



Pioneer-Standard Electronics, Inc.

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value-added services

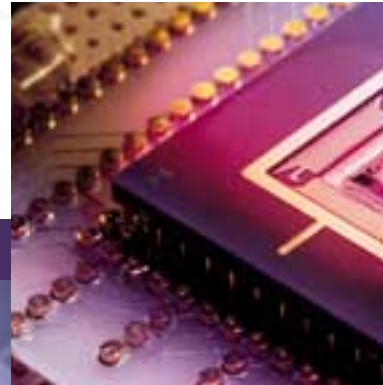
globalization

1999

results

LEADERSHIP that delivers GROWTH

A n n u a l R e p o r t



e-business

Pioneer-Standard at a glance

One results-driven distributor – two great business units

Products and Services

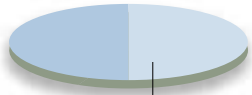
- Products include mid-range computer systems, software, services, networking, and storage products.
- Largest distributor worldwide of IBM mid-range servers, storage, software, and services, including leasing.
- Number-one Compaq Enterprise Reseller Worldwide, including servers, workstations, and maintenance and financial services.
- Enterprise resource planning, e-commerce development, and information management capabilities are offered as comprehensive business solutions.

Customers and Markets

The **Computer Systems Division's** primary customer base consists of 4,400 leading value added resellers (VARs) in North America. KeyLinkSM Systems is Pioneer-Standard's distribution entity for its VAR business partners, offering built-to-order computer products and systems, and technical support services to help them grow their businesses and better serve customers. The division also has a Corporate Accounts Group, which serves thousands of other customers.



Computer Systems Division



50% of sales for Pioneer-Standard

Industrial Electronics Division



50% of sales for Pioneer-Standard

- Products include semiconductors, power products, and interconnect, passive and electromechanical components.
- Value-added services include inventory and logistics management, device programming, component kitting, turnkey, and power products solutions.

The **Industrial Electronics Division** has more than 56,000 customer locations around the world and distributes more than 300,000 different electronic components for applications ranging from computers to communications. Other end-use markets with significant growth potential include: Internet-driven applications, automotive electronics, consumer electronics, and home appliances.



Our Global Reach

Through the Pioneer-Standard Electron World components group, Pioneer-Standard Electronics and its affiliates in Europe and Asia provide seamless global sourcing capabilities. Equity interests in both Eurodis Electron PLC of the U.K. and World Peace Industrial Company of Taiwan are part of Pioneer-Standard's strategic plans for international growth and expansion.



The Year in Review

- Increased market share and brand awareness to attain a leading position for KeyLink Systems in the mid-range computer systems distribution market.
- Received the Arthur Andersen Best Practices Award for KeyLink's ability to exceed customer expectations.
- Introduced online marketing and technical support services dedicated to helping value added reseller customers grow their own businesses.
- Launched a resource center to provide focused ordering and technical support services for customers who buy Intel products from Pioneer-Standard.
- Opened an automated facility for state-of-the-art systems integration and distribution.



- Championed formation of the Pioneer-Standard Electron World components group.
- Launched advanced e-business initiatives for online purchasing and interactive customer service.
- Capitalized on growth opportunities in contract manufacturing and in major markets such as data/telecommunications.
- Opened an advanced device programming and kitting center in southern California.

1999 was a year of significant advances in Pioneer-Standard's e-business capabilities. The Company's approach focuses on offering tools and services that enable customers to increase their effectiveness.

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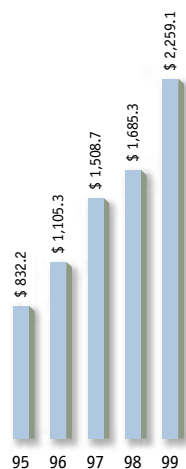
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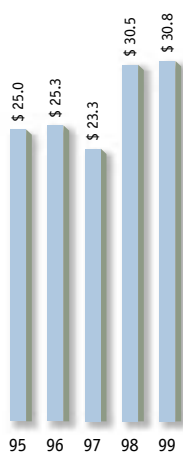
Financial Highlights

<i>Fiscal years ended March 31</i>	1999	1998	1997
<i>In thousands, except per share data</i>			
Net sales	\$2,259,083	\$1,685,265	\$1,508,709
Operating income	84,921	72,950	57,387
Income before income taxes	60,668	52,233	40,321
Income taxes	24,018	21,624	17,067
Net income	\$30,809	\$30,497	\$23,254
Per share data			
Basic	\$1.17	\$1.16	\$1.02
Diluted	1.03	1.14	1.00
Dividends	.12	.12	.12
Shareholders' equity	10.30	9.30	8.22
Weighted average shares outstanding			
Basic	26,351	26,205	22,732
Diluted	35,711	26,949	23,236

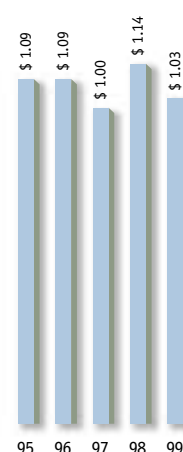
Net Sales
(millions of dollars)



Net Income
(millions of dollars)



Diluted Income Per Share



Fiscal 1999 was a successful year for Pioneer-Standard Electronics. We managed the business effectively, delivered on our commitments, and positioned ourselves to capitalize on growth opportunities in the electronics and computer markets.



