SILICOM LTD
Form 20-F
June 30, 2004

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 20-F

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2003

SILICOM LTD.

(Exact name of Registrant as specified in its charter and translation of Registrant s name into English)

Israel
(Jurisdiction of incorporation or organization)

8 Hanagar Street, Kfar Sava 44000, Israel
(Address of principal executive offices)

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

None

Securities registered or to be registered pursuant to Section 12(g) of the Act:

Ordinary Shares, nominal value 0.01 New Israeli Shekels per share
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None
(Title of Class)

Indicate the number of outstanding shares of each of the issuer s classes of capital or common stock as of the close of the period covered by the annual report: 4,126,800

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days:

Yes x **No** o

Indicate by check mark which financial statement item the registrant has elected to follow:

Item 17 o **Item 18** x

This annual report on Form 20-F includes certain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934. The use of the words projects, expects, may, plans or intends , or words of similar import, identifies a statement as forward-lookin There can be no assurance, however, that actual results will not differ materially from our expectations or projections. Factors that could cause actual results to differ from our expectations or projections include the risks and uncertainties relating to our business described in this report at Item 3 titled Risk Factors.

We have prepared our consolidated financial statements in United States dollars and in accordance with accounting principles generally accepted in the United States. All references herein to dollars or $ are to United States dollars, and all references to Shekels or NIS are to New Israeli Shekels.

Item 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not Applicable.

Item 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not Applicable

Item 3. KEY INFORMATION

Selected Financial Data

The following selected financial data has been derived from our audited consolidated financial statements for the periods, which have been prepared in accordance with U.S. GAAP and were audited by Somekh Chaikin, a member firm of KPMG International. The financial data set forth below should be read in conjunction with our consolidated financial statements and the notes thereto, which are set forth in Item 18 Financial Statements and are included elsewhere in this report, and the other financial information appearing elsewhere in this annual report.

CONSOLIDATED STATEMENTS OF OPERATIONS DATA:

	Year Ended December 31 In US$ Thousands				
	2003	**2002**	**2001**	**2000**	**1999**
Sales	$ 3,725	$ 2,726	$ 4,530	$ 7,769	$ 5,672
Cost of sales	2,160	2,091	3,635	4,829	3,297
Gross profit	1,565	635	895	2,940	2,375
R&D costs, gross	1,647	1,523	1,333	1,418	1,078
(Less) government royalty-bearing participations	(150)	15	(469)	(410)	(417)
R&D costs, net	1,497	1,538	864	1,008	661
Selling, marketing, general and administrative expenses	1,604	1,734	1,738	1,419	1,416
	3,101	3,272	2,602	2,427	2,077

Total operating expenses					
Operating income (loss)	(1,536)	(2,637)	(1,707)	513	298
Other expenses	-	-	-	-	-
Financial income, net	27	152	254	398	264
Income (loss) before taxes on income	(1,509)	(2,485)	(1,453)	911	562
Taxes on income	-	-	33	24	42
Net income (loss)[1]	(1,509)	(2,485)	(1,486)	887	520
Earnings (loss) per share					
Basic earnings (loss) per ordinary share	$ (0.37)	$ (0.60)	$ (0.36)	$ 0.22	$ 0.13
Weighted average number of ordinary shares used to compute basic earnings (loss) per share (in thousands)	4,112	4,110	4,110	4,103	3,986
Diluted earnings (loss) per ordinary share	$ (0.37)	$ (0.60)	$ (0.36)	$ 0.20	$ 0.13
Weighted average number of ordinary shares used to compute diluted earnings (loss) per share (in thousands)	4.112	4,110	4,110	4,394	4,014

(1) Net income is after deduction of taxes on income, which has been reduced by virtue of tax benefits to which the Company is entitled in its capacity as an Approved Enterprise under Israeli law. As such, the Company was not required to pay full income tax for a period of up to seven years ending in 1997 and also for ten years ending in 2006. See Note 10B to the Financial Statements and Item 10 - Additional Information - Taxation.

