

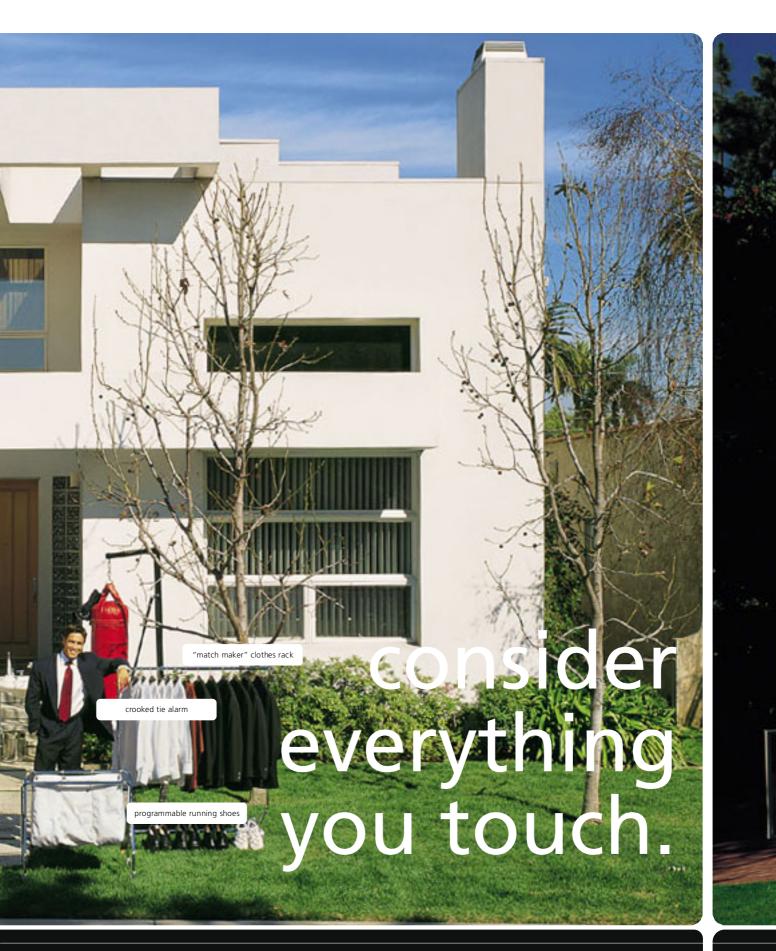
Cadence 1998 Annual Report

# think you know where electronics are heading?

## ideas are just around the corner.







Just to get ideas flowing, let's say 50 trillion things were sold last year. Lawnmowers. Magazines. Notebook computers. Telephone poles. Bags of potato chips. Oil rigs. Blow dryers. Commercial air conditioners. Shopping carts. Rear view mirrors. Pagers. Private yachts. Teddy bears. Grain silos.





Let's assume that next year, approximately the same number of individual products will be sold. Now imagine that a mere subset of those things—1% for discussion's sake—have some new, innovative electronic features designed into them.



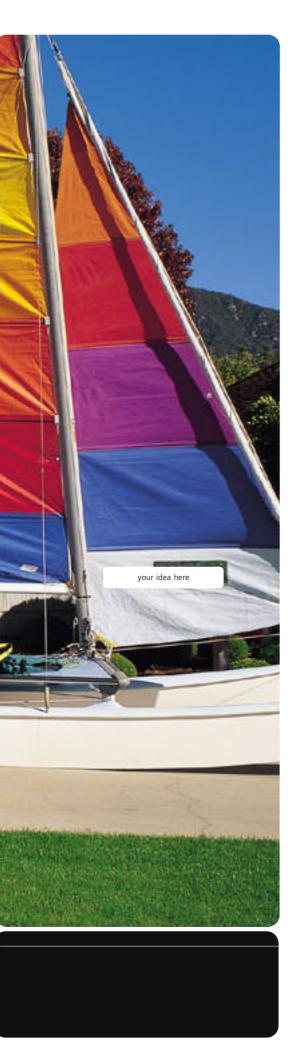


Picture everything... clothes washers that feel the difference between cotton and rayon... golf carts that come when you call them... televisions that work more like computers... milk cartons that display countdown freshness calendars... supertankers that monitor the gaps between steel panels in arctic conditions.





Conservatively, let's suppose that the imaginative electronic features embedded in this next generation of products allow manufacturers to sell each one of those new things for just an additional 10 cents. Now think about this. Based on our example, that's a \$50 billion incremental market.



/96 \$779  /97 \$926  /98 \$1,216  revenue in millions
\$0.16
you've just begun to

### \*Note

Earnings before goodwill excludes unusual items, amortization of acquired intangibles, and the effects of IMS.

### Letter to Stockholders

Get the idea where we're heading? You've heard it. You've read about it. You've experienced it. The scope of electronics is expanding in all directions, for all of us. There are more and more electronics products in more and more hands, cars, offices, and households than ever before. Phenomena like the world wide web are becoming common elements of daily life. Cell phones and pagers are becoming vital tools for business people and teenagers, alike, worldwide. Automobile technologies once considered "high end"—like anti-lock brakes, supplemental restraint systems, even global positioning computers—are practically standard equipment today.

It's evident. Sophisticated tools once reserved for the "electronics elite" are everywhere. But perhaps more importantly, the electronics revolution has started to influence more and more everyday consumer goods and everyday products—things not typically associated with "electronics." With the continuing tendency for computer chips to become smaller, faster, cheaper, and better—an additional and very powerful opportunity has emerged. Suddenly, we're all seeing an abundance of everyday items integrating useful, remarkably affordable electronic features.

Essentially, there are two very important technological movements occurring at the same time. Sophisticated electronics products are enjoying unprecedented successes in the consumer marketplace. All the while, traditionally "low tech" products are being infused with electronic characteristics. This activity is influencing any and every category you can imagine. Household products. Medical devices. Toys. Industrial equipment. Entertainment. Recreational equipment. Just about anything that's made and sold.

