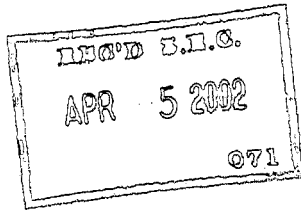
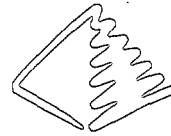


ARIS  
PE. 12/31/01

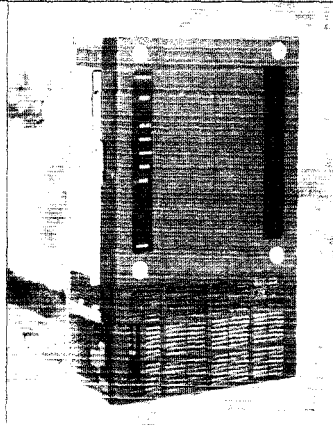


02029749



TUT SYSTEMS® *TAC*

ANNUAL REPORT 2001



PROCESSED  
APR 15 2002  
THOMSON FINANCIAL *P*



Transforming Broadband into Services

To our Stockholders:

While 2001 marked a very challenging year for Tut Systems and the entire telecommunications industry, we executed across a number of fronts throughout this past year to better position ourselves for increased growth going forward. Specifically, we carefully managed our financial resources, expanded our strategic focus to address new markets, and introduced an exciting new product line aimed at the growing market for advanced video and high-speed Internet services.

New Products and Technology for an Expanded Market Focus

Our core business is the design, development and marketing of next-generation, full-service systems based on very high-speed digital subscriber lines and other proprietary technologies. Our systems enable phone companies and other service providers to deliver broadcast television, video-on-demand, video conferencing and high-speed Internet data services as a bundled service over the existing copper telephone lines found in residential homes and multi-tenant complexes like apartments, hotels and commercial buildings. The growth in demand for broadband services continues unabated and we have designed our full-service family of products to take advantage of this demand.

Our new IntelliPOP 8000 platform is intended for large-scale neighborhood and metropolitan area deployment. Powered by our proprietary Signature Switch™ technology, the IntelliPOP 8000 product line gives incumbent service providers a powerful new way to enhance their revenues, to compete for cable television, video-on-demand, and other broadband service dollars, and to recognize a higher return on their embedded investments in optical fiber and copper telephone infrastructure. The IntelliPOP 8000 is designed to support the standards, feature requirements, and business objectives of the Full Service-VDSL (FS-VDSL) Committee of major incumbent local exchange carriers (ILECs) and post, telephone, and telegraph (PTT) companies. In March, 2002, we demonstrated our IntelliPOP 8000 product line at a meeting of the Full Service-VDSL Committee in Denver, Colorado.

Our IntelliPOP 5000 product line also remains a key part of our product and market strategy. It, too, incorporates Signature Switch technology, and is intended for deployment in multi-tenant complexes where high-speed data or video applications are required. Our subscriber management system, the SMS 2000, and our Espresso™ product lines supplement the IntelliPOP 5000 product line for multi-tenant unit markets and provide for plug and play installation, subscriber authentication, bandwidth management and other features required by leading-edge hotel and apartment applications.

Our Vision

Our long-term goal remains clear – to be the dominant provider of advanced full-service broadband access systems that exploit the large existing infrastructure of copper telephone wires within residential neighborhoods and multi-tenant complexes.

Our strategy is to continue penetration of the multi-tenant unit market and break new ground in the market for broadband services delivered to single-family residential homes. Our competitive advantage stems from our ability to offer standards-based solutions with proprietary enhanced service capabilities. In addition, our platform architecture is scalable and therefore inherently capable of satisfying the economically sensitive business requirements for both competitive local exchange carriers and the world's largest incumbent service providers.

We have a dedicated team that has shown their determination to focus our technology and products on new market opportunities. We have emerged from a difficult year as a stronger, better-positioned company that remains committed to delivering results and building stockholder value. We appreciate the efforts of our employees and the loyalty of our stockholders.



Salvatore D'Auria  
Chairman, President, Chief Executive Officer  
and Secretary

FORM 10-K

---

---

# SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

---

## FORM 10-K

(Mark One)

- Annual Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934  
For the fiscal year ended December 31, 2001
- Transition Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 000-25291

---

### TUT SYSTEMS, INC.

(Exact name of Registrant as specified in its charter)

Delaware  
(State or other jurisdiction  
of incorporation or organization)

94-2958543  
(I.R.S. Employer  
Identification No.)

5964 West Las Positas Blvd.  
Pleasanton, California  
(address of principal executive offices)

94588-8540  
(zip code)

Registrant's telephone number, including area code: (925) 460-3900

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

Securities registered pursuant to Section 12(g) of the Act: Common Stock, \$0.001 par value  
(Title of Class)

---

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

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

The aggregate market value of voting stock held by non-affiliates of the Registrant was approximately \$38,073,919 as of December 31, 2001 based on the closing price of the common stock as reported on The Nasdaq National Market for December 31, 2001. There were 16,411,172 shares of the Registrant's common stock issued and outstanding on December 31, 2001.

#### DOCUMENTS INCORPORATED BY REFERENCE

Certain information called for by Part III is incorporated by reference to the definitive proxy statement for the annual meeting of the stockholders, which will be filed with the Securities and Exchange Commission not later than 120 days after December 31, 2001.

---

---

TUT SYSTEMS, INC.  
ANNUAL REPORT ON FORM 10-K  
TABLE OF CONTENTS

<u>ITEM NO.</u>	<u>Page</u>
PART I	
1. BUSINESS .....	1
2. FACILITIES .....	11
3. LEGAL PROCEEDINGS .....	11
4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS .....	12
PART II	
5. MARKET FOR THE REGISTRANT'S COMMON STOCK AND RELATED STOCKHOLDER MATTERS .....	13
6. SELECTED CONSOLIDATED FINANCIAL DATA .....	14
7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS .....	15
7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK .....	43
8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA .....	44
9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE .....	72
PART III	
10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT .....	72
11. EXECUTIVE COMPENSATION .....	72
12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT ..	72
13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS .....	72
PART IV	
14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K ....	73

## PART I

### IMPORTANT NOTE ABOUT FORWARD-LOOKING STATEMENTS

*This Annual Report on Form 10-K contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements include, but are not limited to, statements about our revenue sources, our cash flow and cash position, our expense trends, product and standards development, and our plans, objectives, expectations and intentions and other statements contained in this Annual Report on Form 10-K that are not historical facts. When used in this Annual Report on Form 10-K, the words "anticipates," "believes," "continue," "could," "estimates," "expects," "intends," "may," "plans," "seeks," "should," "will" or the negative of these terms or similar expressions are generally intended to identify forward-looking statements. Because these forward-looking statements involve risks and uncertainties, there are important factors that could cause actual results to differ materially from those expressed or implied by these forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. These forward-looking statements reflect current views of our management with respect to future events and are subject to these and other risks, uncertainties and assumptions. As a result, actual results may differ materially from the forward-looking statements contained herein. Such risks and uncertainties include those set forth in Part II, Item 7—"Management's Discussion and Analysis of Financial Condition and Results of Operations—Additional Risk Factors that Could Affect our Operating Results and the Market Price of our Stock." In particular, see "Additional Risk Factors that Could Affect our Operating Results and the Market Price of our Stock—We have a history of losses and expect to continue to incur losses in the future," "—Our operating results may fluctuate significantly, which could cause our stock price to decline," and "—We are and continue to be affected by poor general economic conditions that have resulted in significantly reduced sales levels and, if such adverse economic conditions continue or worsen, our business, operating results and financial condition could be negatively impacted." All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by this paragraph.*

#### ITEM 1. BUSINESS

##### Overview

Our principal executive offices are located at 5964 West Las Positas Boulevard, Pleasanton, California 94588-8540. Our telephone number is (925) 460-3900. We were incorporated in California in August 1983, began operations in August 1991 and reincorporated in Delaware in September 1998.

We design, develop, and market full-service access systems which enable service providers to deliver broadband services to single-family homes, referred to as neighborhood dwelling units, or NDUs, and to tenants residing in multi-tenant unit properties, or MTUs. Our systems use the existing copper telephone wiring found in neighborhoods and buildings to simultaneously deliver multiple broadband services such as interactive digital broadcast television, video-on-demand services, telecommuter data service, high-speed Internet access and high-quality voice services over a single pair of telephone-grade wires. Our target customers are broadband service providers that include telephony-based incumbent local exchange companies, or ILECs, such as the former regional bell operating companies, or RBOCs, and international post, telephone, and telegraph companies, or PTTs, as well as regulated and unregulated competitive local exchange carriers, or CLECs, who aim to deliver services over existing copper infrastructures.

Our IntelliPOP™ 8000 platform is intended for large-scale neighborhood and metropolitan area deployment. Powered by our proprietary Signature Switch™ technology, these products provide for advanced quality of service, or QoS, management across multiple voice, video, and data applications while providing scalability to support from tens to thousands of residential or commercial subscribers per system. Our IntelliPOP 5000 product line, also incorporating Signature Switch technology, is intended for deployment in multi-tenant complexes

where high-speed data or video applications are required. Our Subscriber Management System, or SMS, and Espresso product lines provide for plug and play installation, subscriber authentication, web portal redirection, internet protocol, or IP, address management and other features required by leading-edge hotel and apartment applications. Our XL product line enables Ethernet networks to be extended over distances of up to 20,000 feet over ordinary telephone wire.

## **Industry Background**

### *Increasing Commercial and Residential Demand for Broadband Services*

In recent years, there has been a significant increase in demand by businesses and consumers for high-speed data access to the Internet and to private corporate networks. This demand is being driven by the growth in users who are accessing networks for a variety of applications, including communications via the Internet and corporate intranets, electronic commerce, and telecommuting. This growth in data applications has created a need for more broadband transmission bandwidth and for intelligent systems to manage this bandwidth across the multiple applications that often have to compete for access to this bandwidth. In addition to an increasing demand for broadband data services, there has been substantial consumer demand for advanced digital-based entertainment systems and services. The industry has seen rapid growth in devices such as MP-3 and DVD players and in services such as digital cable television service and digital broadcast television service via satellite.

To meet this increasing need for broadband video and data services, service providers have significantly upgraded both backbone and local networks with broadband fiber optic facilities and high-speed switches, routers, and multiplexers. In many cases, these service providers are extending fiber optic links all the way to residential neighborhoods or to the basements of multi-tenant buildings. Although service providers are bringing broadband facilities closer to residential and commercial end users, they remain challenged by the cost and logistics associated with extending this bandwidth all the way to Internet devices or digital set-top boxes in a consumer's home or to the local area network, or LAN, of a small business office. These challenges are particularly acute for telephony-based service providers where the majority of the existing "last mile" infrastructure tends to be the copper wires being used to provide existing telephone service.

### *Worldwide Telecommunications Deregulation and New Technology Spawns Competition for Bundled Services*

An open regulatory framework for telecom services and advances in broadband technology have led to cable television companies offering voice services, satellite companies offering asymmetric digital subscriber line, or ADSL-based high-speed Internet access, and telephone companies offering high-speed Internet access and video services. By bundling multiple voice, video, and data services into a single service package, leading-edge service providers reduce their infrastructure, marketing and sales cost per revenue dollar, while increasing the retention rate and absolute revenue of their customers. Recent developments by cable-based multi-system operators to offer voice and data services as an add-on package to television service will motivate the ILECs to respond with a bundled offering of voice, video, and data services. If the ILECs do not respond, they may be left with a very underutilized and expensive network as their voice and data customers migrate to competitive offerings. Further, recent technology advances in delivering high-speed gigabit-per-second signals over coaxial networks and in delivering two-way broadband services via satellite will continue to put pressure on these telephony-based service providers to also offer an advanced bundle of broadband services.

### *Neighborhood Dwelling Unit (NDU) Market Characteristics*

The NDU market is generally characterized by a concentrated collection of single-family homes within a radius of approximately a half-mile. In the United States, many of these neighborhoods are served by neighborhood digital loop carrier systems, or DLCs, used by the ILEC to provide narrowband voice and data services. It is estimated that over 30% of homes in the United States are served from DLCs for basic telephone service.

In many cases, DLCs are connected to the ILEC's local central office by a broadband fiber facility with capacity to support new broadband services in addition to the narrowband telephone services being provided today. Further, recent advances in transmission technology have led to very high speed digital subscriber line, or VDSL chip sets that can simultaneously transmit 4 or 5 digital television signals plus high-speed Internet access over an ordinary pair of telephone wires from a DLC location to a neighborhood home. These factors provide a significant opportunity for a new generation of full-service broadband access systems that may be positioned alongside of existing, limited-function DLCs to provision the bundled voice, data, and video services demanded by the marketplace.

#### *Multi-Tenant Unit (MTU) Market Characteristics*

As the demand for high-speed Internet access has increased significantly over the last couple of years, owners and managers of apartments, hotels and commercial multi-tenant properties have begun to view high-speed Internet access as a critical enhanced service for their residents, guests and tenants. There is demand from owners of MTU complexes and buildings to offer Internet access and other broadband services as an amenity that effectively attracts and retains occupants, thereby increasing revenue and profitability. This demand is facilitated by worldwide telecommunications deregulation that allows the existing in-building telephone wires to be used by a CLEC to provide voice, video, and/or data services—in many cases without having to pay compensation to the ILEC since these facilities are now under control of the property owner.

Given the complexity and cost of deploying broadband services, many property owners prefer to outsource ownership, installation, operation and management of high-speed Internet solutions to an MTU-focused service provider. In exchange for granting a service provider the ability to market and provide telecommunications services to their properties, these MTU owners have an opportunity to offer new Internet-enabled services to their tenants and to potentially share in some of the service revenues generated from their buildings.

A set of specialized service providers and divisions of ILECs have emerged over the last few years to address the growing demand for high-speed Internet service to the MTU market. While high-speed Internet access is the primary service delivered by these service providers today, we believe that the delivery of multiple services, such as high-speed corporate networking, packet voice and IP video, will be the key to meeting future customer needs and driving service provider profitability through bundled service offerings. The MTU market is attractive to these service providers because of the efficiency of delivering multiple services, often on an exclusive basis, to a geographically concentrated and demographically similar customer base.

#### *The Tut Systems Solution Set*

We design, develop and market full-service broadband access systems using standards-based VDSL, proprietary transmission technologies, and advanced service management software that enable ILECs and other service providers to deliver high-speed data, digital broadcast television, high quality video-on-demand, and other interactive services over the existing copper telephone infrastructure found in NDUs and MTUs. Our products provide service providers with enhanced capabilities such as subscriber management, plug-and-play service installation, bandwidth and quality of service management, video broadcasting, service authorization and automated billing. Our products are designed with the specific requirements of the service provider in mind and provide the following benefits to our customers:

#### *High-Performance, Cost-Effective Deployment of Broadband Services*

Our IntelliPOP and Espresso product lines are designed to leverage the existing fiber and copper infrastructures that are already deployed for the offering of new broadband services. By utilizing existing facilities, service providers minimize both the time and cost associated with deploying new, high-growth, revenue-generating services such as high-speed Internet access and broadcast TV.

Our IntelliPOP and Espresso products are also designed to scale in size so that service providers can closely match their cost of deployment to their revenues. Our IntelliPOP 8000 system can start as small as



100 subscribers but can grow to deliver over 300 broadcast video channels simultaneously along with high-speed Internet access to over 9,600 subscribers per system node, making it one of the most powerful and robust access systems currently available. For video-based residential or data-based commercial MTU applications, our IntelliPOP 5000 product line offers a compact, easy-to-deploy stackable VDSL system that can expand from twelve ports to over a hundred ports per system.

Our Espresso line of products, which use our proprietary HomeRun or LongRun transmission technology, provide a low-cost, plug-and-play Ethernet solution primarily for high-speed Internet access MTU applications. These products can deliver high-speed Internet access to multiple nodes over a single pair of copper wires simultaneously being used for telephone service. Systems can start as small as 8 ports and grow to as many as 136 ports in a single chassis.

Our XL line of Ethernet extension products is often used by individual enterprises to extend their Ethernet networks over distances that cannot be accommodated by standard Ethernet wiring. Some of our XL products operate over distances as long as 20,000 feet and at bit rates up to 10 megabits per second, all over a single pair of ordinary telephone wires.

#### *Multiple Value-Added, Revenue-Enhancing Services*

To enable service providers to efficiently create and deploy new service packages, our IntelliPOP products use proprietary Signature Switch technology, which manages bandwidth to and from the end-user appliance or application. The added flexibility afforded by the Signature Switch technology also allows rapid creation and manipulation of bandwidth guarantees so that consumers can purchase bandwidth on demand for their critical applications. Signature Switch also supports a variety of wholesale and retail business models by enabling a "wholesale" service provider to partition subscribers, and particular applications and devices, within a subscriber's premises, to multiple "retail" service providers in a secure and guaranteed manner.

For MTU applications, both our IntelliPOP and Espresso product lines are enhanced by the deployment of our SMS 2000 subscriber management system. SMS 2000 allows service providers to sell bandwidth on demand for critical data or video applications, manages plug and play Internet access for guests in hotels, manages bandwidth across multiple users or networks, and automates billing for services.

#### **Strategy**

Our objective is to be the dominant provider of advanced full-service broadband access systems that exploit the large existing infrastructure of copper telephone wires within residential neighborhoods and multi-tenant complexes. Key elements of our business strategy are as follows:

- *Prepare for Rapid Growth in NDU Markets with New Products.* Our recently introduced IntelliPOP 8000 family of products is a key part of our expanded strategic focus to address both NDU and MTU markets for advanced voice, video, and data services. During 2002, we expect the IntelliPOP 8000 to evolve into an extended product line with a central office-based service gateway linked to multiple remote VDSL service terminals over standards-based fiber facilities. The IntelliPOP 8000 product line is designed to support the standards, feature requirements, and business objectives of the Full Service-VDSL, or FS-VDSL, Committee of major ILECs and PTTs.
- *Penetrate NDU Markets with Industry Leading Companies.* To deliver an integrated, end-to-end broadband solution to incumbent service providers, we are forming strategic alliances with key industry vendors that provide required system elements such as video encoders, video servers, set-top boxes, and service software that together with our IntelliPOP 8000 products provide a complete full-service solution. Therefore, our business development and strategic marketing efforts will focus on working with such

partners to facilitate a cost-effective, ready-to-deploy, high-performance solution based on Full Service-VDSL, or FS-VDSL, architecture and business requirements.

- *Position our IntelliPOP 8000 Product Line for Early NDU Deployment.* We expect VDSL standards to be finalized and technology trial and vendor selection to begin in 2002. We intend to focus our research and development and marketing efforts to position our IntelliPOP 8000 products favorably with the key broadband service providers that are evaluating VDSL systems in 2002 and are preparing to launch residential video and data services over copper in 2003. Our product development and introduction schedules anticipate delivery of lab systems in mid-2002 and market trial systems in the second half of 2002.
- *Continue Penetration of MTU Markets with our Espresso and IntelliPOP 5000 Products.* We plan to market the cost-effectiveness of our Espresso and SMS 2000 products for continued penetration of MTU applications for high-speed Internet access in apartment, hotel, and student housing complexes. For commercial MTU applications we will stress in our marketing and sales programs the bandwidth management aspects of the IntelliPOP 5000 and Signature Switch as key competitive differentiators.
- *Continue to Develop Advanced Service Capabilities of our Products and Systems.* We will focus a significant part of our R&D effort on the development of enhancements to Signature Switch and related technologies. This effort is focused on making it easier and more cost effective for service providers to introduce, manage, and maintain new broadband services.
- *Expand Sales Efforts to Focus on Large Incumbent Service Providers.* We will continue to maintain and grow our MTU business through competitive service providers, integrators and distributors worldwide. Additionally, we are strengthening our direct sales force to focus on major domestic and international ILECs who see a need for full-service broadband deployment. Our primary focus is on the largest service providers in North America and Europe. We will use and add distributors, agents, and partners internationally as needed to penetrate specific countries or markets.

## Core Technologies and Products

We are building upon our core competencies in IP-based data systems to deliver high quality digital broadcast and interactive video systems to support our expanded focus on the markets for residential bundled video and data services. Our products enable the delivery of broadcast video, video-on-demand, video conferencing and high-speed Internet data services as a bundled service offering over existing copper telephone lines.

### *IntelliPOP VDSL-based Systems:*

#### IntelliPOP 5000

The IntelliPOP 5000 system is a VDSL-based service gateway designed to transmit data, video, or voice traffic at speeds up to 26 megabits per second over ordinary telephone wires found in MTU complexes such as business parks, high-rise office buildings, hotels, and apartments. The product line currently includes the IntelliPOP 5212 Service Gateway with 12 VDSL ports and the IntelliPOP 5102 Service Access Unit to terminate a VDSL line. A comprehensive Tut Management System allows full utilization of the Signature Switch based service and bandwidth management aspects of IntelliPOP. The IntelliPOP 5212 Service Gateway is a compact, 1.75 inch high, stackable service platform that combines the functionality of an edge router, a high-speed switch and an access multiplexer with powerful bandwidth management tools to distribute multiple IP-based services to

individual tenants throughout a small or mid-sized commercial building. The IntelliPOP 5102 Service Access Unit includes two standard Ethernet ports for interfacing with a variety of end-user devices and/or networks. With Signature Switch, the IntelliPOP 5000 product family can manage bandwidth based on any of a number of network parameters such as the IP address of a personal computer, the data protocol being used for transmission, or the source or destination address of a particular flow of traffic. We also intend to include higher port capacities, new wide-area network, or WAN, modules and features specifically tailored to the apartment and hospitality markets in our IntelliPOP 5000 system.

#### IntelliPOP 8000

The IntelliPOP 8000 system is a VDSL-based, high density, carrier-class product line which enables digital television and high-speed Internet services to run over standard telephone and fiber infrastructures found in metropolitan neighborhoods. The IntelliPOP 8100 remote service terminal supports up to 240 lines of VDSL per chassis shelf and is designed to be housed in an environmentally-controlled outdoor cabinet within several thousand feet of neighborhood homes. Each IntelliPOP 8100 is connected over industry standard fiber facilities to an IntelliPOP 8200 switch service gateway residing in the local central office.

The IntelliPOP 8200 acts as a fiber distribution point in a local central office and provides aggregation and video broadcasting to multiple IntelliPOP 8100 nodes located in neighborhoods. Utilizing standard OC-12/STM-4 connections from the central office, the IntelliPOP 8200 will be capable of supporting up to 40 downstream IntelliPOP 8100 systems, resulting in an aggregate broadcast capability of up to 24 gigabits per second across up to 9,600 subscribers.

We expect that the IntelliPOP 8100 will be available for market and laboratory trials in the first half of 2002 while the initial release of the 8200 product is scheduled for the second half of 2002. We also intend to fully integrate Signature Switch bandwidth and service management capabilities into the IntelliPOP 8000 product line in the second half of 2002.

#### *Espresso System Products:*

Our Espresso MDU products are designed for incumbent carriers and other service providers to offer high-speed advanced data services to large numbers of end users over private copper network infrastructures. The Espresso MDU platform has been designed for deployment in residential locations, such as in the basement wiring room of an apartment building or hotel. Espresso MDU is AC-powered and, when integrated with our HomeRun™ or LongRun™ technology, provides owners of private copper networks with an easily deployable and scalable means to distribute high-speed data access to tenants over the copper telephone wires found in MTUs.

HomeRun creates a cost-effective Ethernet LAN over the random topology of home telephone wires, without disturbing existing telephone service. With HomeRun, multiple devices can share peripherals and/or a single high-speed Internet access connection on a 1 megabit per second Ethernet LAN. HomeRun is designed to operate at distances up to 500 feet.

LongRun shares similar modulation techniques with HomeRun but operates at lower baseband frequencies to provide improved performance in the presence of intra-system crosstalk and coverage of longer distances that may be found in many apartment, hotel, and university dormitory complexes. LongRun is intended to operate at distances up to 2,500 feet.

An Espresso MDU system consists of a compact, modular central-site shelf with a simple network management protocol, or SNMP, management card, optional multiplexing cards, and up to 17 DSL HomeRun or LongRun line cards. To provide service to small apartment buildings spread across a garden-style complex in which there is no central wiring point, we developed the Espresso MDU Lite and the Espresso LongRun MDU

Lite. The Espresso MDU Lite contains either eight ports of HomeRun or eight ports of LongRun. Multiple units may be connected together to support more than eight subscribers, and these units may be connected back to a central point via LongRun copper-based products, coax-based cable modems, or radio-based modems.

Our Espresso SMS 2000, a subscriber management system, and companion Espresso OCS operations center software system provide plug-and-play functionality, subscriber management, network address translation, credit card billing, and other functions for the MTU market. The Espresso SMS 2000 system runs on a Red Hat Linux operating system, is typically located on the premises of a MTU complex and supports up to 800 simultaneous user sessions per unit. The centralized Espresso OCS system is a software package that runs on a standard personal computer platform. Each Espresso OCS system can manage up to 300 remote Espresso SMS systems, providing central credit card billing interfaces, accounting records, and access to the accounting and policy databases most often used by CLECs and Internet service providers, or ISPs.