James L. Bayman *(right)*

Chairman and Chief

Executive Officer,

Arthur Rhein *(left)*

President and Chief

Operating Officer

To Our Fellow Shareholders

By aligning ourselves with growth industries and best-in-class suppliers, we outperformed our competition and exceeded industry averages for financial results and organizational excellence. Despite very challenging market conditions, we had a record year for revenue and income.

Fiscal 1999 sales were \$2.25 billion, a 34 percent increase over 1998 sales of \$1.7 billion (up 10 percent excluding effects of the Dickens Data Systems acquisition). Our net income reached \$31 million, a 1.4 percent increase over the previous year. Diluted earnings per share for 1999 were \$1.03, compared with \$1.14 for 1998. We demonstrated our ability to deliver top-line growth and perform among the best of our peers. Our bottom-line results were affected by gross margin erosion due to industry overcapacity, causing average selling price reductions, and by a change in product mix.

Going forward, we are committed to delivering continuously improving results for our shareholders.

Controlling Our Destiny

In fiscal 1999, Pioneer-Standard succeeded in building a stronger, growth-oriented enterprise despite facing obstacles that were beyond our control – including continued semiconductor oversupply.

The Computer Systems Division (CSD) accounted for 50 percent of the Company's sales, compared with 44 percent a year ago. CSD's growth is attributable primarily to integration of the Dickens Data Systems acquisition, continued growth in IBM systems sales, increased market share in Compaq products, and record Intel systems sales. The division continues to build and reinforce relationships with its key business partners, including suppliers, value added resellers, and independent software vendors.

The market for mid-range systems – our focus – continues to expand, fueled by the proliferation of Internet and Intranet applications.

For the Industrial Electronics Division, the Asian economic crisis made for a more difficult year than we had anticipated. Electronics manufacturers in the Asian region typically consume 20 to 25 percent of the worldwide semiconductor capacity. When that market faltered, manufacturers redirected their output to North America and Europe, adding to the significant oversupply and further erosion of selling prices.

Nonetheless, the Industrial Electronics Division (IED) still recorded revenue of \$1,134 million by enhancing its offering of value-added services and executing its business strategy more effectively than many of its competitors. The division also implemented several cost control initiatives, including reducing personnel by 14 percent and consolidating some operations.

Strategic Successes

The fiscal year was a strategic success, positioning us for long-term growth and leadership in a fast-paced, consolidating industry. Pioneer-Standard's people worked to enhance our relationships with customers and suppliers, deliver the highest-quality service and support, and increase our market share. We continue to invest in leading-edge information technology, which enabled us to improve operating efficiency and productivity during fiscal 1999.

Throughout the year, we evaluated and, where necessary, adapted the organization to meet customer and market demands. For example, our Electronic Manufacturing Services sales unit provides automated quoting, specialized ordering, and logistics services to contract manufacturers, the components industry's fastest-growing segment.

Fiscal 1999 was also significant for the advances we made in our electronic business capabilities, designed to make our customers more effective and us more efficient. Our corporate Web site, www.pios.com, serves as an information clearinghouse for investors, customers, suppliers, and the media. On the Computer Systems Division side, we launched a number of Web-based tools to help value added resellers and our other business partners deliver comprehensive business solutions. Meanwhile, the Industrial Electronics Division introduced an online catalog and order center with technical specifications, real-time inventory status, and order tracking capabilities to give customers a fast, convenient way to order products from Pioneer-Standard.

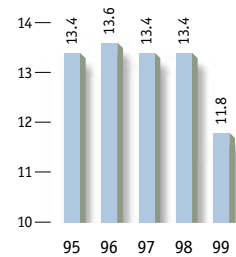
Many of our larger customers and suppliers transact business with us through Electronic Data Interchange (EDI). Going forward, we expect our e-business revenues and capabilities to grow. For example, we recently completed EDI links with our affiliates in Europe and Asia. We are using the Internet and EDI synergistically with other tools to enable customers to help themselves to the marketing, pricing, ordering, order status, and inventory management information they need to be successful.

In September 1998, we announced the formation of Pioneer-Standard Electron World. This group consists of Pioneer-Standard Electronics in North America, Eurodis Electron PLC in Europe, and World Peace Industrial Company serving Asia. With a collective \$3.4 billion in global market influence, this alliance provides the ability to seamlessly deliver products and solutions to customers worldwide, and to create international brand recognition.



In fiscal 1999, Pioneer-Standard reduced its selling, general and administrative (SG&A) expenses as a percentage of sales to 11.8 percent – even better than we had anticipated.

SG&A as a Percentage of Sales



Pioneer-Standard is investing wisely in its future, especially in its ability to offer industry-leading value-added services. In the fourth quarter, we opened a new automated systems distribution and integration facility near Cleveland, and an expanded device programming and components kitting center near Los Angeles. We also formed the Pioneer Resource Center for Intel Products as an e-business-oriented information center for customers who buy Intel products and services from us.