What does it mean for worldwide electronics companies? There's a huge opportunity to provide components to a whole new set of ready customers. What does it mean for manufacturers of more traditional products? There's a huge opportunity to transform categories that haven't seen much revolution in years. What does it mean to Cadence? There's a huge opportunity to provide electronic design software, methodology services, and design expertise to enable and encourage the development of new, electronically infused products—to our current base of electronics components and systems companies, as well as to an emerging category of traditional products companies.



Customer Domosys Idea achieve control

### Product

What if the existing power lines in your house could actually link and control your lights, appliances, alarm system, and thermostat? Think about your lights turning on if the fire alarm triggers. That's part of home automation, Domosys style. Smart Corporation's Energy Control Center uses chips that Cadence helped Domosys design. Cadence even coached Domosys to become great at providing fast-track design services, helping their partners get up to speed swiftly.



Customer Motorola Idea absolutely wireless

### Product

Call virtually anywhere at all? From virtually anywhere at all? Transcend the problems of cellular coverage and forget about building earthbound cell sites. Cadence helped Motorola and its partners successfully build the IRIDIUM network of satellites and mobile telephones to match. The "Internet in the Sky" is bringing people everywhere—from major cities and rural areas to sea captains and emerging nations—high-quality voice communications and messaging.

What does it mean to consumers? If you think electronics have gone as far as they can go, think again. We've all just begun to scratch the surface.

Back down to earth. Let's talk financial performance. Obviously, opportunities abound in the world of electronics. And as you'd expect, Cadence is successfully breaking new ground while significantly building on our very successful existing business.

In the midst of an expanding landscape, and yet in light of a challenging set of worldwide economic and electronics market conditions, Cadence Design Systems, Inc. achieved a most significant milestone in 1998. We became the first electronic design automation (EDA) company to break through the billion-dollar mark for revenue in a single year. In an incredibly competitive and complex arena, Cadence has proven the business to be much more expansive than ever thought. At the same time, by managing our business in ways to simultaneously maximize growth and profitability, we have also expanded our operating margins to their highest levels yet.

For 1998, revenue totaled more than \$1.2 billion, an increase of 31% over the prior year. As a result of our record-setting revenue — excluding the effects of unusual items and amortization of acquired intangibles — full year diluted earnings per share increased to \$1.20, a 30% gain over 1997.

Our financial successes occurred across the world, and across our portfolio of product and services offerings. Fiscal year 1998 software product revenue grew 29%—and surpassed every one of our competitors, reaching \$695 million. Services revenue, including our productivity-enhancing and high-impact methodology services, design services, and software education, totaled \$256 million, representing 59% growth year-over-year. In addition, maintenance revenue increased 16% from 1997 to \$265 million.

The Cadence® financial position remains strong. Thanks to continuous innovation in products and services, our loyal customer base — organizations who design chips, boards, and electronic systems — are deriving more and more value from their design environments. And single-handedly, we are changing the idea of what electronic design automation is all about. Cadence has indeed become, The Design Realization Company.™

A few of the ideas behind our growth. Cadence is engaged in two main business activities—design productivity and design realization. Our Design Productivity group is responsible for the tools and services that help electronics developers create the dreams of tomorrow. Our Design Realization group helps provide services that actually create electronics on behalf of our customers. Distributed between these two organizations are four keys to the continued success of Cadence. Front-to-back software integration. Methodology services. Design services. And what we call "electronics infusion."

Quite simply and without a doubt, Cadence provides the broadest and most technologically advanced toolset in the EDA industry. Our software is the foundation that built this company and it's where we make the biggest impact on electronic design, day after day, worldwide. As electronics continue to become increasingly challenging to build, we have also responded to an enormous obstacle—making sure the many assorted tools that create the world's most advanced electrical components work together. Front-to-back integration of our industry-leading software products is the key component to the Cadence position of strength. We are unique in our dedication to helping customers fully integrate entire design environments—what we bring together is what sets us apart. Because, as in almost any industry, the company that provides the most complete, sophisticated, easiest-to-use solution will lead the pack. As the electronic design software leader, Cadence is doing just that.

Methodology services, inextricably linked to our software tools, are extraordinarily effective ingredients to the successes of Cadence and our customers. Helping design teams and electronics developers be more productive—from professional software support and unrivaled educational opportunities, all the way through detailed process re-engineering—is a tremendous benefit to our customers and to the entire Cadence marketplace. Electronics become more and more complicated every day. It's important that we help our customers best leverage their technology investments.

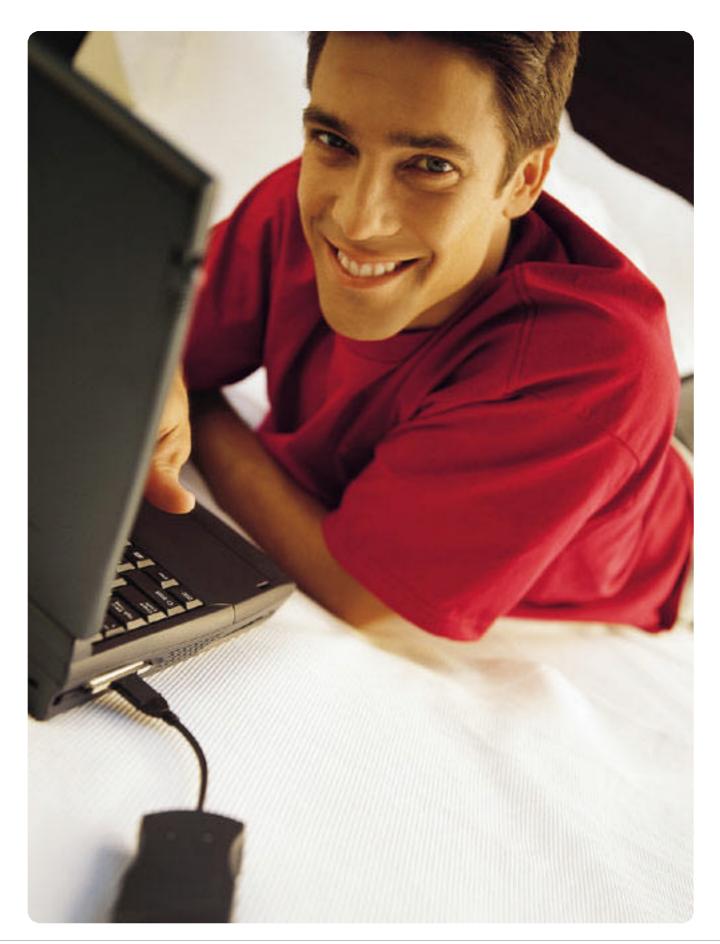
Design services are a collection of many potent businesses, providing worldclass design expertise where and when customers need it most. With Cadence engineering talent, we can help augment the design efforts of an expert chip design organization. We can assist a company new to electronics by managing a complete effort. Or, we can provide specific levels of expertise to nearly any