### *XL Products*

We utilize proprietary technology along with commercially available components to build high-speed data access products. In the XL600 product series, we applied our noise reduction and signal processing expertise to build a 10 megabits-per-second, 600 foot Ethernet LAN extension product to operate over a single pair of copper telephone wires. In the XL 4000 product, we also applied our noise reduction and signal processing expertise to enable a 10 megabits-per-second Ethernet LAN extension at distances up to 4,000 feet over a single pair of copper telephone wires. For other XL products, we pioneered the use of rate adaptive synchronous DSL, or SDSL, technology in products that extend transmission distances up to 24,700 feet without the use of repeaters.

### *Customers and Markets*

We develop, market and focus our sales efforts to service providers in both the NDU and MTU markets.

#### *NDU Market*

Over the last year the incumbent carriers have witnessed significant growth in demand for high-speed Internet access services, a significant increase in market penetration by competitive cable operators into the carriers' core telephony services market, and expanded deregulation. These factors have increased the interest and commitment of carriers to deploy advanced broadband capabilities in a bundled full-service package to residential markets. We believe that service providers can deliver broadband services in the most cost-effective manner by using VDSL within a neighborhood community for the last mile of service connectivity over the existing copper infrastructure.

Our potential customers in the NDU market are the largest telecommunications carriers around the world, the former RBOCs and the PTTs that plan to offer a full set of services to their customers. The services envisioned include digital broadcast television channels and video-on-demand services to multiple televisions per household in addition to high-speed Internet access and telephony services. To the extent possible, the former RBOCs and PTTs will leverage their existing fiber and copper infrastructures to deliver these services.

#### *MTU Market*

Service providers, including incumbent carriers, CLECs, ISPs and multiple system operators for the cable industry, can recognize substantial economies of scale by providing high-speed services to tenants of an MTU building from a single point of presence on the MTU property. MTUs include apartment complexes, hotels, university dormitories, hospitals, military housing complexes, high-rise office buildings and commercial campus environments.

Our potential customers in the MTU market include service providers who seek to sell services to owners of MTU complexes interested in seeking to offer advanced amenities to their tenants thereby increasing their property value. Our Espresso MDU and SMS 2000 systems have been designed with features to specifically address the needs of this market. Due to the demise of many domestic competitive service providers over the last 12 months, we are depending more heavily on international customers and certain business divisions of incumbent carriers for continued sales.

## Marketing, Sales and Customer Support

### *Marketing*

We seek to increase demand for our products, expand both the visibility of the company and our products in the market and establish cooperative marketing programs. In addition to customer-specific sales efforts, our marketing activities include attendance at major industry tradeshows and conferences, the distribution of sales and product literature, operation of a web site, direct marketing and ongoing communications with our customers, the press and industry analysts. As appropriate, we enter into cooperative marketing and/or development agreements with strategic partners that may include key customers, semiconductor manufacturers, radio, fiber, or video equipment manufacturers, set-top box manufacturers and others.

### *Sales*

We sell our products through multiple sales channels in the United States, including a select group of regional value added resellers, system integrators and distributors, data networking catalogs and directly to service providers. Internationally, we sell and market our products through sales agents, systems integrators and distributors. In 1999, 2000 and 2001, we established new sales channels in Canada, Europe, South America, Latin America, Australia and Asia. In 1999, we opened a sales office in the United Kingdom. For the year ended December 31, 2001, we derived approximately 56.3% of our revenue from customers outside of the United States. We believe that our products can serve a substantial market for digital video and high-speed data access products outside of the United States.

### *Customer Support*

We believe that consistent high-quality service and support is a key factor in attracting and retaining customers. Service and technical support of our products is coordinated by our customer support organization located in Pleasanton, California. Telecommunications and networking systems engineers provide critical technical support to our customers. Our systems application engineers, located in each of our sales regions, support pre-sales and post-sales activities. We also employ a nationwide third party support organization to handle inquiries from a large number of customers and provide first level telephone technical support and on-site installation and support services. Customers can also access technical information and receive technical support via our web site.

## Research and Development

Our research and development efforts are focused on enhancing our existing products and developing new products through our emphasis on early stage system engineering. The product development process begins with a comprehensive functional product specification based on input from the sales and marketing organizations. We incorporate feedback from end users and distribution channels, and through participation in industry events, industry organizations and standards development bodies, such as the FS-VDSL Committee. Key elements of our research and development strategy include:

- *Core Designs.* We seek to develop platform architectures and core designs that allow for cost-effective deployment and flexible upgrades that meet the needs of multiple markets and applications. These designs emphasize quick time to market and future cost reduction potential. The Espresso GS/MDU and IntelliPOP platforms are a direct result of this strategy.

- *Product Line Extensions.* We seek to extend our existing product lines through product modifications and enhancements in order to meet the needs of particular customers and markets. Products resulting from our product line extension efforts include the Espresso MDU Lite and IntelliPOP 8200.
- *Use of Industry Standard Components.* Our design philosophy emphasizes the use of industry standard hardware and software components whenever possible to reduce time to market, decrease the cost of goods and reduce the risks inherent in new design. We maximize the use of third party software for operating systems and certain protocol stacks, which allows our software engineers to concentrate on hardware-specific drivers, user interface software and advanced features.
- *New Technologies.* We seek to enhance our product lines by incorporating additional digital subscriber line technologies, such as VDSL, higher speed WAN interfaces and new network management software features. Our IntelliPOP suite of products is designed to utilize technology from our Vintel, Xstreamis and ViaGate acquisitions and to incorporate components of our existing products, technologies and designs. Additionally, our active involvement in industry based standards associations, such as the Full Service-VDSL Committee, enables us to incorporate recommended platform architectures and standards into our technology.

### Manufacturing

We do not manufacture any of our own products. We rely on contract manufacturers to assemble, test and package our products. We require ISO 9002 registration for these contract manufacturers as a condition of qualification. We monitor each contractor's manufacturing process performance through audits, testing and inspections. Each contractor's quality is also rigorously assessed through incoming testing and inspection of packaged products received from each contractor. In addition, we monitor the reliability of our products through in-house repair, reliability audit testing and field data analysis.

We currently purchase a substantial portion of the raw materials and components used in our products through contract manufacturers. We forecast our product requirements to maintain sufficient product inventory to ensure that we can meet the required delivery times demanded by our customer base. However, because of recent changes in the industry, we have had to cancel certain finished goods and component orders. These developments may have a negative impact on our ability to diversify our product manufacturing across a larger base of contract manufacturers. Our future success will depend in significant part on our ability to obtain manufacturing on time, at low costs and in sufficient quantities to meet demand.

### Competition

Within the MTU market space, product price and gross margin associated with our sales in certain areas of the Asia-Pacific region have decreased due to intense price competition from local manufacturers of products with less advanced features. Our sales declines in the North American market have less to do with competition and more to do with the deteriorating economics of the service providers who were focused exclusively on the MTU market. To maintain a competitive position in the MTU market, we will focus our MTU product efforts on price reduction, cost reduction and feature partitioning in order to respond to competitive pressures.

The NDU market, represented by the incumbent carriers, is equally competitive yet remains a systems and application-based solution proposition, allowing us to develop feature differentiation and unique competitive positioning. Many of the competitive factors influencing procurement decisions are external to the technology and outside of our ability to control, such as:

- competition against large multi-national suppliers who have both a track record and a large embedded base of ancillary technology;
- incumbent carriers' desire to try to make embedded systems meet demand for new services through future enhancements or upgrades rather than deploying new systems;

- long evaluation cycles and expensive third party testing requirements for new technology; and
- lack of clarity on certain regulatory and US congressional issues creating a potential roadblock to rapid technology adoption.

The markets for our products are intensely competitive, continually evolving and subject to rapid technological change. In order to be competitive in the NDU and MTU markets, we believe that we must continue to adhere to the following principles:

- conform our products to industry standards wherever possible;
- offer a sufficient breadth of product lines to address the needs of the market;
- continue to incorporate additional product features and enhancements in our products, including improvements in product performance, reliability, size, and scalability;
- continue to design and manufacture our products with a focus on low cost and ease of deployment and use;
- continue to increase the effectiveness of our sales and distribution capability;
- continue to provide technical support; and
- respond quickly to service and general industry and economic conditions.

Although we believe that we currently compete favorably with respect to all of these factors, there can be no assurance that we will have the financial resources, technical expertise or marketing, manufacturing, distribution and support capabilities to compete successfully in the future. We expect that competition in each of our markets will increase in the future. Our principal competitors include, or are expected to include, Cisco Systems, Inc., Lucent Technologies, Inc., Next Level Communications, Inc., Paradyne Networks, Inc. and a number of other public and private companies. Many of our competitors and potential competitors have substantially greater name recognition and technical, financial and marketing resources than we do. These competitors may undertake more extensive marketing campaigns, adopt more aggressive pricing policies and devote substantially more resources to developing new products than we can. There can be no assurance that we will be able to compete successfully against current or future competitors or that competitive pressures that we face will not harm our business, financial condition and results of operations. In addition, some of our HomeRun technology licensees have sold aspects of our technology to our competitors. This competition has resulted in price reductions, reduced profit margins and loss of market share in Asia for our Espresso products.

We also compete with technologies that use alternative transmission media such as coaxial cable, wireless facilities and fiber optic cable. To the extent that telecommunications service providers choose to install fiber optic cable or other transmission media in the last mile, or to the extent that homeowners and businesses install other transmission media within buildings, we expect that demand for our copper telephone wire-based products will decline. These competitive pressures from alternative transmission technologies may further necessitate reductions in the prices of our existing and future products.

### Proprietary Rights

Our success and ability to compete is dependent in part on our proprietary technology. We rely on a combination of patent, copyright and trade secret laws and non-disclosure agreements to protect our proprietary technology. We currently hold 26 United States patents and have 26 United States patent applications pending. We cannot assure you that patents will be issued with respect to pending or future patent applications or that our patents will be upheld as valid or will prevent the development of competitive products. We seek to protect our intellectual property rights by limiting access to the distribution of our software, documentation and other proprietary information. In addition, we enter into confidentiality agreements with our employees and certain customers, vendors and strategic partners. The steps we take in this regard may be inadequate to prevent

misappropriation of our technology and our competitors may independently develop technologies that are substantially equivalent or superior to our technologies. We are also subject to the risk of adverse claims and litigation alleging infringement of the intellectual property rights of others. In this regard, there can be no assurance that third parties will not assert infringement claims in the future with respect to our current or future products or that such claims will not require us to enter into license arrangements or result in protracted and costly litigation, regardless of the merits of those claims. We cannot assure you that any necessary licenses will be available or that, if available, these licenses can be obtained on commercially reasonable terms.

#### Employees

As of December 31, 2001, we employed 146 persons, including:

- 16 in operations;
- 36 in sales, marketing and customer support;
- 73 in research and development; and
- 21 in finance, administration and information technology support.

We also employ a number of contract employees, including those utilized for technical publication drafting and systems verification. None of our employees are represented by a labor union and we have experienced no work stoppages to date.

#### ITEM 2. FACILITIES

Our principal administrative and engineering facilities are located in facilities totaling approximately 89,000 square feet located in Pleasanton, California. In addition, we lease engineering and administrative facilities totaling approximately 20,200 square feet in Sunnyvale, California and engineering facilities totaling approximately 9,500 square feet in Bridgewater Township, New Jersey. The lease for the Pleasanton facility expires in April 2007, with an option to renew for five years. The lease for the Sunnyvale facility expires in August 2002 and the lease for the Bridgewater Township facility expires in November 2006. We vacated facilities in Ann Arbor, Michigan; Beaverton, Oregon and Sunnyvale, California in June 2001. The remaining costs for these facilities were included as part of our restructuring costs recorded in the second quarter of 2001. We believe that our facilities will be adequate to meet our requirements for the foreseeable future and that suitable additional or substitute space will be available as needed.

#### ITEM 3. LEGAL PROCEEDINGS

Beginning July 12, 2001, six putative shareholder class action lawsuits were filed in the United States District Court for the Northern District of California against us and certain of our current and former officers and directors. The complaints were filed on behalf of a purported class of people who purchased our stock during the period between July 20, 2000 and January 31, 2001, seeking unspecified damages. The complaints allege that we and certain of our current and former officers and directors made false and misleading statements about our business during the putative class period. Specifically, the complaints allege violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934. The complaints have been consolidated under the name *In re Tut Systems, Inc. Securities Litigation*, Civil Action No. C-01-2659-JCS. Lead plaintiffs and lead counsel for plaintiffs have been appointed. Plaintiffs filed a consolidated class action complaint on February 4, 2002. We and our current and former officers and directors believe the allegations against us and them are without merit and intend to defend the action vigorously. An unfavorable resolution of this litigation could have a material adverse effect on our business, results of operations, or financial condition.

On August 3, 2001, a complaint, *Arrow Electronics, Inc. v. Tut Systems, Inc.*, Case No. CV 800433, was filed in the Superior Court of the State of California for the County of Santa Clara against us. The Complaint was filed by one of our suppliers and alleges causes of action for breach of contract and for money on common



counts. The Complaint seeks damages in the amount of \$10,469,088. There has been no discovery to date and no trial has yet been scheduled. We deny liability and intend to defend ourselves vigorously. An unfavorable resolution of this litigation could have a material adverse effect on our business, results of operations, or financial condition.

On October 30, 2001, we and certain of our current and former officers and directors were named as defendants in *Whalen v. Tut Systems, Inc. et al.*, Case No. 01-CV-9563, a purported securities class action lawsuit filed in United States District Court, Southern District of New York. An amended complaint was filed on December 5, 2001. The amended complaint asserts that the prospectuses from our January 29, 1999 initial public offering and our March 23, 2000 secondary offering failed to disclose certain alleged actions by the underwriters for the offerings. The complaint alleges claims against us and certain of our current and former officers and directors under Section 11 of the Securities Act of 1933, as amended (the "1933 Act") and alleges claims against certain of our current and former officers and directors under Section 15 of the 1933 Act. The complaints also name as defendants the underwriters for our initial public offering and secondary offering. We and our current and former officers and directors believe the allegations against us and them are without merit and intend to defend the action vigorously. An unfavorable resolution of this litigation could have a material adverse effect on our business, results of operations, or financial condition.

#### ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.

PART II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON STOCK AND RELATED STOCKHOLDER MATTERS

Our common stock has been quoted on the Nasdaq National Market under the symbol "TUTS" since our initial public offering in January 1999. The following table sets forth, for the periods indicated, the low and high closing sales prices per share of the common stock by quarter for 2000 and 2001, as reported on the Nasdaq National Market.

	<u>Low</u>	<u>High</u>
2000:		
First Quarter .....	\$39.00	\$ 72.38
Second Quarter .....	31.38	63.13
Third Quarter .....	55.44	115.50
Fourth Quarter .....	6.16	79.25
2001:		
First Quarter .....	2.94	8.13
Second Quarter .....	1.49	3.30
Third Quarter .....	0.61	1.68
Fourth Quarter .....	0.61	2.40

On March 18, 2002, the last reported sale price of our common stock on the Nasdaq National Market was \$1.99 per share. As of March 18, 2002, there were 16,411,172 shares of our common stock outstanding and approximately 321 holders of record of our common stock.

We have not paid dividends in the past and we intend to retain earnings, if any, and will not pay dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of the board of directors and will be dependent upon our financial condition, results of operations, capital requirements, general business conditions and such other factors as our board of directors may deem relevant.

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

	Years Ended December 31,				
	2001	2000	1999	1998	1997
	(in thousands, except per share data) (unaudited)				
<b>Statement of Operations Data:</b>					
Total revenues	\$ 13,748	\$ 71,991	\$ 27,807	\$ 10,555	\$ 6,221
Total cost of goods sold	40,489	69,983	15,459	5,809	3,228
Gross (loss) margin	(26,741)	2,008	12,348	4,746	2,993
<b>Operating expenses:</b>					
Sales and marketing	12,413	19,945	10,523	8,462	5,147
Research and development	15,044	17,149	7,618	6,200	3,562
General and administrative	9,118	11,503	4,194	2,703	2,362
Restructuring costs	2,311	—	—	—	—
In-process research and development	1,160	800	2,600	—	—
Impairment of intangibles	32,551	—	—	—	—
Amortization of intangibles	8,085	7,623	52	—	—
Noncash compensation expense	182	438	455	1,233	1,260
Provision for doubtful accounts	848	22,546	235	104	13
Total operating expenses	81,172	80,004	25,677	18,702	12,344
Loss from operations	(108,453)	(77,996)	(13,329)	(13,956)	(9,351)
Other income, net	4,128	3,899	1,596	210	195
Loss before income taxes	(104,325)	(74,097)	(11,733)	(13,746)	(9,156)
Income tax expense	1	1	1	1	1
Net loss	(104,326)	(74,098)	(11,734)	(13,747)	(9,157)
Dividend accretion on preferred stock	—	—	235	2,584	1,627
Net loss attributable to common stockholders	<u>\$(104,326)</u>	<u>\$(74,098)</u>	<u>\$(11,969)</u>	<u>\$(16,331)</u>	<u>\$(10,784)</u>
Net loss per share attributable to common stockholders, basic and diluted	<u>\$ (6.39)</u>	<u>\$ (4.98)</u>	<u>\$ (1.12)</u>	<u>\$ (60.62)</u>	<u>\$ (59.36)</u>
Shares used in computing net loss per share attributable to common stockholders, basic and diluted	<u>16,326</u>	<u>14,866</u>	<u>10,729</u>	<u>269</u>	<u>182</u>

	December 31,				
	2001	2000	1999	1998	1997
	(in thousands) (unaudited)				
<b>Balance Sheet Data:</b>					
Cash, cash equivalents and short-term investments	\$ 49,367	\$ 102,614	\$ 32,236	\$ 4,452	\$ 10,285
Working capital	51,484	110,920	44,416	7,173	11,066
Total assets	78,992	205,588	65,356	15,257	15,168
Redeemable convertible preferred stock and warrants	—	—	—	45,995	38,871
Long-term debt, net of current portion	—	—	—	4,262	140
Accumulated deficit	(234,911)	(130,585)	(56,487)	(44,434)	(28,103)
Total stockholders' equity (deficit)	66,096	166,173	51,522	(41,839)	(26,444)

The following table presents certain unaudited consolidated quarterly financial information for each of the eight quarters ended December 31, 2001. In the opinion of management, this quarterly information has been prepared on the same basis as the consolidated financial statements and includes all adjustments necessary to present fairly the information for the periods presented. The results of operations for any quarter are not necessarily indicative of results for the full year or for any future period.

	Quarter Ended							
	Dec. 31, 2001	Sep. 30, 2001	Jun. 30, 2001	Mar. 31, 2001	Dec. 31, 2000	Sep. 30, 2000	Jun. 30, 2000	Mar. 31, 2000
	(in thousands, except per share data) (unaudited)							
Total revenues	\$ 2,172	\$ 3,967	\$ 2,722	\$ 4,887	\$ 5,936	\$28,567	\$21,014	\$16,474
Gross (loss) margin	588	(10,648)	179	(16,860)	(28,612)	13,503	9,780	7,337
Net loss	(6,526)	(49,832) <sup>(1)</sup>	(13,999)	(33,969) <sup>(2)</sup>	(68,071) <sup>(3)</sup>	(611)	(1,180)	(4,236)
Net loss per share, basic and diluted	\$ (0.40)	\$ (3.05)	\$ (0.86)	\$ (2.10)	\$ (4.28)	\$ (0.04)	\$ (0.08)	\$ (0.34)
Shares used in computing net loss per share, basic and diluted	16,395	16,353	16,316	16,213	15,900	15,751	15,302	12,435

(1) The net loss of \$(49,832) in the third quarter of 2001 includes a provision for excess and obsolete inventory of \$11,425 and an impairment of intangibles of \$29,859.

(2) The net loss of \$(33,969) in the first quarter of 2001 includes a provision for excess and obsolete inventory of \$18,500, an impairment of intangibles of \$2,692 and an in-process research and development expense of \$1,160 related to our ActiveTelco acquisition.

(3) The net loss of \$(68,071) in the fourth quarter of 2000 includes a provision for loss on purchase commitments and abandoned products of \$27,223, a provision for doubtful accounts of \$22,338 and an impairment of certain equity investments of \$3,100.

#### ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" set forth below contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements include, but not limited to, statements about our revenue sources, our cash flow and cash position, our expense trends, products and standards development, and our plans, objectives, expectations and intentions and other statements contained herein that are not historical facts. When used herein, the words "anticipates," "believes," "continue," "could," "estimates," "expects," "intends," "may," "plans," "seeks," "should," "will" or the negative of these terms or similar expressions are generally intended to identify forward-looking statements. Because these forward-looking statements involve risks and uncertainties, there are important factors that could cause actual results to differ materially from those expressed or implied by these forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. These forward-looking statements reflect current views of our management with respect to future events and are subject to these and other risks, uncertainties and assumptions. As a result, actual results may differ materially from the forward-looking statements contained herein. Such risks and uncertainties include those set forth below in "Additional Risk Factors that Could Affect our Operating Results and the Market Price of our Stock." In particular, see "Additional Risk Factors that Could Affect our Operating Results and the Market Price of our Stock—We have a history of losses and expect to continue to incur losses in the future," "—Our operating results may fluctuate significantly, which could cause our stock price to decline," and "—We are and continue to be affected by poor general economic conditions that have resulted in significantly reduced sales levels and, if such adverse economic conditions continue or worsen, our business, operating results and financial condition could be negatively impacted." All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by this paragraph.

## Overview

We design, develop, and market full-service access systems which enable service providers to deliver broadband services to single-family homes, referred to as neighborhood dwelling units, or NDUs, and to tenants residing in multi-tenant unit properties, or MTUs. Our systems use the existing copper telephone wiring found in neighborhoods and buildings to simultaneously deliver multiple broadband services such as interactive digital broadcast television, video-on-demand services, telecommuter data service, high-speed Internet access and high-quality voice services over a single pair of telephone-grade wires. Our target customers are broadband service providers that include telephony-based incumbent local exchange companies, or ILECs, such as the former Regional Bell Operating Companies, or RBOCs, and international Post, Telephone, and Telegraph companies, or PTTs, as well as regulated and unregulated competitive local exchange carriers, or CLECs, who aim to deliver services over existing copper infrastructures.

We have incurred net operating losses to date and, as of December 31, 2001, had an accumulated deficit of \$234.9 million. Our ability to generate income from operations will be primarily dependent on increases in sales volume, reductions in manufacturing costs and the growth of high-speed data access solutions in the NDU and MTU markets. In view of our limited history of product revenue from new markets, our reliance on growth in deployment of high-speed data access solutions and the unpredictability of orders and subsequent revenue, we believe that period-to-period comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of future performance. Failure to generate significant revenue from existing or new products, whether due to lack of market acceptance, competition, technological change, continued poor economic conditions affecting the telecommunications industry or otherwise, or the inability to reduce manufacturing costs, will harm our business, financial condition and results of operations.

During 2001, we have reduced the sales prices of some of our products to remain competitive and to reduce our relatively high levels of inventory. Although we have historically been able to offset most price declines with reductions in our manufacturing costs, there can be no assurance that we will be able to offset further price declines with additional cost reductions. Also, market developments, including the write down of significant amounts of inventory by competitors and products resold as a result of bankruptcies within the industry, have put increased pressure on the sales prices of our existing inventories. In addition, some of our licensees may sell products based on our technology to our competitors or potential competitors. We cannot assure you that our HomeRun technology will be successfully deployed on a widespread basis or that such licensing will not result in an erosion of the potential market for our products.

Sales to customers outside of the United States accounted for approximately 56.3%, 41.0% and 32.3% of revenue for the years ended December 31, 2001, 2000 and 1999, respectively. On average, we expect international sales to represent approximately 50% of our revenue. However, actual results, both geographically and in absolute dollars, may vary from quarter to quarter depending on the timing of orders placed by customers. To date, all international sales have been denominated in U.S. dollars.

We expect to continue to evaluate product line expansion and new product opportunities, engage in research, development and engineering activities and focus on cost-effective design of our products. Accordingly, we will continue to make significant expenditures on research and development activities as a percentage of overall operating expenses.

In June 1999, we acquired PublicPort, Inc. ("PublicPort") in exchange for 168,679 shares of our common stock. This transaction was treated as a pooling of interests for accounting purposes. PublicPort was located in Ann Arbor, Michigan. PublicPort designed and developed subscriber management systems that enabled businesses in the MDU market to provide mobile computer users access to the public Internet or private corporate networks without having to reconfigure their computer's network access software.

In November 1999, we acquired Vintel Communications, Inc. ("Vintel") for \$4.8 million, consisting of \$0.5 million cash, 116,370 shares of our common stock and 40,500 options to acquire our common stock. This

transaction was treated as a purchase for accounting purposes. Vintel was located in Oakland, California. Vintel designed and developed high-performance integrated service routers that allowed service providers to offer bundles of services, including voice-over-IP and high speed Internet services over a common IP infrastructure to customers in the MTU market.

In February 2000, we acquired FreeGate Corporation ("FreeGate") for approximately \$25.5 million, consisting of 510,931 shares of our common stock, 19,707 options to acquire shares of our common stock, and acquisition related expenses consisting primarily of investment advisory, legal and other professional service fees and other assumed liabilities. This transaction was treated as a purchase for accounting purposes. FreeGate was located in Sunnyvale, California. FreeGate designed, developed and marketed Internet server appliances combining the functions of IP routing, firewall security, network address translation, secure remote access via VPN networking, and email and web servers on a compact, PC-based platform.