Our investments in technology, globalization, value-added services, and e-business in particular give us an enhanced ability to offer extensive supply chain management and integrated logistics solutions. We are making it fast, easy, cost-effective and technically feasible to get our suppliers' products into the hands of our customers. As a result, our customers become more effective and we become more efficient.

Leadership at the Top

Finally, fiscal 1999 was notable for our overall success in executing our business strategies. Through the experience of our senior management team and the dedication of our employees, we executed our plans and strategies among the best in our industry. We promised to reduce our selling, general and administrative expenses (SG&A), and we did it – faster than anticipated, down to 11.8 percent of sales in fiscal 1999. Through our corporate university, the University of Pioneer, and other employee-active programs, we developed and promoted people who have high motivation and valuable skills.

In April 1999, we announced a key addition to our senior management team, naming Gregory T. Geswein senior vice president and chief financial officer. Greg is a critical link in our efforts to increase shareholder value through growth, cost containment, and investor relations.

As we begin fiscal 2000, we look back on 1999 with pride in the results and solutions we delivered to our customers, suppliers, and shareholders. We implemented programs and systems to enhance Pioneer-Standard's position as an excellent organization and a quality investment.

There are signs that electronic component demand is beginning to align with worldwide supply. When that happens, we expect the investments and strategic decisions of fiscal 1999 to yield improved returns. Looking ahead, we are excited about the Company and the opportunities available to us.

We gratefully acknowledge the hard work of our employees and the support of our shareholders. All of us at Pioneer-Standard are committed to continuously increasing shareholder value. Thank you for your support of our Company and its mission to be the preferred strategic link between our suppliers and our customers.

Sincerely,

James L. Bayman
*Chairman and
Chief Executive Officer*

Arthur Rhein
*President and
Chief Operating Officer*

leadership that delivers growth

Pioneer-Standard Electronics, Inc. combines technological solutions, high-volume logistical resources, and value-added services to meet the needs of its suppliers and customers in the electronic components and computer systems markets. The Company also has a unique ability to forge mutually beneficial relationships with other market leaders, including contract manufacturers, independent software vendors, and transportation and logistics companies. Such leadership creates demand for suppliers' products, solutions for customers, opportunities for employees, and value for shareholders.

Leadership

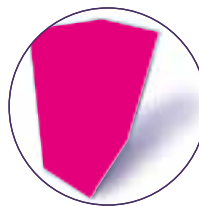
As the 20th century ends, distributors are an increasingly important link between suppliers and customers. Trends in the electronics industry, such as outsourcing, contract manufacturing, globalization and the Internet, pose significant challenges and tremendous opportunities for distributors.

By aligning itself with industry leaders and growth markets, Pioneer-Standard creates demand for suppliers and fulfills customer needs for high-quality solutions. Equally important, the Company excels at being the preferred strategic link between its suppliers and customers. A flexible array of value-added services, including demand planning, warehousing, and ship-to-line, helps suppliers and customers bring their products to market quickly and cost effectively.



Customers are at the forefront of Pioneer Standard's business strategy. The Company is committed to "the three I's":

- **Introduce** the technologies of Pioneer-Standard's suppliers to its target markets.
- Help customers **Incorporate** best-in-class technologies.
- **Improve** customers' business and profit opportunities through the delivery of total solutions and value-added services.



#1 in mid-range... Pioneer-Standard is the largest distributor of Compaq, IBM and Intel mid-range systems.



e-business solutions... Company launches full-scale Web-based catalog and order center.

Missions accomplished in fiscal 1999

Pioneer-Standard serves its target markets with a full array of products and services offered by two distribution divisions:

The **Computer Systems Division** is one of the largest distributors of Compaq, IBM, Intel, Informix and Oracle computer products and software. Areas of particular strength include mid- and high-end computer systems, software, services, networking, and data storage products. Customers include value added resellers (VARs), commercial end-users, systems integrators, network service providers, and government agencies.

The **Industrial Electronics Division** is an international leader in the distribution of semiconductors, power products, and interconnect, passive and electromechanical components. Its primary customers are in the data communications/telecommunications, contract manufacturing and computer markets.

Growth

Pioneer-Standard has a consistent record of delivering year-to-year growth in market share and revenues. Because of acquisitions and organic growth, the Company's revenues have nearly quadrupled, from \$580 million to \$2.25 billion, during the last five years. Pioneer-Standard continues grow its business in a variety of ways:

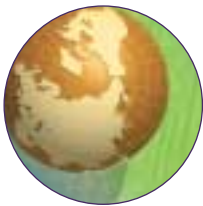
- Capitalizing on demand for increased electronics content in consumer and industrial products.
- Using its logistics and supply chain management expertise to ensure that customers have timely, cost-effective access to the products, services and support they need.



