997 through December 31, 1999, the Registrant has issued 6,944,828 shares of common stock to its employees, consultants and other service providers through restricted stock purchases under its benefit plans or pursuant to stock purchase agreements.

10. From Registrant's inception on October 20, 1997 through December 31, 1999, Registrant has issued 8,199,734 shares of common stock to its employees upon exercise of options, and as of December 31, 1999, 17,548,724 shares of common stock were issuable upon exercise of outstanding options.

11. From Registrant's inception on October 20, 1997 through December 31, 1999, Registrant has issued warrants to purchase 1,011,394 shares of its common stock.

The sale of the above securities was determined to be exempt from registration under the Securities Act in reliance upon Section 4(2) of the Securities Act or Regulation D promulgated thereunder, or Rule 701 promulgated under Section 3(b) of the Securities Act as transactions by an issuer not involving any public offering or transactions under compensation benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of securities in each transaction represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution and appropriate legends were affixed to the share certificates issued in these transactions. All recipients had adequate access, through their relationships with the Registrant, to information about the Registrant.

Item 16. Exhibits and Financial Statement Schedules.

(a) The following exhibits are filed herewith:

Number Exhibit Title

1.01* Form of Underwriting Agreement. 2.01 Agreement and Plan of Reorganization with Object-Mart, dated May 21, 1999. 3.01* Registrant's First Amended and Restated Certificate of Incorporation. 3.02* Form of Registrant's Second Amended and Restated Certificate of Incorporation (to be filed immediately after the closing of this offering). 3.03* Registrant's Amended and Restated Bylaws. 3.04* Registrant's Amended and Restated Bylaws (to be effective immediately after the closing of this offering). 4.01* Form of Specimen Certificate for Registrant's common stock. 4.02 Restated and Amended Investors' Rights Agreement, dated December 22, 1999, by and between the certain investors

and Registrant. 4.03 Voting Agreement portion of Series D Preferred Stock Purchase Agreement, dated April 1, 1998, by and between Cisco Systems, Inc. and Registrant. 4.04 Warrant to Purchase Capital Stock held by Venture Lending & Leasing, Inc.

Number Exhibit Title

4.05 Warrant to Purchase Capital Stock held by Venture Lending & Leasing, Inc. 4.06 Warrant Agreement No. 1 to Purchase Shares of Series B Preferred Stock held by Comdisco, Inc. 4.07 Warrant Agreement No. 2 to Purchase Shares of Series B Preferred Stock held by Comdisco, Inc. 4.08 Warrant Agreement No. 3 to Purchase Shares of Series B Preferred Stock held by Comdisco, Inc. 4.09 Warrant Agreement to Purchase Common Stock held by COLT Telecommunications, Inc. 4.10 Warrant Agreement to Purchase Common Stock held by FMR Corp. 4.11 Redemption and Repurchase Agreement, dated December 22, 1999, by and between Williams Communications, Inc. and Registrant. 4.12* Warrant to Purchase Common Stock held by Fenwick & West LLP. 5.01* Opinion of Fenwick & West LLP regarding the legality of the securities being registered. 10.01* Form of Indemnification Agreement entered into between Registrant and each of its directors and executive officers. 10.02 1997 Stock Option Plan, as amended. 10.03 1998 Equity Incentive Plan, as amended. 10.04 1999 Equity Incentive Plan, as amended. 10.05* Form of 2000 Equity Incentive Plan. 10.06* Form of 2000 Employee Stock Purchase Plan. 10.07 Assignment of Lease, dated June 23, 1998, by and between JTS Corporation ("JTS") and Registrant. 10.08 Agreement, dated June 23, 1998, by and between JTS and Registrant. 10.09 Amendment to Lease, dated May 1, 1999, by and between Cilker Revocable Trust of October 9, 1990 and Registrant. 10.10 Lease Agreement, dated September 29, 1999, by and between John Arrillaga, Trustee, or his Successor Trustee, UTA dated 7/20/77 as amended and Richard T. Peery, Trustee, or his Successor Trustee, UTA dated 7/20/77 as amended, and Registrant. 10.11* Lease Agreement, dated January 1, 2000, by and between JDS Uniphase Corporation and Registrant. 10.12 Offer Letter, dated December 12, 1997, from Registrant to Hugh C. Martin. 10.13 Offer Letter, dated February 4, 1998, from Registrant to Terrence J. Schmid. 10.14 Offer Letter, dated June 1, 1998, from Registrant to Hon Wah Chin. 10.15 Offer Letter, dated August 17, 1998, from Registrant to William R. Cumpston. 10.16 Offer Letter, dated September 10, 1999, from Registrant to Michael A. Dillon. 10.17 Offer Letter, dated February 29, 2000, from Registrant to Robert J. Jandro. 10.18 Offer Letter, dated February 9, 2000, from Registrant to Andrew W. Page. 10.19 Series E Preferred Stock Purchase Agreement dated as of December 23, 1998. 10.20 Series F Preferred Stock Purchase Agreement dated as of September 2, 1999. 10.21 Series G Preferred Stock Purchase Agreement dated as of December 22, 1999. 21.01* List of Registrant's Subsidiaries. 23.01* Consent of Fenwick & West LLP (included in Exhibit 5.01). 23.02 Consent of KPMG LLP, independent accountants. 24.01 Power of Attorney (see signature page hereto). 27.01 Financial Data Schedule.