In April 2000, we acquired certain assets of OneWorld Systems, Inc. ("OneWorld") for approximately \$2.4 million in cash. This transaction was treated as a purchase of assets for accounting purposes. The acquired assets consisted of \$1.0 million for acquired workforce, \$1.1 million for goodwill and \$0.3 million for property and equipment.

In May 2000, we acquired Xstreamis Limited ("Xstreamis"), formerly Xstreamis, PLC, for \$19.6 million, consisting of 439,137 shares of our common stock, 10,863 options to acquire shares of our common stock, \$0.1 million in cash and \$0.6 million in acquisition related expenses consisting primarily of legal and other professional fees. This transaction was treated as a purchase for accounting purposes. Xstreamis was located in the United Kingdom. Xstreamis provided policy-driven traffic management for high-performance, multimedia networking solutions including routing, switching and bridging functions.

In January 2001, we acquired ActiveTelco, Inc. ("ActiveTelco") for approximately \$4.9 million, consisting of an aggregate of 321,343 shares of our common stock and 18,657 options to purchase shares of our common stock and acquisition related expenses consisting primarily of legal and other professional fees, assumed ActiveTelco convertible notes in the amount of \$0.7 million plus accrued interest and other assumed liabilities of approximately \$1.1 million. This transaction was treated as a purchase for accounting purposes. ActiveTelco was located in Fremont, California. ActiveTelco provided an Internet telephony platform that enabled Internet and telecommunications service providers to integrate and deliver Web-based telephony applications such as unified messaging, long-distance service, voicemail and fax delivery, call forwarding, call conferencing and callback services.

In September 2001, we acquired certain assets, including some intellectual property rights, from ViaGate Technologies, Inc. ("ViaGate") for approximately \$0.6 million in cash. This transaction was treated as a purchase of assets for accounting purposes. The acquired patents and technology of ViaGate provide a highly scalable, carrier-class, full service gateway built on standards-based asynchronous transfer mode, or ATM, IP and VDSL technology.

While we expect to derive benefits from sales of product lines that are designed, developed and marketed as a result of these acquisitions, there can be no assurance that we will be able to complete the development and commercial deployment of certain of these products. In January 2001, we decided to abandon future sales of the existing OneGate product that we acquired in the FreeGate acquisition. In April 2001, as part of our cost reduction efforts, we decided not to pursue further incorporation of the related OneGate and other intellectual property acquired from FreeGate into the design of future products. As a result, we took a write down of \$2.7 million for abandonment of the related completed technology and patents in the first quarter of 2001. During our impairment review for the third quarter of 2001, we evaluated the present value of future expected cash flows to determine the fair value of our long-lived assets. This evaluation resulted in a write down of \$29.9 million of goodwill and other intangible assets. The underlying factors contributing to the decline in expected future cash flows include a continued decline in the telecommunications industry and the indefinite postponement of capital

expenditures, especially within the hospitality industry. As of December 31, 2001, our net intangible assets remaining to be amortized were \$4.3 million, comprised entirely of completed technology and patents related to the acquisitions of the ViaGate assets and Xstreamis.

In January 2001, April 2001 and October 2001, we reduced our total workforce by 10%, 28% and 11%, respectively, in an effort to control overall operating expenses in response to recent declines and expected slower growth in our sales. In April 2001, we also implemented plans to close several of our satellite offices. We incurred restructuring charges of \$2.1 million related to the April 2001 restructuring and \$0.2 million related to the October 2001 restructuring.

### Results of Operations

The following table sets forth items from our statements of operations as a percentage of total revenues for the periods indicated:

	Year Ended December 31,		
	2001	2000	1999
Total revenues	100.0 %	100.0 %	100.0 %
Total cost of goods sold	294.5	97.2	55.6
Gross (loss) margin	(194.5)	2.8	44.4
Operating expenses:			
Sales and marketing	90.3	27.7	37.8
Research and development	109.4	23.8	27.4
General and administrative	66.3	16.0	15.1
Restructuring costs	16.8	—	—
In-process research and development	8.5	1.1	9.4
Impairment of intangibles	236.8	—	—
Amortization of intangibles	58.8	10.6	0.2
Noncash compensation expenses	1.3	0.6	1.6
Provision for doubtful accounts	6.2	31.3	0.8
Total operating expenses	594.4	111.1	92.3
Loss from operations	(788.9)	(108.3)	(47.9)
Impairment of certain equity investments	—	(4.3)	—
Interest expense	(0.1)	(0.5)	(2.2)
Interest income	24.0	10.2	7.9
Other income (expense), net	6.2	—	—
Loss before income taxes	(758.8)	(102.9)	(42.2)
Income tax expense	—	—	—
Net loss	(758.8)	(102.9)	(42.2)
Dividend accretion on preferred stock	—	—	0.8
Net loss attributable to common stockholders	(758.8)%	(102.9)%	(43.0)%

### Years Ended December 31, 2001, 2000 and 1999

*Revenue.* We generate revenue primarily from the sale of hardware products and, to a lesser extent, through the licensing of our HomeRun technology and from the sale of software products. Our total revenue decreased to \$13.7 million for the year ended December 31, 2001 from \$72.0 million for the year ended December 31, 2000 and from \$27.8 million for the year ended December 31, 1999. Using a year-over-year comparison, the decrease in 2001 compared to 2000 of \$58.2 million or 80.9% was primarily due to decreased

sales of our Espresso MDU products. The market for our products was significantly weaker in 2001 than it was in 2000. During the fourth quarter of 2000, our revenue growth slowed substantially due to (i) several key customers who, in the latter part of the fourth quarter of 2000, experienced a rapid deterioration in their ability to obtain additional capital and, as a result, severely curtailed or halted their purchases of our product, and (ii) reduced sales volume in the Korean market. The fourth quarter of 2000 revenue declines resulted in fourth quarter revenues of \$5.9 million compared with revenues of \$66.1 million for the first three quarters of 2000 in aggregate and \$10.6 million for the fourth quarter of 1999. These developments were not unique to us and have continued in conjunction with a general downturn in the telecommunications market throughout 2001, affecting our ability to generate comparatively similar levels of sales. In certain instances, these developments have made collection of receivables less certain and require us to defer revenue until cash is collected. During the third quarter of 2001, our revenue growth further slowed due to an increase in the number of customers and potential customers, particularly within the hospitality industry, that indefinitely postponed capital expenditures after the events surrounding September 11, 2001. The increase in 2000 compared to 1999 of \$44.2 million or 158.9% was primarily due to increased sales of our Espresso MDU products.

License and royalty revenue decreased to \$0.9 million for the year ended December 31, 2001 from \$2.0 million for the year ended December 31, 2000 and from \$1.5 million for the year ended December 31, 1999. The decrease in 2001 compared to 2000 of \$1.1 million or 56.1% was primarily due to decreases in royalty payments, as a result of continued economic conditions affecting the telecommunications market. The increase in license and royalty revenue in 2000 compared to 1999 of \$0.5 million or 30.4% was primarily due to increases in royalty payments for products sold by our licensees. We did not enter into any new license or royalty agreements during 2001. We entered into one new license and royalty agreement during 2000.



*Cost of Goods Sold/Gross (Loss) Margin*

The following table sets forth items regarding our cost of goods sold, provisions and margins for the periods indicated:

	Years Ended December 31,		
	2001	2000	1999
	(in thousands) (unaudited)		
Total revenues .....	\$ 13,748	\$ 71,991	\$27,807
Cost of goods sold:			
Product .....	40,489	42,760	15,454
License and royalty .....	—	—	5
Provision for loss on purchase commitments and abandoned products ..	—	27,223	—
Total cost of goods sold .....	40,489	69,983	15,459
Gross (loss) margin .....	\$(26,741)	\$ 2,008	\$12,348
Gross (loss) margin as a percentage of revenue .....	(194.5)%	2.8%	44.4%
Detail of gross margin before certain provisions:			
Total cost of goods sold .....	40,489	69,983	15,459
Less:			
Provision for excess and obsolete inventory .....	(29,925)	—	—
Provision for loss on purchase commitments and abandoned products .....	—	(27,223)	—
Total cost of goods sold excluding provisions for excess and obsolete inventory and provisions for loss on purchase commitments and abandoned products .....	10,564	42,760	15,459
Gross margin before the provision for excess and obsolete inventory and before the provision for loss on purchase commitments and abandoned products .....	\$ 3,184	\$ 29,231	\$12,348
Gross margin before the provision for excess and obsolete inventory and before the provision for loss on purchase commitments and abandoned products as a percentage of revenue .....	23.2%	40.6%	44.4%

Cost of goods sold consists of raw materials, contract manufacturing, personnel costs, test and quality assurance for products, and the cost of licensed technology included in the products. Excluding the reserves for excess and obsolete inventory of \$29.9 million taken in 2001 and the provision for loss on purchase commitments and abandoned products of \$27.2 million, our cost of goods sold decreased to \$10.6 million in 2001, from \$42.8 million for 2000 and from \$15.5 million in 1999. The decrease in 2001 compared to 2000 of \$32.2 million or 75.3% was primarily due to decreased sales of our Espresso MDU products. The increase in 2000 compared to 1999 of \$27.3 million or 176.6% was primarily due to increased production of our Espresso MDU products.

Gross margin before the reserves for excess and obsolete inventory in 2001 and before the provision for loss on purchase commitments and abandoned products in 2000 as a percentage of revenue, decreased to 23.2% of revenue for the year ended December 31, 2001 from 40.6% of revenue for the year ended December 31, 2000, and from 44.4% of revenue for the year ended December 31, 1999. The decrease in 2001 compared to 2000 of 17.4% was due primarily to sales price reductions on some of our Espresso MDU products in response to competitive pricing pressures and to a lesser extent to fixed manufacturing costs that could not be reduced proportionately in relation to the decreased revenue in 2001. The decrease in 2000 compared to 1999 of 3.8% was due primarily to fourth quarter introductions of new products in the Espresso MDU product line which had

lower than average gross margins, increases in inventory reserves related to estimated losses on custom built products and older product versions that were not upgraded in light of fourth quarter of 2000 industry slowdowns, higher costs of scarce component parts which could not be offset by further product cost reductions, and fixed manufacturing costs which could not be reduced in correlation with the rapid decline of revenue in the fourth quarter.

In 1999, no significant adjustments for inventory were recorded.

During the fourth quarter of 2000, we recognized a charge related to provision for loss on purchase commitments and abandoned product lines of \$27.2 million. This provision covers estimated costs for the cancellation of inventory purchase commitments that resulted from industry slow downs of large scale deployments in the MTU market and actual costs of inventory of abandoned product lines no longer deemed essential to our core technologies in the future. The cost of these abandoned products was \$8.2 million and included OneGate products, certain Espresso GS line cards and routers, and certain subscriber management software. This charge was included in cost of goods sold, resulting in an overall gross margin of 2.8% for 2000.

During 2001, we reversed \$2.9 million of the provision for loss on purchase commitments against cost of goods sold and we paid our suppliers \$11.8 million upon receipt of raw material components related to our provision of loss on purchase commitments recorded in the fourth quarter of 2000. At December 31, 2001, these components were included in inventory offset by the provision for \$11.8 million. There were no additional provisions recorded in 2001 related to these raw material components. In 2001, cost of goods sold also included approximately \$0.5 million for the sale of raw materials previously reserved through the loss on purchase commitments.

During the first quarter of 2001, we recorded a reserve for excess and obsolete inventory of \$18.5 million. This reserve was primarily related to the costs of raw materials and finished goods in excess of what we reasonably expected to sell in the foreseeable future as of the first quarter of 2001. During the third quarter of 2001, we recorded an additional reserve for excess and obsolete inventory of \$11.4 million. This reserve was primarily related to the costs of raw materials and finished goods in excess of revised projections of what we reasonably expected to sell in the foreseeable future. Market developments over the past year, including the write down of significant amounts of inventory by competitors, the proliferation of products resold as a result of bankruptcies within the industry, continued slowdown in the telecommunications market and more recently, the indefinite postponement of capital expenditures, especially within the hospitality industry, have contributed to substantial uncertainties related to the value of these inventories. During the year, we also recorded additional reserves of \$4.3 million for excess and obsolete inventory as a part of our normal business operations and product inventory assessments. All of these inventory adjustments for 2001 were included in cost of goods sold resulting in an overall negative gross margin of (194.5)%.

*Sales and Marketing.* Sales and marketing expense primarily consists of personnel costs, including commissions and costs related to customer support, travel, trade shows, promotions and outside services. Our sales and marketing expenses decreased to \$12.4 million for the year ended December 31, 2001 from \$19.9 million for the year ended December 31, 2000, and increased from \$10.5 million for the year ended December 31, 1999. The decrease in 2001 when compared to 2000 of \$7.5 million or 37.8% was primarily due to reduction in our marketing programs in order to reduce our costs in light of the difficult market conditions in 2001 and, to a lesser degree, to align our sales commission expense with lower revenue in 2001. The increase in sales and marketing expenses in 2000 when compared to 1999 of \$9.4 million or 89.5% was primarily due to increased hiring of sales and marketing personnel. These increases were also due to travel, attendance at trade shows and increases in personnel related to customer support activities and expanded efforts in international markets.

*Research and Development.* Research and development expense consists primarily of personnel costs related to engineering and technical support, contract consultants, outside testing services, equipment and

supplies associated with enhancing existing products and developing new products. Research and development costs are expensed as they are incurred. Our research and development expenses decreased to \$15.0 million for the year ended December 31, 2001 from \$17.1 million for the year ended December 31, 2000 and increased from \$7.6 million for the year ended December 31, 1999. The decrease in 2001 when compared to 2000 of \$2.1 million or 12.3% was primarily a result of our workforce reductions in 2001 and our continued focus on cost saving measures, including the reduction, postponement or abandonment of research and development efforts on certain of our product lines. The increase in 2000 compared to 1999 of \$9.5 million or 125.1% was primarily due to further development of the Espresso MDU products, development of HomeRun-related products, continued development of the subscriber management system portion of the Espresso MDU product line and initial development of our IntelliPOP platform. The research and development expenses of FreeGate, Xstreamis and ActiveTelco were consolidated with our expenses for the periods subsequent to the respective February 2000, May 2000 and January 2001 acquisitions. Additionally, in 2001 and 2000, we amortized to research and development \$0.8 million and \$2.0 million, respectively, of deferred compensation and notes receivable related to restricted stock granted to certain FreeGate, OneWorld and ActiveTelco employees. As of December 31, 2001, nominal balances related to deferred compensation and notes receivable are recorded as a reduction of equity in the balance sheet. We will either amortize this remaining balance or collect the note receivable balance depending on the terms and conditions of the notes. Research and development expenses decreased in absolute dollars in 2001, as a result of our continued focus on cost saving measures. We expect research and development activities to represent a significant percentage of our overall fixed operating expenses during 2002.

*General and Administrative.* General and administrative expense primarily consists of personnel costs for administrative officers and support personnel, legal, accounting, insurance and consulting fees. Our general and administrative expenses decreased to \$9.1 million for the year ended December 31, 2001 from \$11.5 million for the year ended December 31, 2000 and increased from \$4.2 million for the year ended December 31, 1999. The decrease in 2001 compared to 2000 of \$2.4 million or 20.7% was primarily a result of our workforce reductions in 2001, recovery of bad debt of \$1.8 million and our continued focus on cost saving measures. This decrease was offset by higher insurance of \$1.4 million and professional service fees of \$2.7 million that we incurred in 2001 compared to \$0.4 million and \$2.4 million, respectively in 2000. The increase in 2000 compared to 1999 of \$7.3 million or 174.3% was primarily due to the addition of administrative personnel and an increase in other costs related to our growth. We anticipate that general and administrative expenses will increase in 2002 because we do not expect significant bad debt recovery in 2002.

*Restructuring Costs.* We incurred restructuring costs of \$2.3 million for the year ended December 31, 2001. We did not incur any restructuring costs in 2000 or 1999. In April 2001, we announced a restructuring program that included a 28% workforce reduction, closure of excess facilities, and the disposition of certain fixed assets. As a result of this restructuring program, we recorded restructuring costs of \$2.1 million in the second quarter of 2001. These restructuring costs were comprised of \$1.2 million in workforce reduction charges relating primarily to severance and related benefits, \$0.8 million relating to closure of excess facilities and \$0.1 million in other fixed assets retired as a result of the workforce reductions. In October 2001, we further reduced our total workforce by 11%, which resulted in restructuring costs of \$0.2 million during the fourth quarter of 2001, comprised of severance and related benefits. Our workforce reductions in 2001 arose from an effort to control overall operating expenses in response to recent declines and expected slower growth in our sales.

*In-Process Research and Development.* Amounts expensed as in-process research and development were \$1.2 million in 2001, \$0.8 million in 2000 and \$2.6 million in 1999, and were related to in-process research and development purchased from ActiveTelco, FreeGate and Vintel, respectively.

*In-Process Research and Development, ActiveTelco.* Amounts expensed as in-process research and development were \$1.2 million for the year ended December 31, 2001 and were related to in-process research and development purchased from ActiveTelco during the first quarter of 2001. The purchased in-process technology was expensed upon acquisition because technological feasibility had not been established and no future alternative uses existed. The in-process technology percentage of completion was

estimated to be 75%. The value of this in-process technology was determined by estimating the cost to develop the purchased in-process technology into a commercially viable product, estimating the net cash flows from the sale of the product after the completion of the in-process technology and discounting the net cash flows back to their present value using a risk-weighted discount rate of 30%. Research and development costs to bring in-process technology from ActiveTelco to technological feasibility are not expected to have a material impact on our future results of operations or cash flows.

*In-Process Research and Development, FreeGate.* Amounts expensed as in-process research and development were \$0.8 million for the year ended December 31, 2000 and were related to in-process research and development purchased from FreeGate. The purchased in-process technology was expensed upon acquisition because technological feasibility had not been established and no future alternative uses existed. The in-process technology percentage of completion was estimated to be 75%. The value of this in-process technology was determined by estimating the cost to develop the purchased in-process technology into a commercially viable product, estimating the resulting net cash flows from the sale of the product resulting from the completion of the in-process technology and discounting the net cash flows back to their present value using a risk-weighted discount rate of 30%. We have abandoned the in-process research and development associated with FreeGate and therefore will not incur additional costs in this regard.

*In-Process Research and Development, Vintel.* Amounts expensed as in-process research and development were \$2.6 million for the year ended December 31, 1999 and were related to in-process research and development purchased from Vintel. The purchased in-process technology was expensed upon acquisition because technological feasibility had not been established and no future alternative uses existed. The in-process technology percentage of completion was estimated to be 75%. The value of this in-process technology was determined by estimating the cost to develop the purchased in-process technology into a commercially viable product, estimating the resulting net cash flows from the sale of the product resulting from the completion of the in-process technology and discounting the net cash flows back to their present value using a risk-weighted discount rate of 30%. In-process technology from Vintel has reached technological feasibility and, in line with original estimates, had no material impact on our results of operations or cash flows.

*Impairment of Intangibles.* Based on the impairment review performed during the third quarter of 2001, we recorded a \$29.9 million impairment charge to write off all of the remaining goodwill and assembled workforce and reduce the book value of our completed technology and patents. The charge was determined based upon estimated discounted future cash flows using a discount rate of 20%. The assumptions supporting future cash flows, including the discount rate, were determined using management's best estimates. The underlying factors contributing to the decline in expected future cash flows include a continued slowdown in the telecommunications market, and more recently, the indefinite postponement of capital expenditures, particularly within the hospitality industry. In the first quarter of 2001, we recorded a \$2.7 million impairment charge to write off the completed technology and patents of FreeGate. This resulted from our decision not to pursue further incorporation of the related OneGate product and other intellectual property acquired from FreeGate into the design of future products. Total impairment of intangibles was \$32.6 million for the year ended December 31, 2001. There were no such impairments for the years ended December 31, 2000 and 1999. As of December 31, 2001, our net intangible assets remaining to be amortized were \$4.3 million, comprised entirely of completed technology and patents related to the acquisitions of the ViaGate assets and Xstreamis.

*Amortization of Intangibles.* Amortization of intangibles is comprised of the amortization of intangible assets related to the purchase acquisitions of Vintel in 1999, FreeGate, OneWorld assets and Xstreamis in 2000, and ActiveTelco and ViaGate assets in 2001. These intangible assets consisted primarily of assembled workforce, completed technology and patents, and goodwill, and each are amortized over their estimated useful lives of three, five and five years, respectively. Amortization of intangibles increased to \$8.1 million for the year ended December 31, 2001 from \$7.6 million for the year ended December 31, 2000 and from \$0.1 million for the year ended December 31, 1999. The increases in 2001 of \$0.5 million and in 2000 of \$7.6 million relate to the additional amortization of intangibles arising from the acquisitions during those years. We expect a significant

decrease in amortization of intangibles in 2002 due to our recording of an impairment of these intangibles totaling \$32.6 million in 2001. As of December 31, 2001, intangible assets totaling \$4.3 million, which consist entirely of completed technology and patents, remain to be amortized.

*Noncash Compensation Expense.* Noncash compensation expense in 2001, 2000 and 1999 consisted of the recognition of expense related to certain employee stock option grants based on the difference between the deemed fair value of our common stock and the stock option exercise price at the date of grant. Our noncash compensation expense was \$0.2 million, \$0.4 million and \$0.5 million for the years ended December 31, 2001, 2000 and 1999, respectively. As of December 31, 2001, we have recognized all of the expenses related to these employee stock options.

*Provision for Doubtful Accounts.* Provision for doubtful accounts consisted of the recognition of bad debt expense related to past due accounts receivable balances. The provision for doubtful accounts decreased to \$0.8 million for the year ended December 31, 2001, from \$22.5 million for the year ended December 31, 2000, and increased from \$0.2 million for the year ended December 31, 1999. The decrease in 2001 of \$21.7 million or 96.2% was primarily related to lower sales volume in 2001 and no requirement for additional provisions in 2001 following the business deterioration experienced by our customers in the fourth quarter of 2000. The increase in 2000 relative to 1999 of \$22.3 million was primarily due to provisions recorded on past due accounts receivable from several key customers who, during the latter part of the fourth quarter of 2000, experienced a rapid deterioration in their ability to obtain additional capital, declared their inability to make timely payments on their accounts, and have not been able to pay their outstanding account balances with us. During 2001, we recovered \$1.8 million in bad debt previously written off in 2000. This bad debt recovery is included as a reduction to general and administrative expenses for 2001. In certain cases, customers filed for bankruptcy protection in 2001 and some of their outstanding balances owed to us have been written off.

*Impairment of Certain Equity Investments.* Impairment of certain equity investments for the year ended December 31, 2000 consisted of the recognition of expense related to the write off of \$3.1 million invested in three privately-held companies. The value of these investments was impaired due to uncertainty associated with the on-going viability of each of these businesses in the current network infrastructure industry. There was no such impairment of our equity investments for the years ended December 31, 2001 or 1999. As of December 31, 2001, we had one remaining investment in a privately-held company of \$0.6 million.

*Interest Expense.* Our interest expense was nominal for the year ended December 31, 2001 compared to \$0.4 million for the year ended December 31, 2000 and \$0.6 million for the year ended December 31, 1999. The decreases in 2001 when compared to 2000 and 1999 were primarily due to our repayment of the principal owed on our credit facilities in June 2000.

*Interest Income.* Interest income consisted of interest income on our cash, investments and notes receivable balances, offset by the amortization of premiums paid on investments. Our interest income decreased to \$3.3 million for the year ended December 31, 2001 from \$7.4 million for the year ended December 31, 2000, which increased from \$2.2 million for the year ended December 31, 1999. The decrease in 2001 compared to 2000 of \$4.1 million or 55.6% was primarily due to lower interest rates on lower average cash and investment balances. The increase in 2000 compared to 1999 of \$5.2 million or 236.5% was primarily due to higher interest rates on higher average cash and investment balances.

*Other Income (Expense), Net.* Our other income (expense), net was \$0.9 million for the year ended December 31, 2001. This was primarily related to a gain on settlement with one of our suppliers of \$1.0 million. Other income (expense), net was nominal for the years ended December 31, 2000 and 1999. Other income (expense), net also included gain (loss) on the disposal of fixed assets, sale of other assets and foreign exchange gains (losses).

## Liquidity and Capital Resources

Historically, our principal source of liquidity has been obtained through equity funding. From our inception through January 1999, we have financed our operations primarily through the sale of preferred equity securities for an aggregate of \$46.2 million net of offering costs. In January 1999, we completed our initial public offering and issued 2,875,000 shares of our common stock at a price of \$18.00. We received approximately \$46.9 million in cash, net of underwriting discounts, commissions and other offering costs. We also received approximately \$6.7 million as a result of the exercise of a warrant to purchase 666,836 shares of Series G convertible preferred stock at a price of \$10.00 per share. In March 2000, we completed our secondary offering and issued 2,500,000 shares of our common stock at a price of \$60.00 and we received approximately \$141.7 million in cash, net of underwriting discounts, commissions and other offering costs. In the future, we cannot be certain that similar equity funding will be available to us and as a result, our business, operating results and financial condition could be negatively impacted.