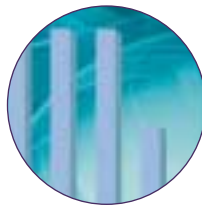
- Offering a comprehensive array of value-added services, ranging from computer systems integration to marketing support for value-added resellers; from component kitting and turnkey solutions to automated ordering and shipping systems.
- Maintaining and enhancing a strong supplier base through long-term, mutually beneficial relationships and alliances. Pioneer-Standard has long-term supplier agreements that include price protection and inventory return privileges. The Company has secured global distribution agreements with several leading manufacturers.

With those growth strategies, an experienced senior management team, and the inherent strength of the business units, Pioneer-Standard is well-positioned to capitalize on industry trends and opportunities. Its leadership is poised to deliver growth and create value for suppliers, customers, employees, and shareholders.

During the next five years, e-business transaction volume is expected to grow to as much as \$1.2 trillion annually. Pioneer-Standard's e-business solutions help customers improve their effectiveness and make Pioneer-Standard's operations more efficient.



Global footprint... Pioneer-Standard Electron World covers North America, Europe and Asia-Pacific.



SG&A reductions... Fiscal 1999 efficiency improvements meet, exceed expectations.



SIVAC investment... New facility offers state-of-the-art systems integration and distribution.

our focus: our customers

The Computer Systems Division's leadership and growth are linked to its ability to offer leading-edge technology and comprehensive business solutions. Working with strategic business partners, the division is a leading distributor in the mid-range computer systems market. Product categories include mid-range computer systems, software, services, networking, and data storage products.



With greater than \$1 billion in revenue in fiscal 1999, the Computer Systems Division is the world's largest reseller of Compaq, IBM and Intel mid-range systems products, and holds industry-leading positions with several other premier vendors.

KeyLinkSM Systems, the division's distribution business unit, manages approximately 4,400 major value added resellers (VARs), which provide computer system solutions, storage, network products, and support services throughout North America. Typically, VARs focus on geographic areas or have expertise in deploying computer solutions in particular market segments such as health care, manufacturing or communications. The Computer Systems Division also has direct sales capabilities for serving the needs of mid- to large-sized corporations, research laboratories, and government agencies.

The Computer Systems Division aligns its organization to address two essential market needs:

- Resource management – Investment in marketing programs, education, training, and technical support to address growing and changing market needs that deliver value-added, customer-focused solutions.
- Systems integration and operational excellence – Cost-effectively delivering hardware, software, storage, networks, and operating systems in a timely manner to meet customer specifications throughout North America.

Resource Management

Pioneer-Standard's resource management capabilities are a strategic business tool, providing customers with resources and skill sets they would otherwise have to establish and maintain on their own. For example, the division's solution marketing team will help customers build a business intelligence program that includes a product roadmap, training and education, technical consulting, and implementation of a total solution. In short, Pioneer-Standard professionals are highly trained to ensure delivery of a complete, fully integrated solution to customers.

The mid-range server market grows with the proliferation of Internet and Intranet applications – some 159 million people worldwide are online today; by 2003, 510 million people will be.

Delivering results for these leading suppliers

- Compaq
- Informix
- Lotus
- IBM
- Intel
- Oracle

Taking customer-focused solutions well beyond hardware, the Computer Systems Division has strategic alliances with independent software vendors, which offer best-in-class software for everything from high-end enterprise resource planning to niche markets. Fiscal 1999 was a year for growth in software vendor relationships: The Computer Systems Division now has more than 100 such strategic alliance partners. Every new vendor relationship creates additional opportunities for the division to increase market share by offering products and services for a wider variety of applications.

Operational Excellence

In the area of integration, the Computer Systems Division has a record of high performance that continues to improve. The division is capitalizing on new technologies and recent investments in automated warehousing and inventory management to help meet customers' needs. In addition, the division's electronic business capabilities are designed to help customers manage procurement, ordering, and order tracking. Electronic business solutions are more important than ever, due to trends in outsourcing, materials management, and logistics that are reinventing the industry.

Systems integration and operational excellence are critical for the division's continued leadership and growth in the computer systems market.

In January 1999, Pioneer-Standard announced the opening of a new, state-of-the-art facility to house both a Systems Integration Value Added Center (SIVAC) and a Systems Distribution Center (SDC). The 223,000-square-foot facility features a paperless, fully automated system designed to enhance system integration capabilities and warehousing efficiency. (For more on this new facility, see the sidebar on page 11.)

The Computer Systems Division's solutions and services for customers also include maintenance agreements, technical support, financing and leasing options, and migration services to support a transition from legacy systems to the advanced open architecture systems of today.

The Computer Systems Division won 11 awards from IBM, including being named the largest distributor of IBM mid-range systems and the largest distributor of the IBM RS/6000 system (shown above).

Strength in KeyLinkSM

In 1997, the Computer Systems Division launched the KeyLink Systems business unit to serve value added resellers (VARs) better than anyone in the industry. At the end of fiscal 1998, Pioneer-Standard completed the acquisition of Dickens Data Systems and seamlessly integrated that organization into KeyLink Systems.