Customer Media 100 Idea a better image

### Product

Creating top quality broadcast images is tough. And these days, audiences of all kinds and all ages have come to expect first-rate graphics on television, in CD-ROMs, on the internet, and in multimedia. Digital video systems from Media 100 make the job much easier. Cadence and its exclusive multimedia design technology helped Media 100 start testing new ideas in software instead of hardware, successfully shaving months off the product design process.



Customer AMD Idea network the home

### Product

Networking isn't just for the office anymore. By connecting computers and peripherals over a home's phone wires, AMD is bringing easy-to-install, user-friendly networking to the household. From the bedroom notebook to the home office printer, the house is now reliably and affordably networked together. Cadence helped AMD meet an aggressive design schedule on the PCnet\*\*-Home networking controller—the first single-chip home phone line solution—by providing IC physical layout design services.

situation. As a result, we have continued to refine our offerings based on market needs, and have continued to find new ways to add value to customers of all kinds. There's also an interesting side benefit to design services. By using our own software in the electronic design marketplace, we are able to provide valuable, first-hand feedback to our research and development efforts. In essence, Cadence becomes its own customer, encouraging us to be even better at developing the most competitive and useful tools. The high demand for electronic design expertise—worldwide and across a diverse set of technologies—continues to drive this extraordinarily fertile business area.

There's also something new on the horizon. The notion of "electronics infusion" is an incredibly exciting opportunity for Cadence and manufacturers around the world. By actually becoming an electronics business consultant, Cadence is forming significant relationships with municipalities, governments, nations, and states, as well as consumer, industrial, and light industrial product companies. We're literally escorting organizations of all kinds into the electronics age. The service and expertise we provide is valuable, rare, and required for the success of many organizations entering the world of electronics.

Let's dig deeper into the Cadence success of 1998. The outstanding performance of the Company can be illustrated through many key application segments.

In the software products area, our custom integrated circuit (IC) design tools grew 42% in 1998, with very strong customer endorsements of our physical design, mixed-signal, and physical verification tools.

It was particularly gratifying to see our deep submicron (DSM) design software grow an additional 21% this year. The trend toward even smaller geometries is proving the value of this suite of tools—and our flagship place-and-route technology portfolio continued to set the standard for advanced, deep submicron design. We're proud that key customers such as Toshiba and NEC have fully embraced our technology roadmap and are integrating our products into their next-generation design environments.

In the area of design and verification, our Affirma™ NC Verilog® simulation software achieved 82% growth, as well as record-level sign-off and support status from a significant proportion of the worldwide application-specific

integrated circuit (ASIC) marketplace. Companies like AMI, Fujitsu, OKI Electric, Toshiba, VLSI Technology, Lucent, Kawasaki Steel, Mitsubishi, and Sanyo all helped propel the success of this critical tool.

Key acquisitions in this area also helped augment our design and verification efforts. Our recent merger with Ambit Design Systems, Inc., created the first complete front-to-back flow for system-on-a-chip (SOC) design. And our acquisition of the Bell Labs' Integrated Circuit Design Automation Group of Lucent Technologies, Inc. (BLDA) created the world's largest electronic design automation development team focused on the complex verification challenges of tomorrow's ICs and next-generation SOC designs.

In the arena of printed circuit board (PCB) and system design, we generated the majority of industry growth, posting 50% higher revenue over 1997. Logically, high-speed chips mean high-speed boards. Cadence is leading the way in providing sophisticated solutions in this area, and our multi-tiered approach to packaging and distribution delivers the technology customers need, when they need it, and at price/performance points they can easily afford.

In our services businesses, we've focused the organizations to significantly increase margins, while delivering solutions to more customers than ever. Our methodology services are now even more closely tied to our software tools and are assisting design teams worldwide, resulting in dramatic productivity gains. Our design service network, with centers organized around specific areas of expertise — wireless/multimedia, datacom/telecom, digital IC, analog/mixed signal, embedded systems, and silicon technology services — has been optimized around customer needs. We have also completed strategic acquisitions to augment those efforts. The additions of Symbionics in the United Kingdom and Excellent Design in Japan have significantly increased our ability to serve as a design partner to our worldwide electronics customer base.

In addition, we achieved great strides with our Project Alba and System-on-a-Chip Institute efforts in Livingston, Scotland. The group delivered a timing-driven design methodology on time and on target, and became the first design center approved by Advanced RISC Machines (ARM), a leading intellectual property (IP) provider, paving the way to provide SOC design services to semi-conductor partners throughout the world.

The Cadence contribution to the world of electronics, as well as to our community. Cadence is also a proud member of the community. We have collaborated with local schools to provide resources for new learning centers, we host and sponsor one of the most successful charity "Human Race" events in the area, we contribute to the continued well-being of the arts—and since 1990, we've been responsible for coordinating and underwriting the record-setting "Stars & Strikes" event, one of the largest and most effective single-day fundraisers in Silicon Valley.