Cash, cash equivalents and short-term investments totaled \$49.4 million at December 31, 2001, a decrease of \$53.2 million or 51.9% from \$102.6 million at December 31, 2000.

The net decrease in cash and cash equivalents of \$1.0 million during the year ended December 31, 2001 resulted primarily from our use of \$51.2 million for operating activities, the purchase of property and equipment of \$1.2 million, the purchase of other assets of \$1.2 million, which includes the acquisition of certain ViaGate assets for \$0.6 million, and acquisition costs related to ActiveTelco of \$0.2 million. The net decrease in cash and cash equivalents from these uses was offset by \$52.4 million in proceeds from the maturities in short-term investments, net of purchases of investments, the issuance of common stock related to the exercise of stock options and purchases made pursuant to the employee stock purchase plan of \$0.2 million and other proceeds from financing activities of \$0.1 million.

The net increase in cash and cash equivalents of \$33.9 million during the year ended December 31, 2000 resulted primarily from net proceeds from our secondary offering of \$141.7 million and proceeds from the issuance of common stock related to the exercise of stock options and purchases made pursuant to the employee stock purchase plan of \$4.9 million. The increases in cash and cash equivalents from these sources were offset by uses in operating activities of \$63.8 million, the purchase of property and equipment of \$8.6 million, the purchase of investments and other assets, net of maturities of investments, of \$36.6 million, the repayment of borrowings under a credit facility of \$1.5 million, the acquisition costs for FreeGate, OneWorld and Xstreamis of \$1.8 million and other financing activities of \$0.4 million.

The net increase in cash and cash equivalents of \$9.0 million during the year ended December 31, 1999 resulted primarily from net proceeds from our initial public offering of \$46.9 million, net proceeds from the exercise of a warrant for convertible preferred stock of \$6.7 million, proceeds from the issuance of common stock related to the exercise of stock options and purchases made pursuant to the employee stock purchase plan of \$0.7 million, and proceeds from the acquisition of Vintel of \$0.4 million. The increases in cash and cash equivalents from these sources were offset by uses in operating activities of \$19.8 million, the purchase of investments, net of proceeds from maturities of investments, of \$20.7 million, the purchase of property and equipment of \$2.5 million, and the repayment of borrowings under a credit facility of \$2.7 million.

In future periods, we generally anticipate a decrease in working capital expenditures on a period-to-period basis primarily as a result of completing a substantial portion of payments for purchase commitments for inventory and a general decrease in our operational costs due to our recent workforce reductions.

We have entered into certain contractual obligations and other purchase commitments that could result in cash outflows. In the first quarter of 2000, we entered into a lease for administrative and engineering facilities in Pleasanton, California. Under the terms of the lease, we were required to issue a letter of credit in the amount of \$1.9 million. The letter of credit is reduced annually, beginning July 1, 2001, by approximately \$0.3 million, provided that we are not in default under the terms of the lease agreement. Pursuant to these terms, our letter of

credit was reduced from \$1.9 million to \$1.6 million in the third quarter of 2001. In the fourth quarter of 2001, we entered into a lease for engineering facilities in Bridgewater Township, New Jersey. Under the terms of the lease, we were required to issue a letter of credit in the amount of \$0.1 million. These letters of credit are collateralized by restricted funds in the amount of \$1.7 million, which are included in intangibles and other assets as of December 31, 2001.

At December 31, 2001, the remaining accrual for purchase commitments of raw material components was \$4.4 million. At this time, we are involved in litigation related to certain of these commitments. As discussed in Note 8 of our Consolidated Financial Statements, the outcome of this litigation is uncertain at this time.

The following summarizes our contractual obligations at December 31, 2001, and the effect these obligations are expected to have on our liquidity and cash flow in future periods:

Our future minimum lease payments under operating leases at December 31, 2001 are as follows:

<u>Year</u>	<u>(in millions)</u>
2002 .....	\$ 2.5
2003 .....	2.0
2004 .....	1.9
2005 .....	1.9
2006 .....	1.9
Thereafter .....	<u>0.9</u>
	<u>\$11.1</u>

To the extent that our business continues to be affected by the poor economic conditions impacting the telecommunications industry, we will continue to require cash to fund our operations, reducing our liquidity. We believe that our cash, cash equivalents and short-term investment balances will be sufficient to satisfy our cash requirements for at least the next 12 months. We expect cash flow from operations to increase during the year and we will seek additional funding for operations from alternative debt and equity sources if necessary to maintain reasonable operating levels. However, we cannot assure you that such funding efforts will be successful. Failure to generate positive cash flow in the future could harm our business, financial condition and results of operations.

#### Option Exchange Program

On May 14, 2001, we made an offer to exchange all stock options outstanding under our 1992 Stock Plan, 1998 Stock Plan and the 1999 Nonstatutory Stock Option Plan to purchase shares of our common stock held by eligible employees for new stock options that were to be granted under our 1998 Stock Plan or our 1999 Nonstatutory Stock Option Plan, upon the terms and subject to the conditions set forth in the Offer to Exchange. An "eligible employee" refers to all employees of Tut Systems, Inc. and its U.S. subsidiaries who were employees at the time the new stock options were granted, other than all executive officers, vice-presidents, members of the Board of Directors and employees receiving Workers' Adjustment and Retraining Notification Act pay, all of whom were not eligible to participate in the offer. The number of shares of common stock subject to the new stock options is equal to the number of shares of common stock subject to the unexercised stock options tendered by such eligible employees and accepted for exchange and cancelled. The new stock options were issued on December 13, 2001, a date that was at least six months and two days later than the date of cancellation. This stock option exchange program required the filing of a tender offer statement. Employees receiving such an offer were requested to read our Form 10-Q for the quarter ended March 31, 2001, a related offering memorandum and other pertinent information before making a decision with respect to the offer. Accounting and other regulatory concerns prevented or limited our ability to issue additional stock options to these employees during the period between cancellation and reissuance.

The offer expired on June 8, 2001. Pursuant to the offer, we accepted, for cancellation, stock options to purchase approximately 1,056,948 shares of our common stock at a weighted average exercise price of \$35.99. Subject to the terms and conditions of the offer, on December 13, 2001, we granted new stock options to purchase a total of 850,757 shares of our common stock at an exercise price of \$2.15 to those employees who were employed by us at that time who had tendered stock options in response to the offer that were accepted for exchange and cancelled.

### **Critical Accounting Policies and Estimates**

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We have identified the policies below as critical to our business operations and the understanding of our results of operations.

#### *Revenue recognition*

##### Product revenues

We generate revenue primarily from the sale of hardware products and, to a lesser extent, through the licensing of our HomeRun technology and the sale of our software products. We sell products through direct sales channels and through distributors. We recognize product revenue when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectibility is probable. Significant management judgments and estimates must be made in connection with the measurement of revenue in a given period. We follow specific and detailed guidelines for determining the timing of revenue recognition. At the time of the transaction, we assess a number of factors including, specific contract and purchase order terms, completion and timing of delivery to the common carrier, past transaction history with the customer, the creditworthiness of the customer, evidence of sell-through to the end user, and current payment terms. Based on the results of the assessment, we may recognize revenue when the products are shipped or defer recognition until evidence of sell-through occurs and cash is received. Revenue from service obligations included in product revenues is deferred and recognized ratably over the period of the obligation. We also maintain accruals and allowances for all cooperative marketing and other programs. Estimated sales returns and warranty costs are based on historical experience and are recorded at the time revenue is recognized. Our products generally carry a one year warranty from the date of purchase.

##### License and royalty revenues

License and royalty revenue consists of nonrefundable up-front license fees, some of which may offset initial royalty payments, and royalties received by us for products sold by our licensees. Currently, the majority of our license and royalty revenue is comprised of non-refundable license fees paid in advance. Such revenue is recognized ratably over the period during which post-contract customer support is expected to be provided or upon delivery and transfer of agreed upon technical specifications in contracts where essentially no further support obligations exist. Future license and royalty revenue is expected to consist primarily of royalties received by us for products sold by our licensees. We do not expect that such license and royalty revenue will constitute a substantial portion of our revenue in future periods.



### Software license and post contract support revenues

With the introduction of our IntelliPOP product line, we expect that revenue from the sale of software products and maintenance fees may constitute a substantial portion of revenue in future periods. Currently, our software revenue is derived from two separate sources, software license fees and post-contract maintenance and support fees. The software license fee typically grants a perpetual license to the customer. We generally recognize revenue from the sale of the software license when all criteria for revenue recognition have been met similar to our hardware product sales. The revenue for maintenance and support fees is recognized ratably over the term of the separate support contract.

Should changes in conditions cause us to determine that the criteria for revenue recognition are not met for certain future transactions, revenue recognition for any reporting period could be adversely affected.

### *Inventories*

Inventories are stated at the lower of cost or market. Cost is computed using standard cost, which approximates actual cost on a first-in, first-out basis. We record provisions to write down our inventory and related purchase commitments for estimated obsolescence or unmarketable inventory equal to the difference between the cost of the inventory and the estimated market value based upon assumptions about the future demand and market conditions. If actual future demand or market conditions are less favorable than we estimate, additional inventory provisions may be required.

### *Allowance for doubtful accounts*

We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make payments. These estimated allowances are periodically reviewed, analyzing the customers' payment history and information regarding the customers' creditworthiness known to us. If the financial condition of any of our customers were to deteriorate, resulting in their inability to make payments, an additional allowance may be required.

### *Accounting for long-lived assets*

We assess the impairment of long-lived assets and related goodwill periodically in accordance with the provisions of SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of." An impairment review is performed whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors considered important which could trigger an impairment review include, but are not limited to, significant underperformance relative to expected historical or projected future operating results, significant changes in the manner of use of the acquired assets or the strategy for the overall business, significant negative industry or economic trends, a significant decline in the stock price for a sustained period, and the market capitalization relative to net book value.

When our management determines that the carrying value may not be recoverable based upon the existence of one or more of the above indicators of impairment, any impairment measured is based on a projected discounted cash flow method using a discount rate commensurate with the risk inherent in our current business model.

During 2001, we did determine certain intangible long-lived assets were impaired and recorded losses accordingly. Future events could cause us to conclude that impairment indicators once again exist. Any resulting impairment loss could have a material adverse impact on our financial condition and results of operations.

### *Legal contingencies*

We are currently involved in certain legal proceedings as discussed in Note 8 of our consolidated financial statements. Because of uncertainties related to both the potential amount and range of loss from the pending

litigation, management is unable to make a reasonable estimate of the liability that could result if there is an unfavorable outcome to these legal proceedings. As additional information becomes available, we will assess the potential liability related to this pending litigation and revise our estimates accordingly. Revisions of our estimates of such potential liability could materially impact our results of operations and financial condition.

#### Recent Accounting Pronouncements

In June 1998, the FASB issued SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities," which establishes accounting and reporting standards for derivative instruments and hedging activities. It requires an entity to recognize all derivatives as either assets or liabilities on the balance sheet and measure those instruments at fair value. We adopted SFAS No. 133, as amended by SFAS No. 138, as required by SFAS No. 137, "Deferral of the Effective Date of the FASB Statement No. 133," effective January 1, 2001. To date, we have not engaged in derivative and hedging activities, and accordingly the adoption of SFAS No. 133 did not have a material impact on our financial statements.

In May 2000, the Emerging Issues Task Force, or EITF, issued EITF Issue No. 00-14, "Accounting for Certain Sales Incentives" which addresses the recognition, measurement and income statement classification for sales incentives that a vendor voluntarily offers to customers, without charge, which the customer can use in, or exercise as a result of, a single exchange transaction. In June 2001, the EITF issued EITF Issue No. 00-25, "Vendor Income Statement Characterization of Consideration Paid to a Reseller of the Vendor's Products," effective for periods beginning after December 15, 2001 which addresses whether consideration from a vendor to a reseller is: (a) an adjustment of the selling prices of the vendor's products and, therefore, should be deducted from revenue when recognized in the vendor's statement of operations; or (b) a cost incurred by the vendor for assets or services received from the reseller and, therefore, should be included as a cost or expense when recognized in the vendor's statement of operations. Upon application of these EITFs, financial statements for prior periods presented for comparative purposes should be reclassified to comply with the income statement display requirements under these Issues. In September 2001, the EITF issued EITF Issue No. 01-09, "Accounting for Consideration Given by Vendor to a Customer or a Reseller of the Vendor's Products," which is a codification of EITF Issues No. 00-14, No. 00-25 and No. 00-22 "Accounting for 'Points' and Certain Other Time- or Volume-Based Sales Incentive Offers and Offers for Free Products or Services to be Delivered in the Future." The adoption of these Issues is not expected to have a material impact on our financial statements.

In July 2001, the FASB issued SFAS No. 142, "Goodwill and Other Intangible Assets," which addresses financial accounting and reporting for acquired goodwill and other intangible assets and supersedes APB Opinion No. 17, "Intangible Assets." It addresses how intangible assets that are acquired individually or with a group of other assets, but not those acquired in a business combination, should be accounted for in financial statements upon their acquisition. SFAS No. 142 also addresses how goodwill and other intangible assets should be accounted for after they have been initially recognized in the financial statements. We will adopt SFAS No. 142 effective January 1, 2002. The adoption of SFAS No. 142 is not expected to have a material impact on our financial statements.

On October 3, 2001, the FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS No. 144 supercedes SFAS No. 121 "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of." SFAS No. 144 applies to all long-lived assets, including discontinued operations, and consequently amends APB Opinion No. 30, "Reporting the Results of Operations, Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions." SFAS No. 144 develops one accounting model for long-lived assets that are to be disposed of by sale. SFAS No. 144 requires that long-lived assets that are to be disposed of by sale be measured at the lower of book value or fair value less cost to sell. Additionally SFAS No. 144 expands the scope of discontinued operations to include all components of an entity with operations that: (a) can be distinguished from the rest of the entity, and (b) will be eliminated from the ongoing operations of the entity in a disposal

transaction. SFAS No. 144 is effective for all of our financial statements issued in 2002. The adoption of SFAS No. 144 is not expected to have a material impact on our financial statements.

#### **Additional Risk Factors that Could Affect our Operating Results and the Market Price of our Stock**

**We have a history of losses and expect to continue to incur losses in the future.**

We have incurred substantial net losses and experienced negative cash flow for each quarter since our inception. We incurred net losses of \$104.3 million, \$74.1 million and \$12.0 million for the years ended December 31, 2001, 2000 and 1999, respectively. As of December 31, 2001, we had an accumulated deficit of \$234.9 million. We expect that we will continue to incur losses into fiscal year 2002.

We may never achieve profitability and, if we do so, we may not be able to maintain profitability. We have spent substantial amounts of money on the development of our Espresso products, HomeRun and LongRun technology, IntelliPOP products and software products. In 2001, we reduced our workforce in an effort to decrease certain of our operating expenditures, including our sales and marketing, research and development and general and administrative expenditures. However, we may not be able to generate a sufficient level of revenue to offset the current level of expenditures. Additionally, we may be unable to adjust spending in a timely manner to respond to any unanticipated decline in revenue due to the fact that our expenditures for sales and marketing, research and development, and general and administrative functions are relatively fixed in the short term. Our ability to achieve and maintain profitability in the future will primarily depend on our ability to do the following:

- increase the level of sales of our Espresso products, including existing Espresso inventories;
- successfully penetrate new markets for our IntelliPOP products;
- reduce manufacturing costs;
- sell excess component parts obtained as a result of canceled purchase commitments; and
- successfully introduce and sell enhanced versions of our existing and new products.

**Our operating results may fluctuate significantly, which could cause our stock price to decline.**

A number of factors could cause our quarterly and annual financial results to be worse than expected, which could result in a decline in our stock price. Our annual and quarterly operating results have fluctuated in the past and may fluctuate significantly in the future as a result of numerous factors, some of which are outside of our control. These factors include:

- availability of capital in the network infrastructure industry;
- management of inventory levels;
- market acceptance of our products;
- competitive pressures, including pricing pressures from our partners and competitors, particularly in light of continued announcements from competitors in recent quarters that they took significant write downs in inventory, which could lead to a general excess of competitive products in the marketplace;
- the timing or cancellation of orders from, or shipments to, existing and new customers;
- the timing of new product and service introductions by us, our customers, our partners or our competitors;
- variations in our sales or distribution channels;
- variations in the mix of products that we offer;
- changes in the pricing policies of our suppliers;

- the availability and cost of key components; and
- the timing of personnel hiring.

We anticipate that average selling prices for our products will decrease in the near future due to increased competitive price pressures in certain geographical regions. In addition, we may also experience substantial period-to-period fluctuations in future operating results and declines in gross margin as a result of the erosion of average selling prices for high-speed data access products and services due to a number of factors, including increased competition and rapid technological change. Decreasing the average selling prices of our products could cause us to experience decreased revenue despite an increase in the number of units sold. We may be unable to sustain our gross margins, even at the anticipated reduced levels, improve our gross margins by offering new products or increased product functionality or offset future price declines with cost reductions.

As a result of these and other factors, it is possible that in some future period our operating results will be below the expectations of securities analysts and investors. In that event, the price of our common stock would likely further decline.

We are and continue to be affected by poor general economic conditions that have resulted in significantly reduced sales levels and, if such adverse economic conditions continue or worsen, our business, operating results and financial condition could be negatively impacted.

The continued poor economic conditions in the world economy, which became particularly acute after the events surrounding September 11, 2001, and the continued industry-wide downturn in the telecommunications market have affected, and may continue to affect, our sales in the future. As a result, we may experience a material adverse impact on our business, operating results and financial condition. Comparatively lower sales have resulted in operating expenses increasing as a percentage of revenue for the year ended December 31, 2001 compared to the years ended December 31, 2000 and 1999. Although we have taken actions throughout 2001 to create revenue opportunities and reduce operating expenses, a prolonged continuation or worsening of sales trends that we faced in 2001 may force us to take additional actions and charges in order to reduce our operating expenses. If we are unable to reduce operating expenses at a rate and level consistent with future adverse sales trends or if we incur significant special charges associated with such expense reductions that are disproportionate to sales, our business, operating results and financial condition could be negatively impacted.

We depend on a limited number of large customers for a substantial portion of our revenue during any given period, and the loss of a key customer or loss or delay of a key order could substantially reduce our revenue in a given period.

We derive a significant portion of our revenue in each period from a limited number of customers. Two customers, Kanematsu Computer System Ltd. and RIKEI Corporation, respectively accounted for 19% and 16%, respectively, of our revenue for the year ended December 31, 2001. Three customers, TriGem InfoComm, Inc., Reflex Communications, Inc. and Darwin Networks Inc., accounted for 18%, 12% and 11%, respectively, of our revenue for the year ended December 31, 2000. Two customers, CAIS, Inc. and Rycom CCI, Inc., accounted for 12% and 10%, respectively, of our revenue for the year ended December 31, 1999. Many of our past customers have limited or, in some cases, no access to capital and are experiencing significant financial difficulties, including bankruptcy. In order to meet our revenue targets, we must continue to acquire new customers and increase sales to our existing customers. In addition, our strategy of targeting larger, more established customers may result in longer sales cycles and delayed revenue. Sales to larger accounts could also result in increased competition from larger and more established competitors. If sales to our largest customers decrease materially below current levels or if we are unable to establish a new base of customers, such decreases or failures could materially and adversely affect our business, results of operations and financial condition.

We are currently engaged in multiple securities class action lawsuits and a lawsuit with one of our suppliers, any of which, if it results in an unfavorable resolution, could adversely affect our business, results of operations or financial condition.

Beginning July 12, 2001, six putative shareholder class action lawsuits were filed in the United States District Court for the Northern District of California against us and certain of our current and former officers and directors. The complaints were filed on behalf of a purported class of people who purchased our stock during the period between July 20, 2000 and January 31, 2001, seeking unspecified damages. The complaints allege that we and certain of our current and former officers and directors made false and misleading statements about our business during the putative class period. Specifically, the complaints allege violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934. The complaints have been consolidated under the name *In re Tut Systems, Inc. Securities Litigation*, Civil Action No. C-01-2659-JCS. Lead plaintiffs and lead counsel for plaintiffs have been appointed. Plaintiffs filed a consolidated class action complaint on February 4, 2002. We and our current and former officers and directors believe the allegations against us and them are without merit and intend to defend the action vigorously. An unfavorable resolution of this litigation could have a material adverse effect on our business, results of operations, or financial condition.

On August 3, 2001, a complaint, *Arrow Electronics, Inc. v. Tut Systems, Inc.*, Case No. CV 800433, was filed in the Superior Court of the State of California for the County of Santa Clara against us. The Complaint was filed by one of our suppliers and alleges causes of action for breach of contract and for money on common counts. The Complaint seeks damages in the amount of \$10.5 million. There has been no discovery to date and no trial has yet been scheduled. We deny liability and intend to defend ourselves vigorously. An unfavorable resolution of this litigation could have a material adverse effect on our business, results of operations, or financial condition.

On October 30, 2001, we and certain of our current and former officers and directors were named as defendants in *Whalen v. Tut Systems, Inc. et al.*, Case No. 01-CV-9563, a purported securities class action lawsuit filed in United States District Court, Southern District of New York. An amended complaint was filed on December 5, 2001. The amended complaint asserts that the prospectuses from our January 29, 1999 initial public offering and our March 23, 2000 secondary offering failed to disclose certain alleged actions by the underwriters for the offerings. The complaint alleges claims against us and certain of our current and former officers and directors under Section 11 of the 1933 Act and alleges claims against certain of our current and former officers and directors under Section 15 of the 1933 Act. The complaints also name as defendants the underwriters for our initial public offering and secondary offering. We and our current and former officers and directors believe the allegations against us and them are without merit and intend to defend the action vigorously. An unfavorable resolution of this litigation could have a material adverse effect on our business, results of operations, or financial condition.

**We face substantial risk in introducing our new IntelliPOP products.**

We launched our new IntelliPOP 5000 series product in the first half of 2001, and recently announced that we intend to launch our IntelliPOP 8000 series product in 2002. We face significant risks associated with the launch of these new products which include, but are not limited to:

- delays in shipping;
- software defects;
- delays in product hardware and software testing; and
- production delays in building the products.

The complexity of the products requires additional customer support resources. Since the products include major software components, we include software maintenance agreements in the sales of our products. Accordingly, revenue associated with such maintenance agreements will be deferred and recognized over the life of the underlying support of the products. The launch of our IntelliPOP products may also cause customers to delay purchases of our existing products. In addition, the introduction of new, more complex products, coupled with a search for larger, more established customers may result in longer sales cycles and delayed revenue from the IntelliPOP series of products.

**If we do not reduce our inventory, we may be forced to incur charges, which could materially and adversely impact our business, results of operations and financial condition.**

We have accumulated a substantial inventory of finished goods and components due to poor global economic conditions, which became more acute after the events surrounding September 11, 2001, and the reduction in product demand due to capital funding decreases experienced by several key customers. In addition, announcements of large-scale inventory write downs by competitors indicate that the risk of inexpensive competitive products coming into the marketplace has continued to increase. We have provided for losses related to the cancellation of purchase commitments and further allowances for excess and obsolete finished goods inventories and related raw materials. However, we must sell existing finished goods inventory and sell component inventory resulting from deliveries on already canceled purchase commitments. Failure to do so may require that we take additional charges related to slow moving or obsolete inventory and components. If we are unable to sell a substantial amount of both the finished goods and the component inventories, our expected cash position throughout 2002 could be negatively impacted, which could harm our business, results of operations and financial condition.

**If our Espresso and IntelliPOP products are not accepted in the market, our business, financial condition and results of operations could be harmed.**

We must devote a substantial amount of human and capital resources in order to maintain commercial acceptance of our Espresso products and IntelliPOP products and to expand offerings of these products in the MDU and MCU markets and to further penetrate these markets. Historically, the majority of our Espresso products has been sold into the MDU market. Our future success depends on the ability to continue to penetrate this market and to expand our penetration into the MCU market. Our success also depends on our ability to educate existing and potential customers and end-users about the benefits of our Fast Copper and Signature Switch technologies, our LongRun and IntelliPOP products, and about the development of new products to meet changing and expanding demands of service providers, MTU owners and corporate customers. The success of our Espresso and IntelliPOP products will also depend on the ability of our service provider customers to market and sell high-speed data services to end-users. If our IntelliPOP or our Espresso products do not achieve or maintain broad commercial acceptance within the MDU market, MCU market, or in any other markets we may enter, our business, financial conditions and results of operations could be materially and adversely affected.

**The market in which we operate is highly competitive, and we may not be able to compete effectively.**

The market for multi-service broadband access systems is intensely competitive, and we expect that this market will become increasingly competitive in the future. Our most immediate competitors include, or are expected to include, Cisco Systems, Inc., Lucent Technologies, Inc., Next Level Communications, Inc., Paradyne Networks, Inc. and a number of other public and private companies. Many of these competitors offer or may offer technologies and services that directly compete with some or all of our high-speed access products and related software products. Also, many of these competitors have continued to announce significant changes in their business plans and operations, some of which, such as major write downs of inventory, could result in lower priced products flooding the market and thus have a negative impact on our ability to sustain our current pricing or to sell current levels of inventory. In addition, the market in which we compete is characterized by increasing consolidation, and we cannot predict with certainty how industry consolidation will affect us or our competitors.