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	2003	2002	2001	2000	1999
Consolidated Balance Sheets Data:					
Working capital	$ 3,675	$ 5,686	$ 5,583	$ 9,051	$ 7,949
Total assets	$ 6,118	$ 7,404	$ 9,658	$ 12,159	$ 10,014
Short-term debt	$ 1,046	$ 976	$ 760	$ 1,812	$ 922
Long-term debt	$ 895	$ 743	$ 728	$ 691	$ 569
Shareholders equity	$ 4,177	$ 5,685	$ 8,170	$ 9,656	$ 8,523
	4,126,800	4,125,300	4,125,300	4,125,300	4,024,600

Number of shares
outstanding
Risk Factors

This annual report and statements that we may make from time to time may contain forward-looking information. There can be no assurance that actual results will not differ materially from our expectations, statements or projections. Factors that could cause actual results to differ from our expectations, statements or projections include the risks and uncertainties relating to our business described below.

Our Multi Port Gigabit Ethernet Server/Storage Networking products, including our TOE/iSCSI products are characterized by long sales cycles

We expect the Multi Port Gigabit-Ethernet Server Networking Adapters we manufacture and sell, as well as the TOE/iSCSI Server Networking adapters we recently announced to become our principal sales growth engine in the coming years. Our sales of these products typically involve significant capital investment decisions by prospective end customers, as well as a significant amount of time to educate such end customers as to the benefits of systems and appliances that include our products. As a result, before purchasing systems and appliances which include our products (and consequently facilitating sales of our products), companies spend a substantial amount of time performing internal reviews and obtaining capital expenditure approvals. The decision making process of our customers includes several time consuming processes: they need to define the required configuration of their Server/Storage system/Appliance, derive the need for adapters, evaluate adapters, qualify adapters and then (or in parallel) negotiate the terms for a purchase. It may therefore take 12 months or more from the time we first contact a prospective customer before receiving an initial order. These long sales cycles make it difficult to predict when and to what extent discussions with potential customers will materialize into sales and could cause our revenue and operating results to fluctuate widely from period to period. In addition, our allocation of significant resources to potential sales opportunities that do not materialize into sales could have a material adverse affect on our business, results of operations and financial condition.

The loss or ineffectiveness of our original equipment manufacturers may have a material adverse effect on our operations and financial results.

Our sales and marketing strategy is to develop and maintain strategic relationships with leading original equipment manufacturers (OEMs), installers and integrators in the computer industry, which sell our Connectivity Products under their own private labels or integrate our products into their systems. These OEMs are not within our control, are not obligated to purchase our products, and may represent other lines of products. A reduction in their sales efforts or discontinuance of sales of our products by our OEMs could lead to reduced sales and could materially adversely affect our operating results. Use of OEMs also entails the risk that they will build up inventories in anticipation of a growth in sales. If such growth does not occur as anticipated, such OEMs may substantially decrease the amount of products ordered in subsequent quarters, discontinue product orders or even attempt to return unsold products (although our standard agreements do not allow return of products). In 2003, one OEM, which was our major customer, was responsible for the vast majority of our sales of Ethernet/Fast Ethernet products (see footnote 12 to the consolidated financial statements). The termination or loss of this OEM, or of several OEMs at approximately the same time, might have a material adverse effect.

We depend on our distributors.

The distribution industry has been characterized by rapid change. While alternative distribution channels have emerged, an increasing number of companies are competing for access to these distribution channels. In addition, consolidations and financial difficulties of distributors occur in the distribution industry. Many of the same risks which apply to the use of OEMs also apply to distributors namely, the fact that they are not under our control, are not obligated to purchase our products, may represent other lines of products and may build up inventories in anticipation of a growth in sales only to substantially decrease the amount of products ordered in subsequent quarters, discontinue product orders or even attempt to return unsold products if such growth does not occur as anticipated. The loss or ineffectiveness of any of our major distributors could have a material adverse effect on our operating results. Although we believe that no termination of a single distributor is likely to have a material adverse effect on us, the termination or loss of several distributors at approximately the same time might have a temporary material adverse effect on us.

The markets for our products change rapidly and demand for new products is difficult to predict.