As the EDA industry leader, growth driver, and innovator, Cadence has a strong position and a unique advantage. Our diversified software products, services offerings, and global customer base provide opportunities unmatched by our competition. And our business approach helps us become experts at tool integration, as well as implementation and design.

We look forward to uncovering even more imaginative opportunities in the future. By doing whatever it takes to help chip, board, and system developers—big and small, regional and global, expert and entrant—we can put the incredible power of electronics into more products and more hands. Simply put, that's the big idea.

Ray Bingham

President & Chief Executive Officer

May 7, 1999

## Financial Highlights 1998

First electronic design automation company to break through the \$1 billion annual revenue mark

\$1.2 billion revenue — increase of 31% year-over-year

Earnings before goodwill\*—30% gain over 1997

Software products achieved outstanding growth

- · custom integrated-circuit software tools—up 42%
- · deep submicron software up 21%
- · design & verification NC Verilog® simulator up 82%
- · printed circuit board (PCB) software up 50%

Services revenue — 59% growth

Investments in key technology and services acquisitions — Ambit®, Bell Labs Design Automation (BLDA), Symbionics

Making the most significant R&D investment of any company in the electronic design automation industry

Successfully furthering reputation as The Design Realization Company<sup>™</sup>

### \*Note

Earnings before goodwill excludes unusual items, amortization of acquired intangibles, and the effects of IMS.

### Selected Financial Data

Five fiscal years ended January 2, 1999

(in thousands, except per share amounts)		1998		1997	1996		1995	1994
Revenue	\$	1,216,070	\$	926,369	\$	779,064	\$ 571,860	\$ 444,617
Unusual items¹	\$	263,594	\$	44,053	\$	100,543	\$ 	\$ 14,707
Income from operations	\$	105,188	\$	232,545	\$	98,239	\$ 119,680	\$ 45,150
Income before cumulative effect of								
change in accounting method <sup>2</sup>	\$	31,982	\$	180,376	\$	34,310	\$ 98,599	\$ 37,292
Net income <sup>3</sup>	\$	31,982	\$	168,100	\$	34,310	\$ 98,599	\$ 37,292
Net income per share-assuming dilution	\$	0.14	\$	0.77	\$	0.16	\$ 0.47	\$ 0.17
Total assets	\$	1,405,958	\$	1,023,850	\$	769,172	\$ 411,526	\$ 369,405
Long-term obligations	\$	136,380	\$	1,599	\$	20,292	\$ 1,619	\$ 2,098
<sup>1</sup> Unusual items are as follows for each of the fiscal years 1998, 1997, 1	1996, an	ıd 1994. There wei	re no	unusual items in 1	1995.			

1998	1997	1996	1994
\$ 194,100	\$ 6,571	\$ 95,700	\$ 4,653
69,494	34,417	2,119	
	3,065	2,724	
_	_	_	10,054
\$ 263,594	\$ 44,053	\$ 100,543	\$ 14,707
	\$ 194,100 69,494 —	\$ 194,100 \$ 6,571 69,494 34,417 — 3,065 — —	\$ 194,100 \$ 6,571 \$ 95,700 69,494 34,417 2,119 — 3,065 2,724 — —

<sup>&</sup>lt;sup>2</sup>Income before cumulative effect of change in accounting method in 1997 excluded a \$12.3 million charge, net of taxes of \$5.3 million, for reengineering project costs that had been previously capitalized by Cadence associated with its implementation of enterprise-wide information systems.

### Market Information—Common Stock

Cadence's common stock is traded on the New York Stock Exchange under the symbol CDN. Cadence has never declared or paid any cash dividends on its common stock in the past, and none is planned to be paid in the future. As of March 31, 1999, Cadence had approximately 1,595 stockholders of record, not including those shares held in street or nominee name.

The following table sets forth the high and low sales price for the common stock for each calendar quarter in the two-year period ended January 2, 1999:

	High	Low
1998		
First Quarter	\$ 37.44	\$ 22.75
Second Quarter	\$ 38.00	\$ 27.63
Third Quarter	\$ 31.13	\$ 20.69
Fourth Quarter	\$ 30.63	\$ 19.19
1997		
First Quarter	\$ 21.94	\$ 15.69
Second Quarter	\$ 19.00	\$ 13.38
Third Quarter	\$ 27.50	\$ 16.75
Fourth Quarter	\$ 28.75	\$ 22.31

<sup>&</sup>lt;sup>3</sup> Net income included a \$9.2 million and a \$13.6 million after tax gain on the sale of stock of a subsidiary in 1997 and 1995, respectively. A \$3.1 million after tax gain on the sale of an equity investment was included in net income for 1994.

### Summary Quarterly Data—Unaudited

### Previously Reported Quarterly Results

The following table represents the quarterly results of Cadence as previously reported, excluding the restatement of prior period financial statements for the CCT merger and adjustments to reduce the amounts of in-process technology previously charged to expense.

			1998		1997							
(in thousands, except per share amounts)	41	h 3r	d 2nd	1st	4th	3rd	2nd	1st				
Revenue	\$ 345,45	2 \$ 308,60	7 \$ 291,788	\$ 270,223	\$ 283,013	\$ 234,866	\$ 210,466	\$ 187,548				
Cost of revenue	\$ 75,98	7 \$ 78,01	3 \$ 70,913	\$ 62,334	\$ 53,795	\$ 46,812	\$ 43,592	\$ 38,897				
Income (loss) from												
operations¹	\$ 71,26	\$(185,30	5) \$ 90,245	\$ (5,541)	\$ 83,733	\$ 74,615	\$ 37,382	\$ 38,277				
Income (loss) before												
cumulative effect of												
change in accounting												
method <sup>2</sup>	\$ 51,63	4 \$(192,76	2) \$ 66,367	\$ (25,459)	\$ 60,873	\$ 55,301	\$ 28,446	\$ 37,122				
Net income (loss) <sup>3</sup>	\$ 51,63	4 \$(192,76	2) \$ 66,367	\$ (25,459)	\$ 48,597	\$ 55,301	\$ 28,446	\$ 37,122				
Net income (loss) per												
share-diluted	\$ 0.2	2 \$ (0.9	I) \$ 0.28	\$ (0.12)	\$ 0.21	\$ 0.24	\$ 0.13	\$ 0.19				

### Restated Quarterly Results<sup>1</sup>

The following table represents restated quarterly results reflecting the merger of Cadence and CCT, and adjustments to reduce the amount of in-process technology previously charged to expense.