Under the KeyLink banner, the division supports VARs with centralized order management, sales and marketing support, technical assistance, and system integration and logistics services to help them grow their business. For example, the Web-based MarketLink program includes a wide range of pre-defined samples and layouts to help VARs create customized advertisements, brochures, direct mail, flyers, and seminar invitations. In fact, the entire KeyLink sales tool kit is available online to VAR partners, who can use it to grow their businesses, which leads to additional revenue opportunities for Pioneer-Standard.

KeyLink's performance in serving VARs is exceptional. In 1998, the KeyLink organization won an Arthur Andersen Best Practices Award, sponsored by the management consulting firm's Enterprise Group. KeyLink won the award for "exceeding customer expectations" with "Quality First," a formal quality program that includes a Customer Advocate position to monitor customer satisfaction. KeyLink also conducts customer satisfaction surveys and updates those results each week.

In addition to serving KeyLink's customers, the Computer Systems Division delivers technical services and solutions direct to end-use customers. Corporate accounts have access to state-of-the-art products from best-in-class vendors, as well as a full suite of value-added services, including performance modeling and simulation, technology assessment, networking project management, Internet services, and system installation and maintenance.

E-Business Is Our Business

Fiscal 1999 was a year of significant advancement in Pioneer-Standard's electronic business capabilities. In addition to the online sales and marketing tools for VARs, the Computer Systems Division introduced a variety of other online tools. For example, the Computer Systems Division site (www.cssd.pios.com) enables customers to search for products, request price quotes based on system configuration, and track their order status 24 hours a day, seven days a week. The site can even suggest "intelligent substitutes" for products and services that are not available at the time of a customer inquiry.

The Computer Systems Division's approach to electronic business is built around facilitating instant access to information, providing solutions, offering technical support, and driving new business opportunities. The Company's strategy of "one-to-one marketing" with customers demands that they receive detailed, relevant information in all communications, including online.

Online ordering and technical support are available for Intel systems and products through the Pioneer Resource Center for Intel Products. The resource center has a highly trained staff and offers complete e-business capabilities for Intel products, promotions, programs, and technological advances available through Pioneer-Standard. Launched in fiscal 1999, this information clearinghouse serves customers of both the Computer Systems and the Industrial Electronics Divisions of Pioneer-Standard.

KeyLink offers expertise in project management, systems integration, materials management and planning, and technical assistance. Consequently, its value added reseller customers are well-positioned to offer business solutions, not just technology.



Demonstrating Results

The Computer Systems Division enjoyed a banner year in fiscal 1999. The division finished the year as the largest distributor of IBM mid-range systems and received 10 other IBM honors – including being number one in sales of IBM storage products and IBM services.

In 1999, the Computer Systems Division earned recognition as the number-one distributor of Compaq “Enterprise Products” worldwide. While some distributors lost market share in the wake of Compaq’s acquisition of Digital Equipment, the Computer Systems Division increased its market share and sales of the combined company’s products. In addition, the division drove Intel systems sales to record levels, and became Intel’s number-one mid-range systems distributor in North America. The division was the top distributor in North America for Cabletron, Genicom, IBM Software, and Informix.

Looking ahead to fiscal 2000 and beyond, the Computer Systems Division is well-positioned for leadership and growth. The mid-range computer market is currently the best-performing segment of the broad computer industry. The market should continue to be driven by the proliferation of Internet and Intranet applications.

The division continues to build on its expertise and commitment to align with premier vendors, build relationships with partners and customers, and offer complete business solutions and technical services. Its focus on operational excellence and customer satisfaction should continue to be a distinct competitive advantage for Pioneer-Standard Electronics.

Investing in Systems Integration

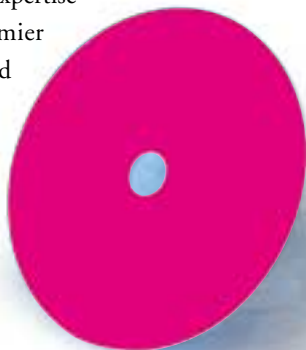
Systems integration is a core competency for the Computer Systems Division. Systems integration capabilities include hardware configuration and testing, custom packaging, software configuration and setup, and many other services designed to provide customers with complete business solutions.

Pioneer-Standard opened a new Systems Integration Value Added Center (SIVAC) in the fourth quarter of fiscal 1999. The new facility enables the Computer Systems Division to build on its commitments to operational excellence and customer satisfaction, and improves its capabilities to serve more customers.

The 223,000-square-foot facility in Solon, Ohio, includes dedicated work areas for custom builds and production assembly. The facility is supported by a paperless, fully automated system to ensure the efficient flow of information and products from vendors to customers.

The building also includes a state-of-the-art Systems Distribution Center (SDC), which uses bar code scanners, a sophisticated warehouse bin system, and automated inventory tracking to ensure that orders are received and processed as fast as possible.

The new SIVAC/SDC is a strategic business tool for customers. It also contributes substantially to Pioneer-Standard’s success. In fact, the Company estimates that the new automation technology will increase capacity as much as fourfold, and enhance production throughput and order processing efficiency by at least 25 percent.



growing our business



Pioneer-Standard's Industrial Electronics Division is one of the world's largest distributors of semiconductors, power products, and interconnect, passive and electromechanical components. The division has more than 100 electronic component suppliers on its line card and serves more than 56,000 customer locations.