Many of our competitors and potential competitors have substantially greater name recognition and technical, financial and marketing resources than we do, and we can give you no assurance that we will be able to compete effectively in our target markets. These competitors may be able to undertake more extensive marketing campaigns, adopt more aggressive pricing policies and devote substantially more resources to developing new products than we can. In addition, our HomeRun licensees may sell products based on our HomeRun technology to our competitors or potential competitors. This licensing may cause an erosion in the potential market for our products. We cannot assure you that we will have the financial resources, technical expertise or marketing, manufacturing, distribution and support capabilities to compete successfully. This competition could result in

price reductions, reduced profit margins and loss of market share, which could harm our business, financial condition and results of operations.

Our copper-wire based solutions face severe competition from other technologies, and the commercial acceptance of any competing solutions could harm our ability to compete and thus materially and adversely impact our business, financial condition and results of operations.

The market for high-speed data access products and services is characterized by several competing technologies, including fiber optic cables, coaxial cables, satellites and other wireless facilities. These competing solutions provide fast access, high reliability and cost-effective solutions for some users. Many of our products are based on the use of copper telephone wire. Because there are physical limits to the speed and distance over which data can be transmitted over copper wire, our products may not be a viable solution for customers requiring service at performance levels beyond the current limits of copper telephone wire. To the extent that telecommunications service providers choose to install fiber optic cable or other transmission media in the last mile, or to the extent that homes and businesses install other transmission media within buildings, we expect that demand for our products that are based on copper telephone wires will decline. Commercial acceptance of any one of these competing solutions or any technological advancement or product introduction that provides faster access, greater reliability, increased cost-effectiveness or other advantages over technologies that utilize existing copper telephone wires could decrease the demand for our products and reduce average selling prices and gross margins associated with our products. The occurrence of any one or more of these events could harm our business, financial condition and results of operations.

If we fail to manage our operations in light of our changing revenue base, our ability to increase our revenues and improve our results of operations could be harmed.

Our operations have changed significantly due to volatility in our business. In the past, we have rapidly and significantly expanded our operations. However, in January 2001, we reduced our workforce by 10%, in April 2001 by an additional 28%, and in October 2001 by 11% in an effort to control overall operating expenses in response to recent declines in and expected slowing of our sales growth. We anticipate that, in the future, expansion in certain areas of our business may be required to expand our customer base and exploit market opportunities. In particular, we expect to face numerous challenges in the implementation of our business strategy to focus on the larger, more established customers such as ILECs and PTTs in both domestic and international markets.

To exploit the market for our products, we must develop new and enhanced products while implementing and managing effective planning and operating processes. To manage our operations, we must, among other things, continue to implement and improve our operational, financial and management information systems, hire and train additional qualified personnel, continue to expand and upgrade core technologies and effectively manage multiple relationships with various customers, suppliers and other third parties. We cannot assure you that our systems, procedures or controls will be adequate to support our operations or that our management will be able to achieve the rapid execution necessary to exploit fully the market for our products or systems. If we are unable to manage our operations effectively, our business, financial condition and results of operations could be harmed.

We depend on international sales for a significant portion of our revenue, which could subject our business to a number of risks; if we are unable to generate significant international sales, our business, financial condition and results of operations could be materially and adversely affected.

Sales to customers outside of the United States accounted for approximately 56.3%, 41.0%, and 32.3% of revenue for the years ended December 31, 2001 and 2000 and 1999, respectively. There are a number of risks arising from our international business, including, but not limited to:

- longer receivables collection periods;
- increased exposure to bad debt write-offs;
- risk of political and economic instability;
- difficulties in enforcing agreements through foreign legal systems;
- unexpected changes in regulatory requirements;
- import or export licensing requirements;
- reduced protection for intellectual property rights in some countries; and
- currency fluctuations.

We expect sales to customers outside of the United States to continue to account for a significant portion of our revenue. However, we cannot assure you that foreign markets for our products will develop at the rate or to the extent currently anticipated. If we fail to continue to generate significant international sales, our business, financial condition and results of operations could be materially and adversely affected.

We also expend product development and other resources in order to meet regulatory and technical requirements of foreign countries. We depend on sales of our products in these foreign markets to recoup the costs associated with developing products for these markets.

Our ability to attract and retain our personnel may be impaired by the decrease in our stock price.

The drop in our stock price has resulted in most of our outstanding employee stock options being "under water" or priced substantially above the current market price. In response to the drop in our stock price, on May 14, 2001, we offered our eligible employees the opportunity to tender their existing stock options for cancellation pursuant to a stock option exchange program and have new stock options granted at a date at least six months and two days later than June 8, 2001, the date of cancellation. Accounting and other regulatory concerns prevented or limited our ability to issue additional stock options to these employees during the period between cancellation and the date of the new grant. In the interim, those employees who participated in the stock option exchange offer were granted fewer or, in certain cases, were not granted stock options until December 13, 2001, the date that was six months and two days after the date of such cancellation. Further, employees who did not participate in the stock option exchange offer continue to hold stock options that are priced substantially above the current market price. In both cases, our employees may have felt, and may continue to feel, that they are receiving inadequate compensation. If adverse market conditions persist, the attractiveness of our stock option offerings and the success of our employee stock plans may be negatively impacted and, as a result, diminish our ability to attract and retain qualified personnel.

Our customers may have difficulty meeting their financial obligations to us due to changes in the capital markets, which would reduce our revenue and harm our business.

Due to increased volatility in equity markets and tightening of lending in the credit markets, we believe that we are exposed to a greater risk that customers will alter their payment practices to conserve capital. These changes may lead to increases in our outstanding accounts receivable as a percentage of revenue, extended payback periods and increased risk of default. During the latter part of the fourth quarter of 2000, several key



customers experienced a rapid deterioration in their ability to obtain additional capital to fund their businesses. As a result, these customers declared their inability to make timely payments on their accounts and have not been able to demonstrate the ability to pay their existing account balances with us since that time. During 2001, a significant number of these customers commenced bankruptcy proceedings. We factor these increased risks of non-payment into our assessment of our customers' ability to pay, and these considerations will likely result in longer revenue deferrals than we have previously experienced. We also believe that certain of our customers will alter their plans to deploy products to meet the constraints imposed on them by changes in the capital markets. If we are not able to increase sales in other customer segments, or if our sales are otherwise delayed, our sales growth patterns may become increasingly volatile. This would increase the risk that our sales would decline in any particular quarter and could harm our business, operating results or financial condition.

If we inaccurately estimate customer demand, our business, results of operations and financial condition could be harmed.

We plan our expense levels in part on our expectations about future revenue. These expense levels are relatively fixed in the short-term. However, orders for our products may vary from quarter to quarter. In some circumstances, customers may delay purchasing our current products in favor of next-generation products. In addition, our new products are generally subject to technical evaluations by potential customers that typically last 60 to 90 days. In the case of IntelliPOP, those evaluations may increase to six months. If orders forecasted for a specific customer for a particular quarter are delayed or cancelled, our revenue for that quarter may be less than our forecast. Currently, we have minimal risk of loss associated with long-term customer commitments or penalties for delayed and/or cancelled orders. However, we may be unable to reduce our spending accordingly in the short-term, and any such revenue shortfall would have a direct impact on our results of operations for that quarter. Further, we outsource the manufacturing of our products based on forecasts of sales. If orders for our products exceed our forecasts, we may have difficulty meeting customers' orders in a timely manner, which could damage our reputation or result in lost sales. Conversely, if our forecasts exceed the order we actually receive and we are unable to cancel future purchase and manufacturing commitments in a timely manner, our inventory levels could increase. This could expose us to losses related to slow moving and obsolete inventory which would have a material adverse effect on our business, operating results and financial condition.

We depend on contract manufacturers to manufacture all of our products and rely on them to deliver high-quality products in a timely manner; the failure of these manufacturers to continue to deliver quality products in a timely manner could have a materially adverse effect on our business, results of operations and financial condition.

We do not manufacture our products. We rely on contract manufacturers to assemble, test and package our products. We cannot assure you that these contract manufacturers and suppliers will be able to meet our future requirements for manufactured products, components and subassemblies. In addition, we believe that current market conditions have placed additional financial strain on our contract manufacturers. Any interruption in the operations of one or more of these contract manufacturers would harm our ability to meet our scheduled product deliveries to customers. We also intend to regularly introduce new products and product enhancements, which will require that we rapidly achieve volume production by coordinating our efforts with those of our suppliers and contract manufacturers. The inability of our contract manufacturers to provide us with adequate supplies of high-quality products or the loss of a current contract manufacturer would cause a delay in our ability to fulfill customer orders while we obtain a replacement manufacturer and would harm our business, operating results and financial condition. In addition, we have canceled certain finished goods and component orders which may harm our relationship with certain contract manufacturers. Moreover, if we do not accurately forecast the actual demand for our products, we may face supply, manufacturing or testing capacity constraints. These constraints could result in delays in the delivery of our products or the loss of existing or potential customers, either of which could harm our business, operating results or financial condition.

If our contract manufacturers fail to obtain the raw materials and component products we require in a timely manner, our business could be harmed.

We currently purchase most of our raw materials and components used in our products through our contract manufacturers. Components are purchased pursuant to purchase orders based on forecasts, but neither we nor our contract manufacturers have any guaranteed supply arrangements with these suppliers. The availability of many of these components depends in part on our ability to provide our contract manufacturers and their suppliers with accurate forecasts of our future needs. If we or our manufacturers are unable to obtain a sufficient supply of key components from current sources, we could experience difficulties in obtaining alternative sources at reasonable prices, if at all, or in altering product designs to use alternative components. Resulting delays and reductions in product shipments could damage customer relationships and could harm our business, financial condition or results of operations. In addition, any increases in component costs that are passed on to our customers could reduce demand for our products.

We rely on third parties to test substantially all of our products and our failure to adequately control the quality of our products could harm our business, financial condition and results of operations.

Substantially all of our products are assembled and tested by our contract manufacturers. Although we perform random spot testing on manufactured products, we rely on our contract manufacturers for assembly and primary testing of our products. Any quality assurance problems could increase the cost of manufacturing, assembling or testing our products and could harm our business, financial condition and results of operation. Moreover, defects in products that are not discovered in the quality assurance process could damage customer relationships and result in product returns or liability claims, each of which could harm our business, financial condition and results of operations.

Based on our building specifications, several key components are purchased from single or limited sources and we could lose sales if these sources fail to fill our needs; if we lose sales, our business, financial condition and results of operations could be materially and adversely affected.

We currently purchase most of the raw materials and components used in our products through our contract manufacturers. In procuring components for our products, we and our contract manufacturers rely on some suppliers that are the sole source of those components, and we are dependent upon supplies from these sources to meet our needs. For example, field programmable gate array supplies used in our products are purchased from Xilinx or Altera. We also depend on various sole source offerings from Broadcom, Dallas Semiconductor, Metalink US, Motorola, Flextronics Semiconductor and SaRonix for certain of our products. If there is any interruption in the supply of any of the key components currently obtained from a single or limited source, obtaining these components from other sources could take a substantial period of time which could cause us to redesign our products or could disrupt our operations and harm our business, financial condition and results of operation in any given period.

Our business relies on the continued growth of the Internet and any negative issues associated with the Internet could harm our business.

The market for high-speed data access products depends in large part on the increased use of the Internet. Issues concerning the use of the Internet, including security, lost or delayed packets, and quality of service may negatively affect the development of the market for our products.

Our industry is characterized by rapid technological change and we must continually introduce new products that achieve broad market acceptance in order remain competitive.

The markets for high-speed data access products are characterized by rapid technological developments, frequent enhancements to existing products and new product introductions, changes in end-user requirements and evolving industry standards. To remain competitive, we must continually improve the performance, features and

reliability of our products, particularly in response to competitive product offerings. We must introduce products that incorporate or are compatible with these new technologies as they emerge and must do so in a timely manner. We cannot assure you that we will be able to respond quickly and effectively to technological change. We may have only limited time to penetrate certain markets, and we cannot assure you that we will be successful in achieving widespread acceptance of our products before competitors offer products and services similar or superior to our products. Any failure to introduce new products addressing technological changes or any delay in our product introductions could adversely affect our ability to compete and cause our operating results to be below our expectations or the expectations of public market analysts or investors. In addition, when we announce new products or product enhancements that have the potential to replace or shorten the life cycle of our existing products, customers may defer purchasing our existing products. These actions could harm our business, financial condition and operating results by unexpectedly decreasing sales, increasing our inventory levels of older products and exposing us to greater risk of product obsolescence.

**Manufacturing or design defects in our products could harm our reputation and our business, financial condition and results of operations.**

Any defect or deficiency in our products could reduce the functionality, effectiveness or marketability of our products. These defects or deficiencies could cause orders for our products to be canceled or delayed, reduce revenue, or render our product designs obsolete. In that event, we would be required to devote substantial financial and other resources for a significant period of time to the development of new product designs. We cannot assure you that we would be successful in addressing any manufacturing or design defects in our products or in developing new product designs in a timely manner, if at all. Any of these events, individually or in the aggregate, could harm our business, financial condition and results of operations.

**Changing industry standards may reduce the demand for our products, which would harm our business, financial condition and results of operations.**

We will not be competitive unless we continually introduce new products and product enhancements that meet constantly changing industry standards. The emergence of new industry standards, whether through adoption by official standards committees or through widespread use of such standards by telephone companies or other service providers, could require the redesign of our products. If these standards become widespread and our products do not comply with these standards, our customers and potential customers may not purchase our products, which would harm our business, financial condition and results of operations. The rapid development of new standards increases the risk that competitors could develop products that make our products obsolete. Any failure by us to develop and introduce new products or enhancements directed at new industry standards could harm our business, financial condition and results of operations. In addition, selection of competing technologies as standards by standards setting bodies such as the HomePNA could negatively affect our reputation in the market, regardless of whether our products are standards-compliant or demand for our products does not decline. This selection could be interpreted by the press and others as having a negative impact on our business which could negatively impact our stock price.

**We have in the past and may in the future acquire companies, technologies or products and if we fail to integrate these acquisitions, our business, results of operations and financial condition could be harmed.**

In 2001 and 2000, we completed five acquisitions. As a part of our business strategy, we expect to make additional acquisitions of, or significant investments in, complementary companies, products or technologies. We may need to overcome significant issues in order to realize any benefits from our past transactions, and any future acquisitions would be accompanied by similar risks. These risks include, but are not limited to:

- difficulties in assimilating the operations and personnel of the acquired companies;
- the potential disruption of our ongoing business and the distraction of our management;

- the potential inability to maximize our financial and strategic position through the successful incorporation of acquired technology and rights into our products and services;
- additional expense associated with amortization of acquired intangible assets;
- maintenance of uniform standards, controls, procedures and policies; and
- impairment of existing relationships with employees, suppliers and customers as a result of the integration of new personnel.

We cannot assure you that we will be able to successfully integrate any business, products, technologies or personnel that we have acquired or may acquire in the future, and our failure to do so could harm our business, operating results and financial condition.

**Fluctuations in currency exchange rates may harm our business.**

All of our foreign sales are invoiced in U.S. dollars. As a result, fluctuations in currency exchange rates could cause our products to become relatively more expensive for international customers and reduce demand for our products. We anticipate that foreign sales will generally continue to be invoiced in U.S. dollars. Accordingly, we do not currently engage in foreign currency hedging transactions. However, as we expand our current international operations, we may allow payment in foreign currencies and, as a result, our exposure to foreign currency transaction losses may increase. To reduce this exposure, we may purchase forward foreign exchange contracts or use other hedging strategies. However, we cannot assure you that any currency hedging strategy would be successful in avoiding exchange related losses.

**If we fail to protect our intellectual property, or if others use our proprietary technology without authorization, our competitive position may suffer.**

Our future success and ability to compete depends in part upon our proprietary technology. We rely on a combination of copyright, patent, trademark and trade secrets laws and nondisclosure agreements to establish and protect our proprietary technology. We currently hold 26 United States patents and have 26 United States patent applications pending. However, we cannot assure you that patents will be issued with respect to pending or future patent applications that we have filed or plan to file or that our patents will be upheld as valid or will prevent the development of competitive products or that any actions we have taken will adequately protect our intellectual property rights.

We generally enter into confidentiality agreements with our employees, consultants, resellers, customers and potential customers, in which we strictly limit access to and distribution of our software, and further limit the disclosure and use of our proprietary information. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy or otherwise obtain or use our products or technology. Our competitors may also independently develop technologies that are substantially equivalent or superior to our technology. In addition, the laws of some foreign countries do not protect our proprietary rights to the same extent as the laws of the United States.

**We may be subject to intellectual property infringement claims that are costly to defend and could harm our business and ability to compete.**

Our industry is characterized by vigorous protection and pursuit of intellectual property rights. We are subject to the risk of adverse claims and litigation alleging infringement of the intellectual property rights of others. From time to time, third parties may assert infringement claims with respect to our current or future products. Any such assertion, regardless of its merit, could require us to pay damages or settlement amounts and could require us to develop non-infringing technology or acquire licenses to the technology that is the subject of the asserted infringement. This litigation or potential litigation could result in product delays, increased costs or both. In addition, the cost of any litigation and the resulting distraction of our management resources could harm

our business, results of operations or financial condition. We also cannot assure you that any licenses of technology necessary for our business will be available or that, if available, these licenses can be obtained on commercially reasonable terms. Our failure to obtain these licenses could harm our business, results of operations and financial condition.

If our products do not comply with complex government regulations, our products may not be sold, preventing us from increasing our revenue or achieving profitability.

We and our customers are subject to varying degrees of federal, state and local regulation. Our products must comply with various regulations and standards defined by the Federal Communications Commission, or FCC. The FCC has issued regulations that set installation and equipment standards for communications systems. Our products are also required to meet certain safety requirements. For example, certain of our products must be certified by Underwriters Laboratories in order to meet federal safety requirements relating to electrical appliances to be used inside the home. In addition, certain products must be Network Equipment Building Standard certified before they may be deployed by certain of our customers. Any delay in or failure to obtain these approvals could harm our business, financial condition or results of operations. Outside of the United States, our products are subject to the regulatory requirements of each country in which our products are manufactured or sold. These requirements are likely to vary widely. If we do not obtain timely domestic or foreign regulatory approvals or certificates, we would not be able to sell our products where these regulations apply, which may prevent us from sustaining our revenue or achieving profitability.

In addition, regulation of our customers may adversely impact our business, operating results and financial condition. For example, FCC regulatory policies affecting the availability of data and Internet services and other terms on which telecommunications companies conduct their business may impede our penetration of certain markets. In addition, the increasing demand for communications systems has exerted pressure on regulatory bodies worldwide to adopt new standards, generally following extensive investigation of competing technologies. The delays inherent in this governmental approval process may cause the cancellation, postponement or rescheduling of the installation of communications systems by our customers, which in turn may harm the sale of products by us to these customers.

If our customers do not receive adequate and timely customer support from us or our third-party providers our relationships with our customers could be damaged, which could harm our business, financial condition and results of operations.

Our ability to achieve our planned sales growth and to retain current and future customers will depend in part on the quality of our customer support operations. Our customers generally require significant support and training with respect to our products, particularly in the initial deployment and implementation stage. As our systems and products become more complex, we believe our ability to provide adequate customer support will be increasingly important to our success. Moreover, we believe that our IntelliPOP products will add a significant layer of complexity to the demands on our customer support organizations. We have limited experience with widespread deployment of our products to a diverse customer base, and we cannot assure you that we will have adequate personnel to provide the levels of support that our customers may require during initial product deployment or on an ongoing basis. In addition, we rely on a third party for a substantial portion of our customer support functions, and therefore we may have limited control over the level of support that is provided. Our failure to provide sufficient support to our customers could delay or prevent the successful deployment of our products. Failure to provide adequate support could also have an adverse impact on our reputation and relationship with our customers, could prevent us from gaining new customers and could harm our business, financial condition or results of operations.

If we lose key personnel or are unable to hire additional qualified personnel as necessary, we may not be able to manage our business successfully, which could materially and adversely affect our business, financial condition and results of operations.

We depend on the performance of Salvatore D'Auria, our President, Chief Executive Officer, Chairman of the Board and Secretary, and on other senior management and technical personnel with experience in the data communications, telecommunications and high-speed data access industries. The loss of any one of them could harm our ability to execute our business strategy. Additionally, we do not have employment contracts with any of our executive officers. We believe that our future success will depend in large part upon our continued ability to identify, hire, retain and motivate highly skilled employees who are in great demand. We cannot assure you that we will be able to do so.

Our stock price has fluctuated and is likely to continue to fluctuate, and you may not be able to resell your shares at or above their purchase price.

The price of our common stock has been and is likely to continue to be highly volatile. Our stock price could fluctuate widely in response to factors including, but not limited to, the following:

- actual or anticipated variations in operating results;
- announcements of technological innovations, new products or new services by us or by our partners, competitors or customers;
- changes in financial estimates or recommendations by stock market analysts regarding us or our competitors;
- conditions or trends in the telecommunications industry, including regulatory developments;
- growth of the Internet;
- announcements by us of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- additions or departures of key personnel;
- future equity or debt offerings or our announcements of these offerings; and
- general market and economic conditions.

In addition, in recent years, the stock market in general, and the Nasdaq National Market and the securities of Internet and technology companies in particular, have experienced extreme price and volume fluctuations with severe drops. These fluctuations have often been unrelated or disproportionate to the operating performance of these technology companies. These market and industry factors may harm our stock price, regardless of our operating results.

Our stock may be delisted from the Nasdaq National Market.

At the closing of the Nasdaq National Market on March 18, 2002, the minimum bid price of a share of our common stock was \$1.99. Nasdaq corporate governance rules require that all shares listed on the Nasdaq National Market maintain a minimum bid price at closing of \$1.00 per share. Our failure to maintain such a minimum bid price for a period of thirty or more consecutive trading days could result in the Nasdaq governing board taking action to remove our shares from the Nasdaq National Market. Since the second quarter of 2001, the minimum closing bid price of our common stock has dropped below \$1.00 per share on a number of occasions, and we cannot assure you that it will not do so again in the future. The delisting of our common stock as well as the threat of delisting of our common stock may negatively impact the value of our shares because shares that trade on the over-the-counter market, rather than the Nasdaq National Market, are typically less liquid and, therefore, trade with larger variations between the bid and asking price.

Our charter, bylaws, retention and change of control plans and Delaware law contain provisions that could delay or prevent a change in control.

Certain provisions of our charter and bylaws and our retention and change of control plans, the "Plans," may have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, control of us. The provisions of the charter and bylaws and the Plans could limit the price that certain investors may be willing to pay in the future for shares of our common stock. Our charter and bylaws provide for a classified board of directors, eliminate cumulative voting in the election of directors, restrict our stockholders from acting by written consent and calling special meetings, and provide for procedures for advance notification of stockholder nominations and proposals. In addition, our board of directors has the authority to issue up to 5,000,000 shares of preferred stock and to determine the price, rights, preferences, privileges and restrictions, including voting rights, of those shares without any further vote or action by the stockholders. The issuance of preferred stock, while providing flexibility in connection with possible financings or acquisitions or other corporate purposes, could have the effect of making it more difficult for a third party to acquire a majority of our outstanding voting stock. The Plans provide for severance payments and accelerated stock option vesting in the event of termination of employment following a change of control. The provisions of the charter and bylaws, and the Plans, as well as Section 203 of the Delaware General Corporation Law, to which we are subject, could discourage potential acquisition proposals, delay or prevent a change of control and prevent changes in our management.

Future sales of our common stock could depress our stock price.

Sales of a substantial number of shares of our common stock in the public market, or the appearance that these shares are available for sale, could harm the market price of our common stock. These sales also may make it more difficult for us to sell equity securities or equity-related securities in the future at a time and price that we deem appropriate. As of December 31, 2001, we had 16,411,172 shares outstanding. Of these shares, 16,083,641 shares of our common stock are currently available for sale in the public market, some of which are subject to volume and other limitations under securities laws.

Our facilities are located near known earthquake fault zones, and the occurrence of an earthquake or other natural disaster could cause damage to our facilities and equipment which could require us to curtail or cease operations.

Our facilities are located in the San Francisco Bay Area near known earthquake fault zones and are vulnerable to damage from earthquakes. In October 1989, a major earthquake that caused significant property damage and a number of fatalities struck this area. We are also vulnerable to damage from other types of disasters, including fire, floods, power loss, communications failures and similar events. If any disaster were to occur, our ability to operate our business at our facilities could be seriously, or completely, impaired. The insurance we maintain may not be adequate to cover our losses resulting from disasters or other business interruptions.

We rely on a continuous power supply to conduct our operations, and a statewide energy crisis could disrupt our operations and increase our expenses.

In the fourth quarter of 2000 and the first quarter of 2001, California suffered an energy crisis that could have disrupted our operations and increased our expenses. In the event of an acute power shortage which occurs when power reserves for the State of California fall below 1.5%, California has on some occasions implemented, and may in the future implement, rolling blackouts throughout the state. We currently do not have backup generators or alternate sources of power in the event of a blackout, and our current insurance does not provide coverage for any damages we or our customers may suffer as a result of any interruption in our power supply. If California was to suffer a similar energy crisis in the future and blackouts interrupt our power supply, we would be temporarily unable to continue operations at our facilities. Any such interruption in our ability to continue operations at our facilities could damage our reputation, harm our ability to retain existing customers and to

obtain new customers, and could result in lost revenue, any of which could substantially harm our business and results of operations.

#### ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to changes in interest rates primarily from our investments in certain held-to-maturity securities. Under our current policies, we do not use interest rate derivative instruments to manage exposure to interest rate changes. A hypothetical 100 basis point adverse move in interest rates along the entire interest rate yield curve would not materially affect the fair value of interest sensitive financial instruments at December 31, 2001.

We have no investments, nor are any significant sales, expenses, or other financial items denominated in foreign country currencies. All of our international sales are denominated in U.S. dollars. An increase in the value of the U.S. dollar relative to foreign currencies could make our products more expensive and, therefore, reduce the demand for our products.



ITEM 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

TUT SYSTEMS, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	<u>Page</u>
Report of Independent Accountants .....	45
Consolidated Balance Sheets as of December 31, 2001 and 2000 .....	46
Consolidated Statements of Operations for the years ended December 31, 2001, 2000, and 1999 .....	47
Consolidated Statements of Stockholders' Equity (Deficit) for the years ended December 31, 2001, 2000, and 1999 .....	48
Consolidated Statements of Cash Flows for the years ended December 31, 2001, 2000, and 1999 .....	49
Notes to Consolidated Financial Statements .....	50

REPORT OF INDEPENDENT ACCOUNTANTS

To the Stockholders and Board of Directors of  
Tut Systems, Inc.

In our opinion, the consolidated financial statements listed in the index appearing under Item 14(a)(1) on page 73 present fairly, in all material respects, the financial position of Tut Systems, Inc. and its subsidiaries at December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 14(a)(2) on page 73 presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.



San Jose, California  
March 14, 2002

TUT SYSTEMS, INC.  
**CONSOLIDATED BALANCE SHEETS**  
(in thousands, except per share amounts)

	December 31,	
	2001	2000
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents .....	\$ 46,338	\$ 47,307
Short-term investments .....	3,029	55,307
Accounts receivable, net of allowance for doubtful accounts of \$6,908 and \$21,167 in 2001 and 2000, respectively .....	550	6,124
Inventories, net .....	11,839	36,285
Prepaid expenses and other .....	1,742	3,526
<b>Total current assets</b> .....	<b>63,498</b>	<b>148,549</b>
Property and equipment, net .....	8,171	10,578
Intangibles and other assets (including restricted cash of \$1,718 and \$3,248 in 2001 and 2000, respectively) .....	7,323	46,461
<b>Total assets</b> .....	<b>\$ 78,992</b>	<b>\$ 205,588</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable .....	\$ 1,204	\$ 9,446
Accrued liabilities .....	9,856	27,129
Deferred revenue .....	954	1,054
<b>Total current liabilities</b> .....	<b>12,014</b>	<b>37,629</b>
Deferred revenue, net of current portion .....	553	1,454
Other liabilities .....	329	332
<b>Total liabilities</b> .....	<b>12,896</b>	<b>39,415</b>
Commitments and contingencies (Note 8)		
Stockholders' equity:		
Preferred stock, \$0.001 par value, 5,000 shares authorized, no shares issued and outstanding in 2001 and 2000, respectively .....	—	—
Common stock, \$0.001 par value, 100,000 shares authorized, 16,411 and 15,911 shares issued and outstanding in 2001 and 2000, respectively .....	16	16
Additional paid-in capital .....	301,182	298,332
Deferred compensation .....	(17)	(1,041)
Notes receivable from stockholders .....	(96)	(555)
Accumulated other comprehensive income (loss) .....	(78)	6
Accumulated deficit .....	(234,911)	(130,585)
<b>Total stockholders' equity</b> .....	<b>66,096</b>	<b>166,173</b>
<b>Total liabilities and stockholders' equity</b> .....	<b>\$ 78,992</b>	<b>\$ 205,588</b>

The accompanying notes are an integral part of these consolidated financial statements.

TUT SYSTEMS, INC.  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(in thousands, except per share amounts)

	Years Ended December 31,		
	2001	2000	1999
Revenues:			
Product .....	\$ 12,866	\$ 69,981	\$ 26,266
License and royalty .....	882	2,010	1,541
Total revenues .....	<u>13,748</u>	<u>71,991</u>	<u>27,807</u>
Cost of goods sold:			
Product .....	40,489	42,760	15,454
License and royalty .....	—	—	5
Provision for loss on purchase commitments and abandoned products (Note 11) .....	—	27,223	—
Total cost of goods sold .....	<u>40,489</u>	<u>69,983</u>	<u>15,459</u>
Gross (loss) margin .....	<u>(26,741)</u>	<u>2,008</u>	<u>12,348</u>
Operating expenses:			
Sales and marketing .....	12,413	19,945	10,523
Research and development .....	15,044	17,149	7,618
General and administrative .....	9,118	11,503	4,194
Restructuring costs .....	2,311	—	—
In-process research and development .....	1,160	800	2,600
Impairment of intangibles .....	32,551	—	—
Amortization of intangibles .....	8,085	7,623	52
Noncash compensation expense .....	182	438	455
Provision for doubtful accounts .....	848	22,546	235
Total operating expenses .....	<u>81,712</u>	<u>80,004</u>	<u>25,677</u>
Loss from operations .....	<u>(108,453)</u>	<u>(77,996)</u>	<u>(13,329)</u>
Impairment of certain equity investments .....	—	(3,100)	—
Interest expense .....	(20)	(379)	(608)
Interest income .....	3,293	7,412	2,203
Other income (expense), net .....	855	(34)	1
Loss before income taxes .....	<u>(104,325)</u>	<u>(74,097)</u>	<u>(11,733)</u>
Income tax expense .....	<u>1</u>	<u>1</u>	<u>1</u>
Net loss .....	<u>(104,326)</u>	<u>(74,098)</u>	<u>(11,734)</u>
Dividend accretion on preferred stock .....	—	—	235
Net loss attributable to common stockholders .....	<u>\$(104,326)</u>	<u>\$(74,098)</u>	<u>\$(11,969)</u>
Net loss per share attributable to common stockholders, basic and diluted (Note 2) .....	<u>\$ (6.39)</u>	<u>\$ (4.98)</u>	<u>\$ (1.12)</u>
Shares used in computing net loss per share attributable to common stockholders, basic and diluted (Note 2) .....	<u>16,326</u>	<u>14,866</u>	<u>10,729</u>

The accompanying notes are an integral part of these consolidated financial statements.

TUT SYSTEMS, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

(in thousands)

	Convertible Preferred Stock Series A-G		Common Stock		Additional Paid-in Capital	Deferred Compensation	Notes Receivable From Stockholders	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount						
Balance, January 1, 1999	1,098	\$ 1,567	347	\$ —	\$ 2,455	\$(1,427)	\$ —	\$ —	\$ (44,434)	\$(41,839)
Net loss	—	—	—	—	—	—	—	—	(11,734)	(11,734)
Common stock issued in initial public offering, net	—	—	2,875	3	46,864	—	—	—	—	46,867
Conversion of Series A-C convertible preferred stock and Series D-G redeemable convertible preferred stock to common stock in conjunction	(1,098)	(1,567)	8,120	8	54,464	—	—	—	—	52,905
Common stock issued in conjunction with Public Port pooling of interest acquisition	—	—	169	—	160	—	—	—	(84)	76
Common stock issued in conjunction with Vintel Corporation purchase acquisition	—	—	116	—	4,254	—	—	—	—	4,254
Common stock issued for cash upon exercise of stock options	—	—	268	1	507	—	—	—	—	508
Common stock issued under employee stock purchase plan	—	—	8	—	239	—	—	—	—	239
Exercise of common stock warrant	—	—	37	—	—	—	—	—	—	—
Common stock issued for consulting services	—	—	1	—	26	—	—	—	—	26
Amortization related to unearned compensation	—	—	—	—	—	455	—	—	—	455
Dividend accretion	—	—	—	—	—	—	—	—	(235)	(235)
Balance, December 31, 1999	—	—	11,941	12	108,969	(972)	—	—	(56,487)	51,522
Components of comprehensive loss:										
Unrealized gains on other assets	—	—	—	—	—	—	—	26	—	26
Foreign currency translation adjustment	—	—	—	—	—	—	—	(20)	—	(20)
Net loss	—	—	—	—	—	—	—	—	(74,098)	(74,098)
Total comprehensive loss	—	—	—	—	—	—	—	—	—	(74,092)
Common stock issued in secondary offering, net	—	—	2,500	3	141,688	—	—	—	—	141,691
Common stock issued in conjunction with FreeGate purchase acquisition	—	—	511	1	21,887	—	—	—	—	21,888
Common stock issued in conjunction with Xstreamis purchase acquisition	—	—	439	—	19,231	—	—	—	—	19,231
Common stock issued for cash upon exercise of stock options	—	—	450	—	4,281	—	—	—	—	4,281
Common stock issued under employee stock purchase plan	—	—	24	—	662	—	—	—	—	662
Unearned compensation related to the issuance of restricted stock	—	—	46	—	1,614	(1,614)	—	—	—	—
Amortization related to unearned compensation	—	—	—	—	—	1,545	—	—	—	1,545
Notes receivable issued to stockholders	—	—	—	—	—	—	(555)	—	—	(555)
Balance, December 31, 2000	—	—	15,911	16	298,332	(1,041)	(555)	6	(130,585)	166,173
Components of comprehensive loss:										
Unrealized gains on other assets	—	—	—	—	—	—	—	(70)	—	(70)
Foreign currency translation adjustment	—	—	—	—	—	—	—	(14)	—	(14)
Net loss	—	—	—	—	—	—	—	—	(104,326)	(104,326)
Total comprehensive loss	—	—	—	—	—	—	—	—	—	(104,410)
Common stock issued in conjunction with ActiveTelco purchase acquisition	—	—	321	—	2,944	—	—	—	—	2,944
Common stock issued for cash upon exercise of stock options	—	—	67	—	58	—	—	—	—	58
Common stock issued under employee stock purchase plan	—	—	104	—	188	—	—	—	—	188
Unearned compensation related to common stock	—	—	8	—	64	(64)	—	—	—	—
Reversal of deferred compensation related to the workforce reduction	—	—	—	—	(404)	404	—	—	—	—
Amortization related to unearned compensation	—	—	—	—	—	684	—	—	—	684
Forgiveness of notes receivable issued to stockholders	—	—	—	—	—	—	479	—	—	479
Notes receivable issued to stockholders	—	—	—	—	—	—	(20)	—	—	(20)
Balance, December 31, 2001	—	\$ —	16,411	\$ 16	\$301,182	\$ (17)	\$ (96)	\$ (78)	\$(234,911)	\$ 66,096

The accompanying notes are an integral part of these consolidated financial statements.

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

	Years Ended December 31,		
	2001	2000	1999
Cash flows from operating activities:			
Net loss	\$(104,326)	\$ (74,098)	\$(11,734)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	3,602	2,267	894
Noncash interest income and amortization of discounts on investments	(168)	(4,375)	(484)
Provision for allowance for doubtful accounts	848	22,546	235
Provision for excess and obsolete inventory and abandoned products	34,237	14,468	340
Impairment of certain equity investments	—	3,100	—
Impairment of intangibles	32,551	—	—
Amortization of intangibles and noncash compensation expense	9,184	10,057	533
Write-off of in-process research and development	1,160	800	2,600
Gain (loss) on sale or disposal of other assets	77	(103)	—
Change in operating assets and liabilities, net of businesses acquired:			
Accounts receivable	4,726	(17,613)	(9,239)
Inventories	(9,148)	(42,151)	(4,954)
Prepaid expenses and other assets	4,547	(1,979)	(3,373)
Accounts payable and accrued liabilities	(27,451)	24,112	5,168
Deferred revenue	(1,001)	(826)	235
Net cash used in operating activities	<u>(51,162)</u>	<u>(63,795)</u>	<u>(19,779)</u>
Cash flows from investing activities:			
Purchase of property and equipment	(1,189)	(8,620)	(2,524)
Purchase of short-term and long-term investments	(7,002)	(164,063)	(34,855)
Purchase of other assets	(1,196)	(4,501)	—
Proceeds from maturities of short-term investments	59,423	131,889	14,154
Proceeds from sale of other assets	—	128	—
Acquisition of businesses, net of cash acquired and purchased research and development	(169)	(1,788)	406
Net cash provided by (used in) investing activities	<u>49,867</u>	<u>(46,955)</u>	<u>(22,819)</u>
Cash flows from financing activities:			
Payment on lines of credit	—	(1,529)	(2,733)
Proceeds from issuances of common stock, net	246	146,634	54,284
Other	80	(453)	—
Net cash provided by financing activities	<u>326</u>	<u>144,652</u>	<u>51,551</u>
Net increase (decrease) in cash and cash equivalents	(969)	33,902	8,953
Cash and cash equivalents, beginning of year	47,307	13,405	4,452
Cash and cash equivalents, end of year	<u>\$ 46,338</u>	<u>\$ 47,307</u>	<u>\$ 13,405</u>
Supplemental disclosure of cash flow information:			
Interest paid during the year	<u>\$ 20</u>	<u>\$ 1,036</u>	<u>\$ —</u>
Income taxes paid during the year	<u>\$ 1</u>	<u>\$ 1</u>	<u>\$ 1</u>
Noncash financing activities:			
Common stock issued in connection with the ActiveTelco acquisition in 2001, the FreeGate and Xstreamis acquisitions in 2000 and the PublicPort and the Vintel acquisitions in 1999	<u>\$ 2,944</u>	<u>\$ 41,119</u>	<u>\$ 4,414</u>
Accretion of preferred stock	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 235</u>
Conversion of preferred stock to common stock	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 47,802</u>
Unearned compensation related to stock and stock option grants	<u>\$ 64</u>	<u>\$ 1,614</u>	<u>\$ —</u>

The accompanying notes are an integral part of these consolidated financial statements.

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
(in thousands, except per share amounts)

**NOTE 1—DESCRIPTION OF BUSINESS:**

Tut Systems, Inc. (the "Company"), was founded in 1983 and began operations in August 1991. The Company designs, develops and markets advanced communications products that enable high-speed data access over the copper infrastructure of telephone companies, as well as the copper telephone wires in residential and commercial multi-tenant buildings. The Company's products incorporate high-bandwidth access multiplexers, associated modems and routers, ethernet extension products and integrated network management software.

The Company has incurred substantial losses and negative cash flows from operations since inception. For the year ended December 31, 2001, the Company incurred a net loss of \$104,326, and negative cash flows from operations of \$51,162, and has an accumulated deficit of \$234,911 at December 31, 2001. Management expects cash flow from operations to increase during the year, however, to the extent the Company's business continues to be affected by poor economic conditions impacting the telecommunications industry, the Company will continue to require cash to fund operations. The Company will seek additional funding for operations from alternative debt and equity sources if necessary to maintain reasonable operating levels. The Company cannot be assured that such funding efforts will be successful. Failure to generate positive cash flow in the future could have a material adverse effect on the Company's ability to achieve its intended business objectives.

**NOTE 2—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:**

**Principles of consolidation**

These consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated.

**Use of estimates**

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The most significant estimates include valuation of inventories and accounts receivable, estimation of loss on purchase commitments and the recoverability of long-lived assets. Actual results could differ from those estimates. Periodically, the Company reviews all significant investments and assumptions affecting financial statements and, when necessary, records the effect of any adjustments.

**Fair value of financial instruments**

The fair value of the Company's cash and cash equivalents, short-term investments, accounts receivable and accounts payable approximate their carrying value due to the short maturity or market rate structure of those instruments. The estimated fair values of short-term investments are based on quoted market prices for those securities or similar financial instruments.

**Cash, cash equivalents and investments**

Cash, cash equivalents and short-term investments are stated at cost or amortized cost, which approximates fair value, and consist of money market funds, commercial paper, US government agency notes and corporate

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

bonds. The Company includes in cash and cash equivalents all highly liquid investments which mature within three months of their purchase date. Management determines the appropriate classification of debt securities at the time of purchase and re-evaluates that designation as of each balance sheet date. As of December 31, 2001, debt securities were classified as held-to-maturity as the Company intended to, and had the ability to hold these securities to maturity. Held-to-maturity securities are stated at amortized cost, which approximates fair market value.

The Company also has a minority investment in a privately-held company. This investment is included in other assets on the Company's balance sheet and is carried at cost. The Company monitors this investment for impairment and makes appropriate reductions in carrying value when necessary.

Inventories

Inventories are stated at the lower of cost or market. Cost is computed using standard cost, which approximates actual cost on a first-in, first-out basis. The Company records provisions to write down its inventory and related purchase commitments for estimated obsolescence or unmarketable inventory equal to the difference between the cost of the inventory and the estimated market value based upon assumptions about the future demand and market conditions. If actual future demand or market conditions are less favorable than those estimated by the Company, additional inventory provisions may be required.

Property and equipment

Property and equipment are stated at cost less accumulated depreciation. The Company provides for depreciation by charges to expense which are sufficient to write off the cost of the assets over their estimated useful lives on the straight-line basis. Leasehold improvements are amortized over the lesser of the lease term or the estimated useful life of the improvement. Useful lives by principal classifications are as follows:

Office equipment .....	5 years
Computers and software .....	3-7 years
Test equipment .....	5 years
Leasehold improvements .....	1-7 years

When assets are sold or otherwise disposed of, the cost and accumulated depreciation are removed from the asset and allowance for depreciation accounts, respectively. Upon the disposition of property and equipment, the accumulated depreciation is deducted from the original cost and any gain or loss on that sale or disposal is credited or charged to income.

Maintenance, repairs, and minor renewals are charged to expense as incurred. Expenditures which substantially increase an asset's useful life are capitalized.



TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

**Intangible assets**

Intangible assets are stated at cost less amortization. As of December 31, 2001, intangible assets consisted of completed technology and patents and as of December 31, 2000 intangible assets consisted of goodwill, completed technology and patents, and assembled workforce. These intangible assets were/are amortized on a straight line basis over the estimated periods of benefit, which are as follows:

Goodwill .....	5 years
Completed technology and patents .....	5 years
Assembled workforce .....	3 years

Goodwill represented the excess of cost over the fair value of the net assets acquired.

**Accounting for long-lived assets**

The Company assesses the impairment of long-lived assets and related goodwill periodically in accordance with the provisions of SFAS No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of*. An impairment review is performed whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors considered important which could trigger an impairment review include, but are not limited to, significant underperformance relative to expected historical or projected future operating results, significant changes in the manner of use of the acquired assets or the strategy for the overall business, significant negative industry or economic trends, a significant decline in the stock price for a sustained period, and the market capitalization relative to net book value.

When management determines that the carrying value may not be recoverable based upon the existence of one or more of the above indicators of impairment, any impairment measured is based on a projected discounted cash flow method using a discount rate commensurate with the risk inherent in the Company's current business model.

**Revenue recognition**

*Product revenues*

The Company generates revenue primarily from the sale of hardware products and, to a lesser extent, through the licensing of its HomeRun technology and the sale of its software products. The Company sells products through direct sales channels and through distributors. The Company recognizes product revenue when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectibility is probable. Significant management judgements and estimates must be made in connection with the measurement of revenue in a given period. The Company follows specific and detailed guidelines for determining the timing of revenue recognition. At the time of the transaction, the Company assesses a number of factors including, specific contract and purchase order terms, completion and timing of delivery to the common carrier, past transaction history with the customer, the credit-worthiness of the customer, evidence of sell-through to the end user, and current payment terms. Based on the results of the assessment, the Company may recognize revenue when the products are shipped or defer recognition until evidence of sell-through occurs and cash is received. Revenue from service obligations included in product revenues is deferred and recognized ratably over the period of the obligation. The Company also maintains accruals and allowances for all cooperative marketing and other programs. Estimated sales returns and warranty costs are based on historical experience and are recorded at the time revenue is recognized. The Company's products generally carry a one year warranty from the date of purchase.

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

*License and royalty revenues*

The Company has entered into non-exclusive technology agreements with various licensees. These agreements provide the licensees the right to use the Company's proprietary technology to manufacture or have products manufactured using the proprietary technology and to receive customer support for specified periods and any changes or improvement to the technology over the term of the agreement.

Contract fees for the services provided under these licensing agreements are generally comprised of license fees and non-refundable, prepaid royalties which are recognized when the proprietary technology is delivered if there are no significant vendor obligations. If the licensing agreements contain post-contract customer support, the Company recognizes the contract fees ratably over the period during which the post-contract customer support is expected to be provided. This period represents the estimated life of the technology. The Company begins to recognize revenue under the contract, once it has delivered the implementation package which contains all information needed to use the Company's proprietary technology in the licensee's process. The remaining obligations are primarily to provide the licensee with any changes or improvements to the technology and technical advice on specifications, testing, debugging and enhancements.

The Company recognizes royalties upon notification of sale by its licensees. The terms of the royalty agreements generally require licensees to give notification to the Company and to pay royalties within 60 days of the end of the quarter during which the sales take place.

*Software license and post contract support revenues*

Currently, the Company's software revenue is derived from two separate sources, software license fees and post-contract maintenance and support fees. The software license fee typically grants a perpetual license to the customer. The Company generally recognizes revenue from the sale of the software license when all criteria for revenue recognition have been met similar to the Company's hardware product sales. The revenue for maintenance and support fees is recognized ratably over the term of the separate support contract.

*Accounting for stock based compensation*

The Company accounts for stock-based employee compensation arrangements in accordance with the provisions of Accounting Principles Board ("APB") Opinion No. 25, and "Accounting for Stock Issued to Employees," Financial Accounting Standard Board Interpretation No. 44 ("FIN 44") "Accounting for Certain Transactions Involving Stock Compensation—an Interpretation of APB 25," and complies with the disclosure provisions of SFAS No. 123, "Accounting for Stock-Based Compensation." Under APB No. 25, compensation expense is based on the difference, if any, on the date of the grant, between the fair value of the Company's stock and the exercise price. The Company accounts for stock issued to non-employees in accordance with the provisions of SFAS No. 123 and the EITF Issue No. 96-18, "Accounting for Equity Instruments that are Issued to other than Employees for Acquiring, or in Conjunction with Selling Goods or Services."

*Advertising expenses*

The Company accounts for advertising costs as expense in the period in which they are incurred. Advertising expense for the years ended December 31, 2001, 2000 and 1999 was \$103, \$371 and \$260, respectively.

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

**Research and development**

Research and development expenditures are charged to expense as incurred.

**Income taxes**

Deferred income taxes result primarily from temporary differences between financial and tax reporting. Deferred tax assets and liabilities are determined based on the difference between the financial statement bases and the tax bases of assets and liabilities using enacted tax rates. A valuation allowance is established to reduce a deferred tax asset to the amount that is expected more likely than not to be realized.

**Foreign currency translation**

The functional currency for the Company's foreign subsidiary is the relevant local currency. The translation from foreign currencies to U.S. dollars is performed for balance sheet accounts using current exchange rates in effect at the balance sheet date and for revenue and expense accounts using the weighted average exchange rate during the period. Adjustments resulting from such translation are reflected in comprehensive loss as a separate component of stockholders' equity. Gains or losses resulting from foreign currency transactions are included in the results of operations.

**Net loss per share**

Basic and diluted net loss per share is computed using the weighted average number of common shares outstanding. Options were not included in the computation of diluted net loss per share because the effect would be antidilutive.

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

The calculation of net loss per share attributable to common stockholders follows:

	Years Ended December 31,		
	2001	2000	1999
Net loss per share attributable to common stockholders, basic and diluted:			
Net loss attributable to common stockholders . . . . .	<u>\$(104,326)</u>	<u>\$(74,098)</u>	<u>\$(11,969)</u>
Shares used in computing net loss per share attributable to common stockholders, basic and diluted . . . . .	<u>16,326</u>	<u>14,866</u>	<u>10,729</u>
Net loss per share attributable to common stockholders, basic and diluted . . . . .	<u>\$ (6.39)</u>	<u>\$ (4.98)</u>	<u>\$ (1.12)</u>
Antidilutive securities including options not included in net loss per share attributable to common stockholders' calculations . . . .	<u>3,054</u>	<u>2,895</u>	<u>1,442</u>

Accumulated other comprehensive loss

Accumulated other comprehensive loss includes unrealized gains and losses on other assets and foreign currency translation adjustment that have been previously excluded from net loss and reflected instead in stockholders' equity. The following table sets forth the components of accumulated other comprehensive loss:

	Years Ended December 31,		
	2001	2000	1999
Unrealized gains (losses) on other assets . . . . .	(44)	26	—
Foreign currency translation adjustment . . . . .	<u>(34)</u>	<u>(20)</u>	<u>—</u>
Total . . . . .	<u>\$(78)</u>	<u>\$ (6)</u>	<u>\$ —</u>

Concentrations

The Company operates in one business segment, designing, developing and marketing advanced communications products that enable high-speed data access in residential and commercial multi-tenant buildings. The market for high-speed data access products is characterized by rapid technological developments, frequent new product introductions, changes in end-user requirements and constantly evolving industry standards. The Company's future success depends on its ability to develop, introduce and market enhancements to its existing products, to introduce new products in a timely manner that meet customer requirements and to respond effectively to competitive pressures and technological advances. Further, the emergence of new industry standards, whether formally adopted by official standards committees or informally through widespread use of such standards by telephone companies or other service providers, could require the Company to redesign its products.