	1998							1997								
(in thousands, except per share amounts)		4th		3rd		2nd		1st		4th		3rd		2nd		1st
Revenue	\$	345,452	\$	308,607	\$	291,788	\$	270,223	\$	283,013	\$	234,866	\$	212,204	\$	196,286
Cost of revenue	\$	72,554	\$	76,602	\$	69,731	\$	61,788	\$	53,264	\$	46,319	\$	43,474	\$	39,556
Amortization of acquired																
intangibles	\$	11,414	\$	2,856	\$	2,627	\$	546	\$	529	\$	493	\$	493	\$	431
Income (loss) from																
operations <sup>2</sup>	\$	63,279	\$	(66,450)	\$	88,800	\$	19,559	\$	83,733	\$	74,615	\$	35,226	\$	38,971
Income (loss) before																
cumulative effect of																
change in accounting																
method <sup>3</sup>	\$	45,906	\$	(78,677)	\$	65,112	\$	(359)	\$	60,873	\$	55,301	\$	27,192	\$	37,010
Net income (loss) <sup>4</sup>	\$	45,906	\$	(78,677)	\$	65,112	\$	(359)	\$	48,597	\$	55,301	\$	27,192	\$	37,010
Net income (loss) per																
share-diluted	\$	0.20	\$	(0.37)	\$	0.28	\$	_	\$	0.21	\$	0.24	\$	0.13	\$	0.16

In 1998, the Company acquired Ambit, BLDA, EXD, and Symbionics. The acquisitions were accounted for as business combinations using the purchase method of accounting. The estimated fair value of the acquired in-process technology (IPR&D) of \$214.4 million and \$42.7 million for Ambit and BLDA, respectively, was charged to expense in the quarter ended October 3, 1998, and the estimated fair value of the IPR&D of \$42.0 and \$40.0 for EXD and Symbionics, respectively, was charged to expense in the quarter ended April 4, 1998 (the periods in which the acquisitions were consummated). Subsequent to the Securities and Exchange Commission's letter to the AICPA, dated September 9, 1998, regarding its views on IPR&D, the Company had discussions with the staff of the Securities and Exchange Commission and revised the purchase price allocations and restated its financial statements. As a result, the Company has made adjustments to decrease the amounts previously expensed as IPR&D in 1998 and to increase goodwill and intangible assets by similar amounts.

2 Income (loss) from operations for 1998 and 1997 included certain unusual item charges for \$263.6 million and \$44.1 million, respectively, which follow:

(in thousands)	4th	3rd	2nd	1st
1998				
Write-off of acquired in-process technology	\$ _	\$ 137,200	\$ 	\$ 56,900
Restructuring charges	44,704	20,833		3,957
	\$ 44,704	\$ 158,033	\$ _	\$ 60,857
1997				
Write-off of acquired in-process technology	\$ 1,711	\$ _	\$ 	\$ 4,860
Restructuring charges	6,372		21,157	6,888
Write-off of capitalized software development costs	1,856	_	1,209	_
	\$ 9,939	\$ _	\$ 22,366	\$ 11,748

<sup>3</sup> For the fourth quarter ended January 3, 1998 income before cumulative effect of change in accounting method excluded a \$12.3 million charge, net of taxes of \$5.3 million, for reengineering project costs that had been previously capitalized by Cadence associated with its implementation of enterprise-wide information systems.

<sup>&</sup>lt;sup>4</sup>Net income included a \$13.1 million pre-tax gain on the sale of stock of a subsidiary in the first quarter ended March 28, 1997.

### Management's Discussion and Analysis

of Financial Condition and Results of Operations

The following discussion should be read in conjunction with the five-year summary of selected financial data and Cadence Design Systems, Inc.'s consolidated financial statements and notes thereto included elsewhere herein. All references to years represent fiscal years unless otherwise noted. Except for the historical information contained herein, the following discussion contains forward looking statements based on current expectations that involve certain risks and uncertainties. Cadence's actual results could differ materially from those discussed herein. Factors that could cause actual results or performance to differ materially or contribute to such differences include, but are not limited to, those discussed below in "Factors That May Affect Future Results," "Disclosures about Market Risk," and "Liquidity and Capital Resources."

### Overview

Cadence® provides software technology and comprehensive design and consulting services and technology for the product development requirements of the world's leading electronics companies. Cadence licenses its leading-edge electronic design automation software technology and provides a range of professional services to companies throughout the world,ranging from consulting services to help optimize performance of the customers' product to design services to create the actual design of the electronic system for the customer's product. Cadence is a supplier of "design realization" solutions, which are used by companies to design and develop complex chips and electronic systems, including semiconductors, computer systems and peripherals, telecommunications and networking equipment, mobile and wireless devices, automotive electronics, consumer products, and other advanced electronics.

In December 1998, Cadence entered into a merger agreement with Quickturn Design Systems, Inc., a Delaware corporation (Quickturn). Quickturn designs, manufactures, sells, and supports products that verify the design of computer chips and electronic systems. Cadence will acquire Quickturn in a tax-free, stock-for-stock transaction. Each share of Quickturn common stock will be converted into \$15 worth of Cadence common stock. Cadence common stock will be valued at the average of its closing prices over a five day period that ends two business days before the merger closes. There were 18,380,083 shares of Quickturn common stock outstanding as of March 12, 1999. In addition, Cadence will assume outstanding stock options of Quickturn. The merger is expected to be accounted for as a pooling of interests. The consummation of the merger is subject to various conditions, including the approval of Quickturn's stockholders. There can be no assurance that stockholder approval will be obtained, or the other conditions will be satisfied, and that the merger will be consummated.