The markets for our products are characterized by rapidly changing technology, short product-life cycles and evolving industry standards. For example, innovations in the modem and Ethernet industries have enabled PC manufacturers to incorporate modems and Ethernet cards in their original products. Such innovations have eliminated much of the need for our legacy products and have caused the market for these products to decline significantly. As such, our Modem PC Cards have been completely phased out and we believe that our Ethernet/Fast Ethernet PC Cards will also be phased out completely over time. We intend to continue making substantial investments in product and technology development. Although we have already recorded purchase orders for our new lines of products, Multi Port Gigabit-Ethernet Server Adapters and TOE/iSCSI Network adapters, there can be no assurance that we will continue to be successful in selecting, developing, manufacturing and marketing enhanced and new products in a timely manner.

We may experience difficulty in developing new, commercially successful products at acceptable release times.

Since we commenced operations, we have conducted extensive research, development and engineering activities. Our efforts emphasize the development of new products, cost reduction of current products, and the enhancement of existing products, generally in response to rapidly changing customer preferences, technologies and industry standards. Although we already recorded purchase orders for our new lines of products, Multi Port Gigabit-Ethernet Server Adapters and TOE/iSCSI Network adapters, we cannot guarantee that these products will be widely accepted by the marketplace or that any of our development efforts will result in commercially successful products, that such products will be released in a timely manner or that we will be able to respond effectively to technological changes or new product announcements by others.

Loss of our sources for certain key components could harm our operations.

Although we generally use standard parts and components for our products, certain key components used in our products are currently available from only one source, and others are available from a limited number of sources. We believe that we maintain a sufficient inventory of these components to protect against delays in deliveries. However, we cannot guarantee that we will not experience delays in the supply of critical components in the future or that we will have a sufficient inventory of critical components at such time to produce products at full capacity. In the event that we are not able to purchase key components of our products from our limited sources, we may need to redesign certain products. We cannot guarantee that we will have adequate resources for such a redesign or that such a redesign will be successful. Such inability to obtain alternative resources or to successfully redesign our products could have a material adverse effect on our business, results of operations and financial condition.

The market for our products is highly competitive and some of our competitors may be better positioned than we are.

The data communications industry is highly competitive. We face competition from numerous companies, most of which are more established, benefit from greater market recognition (especially in the United States) and have greater financial, production and marketing resources than we do. For example, in the evolving server/storage networking industry for which we have developed our multi-port Gigabit-Ethernet Server/Storage Networking cards, our main competitors are Intel and 3Com Corporation, in the TCP/IP Offload Engine, or TOE, industry our main competitors are Alacritec, Inc. and Adaptec, Inc. and in the iSCSI industry our main competitors are Emulex, Inc., Qlogic, Inc., and JNI, Inc. We cannot guarantee that our present or contemplated products will continue to be distinguishable from those of our competitors or that the marketplace will find our products preferable to those of our competitors. Furthermore, there can be no assurance that competitive pressures will not result in price reductions that could materially adversely affect our business and financial condition and the results of our operations.

Our success depends on the protection of our intellectual property rights.

Our success and ability to compete depend to a significant degree on our proprietary technology. The measures we have taken to protect our proprietary technology afford only limited protection, and, accordingly, there can be no assurance that such steps will be adequate to prevent misappropriation of our technology or the independent development of similar technologies by others. Despite our efforts, unauthorized parties may attempt to copy aspects of our products and develop similar hardware or software or to obtain and use information that we regard as proprietary.

We may not be able to prevent others from claiming that we have infringed their proprietary rights.

We cannot guarantee that one or more parties will not assert infringement claims against us. The cost of responding to claims could be significant, regardless of whether the claims have merit. Significant and protracted litigation may be necessary to determine the scope of the proprietary rights of others or to defend against claims of infringement, regardless of whether the claims have merit. Although we believe that all our products use only our intellectual property, or intellectual property which is properly licensed to us, in the event that any infringement claim is brought against us and infringement is proven, we could be required to discontinue the use of the relevant technology, to cease the manufacture, use and sale of infringing products, to incur significant litigation damages, costs and expenses, to develop non-infringing technology or to obtain licenses to the alleged infringing technology and to pay royalties to use such licenses. There can be no assurance that we would be able to develop any such alternative technologies or obtain any such licenses on terms commercially acceptable to us. Although in the past we have resolved a claim of infringement through a license agreement, the terms of which did not have a material effect on our business, any infringement claim or other litigation against us could seriously harm our business, operating results and financial condition. While there are no lawsuits or other claims currently pending against us regarding the infringement of patents or intellectual property rights of others, we have been a party to such claims in the past and may be party to such claims in the future.