Currently, the Company relies on contract manufacturers and certain single source suppliers of materials for certain product components. As a result, should the Company's current manufacturers or suppliers not produce and deliver inventory for the Company to sell on a timely basis, operating results could be adversely impacted.

From time to time, the Company maintains a substantial portion of its cash and cash equivalents in money market accounts with one financial institution. The Company invests its excess cash in debt instruments of the

## TUT SYSTEMS, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued) (in thousands, except per share amounts)

U.S. Treasury, governmental agencies and corporations with strong credit ratings. The Company has established guidelines relating to diversification and maturities in order to maintain the safety and liquidity of these assets. To date, the Company has not experienced any significant losses on its cash equivalents or short-term investments. During 2001, the Company held an investment in commercial paper issued by Southern California Edison Company. This investment had been included in short-term investments at a carrying value of approximately \$9.0 million and matured in January 2001 but was in default. In November 2001, the Company sold this investment for \$8.8 million, realizing a loss of \$0.2 million. This loss was included in other income (expense), net for 2001.

#### Recent accounting pronouncements

In June 1998, the Financial Accounting Standards Board, or FASB, issued Statement of Financial Accounting Standards, SFAS, No. 133, "Accounting for Derivative Instruments and Hedging Activities," which establishes accounting and reporting standards for derivative instruments and hedging activities. It requires an entity to recognize all derivatives as either assets or liabilities in the balance sheet and measure those instruments at fair value. The Company adopted SFAS No. 133 as amended by SFAS No. 138, as required by SFAS No. 137, "Deferral of the Effective Date of the FASB Statement No. 133," effective January 1, 2001. To date, the Company has not engaged in derivative and hedging activities. Accordingly the adoption of SFAS No. 133 did not have a material impact on the financial statements.

In May 2000, the Emerging Issues Task Force, or EITF, issued EITF Issue No. 00-14, "Accounting for Certain Sales Incentives", which addresses the recognition, measurement and income statement classification for sales incentives that a vendor voluntarily offers to customers, without charge, which the customer can use in, or exercise as a result of, a single exchange transaction. In June 2001, the EITF issued EITF Issue No. 00-25, "Vendor Income Statement Characterization of Consideration Paid to a Reseller of the Vendor's Products," effective for periods beginning after December 15, 2001 which addresses whether consideration from a vendor to a reseller is: (a) an adjustment of the selling prices of the vendor's products and, therefore, should be deducted from revenue when recognized in the vendor's statement of operations; or (b) a cost incurred by the vendor for assets or services received from the reseller and, therefore, should be included as a cost or expense when recognized in the vendor's statement of operations. Upon application of these EITFs, financial statements for prior periods presented for comparative purposes should be reclassified to comply with the income statement display requirements under these Issues. In September 2001, the EITF issued EITF Issue No. 01-09, "Accounting for Consideration Given by Vendor to a Customer or a Reseller of the Vendor's Products," which is a codification of EITF Issues No. 00-14, No. 00-25 and No. 00-22 "Accounting for 'Points' and Certain Other Time- or Volume-Based Sales Incentive Offers and Offers for Free Products or Services to be Delivered in the Future." The adoption of these Issues is not expected to have a material impact on the Company's financial statements.

In July 2001, the FASB issued SFAS No. 142, "Goodwill and Other Intangible Assets," which addresses financial accounting and reporting for acquired goodwill and other intangible assets and supersedes Accounting Principles Board ("APB") Opinion No. 17, "Intangible Assets." It addresses how intangible assets that are acquired individually or with a group of other assets, but not those acquired in a business combination, should be accounted for in financial statements upon their acquisition. SFAS No. 142 also addresses how goodwill and other intangible assets should be accounted for after they have been initially recognized in the financial statements. The Company will adopt SFAS No. 142 effective January 1, 2002. The adoption of SFAS No. 142 is not expected to have a material impact on the Company's financial statements.

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

(in thousands, except per share amounts)

On October 3, 2001, the FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS No. 144 supercedes SFAS No. 121 "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed of." SFAS No. 144 applies to all long-lived assets, including discontinued operations, and consequently amends APB Opinion No. 30, "Reporting the Results of Operations, Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions." SFAS No. 144 develops one accounting model for long-lived assets that are to be disposed of by sale. SFAS No. 144 requires that long-lived assets that are to be disposed of by sale be measured at the lower of book value or fair value less cost to sell. Additionally SFAS No. 144 expands the scope of discontinued operations to include all components of an entity with operations that: (a) can be distinguished from the rest of the entity, and (b) will be eliminated from the ongoing operations of the entity in a disposal transaction. SFAS No. 144 is effective for the Company for all financial statements issued in 2002. The adoption of SFAS No. 144 is not expected to have a material impact on the Company's financial statements.

**Reclassifications**

Certain reclassifications have been made to prior year balances in order to conform to the current year presentation.

**NOTE 3—ACQUISITIONS:**

*Pooling of interests combination*

In June 1999, the Company acquired PublicPort, Inc. ("PublicPort"), a company that designed and developed subscriber management systems. Under the terms of the agreement, the Company issued 169 shares of its common stock for all of the outstanding stock of PublicPort. The transaction was accounted for as a pooling of interests. The historical results of operations and financial position of PublicPort have not been significant in relation to the Company. As such, historical results of the Company have not been restated for this acquisition.

*Purchase combinations*

a) *Vintel*

In November 1999, the Company acquired all of the common stock and outstanding options to purchase common stock of Vintel Communications, Inc. ("Vintel") for a total purchase price of \$4,780, which consisted of \$500 cash, 116 shares of the Company's common stock, 40 options to purchase shares of the Company's common stock and related expenses. The acquisition was accounted for as a purchase and the results of the operations of Vintel have been included in the consolidated financial statements from the date of acquisition.

The allocation of the purchase price was based on the estimated fair value of the net assets at the date of the acquisition of \$354, goodwill of \$1,446, assembled workforce of \$380, and in-process research and development of \$2,600. The amount allocated to intangibles was determined based on an appraisal completed by an independent third party using established valuation techniques. The purchased in-process technology was expensed upon acquisition, because technological feasibility had not been established and no future alternative uses existed. The in-process technology percentage of completion was estimated to be 75%. The value of this in-process technology was determined by estimating the costs to develop the purchased in-process technology into a commercially viable product, estimating the resulting net cash flows from the sale of the product resulting from the completion of the in-process technology and discounting the net cash flows back to their present value. In-process technology from Vintel has reached technological feasibility and, in line with original estimates, had no material impact on the Company's results of operations or cash flows.

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

b) *FreeGate*

On February 14, 2000, the Company acquired FreeGate Corporation (“FreeGate”) for a total of \$25,486. The purchase price consisted of 511 shares of the Company’s common stock and approximately 20 options to acquire the Company’s common stock, and acquisition related expenses, consisting primarily of investment advisory, legal, other professional fees and other assumed liabilities. This acquisition was accounted for as a purchase and the results of the operations of FreeGate have been included in the consolidated financial statements from the date of acquisition.

The allocation of the purchase price was based on the estimated fair value of goodwill of \$19,786, completed technology and patents of \$3,400, assembled workforce of \$1,500, and in-process research and development of \$800. The amount allocated to intangibles was determined based on an appraisal completed by an independent third party using established valuation techniques. The purchased in-process technology was expensed upon acquisition, because technological feasibility had not been established and no future alternative uses existed. The in-process technology percentage of completion was estimated to be 75%. The value of this in-process technology was determined by estimating the costs to develop the purchased in-process technology into a commercially viable product, estimating the resulting net cash flows from the sale of the product resulting from the completion of the in-process technology and discounting the net cash flows back to their present value. The Company has abandoned the in-process research and development associated with FreeGate and therefore will not incur additional costs in this regard.

c) *Xstreamis*

On May 26, 2000, the Company acquired Xstreamis, plc (“Xstreamis”), a United Kingdom based holding company, for a total of \$19,557. The purchase price consisted of 439 shares of the Company’s common stock and 11 options to acquire the Company’s common stock, \$100 in cash and \$600 in acquisition related expenses, consisting primarily of legal and other professional fees. This acquisition was accounted for as a purchase and the results of the operations of Xstreamis have been included in the consolidated financial statements from the date of acquisition. The name of the acquired company was changed to Xstreamis Limited and subsequently to Tut Systems UK Limited.

The allocation of the purchase price was based on the estimated fair value of the goodwill of \$11,967, completed technology and patents of \$7,180, and assembled workforce of \$410. The amount allocated to intangibles was determined based on an appraisal completed by an independent third party using established valuation techniques.

The following unaudited pro forma consolidated information gives effect to the acquisitions of Vintel, FreeGate and Xstreamis as if they had occurred on January 1, 2000 and January 1, 1999, respectively, by consolidating the results of operations of Vintel, FreeGate and Xstreamis with the results of operations of the Company for the years ended December 31, 2000 and 1999, respectively. These pro forma results exclude the nonrecurring write-off of in-process research and development of \$800 related to the FreeGate acquisition and \$2,600 related to the Vintel acquisition for the years ended December 31, 2000 and 1999, respectively.

	Year Ended December 31,	
	2000	1999
	(unaudited)	
Revenue .....	\$ 72,082	\$ 30,153
Net loss .....	\$(77,430)	\$(34,432)
Net loss per share, basic and diluted .....	\$ (5.13)	\$ (2.57)

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

d) *ActiveTelco*

On January 11, 2001, the Company acquired ActiveTelco, Inc. ("ActiveTelco") for approximately \$4,850, consisting of an aggregate of 321 shares of the Company's common stock and 19 options to purchase shares of the Company's common stock, acquisition related expenses consisting primarily of legal and other professional fees, assumed ActiveTelco convertible notes in the amount of \$650 plus accrued interest and other assumed liabilities of approximately \$1,100. This transaction was treated as a purchase for accounting purposes. ActiveTelco provided an Internet telephony platform that enabled Internet and telecommunications service providers to integrate and deliver web-based telephony applications such as unified messaging, long-distance service, voicemail and fax delivery, call forwarding, call conferencing and callback services.

The allocation of the purchase price was based on the estimated fair value of goodwill of \$3,248, assembled workforce of \$442, and in-process research and development of \$1,160. The amount allocated to intangibles was determined based on an appraisal using established valuation techniques. The purchased in-process technology was expensed upon acquisition because technological feasibility had not been established and no future alternative uses existed. The in-process technology percentage of completion was estimated to be 75%. The value of this in-process technology was determined by estimating the costs to develop the purchased in-process technology into a commercially viable product, estimating the resulting net cash flows from the sale of the product resulting from the completion of the in-process technology and discounting the net cash flows back to their present value. Research and development costs to bring in-process technology from ActiveTelco to technological feasibility are not expected to have a material impact on the Company's future results of operations or cash flows.

Purchase of assets

e) *OneWorld*

On April 28, 2000, the Company acquired certain assets of OneWorld Systems, Inc. ("OneWorld") for \$2,408 in cash. The allocation of the purchase price was based on the fair market value of the assets at the date of acquisition of property and equipment of \$300, and the estimated fair value of goodwill of \$1,098 and assembled workforce of \$1,010.

f) *ViaGate*

On September 14, 2001, the Company acquired certain assets of ViaGate Technologies, Inc. ("ViaGate") for \$550 in cash and assumed liabilities of \$46 for certain capital leases. The allocation of the purchase price was based on the fair market value of the assets at the date of acquisition of property and equipment of \$5, and the estimated fair value of completed technology and patents of \$591.



TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

NOTE 4—BALANCE SHEET COMPONENTS:

	December 31,	
	2001	2000
Inventories, net:		
Finished goods .....	\$ 49,981	\$ 43,151
Raw materials .....	15,190	6,889
	65,171	50,040
Less: reserves .....	(53,332)	(13,755)
	<u>\$ 11,839</u>	<u>\$ 36,285</u>
Prepaid expenses and other:		
Receivables from contract manufacturers .....	\$ 28	\$ 2,448
Prepaid expenses .....	1,714	1,078
	<u>\$ 1,742</u>	<u>\$ 3,526</u>
Property and equipment:		
Computers and software .....	\$ 6,677	\$ 6,326
Leasehold improvements .....	4,437	4,286
Test equipment .....	3,624	3,257
Office equipment .....	1,395	1,241
	16,133	15,110
Less: accumulated depreciation .....	(7,962)	(4,532)
	<u>\$ 8,171</u>	<u>\$ 10,578</u>
Intangibles and other assets:		
Goodwill .....	\$ —	\$ 34,298
Completed technology and patents .....	6,467	10,580
Assembled workforce .....	—	3,300
	6,467	48,178
Less: accumulated amortization .....	(2,215)	(7,648)
Net intangibles .....	4,252	40,530
Other .....	3,071	5,931
	<u>\$ 7,323</u>	<u>\$ 46,461</u>
Accrued liabilities:		
Provision for loss on purchase commitments .....	\$ 4,421	\$ 19,042
Bankruptcy preference item .....	1,500	1,500
Compensation .....	1,014	2,571
Other .....	2,921	4,016
	<u>\$ 9,856</u>	<u>\$ 27,129</u>

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

NOTE 5—SHORT-TERM INVESTMENTS:

	December 31,	
	2001	2000
Commercial paper .....	\$ —	\$37,564
Corporate bonds .....	—	12,637
US government agency notes .....	3,029	5,106
	<u>\$3,029</u>	<u>\$55,307</u>

The cost of short-term investments approximated the fair value at December 31, 2001 and 2000. During 2001, the Company held an investment in commercial paper issued by Southern California Edison Company. This investment had been included in short-term investments at a carrying value of approximately \$9.0 million and matured in January 2001 but was in default. In November 2001, the Company sold this investment for \$8.8 million, realizing a loss of \$0.2 million. This loss was included in other income (expense), net for 2001.

NOTE 6—RESTRUCTURING COSTS, IMPAIRMENT OF CERTAIN INTANGIBLE ASSETS AND PROVISION FOR INVENTORY:

*Restructuring costs*

During 2001, the Company recorded \$2,311 in restructuring costs and related facility costs in connection with its April 2001 and October 2001 workforce reductions.

In April 2001, the Company announced a restructuring program which included a workforce reduction, closure of excess facilities, and disposal of certain of its fixed assets. As a result of this restructuring program, the Company recorded restructuring costs of \$2,092. The restructuring program resulted in the reduction of approximately 28% of the Company's employees, and the Company recorded a workforce reduction charge of approximately \$1,235 relating primarily to severance and fringe benefits. In addition, the number of temporary and contract workers employed by the Company was significantly reduced. The Company recorded costs of restructuring of \$785 relating to closure of excess facilities. The closure of excess facilities included the closure of certain satellite facilities due to workforce reductions and the Company's effort to reduce operating expenses as a result of the restructuring. This cost of restructuring is primarily comprised of non-cancelable lease and operating costs. Other fixed assets retired as a result of the workforce reductions totaled \$72. Cash expenditures relating to these workforce reductions were paid in the second quarter of 2001. Amounts related to the closure of excess facilities were accrued in the second quarter of 2001 and will be paid over the respective lease terms through August 2002. As of December 31, 2001, the Company had a remaining accrual of \$402, which remains to be paid through August 2002 related to the Sunnyvale facility shut down in the second quarter of 2001.

In October 2001, the Company further reduced its workforce by approximately 11%. The Company recorded a workforce reduction charge of \$219. Cash expenditures relating to this workforce reduction were paid in the fourth quarter of 2001.

*Impairment of certain intangible assets*

The Company recorded impairment charges totaling \$32,551 in 2001.

Based on the impairment review performed during the third quarter of 2001, the Company recorded a \$29,859 impairment charge to reduce goodwill and other intangible assets. The charge was determined based

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

upon estimated discounted future cash flows using a discount rate of 20%. The assumptions supporting future cash flows, including the discount rate, were determined using management's best estimates. The underlying factors contributing to the decline in expected future cash flows include a continued slowdown in the telecommunications market, and more recently, the indefinite postponement of capital expenditures, especially within the hospitality industry.

During the first quarter of 2001, the Company recorded a \$2,692 impairment charge relating to completed technology and patents. This resulted from the Company's decision not to pursue further incorporation of the related OneGate product and other intellectual property acquired from FreeGate into the design of future products.

*Provision for inventory*

The Company recorded a provision for inventory totaling \$18,500 in the first quarter of 2001, related to the costs of raw materials and finished goods in excess of what the Company reasonably expected to sell in the foreseeable future as of the first quarter of 2001. The Company recorded an additional provision for inventory totaling \$11,425 during the third quarter of 2001, related to the costs of raw materials and finished goods in excess of revised projections of what the Company reasonably expected to sell in the foreseeable future as of the third quarter of 2001. These revised projections were a result of continued decline in the telecommunications market, and, following the events surrounding September 11, 2001, the indefinite postponement of capital expenditures, especially within the hospitality industry. The Company recorded an additional provision for inventory totaling \$4,312 in the fourth quarter of 2001 as a part of our normal business operations and product inventory assessments.

**NOTE 7—INCOME TAXES:**

The income tax provision for \$1 for each of 2001, 2000 and 1999 relates to the state minimum franchise tax. The components of net deferred tax assets and liabilities as of December 31, 2001 and 2000 are as follows:

	<u>December 31,</u>	
	<u>2001</u>	<u>2000</u>
Deferred tax assets:		
Net operating loss carryforwards .....	\$ 43,408	\$ 26,124
Research and development credit .....	2,944	2,557
Deferred research and development costs .....	1,696	1,269
Deferred revenue .....	220	998
Accruals and reserves .....	30,662	24,136
Acquired intangibles .....	6,235	—
Investment write-offs .....	1,234	1,234
Other .....	235	243
Gross deferred tax assets .....	<u>86,634</u>	<u>56,561</u>
Deferred tax liabilities:		
Acquired intangibles .....	—	(905)
Deferred compensation .....	(7)	(415)
Gross deferred tax liabilities .....	<u>(7)</u>	<u>(1,320)</u>
Less: valuation allowance .....	(86,627)	(55,241)
Net deferred tax assets .....	<u>\$ —</u>	<u>\$ —</u>

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

Due to the uncertainty surrounding the realization of the tax attributes in tax returns, the Company has placed a full valuation allowance against its otherwise recognizable net deferred tax assets.

At December 31, 2001, the Company has approximately \$120,838 in federal and \$40,058 in state net operating loss, or NOL, carryforwards to reduce future taxable income. Of these amounts, \$28,044 and \$12,049 represent federal and state tax deductions, respectively, from stock option compensation. The tax benefit from these deductions will be recorded as an adjustment to additional paid-in capital in the year in which the benefit is realized.

At December 31, 2001, the Company also has research and experimentation tax credit carryforwards of approximately \$1,936 and \$1,526 for federal and state income tax purposes, respectively. The NOL and credit carryforwards expire in 2002 to 2021.

The Company's ability to use its federal and state net operating loss carryforwards and federal and state tax credit carryforwards to reduce future taxable income and future taxes, respectively, may be subject to restrictions attributable to equity transactions that may have resulted in a change of ownership as defined by Internal Revenue Code Section 382. In the event the Company has had such a change in ownership, utilization of these carryforwards could be severely restricted and could result in significant amounts of these carryforwards expiring prior to benefiting the Company. The Company is currently assessing whether such a change in ownership has occurred.

NOTE 8—COMMITMENTS AND CONTINGENCIES:

*Lease obligations*

The Company leases office, manufacturing and warehouse space under noncancelable operating leases that expire in 2006 and 2007. In connection with business combinations in 1999 and 2000, the Company assumed operating leases that expired in December 2001 and another that expires in August 2002.

The lease for the Pleasanton facility expires in April 2007, with an option to renew for five years. Under the terms of the lease agreement, the Company was required to issue a letter of credit in the amount of \$1,850. The letter of credit is reduced annually, beginning July 1, 2001, by approximately \$250, provided that the Company is not in default under the terms of the lease agreement. Pursuant to these terms, the Company's letter of credit was reduced from \$1,850 to \$1,600 in the third quarter of 2001. In the fourth quarter of 2001, the Company entered into a lease for engineering facilities in Bridgewater Township, New Jersey. Under the terms of this lease, the Company was required to issue a letter of credit in the amount of \$118. These letters of credit are collateralized by restricted funds in the amount of \$1,718, which are included in intangibles and other assets as of December 31, 2001.

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

Minimum future lease payments under operating leases at December 31, 2001 are as follows:

2002 .....	\$ 2,518
2003 .....	1,995
2004 .....	1,861
2005 .....	1,914
2006 .....	1,948
Thereafter .....	882
	<u>\$11,118</u>

Rent expense for the years ended December 31, 2001, 2000 and 1999 was \$2,630, \$2,165 and \$369, respectively.

*Purchase commitments*

The Company had noncancellable commitments to purchase finished goods inventory totaling \$531 and \$10,693 in aggregate at December 31, 2001 and 2000, respectively.

*Royalty obligation*

In February 1999, the Company paid one of its founders, a former employee of the Company, \$2,500 as a lump sum payment for all its future royalty obligations for the rights, title and interests in two patents. These two patents give the Company exclusive control of the Balun technology required in the Company's products. The Company is amortizing this royalty payment ratably over the five year period beginning February 1999. This period represents the estimated life of the patented technology. As of December 31, 2001, the balance of this payment remaining to be amortized was \$1,042. Amortization expense for the years ended December 31, 2001, 2000 and 1999 was approximately \$500 each year.

*Contingencies*

Beginning July 12, 2001, six putative shareholder class action lawsuits were filed in the United States District Court for the Northern District of California against Tut Systems, Inc. and certain of its current and former officers and directors. The complaints were filed on behalf of a purported class of people who purchased the Company's stock during the period between July 20, 2000 and January 31, 2001, seeking unspecified damages. The complaints allege that the Company and certain of its current and former officers and directors made false and misleading statements about its business during the putative class period. Specifically, the complaints allege violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934. The complaints have been consolidated under the name *In re Tut Systems, Inc. Securities Litigation*, Civil Action No. C-01-2659-JCS. Lead plaintiffs and lead counsel for plaintiffs have been appointed. Plaintiffs filed a consolidated class action complaint on February 4, 2002. The Company and its current and former officers and directors believe the allegations against them are without merit and intend to defend the action vigorously. An unfavorable resolution of this litigation could have a material adverse effect on the Company's business, results of operations, or financial condition.

On August 3, 2001, a complaint, *Arrow Electronics, Inc. v. Tut Systems, Inc.*, Case No. CV 800433, was filed in the Superior Court of the State of California for the County of Santa Clara against the Company. The Complaint was filed by one of its suppliers and alleges causes of action for breach of contract and for money on common counts. The Complaint seeks damages in the amount of \$10,469. There has been no discovery to

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

date and no trial has yet been scheduled. The Company denies liability and intends to defend itself vigorously. An unfavorable resolution of this litigation could have a material adverse effect on the Company's business, results of operations, or financial condition.

On October 30, 2001, the Company and certain of its current and former officers and directors were named as defendants in *Whalen v. Tut Systems, Inc. et al.*, Case No. 01-CV-9563, a purported securities class action lawsuit filed in United States District Court, Southern District of New York. An amended complaint was filed on December 5, 2001. The amended complaint asserts that the prospectuses from the Company's January 29, 1999 initial public offering and its March 23, 2000 secondary offering failed to disclose certain alleged actions by the underwriters for the offerings. The complaint alleges claims against the Company and certain of its current and former officers and directors under Section 11 of the Securities Act of 1933, as amended (the "1933 Act") and alleges claims against certain of its current and former officers and directors under Section 15 of the 1933 Act. The complaints also name as defendants the underwriters for the Company's initial public offering and secondary offering. The Company and its current and former officers and directors believe the allegations against them are without merit and intend to defend the action vigorously. An unfavorable resolution of this litigation could have a material adverse effect on the Company's business, results of operations, or financial condition.

The Company is subject to other legal proceedings, claims and litigation arising in the ordinary course of business. The Company's management does not expect that the ultimate costs to resolve these matters will have a material adverse effect on the Company's consolidated financial position, results of operations, or cash flows.

**NOTE 9—STOCKHOLDERS' EQUITY**

*Preferred stock*

The Company has 5,000 shares of undesignated preferred stock, \$0.001 par value, authorized for issuance. The Board of Directors can issue, in one or more series, this preferred stock and fix the voting rights, liquidation preferences, dividend rights, repurchase rights, conversion rights, redemption rights and terms and certain other rights and preferences with stockholder action. There was no preferred stock issued and outstanding at December 31, 2001 or 2000.

*Warrants for series G mandatorily redeemable convertible preferred stock*

In connection with the issuance of Series G redeemable convertible preferred stock ("Series G"), in 1998 the Company issued warrants to purchase 667 shares of Series G with an exercise price of \$10.00 per share. In January 1999, prior to the public offering, these warrants were exercised, resulting in the issuance of 667 shares of Series G in exchange for cash proceeds totaling \$6,700. Simultaneously with the closing of the initial public offering, these Series G redeemable convertible preferred shares were automatically converted into shares of common stock. There were no warrants issued and outstanding at December 31, 2001 or 2000.