In September 1998, Cadence acquired all of the outstanding stock of Ambit Design Systems, Inc., a California corporation (Ambit), for cash. Ambit is a leading developer of design automation technology used in system-on-a-chip (SOC) design. The total purchase price was \$255 million, and the acquisition was accounted for as a purchase.

In September 1998, Cadence acquired the Bell Labs' Integrated Circuit Design Automation Group of Lucent Technologies Inc. (BLDA) for cash. The total purchase price was \$58 million and the acquisition was accounted for as a purchase. BLDA is a design automation development organization that focuses on the complex verification challenges companies face when designing integrated circuits and next-generation soc.

In March 1998, Cadence acquired all of the outstanding stock of Excellent Design, Inc., a Japanese corporation (EXD), for cash. The total purchase price was \$40.9 million and the acquisition was accounted for as a purchase. EXD provides application-specific integrated circuit (ASIC) and SOC design and library development.

In February 1998, Cadence acquired all of the outstanding stock of Symbionics Group Limited, a United Kingdom corporation (Symbionics), for approximately 1 million shares of Cadence's common stock and \$21.3 million of cash. Symbionics provides product development design services to leading electronics manufacturers. The total purchase price was \$46.1 million and the acquisition was accounted for as a purchase.

In May 1997, Cadence merged with Cooper & Chyan Technology, Inc. (CCT), whose software products are used to design sophisticated integrated circuits and high-speed printed circuit boards. In connection therewith, Cadence issued approximately 22.8 million shares of common stock. The merger was accounted for using the pooling of interests method of accounting. At the time of the transaction, Cadence believed that the operations of CCT were not material to Cadence's consolidated operations and financial position. Therefore, prior period consolidated

financial statements were not restated and the results of CCT were only recorded in Cadence's consolidated financial statements prospectively from the date of acquisition. Following discussions with the staff of the Securities and Exchange Commission, Cadence has restated all prior period financial statements as if the merger took place at the beginning of such periods, in accordance with the required pooling of interests accounting and disclosures. See additional information in Notes to Consolidated Financial Statements under "Acquisitions."

In February 1997, Cadence and its subsidiary, Integrated Measurement Systems, Inc. (IMS), sold to the public 1.7 million shares of IMS common stock, of which approximately 1 million shares were sold by Cadence, netting Cadence approximately \$18.6 million in cash. As a result of the offering and sale of shares by Cadence, Cadence's ownership interest in IMS decreased to approximately 37% from approximately 55%. Accordingly, Cadence changed the accounting for its investment in IMS from consolidation to the equity method of accounting in fiscal 1997. The consolidated financial statements of Cadence for fiscal year 1996 included the accounts of IMS after elimination of intercompany accounts and transactions and minority interest adjustments. Although Cadence has no current intent to enter into similar transactions, the likelihood of such transactions in the future is dependent upon the state of the financial markets as well as liquidity and other considerations of each of Cadence and IMS. IMS manufactures and markets verification systems used in testing prototype ASICS.

In December 1996, Cadence acquired all of the outstanding stock of High Level Design Systems, Inc. (HLDS), whose software products are used to design high density, high performance integrated circuits. In connection with the acquisition, Cadence issued approximately 5.2 million shares of common stock. The total purchase price was approximately \$101.4 million, and the acquisition was accounted for as a purchase.

In November 1996, Cadence consummated a secondary public offering in which 11.5 million shares of common stock were issued and sold, generating \$202.1 million of net proceeds.

### Results of Operations

Revenue
---------

				% Ch	ange
(in millions)	1998	1997	1996	98/97	97/96
Product	\$ 695.0	\$ 537-5	\$ 441.3	29%	22%
Services	255.8	160.9	114.6	59%	40%
Maintenance	265.3	228.0	223.2	16%	2%
Total revenue	\$ 1,216.1	\$ 926.4	\$ 779.1	31%	19%
Sources of Revenue as a Percent of Total Revenue					
Product	57%	58%	56%		
Services	$2\mathrm{I}\%$	17%	15%		
Maintenance	22%	25%	29%		

In 1998, strong demand for Cadence's products, services, and maintenance generated a 31% increase in total revenue as compared to the prior year.

Product revenue increased \$157.5 million in 1998, as compared to 1997, due primarily to increased demand for place-and-route and physical design tools used to design deep submicron integrated circuits. Product revenue increased \$96.2 million in 1997, as compared to 1996, primarily due to increased customer demand for place-and-route and physical design products. Product revenue would have increased \$136.5 or 34% in 1997, as compared to 1996, excluding \$40.3 million of product revenue from 1Ms in 1996 for which there were no similar reported revenues in 1997.

Services revenue increased \$94.9 million in 1998 and \$46.3 million in 1997, as compared to each prior year, primarily due to the increased demand for Cadence's consulting and design services offerings.

Maintenance revenue increased \$37.3 million in 1998 and \$4.8 million in 1997, as compared to each prior year, primarily due to continued growth of the installed customer base and the renewal of maintenance and support contracts.

### Revenue by Geography

				% Ch	ange
(in millions)	1998	1997	1996	98/97	97/96
Domestic	\$ 613.0	\$ 439.0	\$ 405.9	40%	8%
International	603.1	487.4	373.2	24%	31%
Total revenue	\$ 1,216.1	\$ 926.4	\$ 779.I	31%	19%
Revenue by Geography as a Percent of Total Revenue					
Domestic	50%	47%	52%		
International	50%	53%	48%		

Revenue from international sources increased \$115.7 million in 1998 and \$114.2 million in 1997, as compared to each prior year. The increase in 1998, as compared to 1997, was primarily due to increased demand for Cadence's products and services in Europe and for Cadence's services in Japan, offset somewhat by a decline in product revenue in Japan. To a lesser extent, revenue growth in 1998 was also due to additional maintenance and support contracts in Asia and Canada. The increase in 1997, as compared to 1996, was primarily due to product revenue growth in all regions, except Japan, and new services and support contracts in all regions.