We are dependent on key personnel.

Our success has been, and will be, dependent to a large degree on our ability to retain the services of key personnel and to attract additional qualified personnel in the future. Competition for such personnel is intense. There can be no assurance that we will be able to attract, assimilate or retain key personnel in the future and our failure to do so would have a material adverse affect on our business, financial condition and results of operations.

Exchange rate fluctuations and international risks could increase the cost of our operations.

Substantially all of our international sales are denominated in U.S. dollars and may be subject to government controls and other risks, including, in some cases, export licenses, federal restrictions on export, currency fluctuations, political instability, trade restrictions, and changes in tariffs and freight rates. We believe that the rate of inflation in Israel and exchange rate fluctuations between the New Israeli Shekel (NIS) and the U.S. dollar have had a minor effect on our business to date. However, our dollar costs in Israel will increase if inflation in Israel exceeds the devaluation of the NIS against the dollar, if the timing of such devaluation lags behind inflation in Israel or if the dollar is devaluated against the NIS. See Item 5. Operating and Financial Review and Prospects - Impact of Inflation and Devaluation on Results of Operations, Liabilities and Assets.

If we are characterized as a passive foreign investment company for U.S. federal income tax purposes, our U.S. shareholders may suffer adverse tax consequences.

We will be a passive foreign investment company, or PFIC, if 75% or more of our gross income in a taxable year, including our pro rata share of the gross income of any company, U.S. or foreign, in which we are considered to own, directly or indirectly, 25% or more of the shares by value, is passive income. Alternatively, we will be considered to be a PFIC if at least 50% of our assets in a taxable year, averaged over the year and ordinarily determined based on fair market value and including our pro rata share of the assets of any company in which we are considered to own, directly or indirectly, 25% or more of the shares by value, are held for the production of, or produce, passive income. If we were to be a PFIC, and a U.S. Holder does not make an election to treat us as a qualified electing fund, or QEF, or a mark to market election, excess distributions to a U.S. Holder, and any gain recognized by a U.S. Holder on a disposition or our ordinary shares, would be taxed in an unfavorable way. Among other consequences, our dividends, to the extent that they constituted excess distributions, would be taxed at the regular rates applicable to ordinary income, rather than the 15% maximum rate applicable to certain dividends received by an individual from a qualified foreign corporation, and certain interest charges may apply. In addition, gains on the sale of our shares would be treated in the same way as excess distributions. The tests for determining PFIC status are applied annually and it is difficult to make accurate predictions of future income and assets, which are relevant to the determination of PFIC status. In addition, under the applicable statutory and regulatory provisions, it is unclear whether we would be permitted to use a gross loss from sales (sales less cost of goods sold) to offset our passive income in the calculation of gross income. In light of the uncertainties described above, no assurance can be given that we will not be a PFIC in any year. If we determine that we have become a PFIC, we will then notify our U.S. Holders and provide them with the information necessary to comply with the QEF rules. A U.S. Holder who makes a QEF election is taxed currently on such holder s proportionate share of our earnings. If the IRS determines that we are a PFIC for a year with respect to which we have determined that we were not a PFIC, however, it might be too late for a U.S. Holder to make a timely QEF election, unless the U.S. Holder qualifies under the applicable Treasury regulations to make a retroactive (late) election. U.S. Holders who hold ordinary shares during a period when we are a PFIC will be subject to the foregoing rules, even if we cease to be a PFIC, subject to exceptions for U.S. Holders who made a timely QEF or mark-to-market election, or certain other elections.

The trading volume of our shares has been low in the past and may be low in the future, resulting in lower than expected market prices for our shares.