The Industrial Electronics Division serves as the strategic link between suppliers and customers, faci-



tating the movement of products and services, and adding value at both ends of the supply chain. By aligning itself with growth markets and best-in-class suppliers, Pioneer-Standard is capitalizing on the growing demand for electronics at home, at work, and on the road. The division also works with its suppliers to create demand for their products and to build value-added relationships with key customers.

Supply Chain Management Leader

The Industrial Electronics Division's strength lies in its ability to provide fast, easy, and cost-effective solutions that incorporate suppliers' products into the products of customers. Supply chain management is reducing customers' time-to-manufacture and time-to-market.

Strategic deployment of sophisticated tools positions Pioneer-Standard as a leader in supply chain management. This position is reinforced consistently in marketing programs, including the division's "Anything, Anytime, Anywhere" campaign.

The Company's Integrated Inventory and Logistics Services offer customizable programs to assist customers with information and inventory management. For example, its Material Requirements Planning (MRP) software uses bills of material, inventory data, and the master production schedule to calculate requirements for materials. When interfaced with bar coding and Electronic Data Interchange (EDI) technology, MRP sets up an open, automated flow for replenishment of components on an as-needed, just-in-time basis.

Through effective supply chain management, the division delivers:

- Improved ordering, logistics, delivery, and inventory management for customers and suppliers around the world.
- Reduced time to manufacture and time to market for customers.
- Reduced total acquisition costs for customers.
- Improved customer access to new products and technologies.
- Improved supplier access to global growth markets and new customers.

With its long-term focus on being the strategic link between suppliers and customers, the Industrial Electronics Division is well-positioned to capitalize on the opportunities of supply chain management. In fact, the division closely links its goals and strategies – from investment in electronic business capabilities to expansion of its global presence – to its ability to grow as a supply chain management leader. To the benefit of its customers and suppliers, the Industrial Electronics Division has made supply chain management a core competency.

In 1999, business-to-business e-commerce accounted for \$43 billion, five times as much as consumer e-commerce. By 2003, the worldwide e-commerce market will grow to between \$541 billion and \$1.2 trillion.

Delivering results for these leading suppliers

- Actel
- Analog Devices
- Astec
- Atmel
- Bourns
- Fairchild Semiconductor
- Fujitsu
- Intel
- Kemet
- Lambda
- Microchip Technology
- Murata
- National Semiconductor
- Power One
- Siemens
- ST Microelectronics
- Thomas & Betts
- Vishay

Online and Interactive

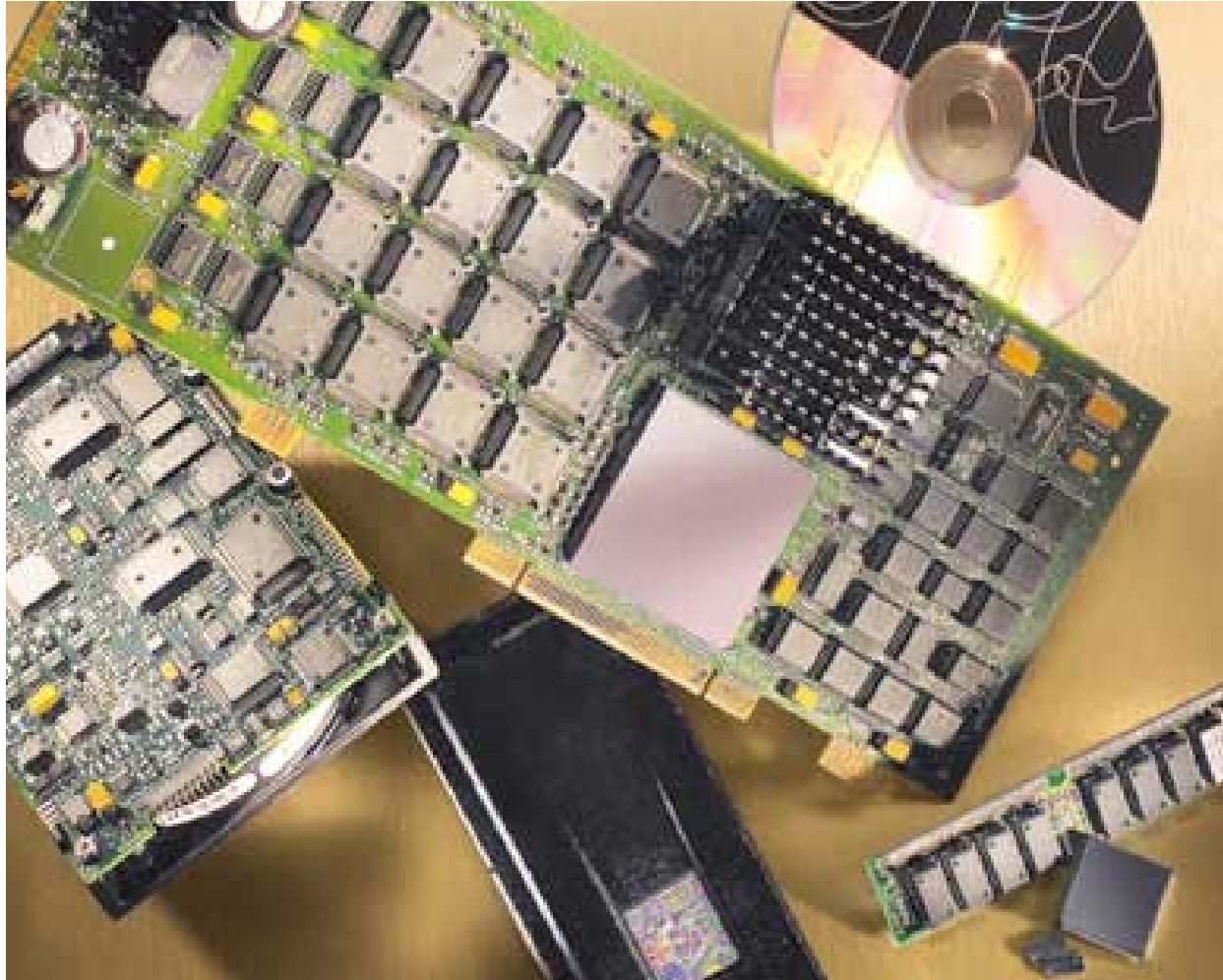
In fiscal 1999, the Industrial Electronics Division established a strong presence in the electronic business arena. A new Online Catalog and Order Center offers customers 24-hour access to more than 300,000 semiconductors, power products, and interconnect, passive and electromechanical components. The service, located at ied.pios.com/catalog, allows prospective buyers to browse through catalogs, access technical specifications, obtain pricing, and place orders online. Later in the year, the division introduced online order tracking capabilities, located at ied.pios.com/orderstatus. The system allows customers to determine an order's shipping status and track the order with hot links directly to the transportation carrier.