Differences in the rate of growth of domestic and international revenue, over the years presented and as compared geographically, are primarily due to fluctuations in demand and resulting sales volume of place-and-route and physical design products, and for Cadence's consulting and design services offerings.

Foreign currency exchange rates adversely affected reported revenue by \$15.6 million and \$32.4 million in 1998 and 1997, respectively, primarily due to the weakening of the Japanese yen in relation to the U.S. dollar. Additional information about revenues by geographic areas can be found under "Segment Reporting" in the Notes to Consolidated Financial Statements.

### Cost of Revenue

				% C	hange
(in millions)	1998	1997	1996	98/97	97/96
Product	\$ 51.5	\$ 40.I	\$ 49.5	29%	(19)%
Services	\$ 185.7	\$ 114.7	\$ 81.0	62%	42%
Maintenance	\$ 43.5	\$ 27.8	\$ 25.1	56%	11%
Cost of Revenue as a Percent of Related Revenue					
Product	7%	7%	11%		
Services	73%	71%	71%		
Maintenance	16%	12%	11%		

Cost of product revenue includes costs of production personnel, packaging and documentation, and amortization of capitalized software development costs. Cost of product revenue increased \$11.4 million or 29% from 1997 to 1998. The increase was primarily due to increases in amortization of capitalized software development costs of \$7 million and royalty expenses of \$3.4 million. Cost of product revenue decreased \$9.4 million or 19% from 1996 to 1997. The decrease was primarily due to \$14.1 million of product costs related to IMS' automated test equipment hardware business in 1996 for which there were no similar reported costs in 1997. Offsetting this decrease were additional costs incurred for Cadence's new European manufacturing facility of \$1.2 million, increases in amortization of capitalized software development costs of \$1.4 million, and royalty expenses of \$1.2 million. If IMS costs had been excluded from the costs incurred in 1996, cost of product revenue would have increased \$4.7 million or 13% from 1996 to 1997, and cost of product revenue as a percentage of product sales would have been 9% in 1996. The decrease in cost of product revenue as a percentage of product revenue in 1997, as compared to 1996, was primarily due to revenue growing at a faster rate than costs.

Cost of services revenue includes personnel and related costs associated with providing services, primarily salaries, as well as costs to recruit, develop, and retain personnel and maintain the infrastructure to manage a services organization. Cost of services revenue increased \$71.0 million or 62% in 1998, as compared to 1997. This increase was due to investments made in services capacity, primarily the addition of services professionals by Cadence of

\$68.2 million. Cost of services revenues increased \$33.7 million or 42% in 1997, as compared to 1996. These increases were due to investments made in services capacity, primarily due to the addition of services professionals by Cadence of \$28.9 million.

The decrease in services gross margins to 27% in 1998, as compared to 29% in 1997 and 1996, was primarily due to increased services capacity that was not fully utilized. Services gross margins have been and may continue to be adversely affected by the cost of integrating new service professionals, as well as Cadence's inability to fully utilize these resources. In addition, services gross margins may continue to be adversely affected by Cadence's inability to achieve operating efficiencies with its resources when implementing a growing number of services offerings.

Cost of maintenance revenue includes the costs of customer services, such as hot-line and on-site support, and the production cost of the maintenance renewal process. Cost of maintenance revenue increased \$15.7 million or 56% in 1998, as compared to 1997. This increase was primarily due to the investment in a new centralized customer response center and increased support levels on a per customer basis. Cost of maintenance revenue increased \$2.7 million or 11% in 1997, as compared to 1996, primarily due to increased support costs necessary to support a larger installed base.

Amortization of Acquired Intangibles			
(in millions)	 1998	1997	1996
Amortization of acquired intangibles	\$ 17.4	\$ 1.9	\$ 0.9
Amortization of Acquired Intangibles as a Percent of Total Revenue			
Amortization of acquired intangibles	1%	ο%	ο%

Amortization of acquired intangibles increased \$15.5 million in 1998, as compared to 1997, primarily due to \$7.2 million, \$1.5 million, \$2.7 million, and \$3.1 million associated with Cadence's acquisitions of Ambit, BLDA, Symbionics, and EXD, respectively. Amortization of acquired intangibles increased \$1 million in 1997, as compared to 1996, primarily due to \$0.8 million associated with Cadence's acquisition of HLDS. For additional information regarding these acquisitions see below under "Acquisitions and In-Process Technology."

### **Operating Expenses**

					% Change		
(in millions)	1998	1997		1996	98/97	97/96	
Marketing and sales	\$ 302.3	\$ 263.1	\$	240.7	15%	9%	
Research and development	\$ 179.4	\$ 143.7	\$	123.1	25%	17%	
General and administrative	\$ 67.4	\$ 58.4	\$	60.0	15%	(3)%	
Operating Expenses as a Percent of Total Revenue							
Marketing and sales	25%	28%		31%			
Research and development	15%	16%		16%			
General and administrative	6%	6%		8%			

General Operating expenses incurred in 1998 and 1997 excluded expenses from IMS.

Marketing and Sales The increase in marketing and sales expenses of \$39.2 million for 1998, as compared to 1997, was primarily the result of an increase in employee related expenses resulting from increased headcount and commissions of \$28.6 million, a higher volume of pre-sales activities of \$10 million, and an increase in consulting and outside services costs of \$8.4 million. These increases were partially offset by the weakening of certain foreign currencies, primarily the Japanese yen, in relation to the U.S. dollar which favorably affected marketing and sales expense by approximately \$6.2 million in 1998, as compared to the prior year. The increase in marketing and sales expense of \$22.4 million for 1997, as compared to 1996, was primarily due to an increase in employee related expenses attributable to increased headcount and commissions of \$24.1 million, consulting and outside services costs of \$6.1 million, management information systems costs of \$5.9 million, and costs associated with business trips of \$5.8 million. These increases were partially offset by a decrease of \$11.9 million related to the deconsolidation of 1MS and by the weakening of certain foreign currencies, particularly the Japanese yen, which resulted in a favorable effect of \$5.6 million.