Our shares have been traded at low volumes in the past and may be traded at low volumes in the future for reasons related or unrelated to our performance. This low trading volume may result in lower than expected market prices for our ordinary shares and our shareholders may not be able to resell their shares for more than they paid for them.

Israeli courts might not enforce judgments rendered outside of Israel.

We are incorporated in Israel. Most of our executive officers and all of our directors are non-residents of the United States, and a substantial portion of our assets and the assets of these persons are located outside the United States. Therefore, it may be difficult to enforce a judgment obtained in the United States against us or any such persons. It may also be difficult to enforce civil liabilities under U.S. federal securities laws in original actions instituted in Israel. However, subject to certain time limitations, Israeli courts may enforce United States final executory judgments for liquidated amounts in civil matters obtained after due trial before a court of competent jurisdiction (according to the rules of private international law currently prevailing in Israel) which enforces similar Israeli judgments, provided that the requisite procedural and legal requirements are adhered to. If a foreign judgment is enforced by an Israeli court, it generally will be payable in New Israeli Shekels, which can then be converted into foreign currency at the rate of exchange of such foreign currency on the date of payment. Pending collection, the amount of the judgment of an Israeli court stated in New Israeli Shekels (without any linkage to a foreign currency) ordinarily will be linked to the Israeli consumer price index plus interest at the annual statutory rate prevailing at such time. Judgment creditors bear the risk of unfavorable exchange rates.

The political environment and hostilities in Israel could harm our business.

Since the establishment of the State of Israel in 1948, a state of hostility has existed between Israel and the Arab countries in the region. This state of hostility has varied in degree and intensity over time. There has been a significant increase in violence since September 2000 which has continued with varying levels of severity into 2004, and negotiations between Israel and Palestinian representatives has ceased. Since late September 2000, there has been a significant increase in hostilities and unrest as between Israel, the Palestinian Authority and certain terrorist groups operating within the Palestinian Authority. While this development has not had a material impact on our business, we cannot guarantee that it will not have such an effect in the future. The political and security situation in Israel may result in parties with whom we have contracts claiming that they are not obligated to perform their commitments under those agreements pursuant to force majeure provisions. Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its present trading partners could adversely affect our operations and could make it more difficult for us to raise capital. Furthermore, many of our facilities are located in Israel. Since we do not have a detailed disaster recovery plan that would allow us to quickly resume business activity, we could experience serious disruptions if acts associated with this conflict result in any serious damage to our facilities. Our business interruption insurance may not adequately compensate us for losses that may occur and any losses or damages incurred by us could have a material adverse effect on our business. Any future armed conflicts or political instability in the region would likely negatively affect business conditions and harm our results of operations.

Many of our employees in Israel are required to perform military reserve duty.

All non-exempt male adult permanent residents of Israel under the age of 40 are obligated to perform military reserve duty and may be called to active duty under emergency circumstances. In recent years, there have been significant call-ups of military reservists, and it is possible that there will be additional call-ups in the future. While we have operated effectively despite these conditions in the past, we cannot assess what impact these conditions may have in the future, particularly if emergency circumstances arise. Our operations could be disrupted by the absence for a significant period of one or more of our executive officers or key employees or a significant number of our other employees due to military service. Any disruption in our operations would harm our business.

We are affected by volatility in the securities markets.

Due to the recent downturn in the world economy, the securities markets in general have recently experienced volatility which has particularly affected the securities of many high-technology companies and particularly those in the fields of communications, software and Internet, including companies that have a significant presence in Israel. This volatility has often been unrelated to the operating performance of these companies and may cause difficulties in raising additional financing required to effectively operate and grow their businesses. Such difficulties and the volatility of the securities markets in general may affect our financial results.

We have been and may continue to be negatively affected by the aftermath of September 11 events.

On September 11, 2001, the United States was subject to terrorist attacks at the World Trade Center buildings in New York City and at the Pentagon in Washington, D.C. In response to these terrorist attacks, a United States-led coalition of nations commenced a series of retaliatory military strikes in Afghanistan upon strategic installations of the Taliban regime. Another United States-led coalition also conducted a war in Iraq which led to the end of Saddam Hussein s regime. These events have had, and we expect will continue in the foreseeable future to have, an adverse effect on the global economy, and could result in a disruption of our business or that of our customers.