The division's EDI programs create direct links between Pioneer-Standard's information systems and customers' purchasing, inventory, and production systems. The result is a seamless flow of information and product that significantly reduces the need for manual purchase orders and other time- and resource-intensive work.

By the end of fiscal 1999, more than 80 percent of suppliers and approximately one-third of customers were doing business with the division electronically. Along with customer service and supply chain management, the Industrial Electronics Division's approach to the Internet is to improve operating efficiencies. Online services – for catalog searches, pricing, ordering, order status, and inventory management – give customers instant access to information so they can be more effective and the division can be more efficient.

Interactive customer service features such as the online order status and shipping information enhance Pioneer-Standard's position as a supply chain management and e-business leader.

A comprehensive array of value-added services, such as component kitting, assembly, programming, and turnkey services, helps customers increase inventory turns, reduce costs, and improve yields.



Aligned with Growth

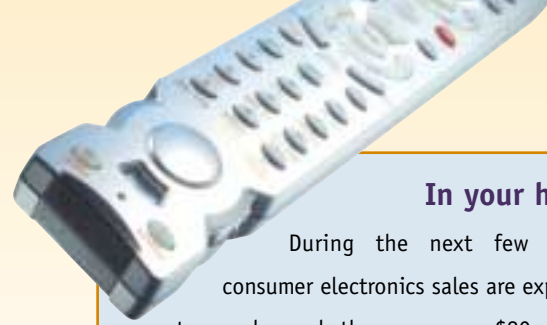
By focusing on its CustomerCentricSM philosophy, the Industrial Electronics Division aligns itself with market demands and growth opportunities. Despite semiconductor oversupply in most of the world's markets, the Industrial Electronics Division continues to capitalize on the rapidly growing demand for electronics content in products ranging from medical systems and cars to computers and communications. In addition, Pioneer-Standard is adept at creating segment-specific business units to meet market needs and drive growth.

For example, a dedicated Electronic Manufacturing Services (EMS) organization was established to serve contract manufacturers, the

components industry's fastest-growing segment. Contract manufacturing's growth has resulted from OEMs closely defining their core competencies – such as product creation, design and marketing – and outsourcing other functions such as manufacturing and assembly.

Through EMS, the Industrial Electronics Division offers automated quoting, ordering, and materials management systems, in addition to unique supply chain management capabilities designed to help contract manufacturers reduce cycle times and improve yields. The

Industrial Electronics Division also helps its contract manufacturing customers grow their businesses by linking them with OEMs that need an outsourcing solution.



In your home

During the next few years, consumer electronics sales are expected to reach, and then surpass, \$80 billion annually. There are some 9 billion microprocessors embedded in everything from cordless telephones and computers to toys and kitchen appliances. Pioneer-Standard distributes the components that make these products and systems work.

The Industrial Electronics Division deploys technical resources and expertise to focus on industry segments with maximum growth opportunities. One such area is data communications/telecommunications, which is experiencing explosive growth due to the Internet, cellular and digital telephone growth, and other voice, data and video applications. The division assigns engineers who have an average of 15 years of communications-related design experience. They offer technology and design solutions that meet worldwide demand for Ethernet, broadband and wireless communications capabilities. Many engineering support services are available online for immediate response. The results for customers are best-in-class solutions and minimal design bottlenecks.