*Initial public offering*

On January 29, 1999, the Company completed its initial public offering of common stock. The Company issued 2,875 shares at \$18.00 per share, obtaining net proceeds of approximately \$46,900, net of underwriting discounts, commissions and other offering costs. Simultaneously with the closing of the initial public offering, all issued and outstanding shares of the Company's convertible preferred stock and redeemable convertible preferred shares were automatically converted into shares of common stock.

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

(in thousands, except per share amounts)

*Secondary offering*

On March 23, 2000, the Company completed its secondary offering of common stock. The Company issued 2,500 shares at \$60.00 per share, obtaining net proceeds of approximately \$141,700, net of underwriting discounts, commissions and other offering costs.

**NOTE 10—EQUITY BENEFIT PLANS**

*Stock option plans*

In November 1993, the Company adopted the 1992 Stock Plan (the “1992 Plan”), under which the Company may grant both incentive stock options and nonstatutory stock options to employees, consultants and directors. Options issued under the 1992 Plan can have an exercise price of no less than 85% of the fair market value, as defined under the 1992 Plan, of the stock at the date of grant. The 1992 Plan, including amendments, allows for the issuance of a maximum of 178 shares of the Company’s common stock. This number of shares of common stock has been reserved for issuance under the 1992 Plan. At December 31, 2001, the Company is no longer granting stock options from the 1992 Plan. As stock options are terminated or cancelled from the 1992 Plan, the stock options are being retired and are no longer available for future grant.

The Company’s 1998 Stock Plan (the “1998 Plan”) was adopted by the Board of Directors in July 1998 and was approved by the stockholders in September 1998 and has rights and privileges similar to the 1992 Plan. The 1998 Plan allows for the issuance of a maximum of 1,000 shares of the Company’s common stock with annual increases starting in 2000, subject to certain limitations. In January 2000, the 1998 Plan was amended to increase the maximum number of shares that may be issued to 1,358. In January 2001, the 1998 Plan was amended to increase the maximum number of shares that may be issued to by 375 to 1,733.

The Company’s 1999 Nonstatutory Stock Option Plan (the “1999 Plan”) was adopted by the Board of Directors in December 1999. The 1999 Plan allows for the issuance of a maximum of 1,000 shares of the Company’s common stock. Additions to the Plan may be approved by the Board of Directors. The 1999 Plan has rights and privileges similar to the 1998 Plan. In April 2000, the 1999 Plan was amended to increase the maximum number of shares that may be issued to 1,425. In October 2000, the 1999 Plan was amended to increase the maximum number of shares that may be issued to 1,825.

Generally, stock options are granted with vesting periods of four years and have an expiration date of ten years from the date of grant. However, in the event of a change in control, as defined in our Change in Control plans adopted June 2000, employees who are terminated as a direct result of the change in control will be entitled to certain separation benefits including acceleration of unvested options ranging from six months to full vesting and severance pay ranging from one to eighteen months. Benefits may be limited in certain circumstances due to certain tax code provisions.

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

Activity under the 1992, 1998 and 1999 Plans (the "Plans") are summarized as follows:

	Shares Available For Grant	Options Exercised	Number of Shares	Outstanding Options			Weighted Average Exercise Price
				Price Per Share	Aggregate Price		
Balance, January 1, 1999	1,096	337	1,005	\$0.28 - \$ 15.00	\$ 3,141	\$ 3.13	
Options authorized	1,000	—	—	—	—	—	
Options granted	(849)	—	849	1.85 - 51.38	22,346	26.35	
Options exercised	—	268	(268)	0.36 - 15.00	(508)	1.89	
Options terminated	30	—	(144)	0.48 - 46.63	(1,957)	13.59	
Available options retired from 1992 Plan	(10)	—	—	—	—	—	
Balance, December 31, 1999	1,267	605	1,442	0.36 - 51.38	23,022	15.96	
Options authorized	1,183	—	—	—	—	—	
Options granted	(2,461)	—	2,461	6.16 - 100.63	98,263	39.92	
Options exercised	—	450	(450)	0.36 - 59.59	(4,281)	9.51	
Options terminated	695	—	(698)	0.48 - 94.50	(25,146)	36.03	
Restricted stock issued	(46)	—	—	—	—	—	
Available options retired from 1992 Plan	(51)	—	—	—	—	—	
Balance, December 31, 2000	587	1,055	2,755	0.36 - 100.63	91,858	33.34	
Options authorized	375	—	—	—	—	—	
Options granted	(2,450)	—	2,450	0.11 - 6.19	5,566	2.27	
Options exercised	—	66	(66)	0.11 - 3.60	(59)	0.89	
Options terminated	2,144	—	(2,235)	0.52 - 100.63	(75,454)	—	
Restricted stock issued	(13)	—	—	—	—	—	
Repurchases of unvested shares	5	—	—	—	—	—	
Balance, December 31, 2001	648	1,121	2,904	\$0.11 - \$ 68.25	\$ 21,911	\$ 7.54	

In addition to options granted under the Plans, in March 2000, the Company granted an option to purchase 75 shares at \$51.25 with rights and privileges similar to the 1998 Plan. In December 2000, the Company granted an option to purchase 65 shares at \$7.44 with rights and privileges similar to the 1998 Plan.

In addition, during 2001 and 2000 restricted stock was granted with repurchase rights which lapse over an eighteen month period to certain employees as part of the acquisitions of FreeGate, the OneWorld assets and ActiveTelco. The unearned compensation associated with restricted stock grants is amortized on a straight line basis over the eighteen month period. Accordingly, the Company amortized \$502 and \$1,107 for the years ended December 31, 2001 and 2000, respectively. At December 31, 2001, \$17 remains to be amortized through July 2002 related to restricted stock granted to certain employees as part of the ActiveTelco acquisition.

In connection with the grant of options for the purchase of 356 shares of common stock to employees during the period from December 1997 through June 1998, the Company recorded aggregate deferred compensation of \$1,820 representing the difference between the deemed fair value of the common stock and the option exercise price at the date of grant. In December 2000, the Company reduced this deferred compensation by \$251 to \$1,569 before amortization, reflecting employee terminations through December 2000. In September 2001, the



TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

(in thousands, except per share amounts)

Company further reduced this deferred compensation by \$101 to \$1,468 before amortization, reflecting employee terminations through September 2001. This deferred compensation was amortized over the vesting period relating to these options. The Company amortized \$182, \$438 and \$455 for the years ended December 31, 2001, 2000 and 1999, respectively. At December 31, 2001, this deferred compensation had been fully amortized.

The Company uses the Black-Scholes option pricing model to value options granted to consultants. The total estimated fair value of these grants during the periods presented was not significant and was expensed over the applicable vesting periods.

At December 31, 2001, 2000 and 1999, vested options to purchase 1,108, 418 and 379 shares of common stock, respectively were unexercised. The weighted average exercise price of these options was \$11.75, \$19.92 and \$1.96 per share for 2001, 2000 and 1999, respectively.

The following table summarizes information about stock options outstanding at December 31, 2001:

Options Outstanding				Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$ 0.11 - \$ 0.11	8	9.00	\$ 0.11	8	\$ 0.11
0.36 - 0.52	53	3.40	0.41	53	0.41
0.61 - 0.61	188	9.80	0.61	2	0.61
1.09 - 1.49	721	9.60	1.44	198	1.44
1.85 - 2.48	1,038	9.60	2.20	421	2.20
3.60 - 3.75	309	9.10	3.75	101	3.74
5.67 - 8.00	141	8.90	6.61	21	7.43
12.00 - 15.00	24	6.40	14.62	16	14.47
20.11 - 28.00	242	7.80	24.68	122	24.09
31.38 - 45.00	187	8.10	35.72	81	35.90
51.25 - 68.25	133	8.30	57.66	85	61.04
	<u>3,044</u>			<u>1,108</u>	

*Employee stock purchase plan*

The Company's 1998 Employee Stock Purchase Plan (the "1998 Purchase Plan") was adopted by the Board of Directors in July 1998 and was approved by the stockholders in September 1998. Under the 1998 Purchase Plan, an eligible employee may purchase shares of common stock from the Company through payroll deductions of up to 15% of his or her compensation, at a price per share equal to 85% of the lesser of the fair market value of the Company's common stock as of the first or last trading day on or after May 1 and November 1 and end on the last trading day of the period six (6) months later. In 1998, the Company reserved 250 shares of common stock for issuance under the 1998 Purchase Plan. In 2001, the Company allocated an additional 250 shares of common stock, increasing the number of shares reserved for issuance under the 1998 Purchase Plan to 500 of which 136 have been issued, leaving 364 for future issuances under the 1998 Purchase Plan as of December 31, 2001. The 1998 Purchase Plan is subject to annual increases, subject to certain limitations.

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

*Pro forma stock-based compensation*

The Company is required under Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123"), to disclose pro forma information regarding option grants made to its employees based on specified valuation techniques that produce estimated compensation charges. The following information concerning the Company's stock option plans and employee stock purchase plan is provided in accordance with SFAS 123. The Company accounts for its stock option plans and employee stock purchase plan in accordance with APB No. 25 and related Interpretations. Had compensation expense for the stock option plans and the employee stock purchase plan been determined based on the fair value at the grant date for awards granted in 2001, 2000 and 1999, consistent with the provisions of SFAS 123, the pro forma net loss would have been reported as follows:

	Year Ended December 31,		
	2001	2000	1999
Net loss—as reported .....	\$(104,326)	\$(74,098)	\$(11,969)
Net loss—pro forma .....	(107,800)	(87,618)	(13,602)
Net loss per share—as reported .....	(6.39)	(4.98)	(1.12)
Net loss per share—pro forma .....	(6.60)	(5.89)	(1.27)

The Black-Scholes option pricing model was developed for use in estimating fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option pricing models require the input of highly subjective assumptions including the expected stock price volatility. The Company uses projected volatility rates which are based upon historical volatility rates trended into future years. Because the Company's stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimates, in management's opinion, the existing models do not necessarily provide reliable single measure of the fair value of the Company's options.

Prior to the Company's initial public offering, the fair value of each option grant was estimated using the minimum value method. Volatility and dividend yields were not factors in the Company's minimum value calculation. Subsequent to the offering, the fair value of each stock option grant has been estimated on the date of the grant using the Black-Scholes option pricing model. The Company has also estimated the fair value of the purchase rights issued from its employee stock purchase plan, using the Black-Scholes option pricing model. The Company first issued purchase rights from the 1998 Purchase Plan in fiscal 1999. The following table outlines the weighted average assumptions for both the stock options granted and the purchase rights issued:

	Stock Option Plans			Employee Stock Purchase Plan		
	Year Ended December 31,			Year Ended December 31,		
	2001	2000	1999	2001	2000	1999
Expected dividend yield .....	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Risk-free interest rate .....	4.2%	6.2%	5.6%	4.6%	5.8%	4.7%
Expected volatility .....	120.0%	120.0%	90.0%	120.0%	120.0%	90.0%
Expected life (in years) .....	4.0	4.0	4.0	0.5	0.5	0.5

Generally, the Company grants options at a price equal to the fair market value of the Company's stock on the date of the grant. The weighted-average estimated fair values of stock options granted during fiscal 2001, 2000 and 1999 as calculated using the Black-Scholes option pricing model were \$1.84, \$31.51 and \$17.74 per share, respectively.

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

401(k) plan

In April 1995, the Company adopted the Tut Systems' Inc. 401(k) Plan (the "401(k) Plan") covering all eligible employees. Through December 31, 2001, contributions were limited to 15% of each employee's annual compensation, and further limited by IRS annual contribution limitations. Effective January 1, 2002, contributions are allowed up to 100% of each employee's annual compensation, but are still limited by IRS annual contribution limitations, depending on the age of the eligible employee. Contributions to the 401(k) Plan by the Company are discretionary. The Company did not make any contributions for the years ended December 31, 2001, 2000 and 1999.

NOTE 11—LOSS ON PURCHASE COMMITMENTS AND ABANDONED PRODUCTS

At December 31, 2000, the Company accrued a provision for estimated loss on purchase commitments in the amount of \$19,042 related to cancelled purchase orders. In addition, at December 31, 2000, the Company recorded a provision for loss on abandoned products of \$8,181 related to the Company's decision to abandon the further development and sale of certain product lines. This amount excludes \$6,287 already recorded as a provision for excess and obsolete inventory included in the cost of goods sold related to product for the year ended December 31, 2000.

During 2001, the Company reversed \$2,869 of the provision for loss on purchase commitments against cost of goods sold and the Company paid its suppliers \$11,752 upon receipt of raw material components related to its provision for loss on purchase commitments recorded in the fourth quarter of 2001. At December 31, 2001, these components were included in inventory offset by the provision for \$11,752. There were no additional provisions recorded in 2001 related to these raw material components.

NOTE 12—SEGMENT INFORMATION:

Revenue

The Company currently targets its sales and marketing efforts to both public and private service providers and users across two related markets. The Company currently operates in a single business segment as there is only one measurement of profitability for its operations. Revenues are attributed to the following countries based on the location of customers:

	Years Ended December 31,		
	2001	2000	1999
United States .....	\$ 6,007	\$42,474	\$18,825
International:			
Canada .....	*	*	2,779
Japan .....	5,331	*	*
Korea .....	*	12,791	*
All other countries .....	2,410	16,726	6,203
	<u>\$13,748</u>	<u>\$71,991</u>	<u>\$27,807</u>

\* Revenue attributable to this country was less than 10% of total revenue and any revenue attributable to this country is included in the "All other countries" line.

It is impracticable for the Company to compute product revenues by product type for the years ended December 31, 2001, 2000 and 1999.

TUT SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)  
(in thousands, except per share amounts)

Two customers, Kanematsu Computer System Ltd. and RIKEI Corporation, respectively accounted for 19% and 16%, respectively, of the Company's revenue for the year ended December 31, 2001. Three customers, TriGemm InfoComm, Inc., Reflex Communications, Inc. and Darwin Networks Inc., accounted for 18%, 12% and 11%, respectively, of the Company's revenue for the year ended December 31, 2000. Two customers, CAIS, Inc. and Rycom CCI, Inc., accounted for 12% and 10%, respectively, of the Company's revenue for the year ended December 31, 1999.

*Long-lived Assets*

The Company has long-lived assets, which consist of property and equipment, intangibles, and other assets. Long-lived assets are located in the following countries:

	December 31,	
	2001	2000
United States .....	\$11,711	\$39,422
United Kingdom .....	3,783	17,616
	<u>\$15,494</u>	<u>\$57,039</u>

NOTE 13—TENDER OFFER:

On May 14, 2001, the Company made an offer to exchange all stock options outstanding under its 1992 Stock Plan, 1998 Stock Plan and the 1999 Nonstatutory Stock Option Plan to purchase shares of the Company's common stock held by eligible employees for new stock options that will be granted under the Company's 1998 Stock Plan or the 1999 Nonstatutory Stock Option Plan, upon the terms and subject to the conditions set forth in the Offer to Exchange. An "eligible employee" refers to all employees of Tut Systems, Inc. and its U.S. subsidiaries who were employees at the time the new stock options were granted, other than all executive officers, vice-presidents, members of the Board of Directors and employees receiving Workers' Adjustment and Retraining Notification Act pay, all of whom were not eligible to participate in the offer. The number of shares of common stock subject to the new stock options would be equal to the number of shares of common stock subject to the unexercised stock options tendered by such eligible employees and accepted for exchange and cancelled. The offer expired on June 8, 2001. Pursuant to the offer, the Company accepted, for cancellation, stock options to purchase approximately 1,057 shares of the Company's common stock at a weighted average exercise price of \$35.99. Subject to the terms and conditions of the offer, the Company granted new stock options to purchase 851 shares of the Company's common stock on December 13, 2001 at an exercise price of \$2.15 to those employees who were employed by the Company at that time, in exchange for the stock options tendered in response to the offer and accepted for exchange and cancelled.

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

There has been no change in our independent accountants during the past two fiscal years. There have been no disagreements with our independent accountants on our accounting or financial reporting that would require our independent accountants to qualify or disclaim their report on our consolidated financial statements and financial statement schedule, or otherwise require disclosure in this Annual Report on Form 10-K.

### **PART III**

## **ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT**

The Company's Proxy Statement for its 2002 Annual Meeting of Stockholders, when filed pursuant to Regulation 14A under the Securities and Exchange Act of 1934, as amended (the "Exchange Act"), will be incorporated by reference in this Annual Report on Form 10-K pursuant to General Instruction G(3) and will provide the information required in Item 10.

### **Section 16(a) Beneficial Ownership Reporting Compliance**

With respect to Section 16(a) compliance, the Company's Proxy Statement for its 2002 Annual Meeting of Stockholders, when filed pursuant to Regulation 14A under the Exchange Act, will be incorporated by reference in this Annual Report on Form 10-K pursuant to General Instruction G(3) and will provide the information required in Item 10.

## **ITEM 11. EXECUTIVE COMPENSATION**

The Company's Proxy Statement for its 2002 Annual Meeting of Stockholders, when filed pursuant to Regulation 14A under the Exchange Act, will be incorporated by reference in this Annual Report on Form 10-K pursuant to General Instruction G(3) and will provide the information required in Item 11.

## **ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

The Company's Proxy Statement for its 2002 Annual Meeting of Stockholders, when filed pursuant to Regulation 14A under the Exchange Act, will be incorporated by reference in this Annual Report on Form 10-K pursuant to General Instruction G(3) and will provide the information required in Item 12.

## **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS**

The Company's Proxy Statement for its 2002 Annual Meeting of Stockholders, when filed pursuant to Regulation 14A under the Exchange Act, will be incorporated by reference in this Annual Report on Form 10-K pursuant to General Instruction G(3) and will provide the information required in Item 13.

PART IV

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

(a)

1. *Financial Statements*

The following documents are filed as part of this Annual Report on Form 10-K:

	<u>Page</u>
Report of Independent Accountants . . . . .	45
Consolidated Balance Sheets as of December 31, 2001 and 2000 . . . . .	46
Consolidated Statements of Operations for the years ended December 31, 2001, 2000, and 1999 . . . . .	47
Consolidated Statements of Stockholders' Equity (Deficit) for the years ended December 31, 2001, 2000 and 1999 . . . . .	48
Consolidated Statements of Cash Flows for the years ended December 31, 2001, 2000 and 1999 . . . . .	49
Notes to Consolidated Financial Statements . . . . .	50

2. *Financial Statements Schedules*

The following financial statement schedule is filed as part of this Annual Report on Form 10-K:

Schedule II—Valuation and Qualifying Accounts and Reserves

All other schedules have been omitted as they are not required, not applicable, or the required information is otherwise included.

3. *Exhibits*

The exhibits listed on the accompanying index to exhibits immediately following the financial statement schedule are filed as part of, or incorporated by reference into, this Annual Report on Form 10-K.

(b) *Reports on Form 8-K*

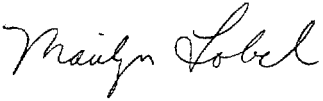
We did not file any Reports on Form 8-K during the fourth quarter ended December 31, 2001.

SIGNATURES

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

Date: March 29, 2002

TUT SYSTEMS, INC.

By:   
Marilyn Lobel  
Vice President, Finance and  
Chief Financial Officer  
(Chief Financial and Accounting Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Salvatore D'Auria and Marilyn Lobel, and each of them, jointly and severally, his true and lawful attorneys-in-fact, each with full power of substitution and resubstitution, for him in any and all capacities, to sign any or all amendments to this Annual Report on Form 10-K, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do if personally present, hereby ratifying and confirming all that each said attorney-in-fact and agent, or his or her substitute or substitutes or any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1934, this Annual Report on Form 10-K has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ SALVATORE D'AURIA</u> Salvatore D'Auria	President, Chief Executive Officer, Chairman of the Board and Secretary (Chief Executive Officer)	March 29, 2002
<u>/s/ MARILYN LOBEL</u> Marilyn Lobel	Vice President, Finance and Chief Financial Officer (Chief Financial and Accounting Officer)	March 29, 2002
<u>/s/ NEAL DOUGLAS</u> Neal Douglas	Director	March 29, 2002
<u>/s/ CLIFFORD H. HIGGERSON</u> Clifford H. Higgeson	Director	March 29, 2002
<u>/s/ GEORGE M. MIDDLEMAS</u> George M. Middlemas	Director	March 29, 2002
<u>/s/ ROGER H. MOORE</u> Roger H. Moore	Director	March 29, 2002

TUT SYSTEMS, INC.

SCHEDULE II: VALUATION AND QUALIFYING ACCOUNTS AND RESERVES

	<u>Balance at Beginning of Period</u>	<u>Additions (reductions) to Costs and Expenses</u>	<u>Write-offs</u>	<u>Reclasses from Other Accounts</u>	<u>Balance at End of Period</u>
Allowance for doubtful accounts:					
Year ended December 31, 1999 .....	\$ 115	\$ 235	\$ (15)	\$ —	\$ 335
Year ended December 31, 2000 .....	335	22,546	(1,714)	—	21,167
Year ended December 31, 2001 .....	21,167	(954) <sup>(1)</sup>	(13,305)	—	6,908
Allowance for doubtful notes receivable:					
Year ended December 31, 1999 .....	—	—	—	—	—
Year ended December 31, 2000 .....	—	—	—	—	—
Year ended December 31, 2001 .....	—	3,820	—	—	3,820
Valuation allowance for deferred tax assets:					
Year ended December 31, 1999 .....	14,271	5,480	—	—	19,751
Year ended December 31, 2000 .....	19,751	35,490	—	—	55,241
Year ended December 31, 2001 .....	55,241	25,104	—	—	80,345
Allowance for excess and obsolete inventory and abandoned product:					
Year ended December 31, 1999 .....	115	340	(37)	—	418
Year ended December 31, 2000 .....	418	14,468	(1,131)	—	13,755
Year ended December 31, 2001 .....	13,755	34,237	(6,412)	11,752 <sup>(2)</sup>	53,332

- (1) During 2001, the Company recovered \$1,802 of bad debt and recorded a provision for doubtful accounts of \$848.
- (2) During 2001, the Company paid its suppliers \$11,752 upon receipt of raw material components related to its provision for loss on purchase commitments recorded in the fourth quarter of 2000. At December 31, 2001, these components were included in inventory. There were no additional provisions recorded in 2001 related to these raw material components.



[This Page Intentionally Left Blank]

[This Page Intentionally Left Blank]

## Corporate Information

### Corporate Headquarters

Tut Systems, Inc.  
5964 West Las Positas Blvd.  
Pleasanton, CA 94588-8540  
PH: 925-460-3900  
FAX: 925-460-3901  
WEB: www.tutsystems.com

### Stock Trading

The Nasdaq National Market  
Symbol: TUTS

### Registrar and Transfer Agents

American Stock Transfer & Trust Co.  
40 Wall Street  
New York, NY 10005  
1-800-937-5449

### Dividend Policy

We have not paid dividends in the past and we intend to retain earnings, if any, and will not pay dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of the board of directors, and will be dependent upon our financial condition, results of operations, capital requirements, general business conditions and such other factors as our board of directors may deem relevant.

### Auditors

PricewaterhouseCoopers LLP  
Ten Almaden Blvd., Suite 1600  
San Jose, CA 95113  
408-817-3700

### Corporate Attorneys

Wilson Sonsini Goodrich & Rosati  
650 Page Mill Road  
Palo Alto, CA 94304  
650-493-9300

### Investor Relations

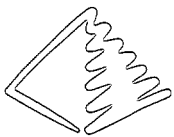
Tut Systems, Inc.  
Investor Relations Department  
5964 West Las Positas Blvd.  
Pleasanton, CA 94588-8540  
PH: 925-460-3900  
FAX: 925-460-3901  
WEB: www.tutsystems.com

### Annual Meeting

The annual meeting of stockholders will be held on Wednesday, May 15, 2002, at 10:00 a.m. at the Four Points Sheraton in Pleasanton, California.

### Forward-Looking Statements

This Annual Report, and the Annual Report on Form 10-K contained herein, contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements include, but are not limited to, statements about our revenue sources, our cash flow and cash position, our expense trends, product and standards development, and our plans, objectives, expectations and intentions and other statements contained in this Annual Report, and the Annual Report on Form 10-K contained herein, that are not historical facts. When used in this Annual Report, and the Annual Report on Form 10-K contained herein, the words "anticipates," "believes," "continue," "could," "estimates," "expects," "intends," "may," "plans," "seeks," "should," "will" or the negative of these terms or similar expressions are generally intended to identify forward-looking statements. Because these forward-looking statements involve risks and uncertainties, there are important factors that could cause actual results to differ materially from those expressed or implied by these forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. These forward-looking statements reflect current views of our management with respect to future events and are subject to these and other risks, uncertainties and assumptions. As a result, actual results may differ materially from the forward-looking statements contained herein. Such risks and uncertainties include those set forth in Part II, Item 7 of the Annual Report on Form 10-K contained herein, "Management's Discussion and Analysis of Financial Condition and Results of Operations—Additional Risk Factors that Could Affect our Operating Results and the Market Price of our Stock." All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by this paragraph.



**TUT SYSTEMS®**

5964 West Las Positas Boulevard  
Pleasanton CA, 94588-8540  
925.460.3900  
800.998.4888

[www.tutsystems.com](http://www.tutsystems.com)