We are affected by worldwide downturns in industries based on technology.

The volatility in the securities markets discussed above and its effect on high-technology companies may have a ripple effect on our performance. Cable companies and internet providers were severely affected by the recent downturn in internet related technologies, and some were forced to cease operations. We felt the effects of this downturn in 2001 through 2003. We can give no assurance that our results will not be affected on a going forward basis by any future downturns.

Item 4. INFORMATION ON THE COMPANY.

History and Development of the Company

Our legal and commercial name is Silicom Ltd. We were incorporated under the laws of Israel in 1987, and we operate under Israeli law and legislation. Our registered and principal executive offices are located in Israel at 8 Hanagar Street, Kfar Sava, Israel 44000, and our telephone number is 011-972-9-764-4555. Our website is http://www.silicom.co.il. We do not intend for any information contained on our internet website to be considered part of this annual report.

We are engaged in the design, manufacture, marketing and support of connectivity solutions for a broad range of computer users. Our first products were integrated circuits for information technology, or IT, manufacturers. In the early 1990s, we began focusing our strategy on designing, manufacturing, marketing and supporting a range of connectivity solutions for mobile and remote personal computer, or PC, users. Our traditional line of products serves as a communication gateway to enable portable computers to access information and resources found on Local Area Networks (LANs) and Wide Area Networks (WANs).

Responding to changes in the market for connectivity products, we leveraged our expertise in developing connectivity solutions for portable and desktop computer users and introduced a range of connectivity solutions which facilitate connection between PCs and broadband internet modems in the years 2000 and 2001. In 2002 we leveraged our expertise and know-how in networking and operating systems to develop a line of high-end multi-port server/storage networking cards, which we expect to be the principal engine of our sales growth in the coming years. In November and December of 2003 we secured our first design wins for these new products. Since that time we have started to receive orders for our server/storage products and have been able to secure additional design wins. In April 2004, we announced our new TOE/iSCSI Storage/Server Network Adapters.

Business Overview

Our business model is based on the exploitation of our core intellectual property relating to connectivity solutions and networking. On one side of the spectrum, at the conception or pure thought stage, we offer production files in which we develop the required product and deliver full documentation needed to produce the product. In the middle of the spectrum, we design modules which are subassemblies containing our intellectual property for integration into products of other companies. At the far end of the IP spectrum, we produce completed products which fulfill the time-to-market needs of our clients.

We are currently active in the following markets, each of which is described in greater detail below:

High-end Server/Storage networking cards: this is the newest area in which we are leveraging our expertise in networking and operating systems.

Connectivity solutions for portable PCs: this is our traditional area of expertise, in which demand for our products has significantly declined and in which we expect to fully phase out over time.

Broadband Internet access: this is the area in which we leveraged our core technology and connectivity solutions know-how in 2000 and 2001. Our operations in this industry are declining as well.

High end Server/Storage Networking Cards

In an effort to leverage our strengths, in late 2001 we began exploring a new direction which we feel will be our primary growth driver in the future: high-end server/storage networking cards. Our core expertise has always been our broad range of Ethernet and connectivity products, which provided personal computer users with solutions to their connectivity problems. In late 2002 we decided to employ our core know-how in the realm of server-based systems. Doing so takes advantage of our competitive edge by using the expertise we have developed in connectivity solutions for personal computers in industries which require broader connectivity solutions with very high-performance environments. These industries include data storage, video on demand, internet content delivery, high-performance computing, web servers, security appliances, etc. Our decision to move into the server-based systems area also capitalizes on our previous experience with the storage market. In order to increase our sales efforts and to improve our access to the relevant markets, we opened two new sales offices in the U.S., one in the Boston area and the other in California, both targeted to sell networking cards to the server-based industries.