* To be filed by amendment.

(b) The following financial statement schedule is filed herewith:

Schedule II--Valuation and Qualifying Accounts Other financial statement schedules are omitted because the information called for is not required or is shown either in the financial statements or the notes thereto.

Item 17. Undertakings.

The undersigned Registrant hereby undertakes to provide to the Underwriters at the closing specified in the Underwriting Agreement certificates in such denominations and registered in such names as required by the Underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described in Item 14 above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered hereunder, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective; and (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Signatures

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Jose, State of California, on this 9th day of March, 2000.

Oni Systems Corp.

/s/ Hugh C. Martin By: _____ Hugh C. Martin President, Chief Executive Officer and Chairman of the Board

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints Hugh C. Martin, Terrence J. Schmid and Michael A. Dillon and each of them, his true and lawful attorneys-in-fact and agents with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to sign any registration statement for the same offering covered by the Registration Statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or their substitute or substitutes, may lawfully do or cause to be done or by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the date indicated.

Name Title Date

Principal Executive Officer:

/s/ Hugh C. Martin Hugh C. Martin	President, Chief Executive Officer and Chairman of the Board	March 9, 2000

Principal Financial Officer and Principal Accounting Officer:

/s/ Terrence J. Schmid Terrence J. Schmid	Chief Financial Officer and Vice President, Finance and Administration	March 9, 2000

Name Title Date

Additional Directors:

/s/ Matthew W. Bross Director March 9, 2000 Matthew W. Bross /s/ Kevin R. Compton Director March 9, 2000 Kevin R. Compton /s/ Jonathan D. Feiber Director March 9, 2000 Jonathan D. Feiber /s/ James F. Jordan Director March 9, 2000 James F. Jordan /s/ Gregory B. Maffei Director March 9, 2000 Gregory B. Maffei ONI SYSTEMS CORP. SCHEDULE II--VALUATION AND QUALIFYING ACCOUNTS Period from October 20, 1997 (inception) to December 31, 1997 and the years ended December 31, 1998 and 1999 Year Ended December 31, 1999

Reserve for obsolete and excess inventory:	
Balance, beginning of period	$ --
Additions charged to expense	1,366,905
Additions due to acquisitions	--
Reductions	--
Balance, end of period	$1,366,905

Exhibit Index

Number Exhibit Title

2.01 Agreement and Plan of Reorganization with Object-Mart, dated May 21, 1999. 4.02 Restated and Amended Investors' Rights Agreement, dated December 22, 1999, by and between the certain investors and Registrant. 4.03 Voting Agreement portion of Series D Preferred Stock Purchase Agreement, dated April 1, 1998, by and between Cisco Systems, Inc. and Registrant. 4.04 Warrant to Purchase Capital Stock held by Venture Lending & Leasing, Inc. 4.05 Warrant to Purchase Capital Stock held by Venture Lending & Leasing, Inc. 4.06 Warrant Agreement No. 1 to Purchase Shares of Series B Preferred Stock held by Comdisco, Inc. 4.07 Warrant Agreement No. 2 to Purchase Shares of Series B Preferred Stock held by Comdisco, Inc. 4.08 Warrant Agreement No. 3 to Purchase Shares of Series B Preferred Stock held by Comdisco, Inc. 4.09 Warrant Agreement to Purchase Common Stock held by COLT Telecommunications, Inc. 4.10 Warrant Agreement to Purchase Common Stock held by FMR Corp. 4.11 Redemption and Repurchase Agreement, dated December 22, 1999, by and between Williams Communications, Inc. and Registrant. 10.02 1997 Stock Option Plan, as amended. 10.03 1998 Equity Incentive Plan, as amended. 10.04 1999 Equity Incentive Plan, as amended. 10.07 Assignment of Lease, dated June 23, 1998, by and between JTS Corporation ("JTS") and Registrant. 10.08 Agreement, dated June 23, 1998, by and between JTS and Registrant. 10.09 Amendment to Lease, dated May 1, 1999, by and between Cilker Revocable Trust of October 9, 1990 and Registrant. 10.10 Lease Agreement, dated September 29, 1999, by and between John Arrillaga, Trustee, or his Successor Trustee, UTA dated 7/20/77 as amended and Richard T. Peery, Trustee, or his Successor Trustee, UTA dated 7/20/77 as amended, and Registrant. 10.12 Offer Letter, dated December 12, 1997, from Registrant to Hugh C. Martin. 10.13 Offer Letter, dated February 4, 1998, from Registrant to Terrence J. Schmid. 10.14 Offer Letter, dated June 1, 1998, from Registrant to Hon Wah Chin. 10.15 Offer Letter, dated August 17, 1998, from Registrant to William R. Cumpston. 10.16 Offer Letter, dated September 10, 1999, from Registrant to Michael A. Dillon. 10.17 Offer Letter, dated February 29, 2000, from Registrant to Robert J. Jandro. 10.18 Offer Letter, dated February 9, 2000, from Registrant to Andrew W. Page. 10.19 Series E Preferred Stock Purchase Agreement dated as of December 23, 1998. 10.20 Series F Preferred Stock Purchase Agreement dated as of September 2, 1999. 10.21 Series G Preferred Stock Purchase Agreement dated as of December 22, 1999. 23.02 Consent of KPMG LLP, independent accountants. 24.01 Power of Attorney (see signature page hereto). 27.01 Financial Data Schedule.

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