Adding Value

The Industrial Electronics Division's success and growth depend on its ability to deliver solutions, not just products. Its industry-leading value-added services are closely linked to the Company's continued ability to win business and exceed customer expectations. In addition, value-added services have become an increasingly important source of revenue and growth opportunities.

Capitalizing on the outsourcing trend in the industry, for example, the Electronics Manufacturing Resources and Services (EMRS) program offers component kitting, turnkey services, and sub-assembly. Designed to increase inventory turns and reduce costs, EMRS works with customers to ensure that individual components and kits are configured properly and available when needed. Pioneer-Standard also operates comprehensive Device Programming Centers (DPC), featuring factory-certified technicians using best-in-class components and rigorous testing protocols.

During the last quarter of fiscal 1999, Pioneer-Standard opened a new state-of-the-art EMRS/DPC facility in southern California. The investment is part of the Industrial Electronics Division's strategy to leverage its supply chain management and device programming strengths and resources.

Electronic components and solutions, such as those offered by Pioneer-Standard, will enable the telecommunications carrying capacity of U.S. long-distance networks to be 90 times greater in 2001 than it was in 1996.

Technical support, provided by experienced, locally based field application engineers, is also a core value-added service for the Industrial Electronics Division. These field application engineers are a force in the industry, with their software-based design tools, frequent customer interactions, and a Web-based communications network that allows them to benefit from each other's experience and successes. Their efforts in developing analog, programmable logic, microcontroller and power solutions help customers bring products to market quickly, and provide the division another strategic advantage in a fast-paced industry.

Despite continued softness in the semiconductor and passive components markets, the Industrial Electronics Division exceeded expectations in fiscal 1999 by executing a sound business strategy. The division identified and capitalized on growth market opportunities, made supply chain management a core competency, strengthened its value-added services, and maximized its use of essential tools (notably the Internet and a growing global presence). These strategies position the Industrial Electronics Division as a high-value electronic components distributor, delivering leadership and growth that benefit customers, suppliers, employees, and shareholders.

a strategy for global growth

Since achieving a pervasive North American presence, Pioneer-Standard has been systematically shaping an international profile. Global alignment with growth industries is important to Pioneer-Standard for two reasons:

- It ensures industry **leadership** and a long-term commitment to serving customers, no matter where they are in the world.
- It represents a source of substantial **growth** potential as certain national and regional economies emerge and expand.

An Alliance of Leaders

During the second quarter of fiscal 1999, Pioneer-Standard, in concert with its Asian and European affiliates, announced the creation of a new global alliance for distributing electronic components. The resulting Pioneer-Standard Electron World components group (*world.pios.com*) combines a strong knowledge of local market conditions with a collective \$3.4 billion in global market influence.

The strategic alliance consists of industrial electronic components and computer products distributors on three continents:

- **Pioneer-Standard** has a large supplier and customer base, and strong offerings of technical support, supply chain management, and logistics serving the United States and Canada.
- **World Peace Industrial Company, Ltd.** (WPI), of Taiwan, holds a significant market position throughout Asia and the Pacific Rim, including Singapore, South Korea, Thailand, Malaysia, China and Hong Kong.
- **Eurodis Electron PLC**, of the United Kingdom, has operating centers in the United Kingdom, Austria, Belgium, the Czech Republic, France, Germany, Hungary, Ireland, Italy, the Netherlands, Poland, Slovakia and Switzerland.

Pioneer-Standard's continuing investments in overseas affiliates in Europe and Asia offer a flexible means for the Company to build momentum for global growth and expansion.

Pioneer-Standard owns equity interests in both WPI and Eurodis. At the beginning of fiscal 2000, Pioneer-Standard continued to build on its global momentum, as it increased its ownership in both companies. The Company has the option of making additional investments in both WPI and Eurodis.

Think Globally, Act Locally

The global group gives Pioneer-Standard a flexible way to reach out to the worldwide electronics marketplace and pursue growth opportunities. Group members share ideas and best practices, while retaining their autonomy and the ability to manage their own businesses and best serve local customers. This approach provides North American customers with global sourcing capabilities and increases customer access to Pioneer-Standard's field-based technical expertise.

The group can draw on state-of-the-art distribution centers in the U.S., U.K., France, Netherlands, Taiwan, China and Singapore. It has agreements with major shipping and transportation carriers around the world to deliver products to 210 destination countries. Customers in many parts of the world can place orders 24 hours a day, seven days a week, and receive their orders in three days or less.

The alliance also works to the benefit of Pioneer-Standard suppliers, which receive increased access and exposure to growth markets around the world. Adding to Pioneer-Standard's strong line card, the Company has worked with the other group members to secure worldwide distribution agreements with leading suppliers that include Bourns and Vishay.

Pioneer-Standard has built the infrastructure necessary to create a global footprint. Now it is strategically positioned to serve its customers around the world and to capitalize on additional opportunities for international growth and expansion.