We believe that the high-end storage/server networking cards will be the key driver of our growth in the coming years. A distinct advantage of these products is that the demand in the Server/Storage industry has been almost continuously growing. Server-based systems and data storage are industries that continue to require innovative solutions which must become faster each time they are implemented. However, it is taking us time to build our customer base as a result of the fact that the sales cycles for products in this industry are long. Once we begin to build this base, though, each success we have may represent an opportunity for sustained, long-term revenues.

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We have developed a line of products for the evolving server networking industry which facilitates interaction between servers, allowing them to communicate with each other. It would be difficult to design such high-end products without a high level of cross-disciplinary knowledge. The products we have developed use our Ethernet and operating systems expertise. The first products in this line are eight multi-port Gigabit-Ethernet Server/Storage Networking cards. These are powerful products that allow server-based systems to fully exploit the high-speed potential of Gigabit Ethernet. The products have either two, four or six ports, which plug into the servers between which interaction is facilitated. We subsequently developed some of these same products with a bypass feature. Intended for mission-critical environments, the Silicom Gigabit Ethernet Bypass Adapters feature innovative bypass circuitry to maintain continuity of network connectivity in the event of a gateway failure. Upon the occurrence of a gateway failure, the adapter s bypass mechanism automatically reroutes traffic to bypass faulty components, enabling customers to have reliable and always available network accessibility. As with all of Silicom s Multiport Gigabit Ethernet Adapters, the Bypass Adapters also improve server throughput and performance during normal operations by reducing network congestion, simplifying network management, and minimizing CPU utilization. The addition of the innovative bypass capability makes Silicom Gigabit Ethernet Bypass Adapters an appropriate connectivity solution for security appliances, as well as for appliances targeted at other high-potential, growing markets such as network monitoring, load balancing, network event management, network optimization, LAN policy enforcement, intrusion detection, virus protection, e-mail content filtering, and more. Our main competitors in this area, Intel and 3Com Corporation, have developed cards which do not cover the full scope of features that our products do. For instance, Intel s and 3COM s products do not offer six ports, quad optical, or a bypass feature. We believe that our expanded feature set coupled with the fact that our products are based on two different industry leader chip sets, which makes them more compatible with our potential customers needs, gives us a competitive edge. To the best of our knowledge we are currently the only company offering such a product with six ports and offering 3 types of bypass cards (Dual port copper, quad port copper and Dual port optical). Although the situation may change in the future, we believe that our competition in the bypass card market is less significant than in the non bypass card market.

The following is a brief description of our new networking products:

The products are divided into two groups: six products are based on Broadcom s chipset and six products are based on Intel s chipset.

Products based on Broadcom s chipset are: PXG6, PXG4, PXG2, PXG2F, PXG2BP, PXG4BP. The number in each product name represents the number of Gigabit-Ethernet ports that the product has. The F (in the fourth product) represents a Fiber-optic Ethernet interface, rather than a copper Ethernet interface as in the other products. Products based on the Intel chipset carry the same name with an addition of I at the end to indicate the Intel chipset. We have: PXG6i, PXG4i, PXG2i, PXG2Fi, PXG4Fi and PXG2BPFi. Except for the difference in the type of chipset, number of ports and type of Ethernet interface, all of the following other principal applications and key features of these products are similar:

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Principal Applications, all of which demand high performance multi port connectivity:

- Network-attached storage (NAS)
- Video on Demand servers
- Content Delivery servers
- Internet Service Providers / Web Hosting
- Firewalls, Gateways & Routers
- Network segmentation for network security purposes.

Key Features which enable high performance Gigabit speed multi port cards:

- Six, four or two independent copper, or, four or two independent fiber, Gigabit Ethernet channels with support for Gigabit Ethernet (1000Base-T), Fast Ethernet (100Base-Tx), and Ethernet (10Base-T)
- Auto-negotiation automatic sensing and switching between 1000Mbps full duplex or 100 / 10 Mbps operations Simplex or Full Duplex
- Host Interface standard support:
  - PCI v2.2 32/64 bit, 33/66Mhz
  - PCI-X v1.0 32/64-bit, 66/100/133MHz
- Individual MAC address for each port (support multiple domain/IP networks)
- Ultra deep, 64 KB packet buffer per channel, which lowers CPU utilization and avoids PCI-X congestion