Research and Development Cadence's investment in research and development, prior to the reduction for capitalization of software development costs, was \$201.1 million, \$158.7 million, and \$136.7 million for 1998, 1997, and 1996, respectively, representing 17%, 17%, and 18% of total revenue for 1998, 1997, and 1996, respectively. The increase of \$42.4 million for 1998, as compared to 1997, was primarily attributable to higher employee related costs of \$19.2 million due to increases in headcount, facility related costs of \$12.2 million, consulting and other services of \$8 million, and management information systems costs of \$3 million. The increase of \$22 million for 1997, as compared to 1996, was primarily attributable to higher employee related costs of \$22.5 million due to increases in headcount and management information systems costs of \$9.7 million. These increases were partially offset by a decrease of \$7.5 million related to the deconsolidation of IMS. Cadence capitalized approximately \$21.7 million, \$15.0 million, and \$13.6 million of software development costs in the years 1998, 1997, and 1996, respectively, which represented approximately 11%, 9%, and 10% of total research and development expenditures incurred in those years. The amount of capitalized software development costs in any given period may vary depending on the exact nature of the development performed.

General and Administrative General and administrative expense increased \$9.0 million in 1998, as compared to 1997, primarily as a result of increases in bad debt reserves of \$7.3 million, and consulting and outside services costs of \$2.4 million. General and administrative expenses decreased \$1.6 million in 1997, as compared to 1996, primarily resulting from the deconsolidation of IMS.

Unusual Items Described below are unusual item charges in 1998, 1997, and 1996.

(in millions)	 1998	1997	1996
Write-off of acquired in-process technology	\$ 194.1	\$ 6.6	\$ 95.7
Restructuring charges	69.5	34.4	2.I
Write-off of capitalized software development costs	_	3.1	2.7
Total unusual items	\$ 263.6	\$ 44.1	\$ 100.5

During the year ended January 2, 1999, Cadence made a number of acquisitions accounted for under the purchase method. The consolidated financial statements include the operating results of each business from the date of acquisition. A summary of these acquisitions and values assigned to acquired in-process technology and projected costs to complete the ongoing development for the year ended January 2, 1999, follows:

(in millions)		Purchase Price	In-Process Technology Charge		Estimated Cost to Complete In-Process Technology	
Ambit Design Systems, Inc.:						
Buildgates synthesis	\$	_	\$	106.5	\$	15.0
Total	\$	255.0	\$	106.5	\$	15.0
Bell Labs' Integrated Circuit Design Automation Group:	=					
Formal verification	\$	_	\$	14.0	\$	2.0
Physical extraction		_		16.3		3.0
Total	\$	58.0	\$	30.3	\$	5.0
Excellent Design, Inc.:						
Process libraries/intellectual property	\$	_	\$	20.5	\$	4.0
Process specific tools		_		7.9		3.0
Total	\$	40.9	\$	28.4	\$	7.0
Symbionics Group Limited:	=					
Digital television	\$	_	\$	13.2	\$	2.5
Wireless communications				15.3		3.5
Total	\$	46. I	\$	28.5	\$	6.0

Acquisitions and In-Process Technology In September 1998, Cadence acquired all of the outstanding stock of Ambit, for cash. Ambit is a leading developer of design automation technology used in soc design. The total purchase price was \$255 million, and the acquisition was accounted for as a purchase.

Upon consummation of the Ambit\* acquisition, Cadence immediately charged to expense \$106.5 million representing acquired in-process technology that had not yet reached technological feasibility and had no alternative future use. See "Notes to Consolidated Financial Statements." The value was determined by estimating the costs to develop the acquired in-process technology into commercially viable products, estimating the resulting net cash flows from such projects, and discounting the net cash flows back to their present value. The discount rate includes a factor that takes into account the uncertainty surrounding the successful development of the acquired in-process technology. The in-process technology is expected to be commercially viable in 1999. Expenditures to complete the in-process technology are expected to total approximately \$15 million. These estimates are subject to change, given the uncertainties of the development process, and no assurance can be given that deviations from these estimates will not occur. Additionally, these projects will require maintenance research and development after they have reached a state of technological and commercial feasibility.

At the time of its acquisition by Cadence, Ambit was working on several significant research and development projects that were intended to provide the next generation version of its existing product, Buildgates 2.2. The nature of the efforts to complete the next generation version of Buildgates relate to the completion of all planning, designing, prototyping, verification, and testing activities that are necessary to establish that the proposed technologies meet their design specifications including functional, technical, and economic performance requirements.

Cadence expects Ambit's creation of a fundamentally new approach to synthesis in deep submicron and in soc to create the opportunity for additional consulting services revenue.

In September 1998, Cadence acquired BLDA for cash. The total purchase price was \$58 million and the acquisition was accounted for as a purchase.

Upon consummation of the BLDA acquisition, Cadence immediately charged to expense \$30.3 million representing acquired in-process technology that had not yet reached technological feasibility and had no alternative future use. See "Notes to Consolidated Financial Statements." The value was determined by estimating the costs to develop the acquired in-process technology into commercially viable products, estimating the resulting net cash flows from such projects, and discounting the net cash flows back to their present value. The discount rate includes a factor that takes into account the uncertainty surrounding the successful development of the acquired in-process technology. The in-process technology is expected to be commercially viable in 2000. Expenditures to complete these projects are expected to total approximately \$5 million. These estimates are subject to change, given the uncertainties of the development process, and no assurance can be given that deviations from these estimates will not occur. Additionally, these projects will require maintenance research and development after they have reached a state of technological and commercial feasibility.

BLDA's in-process research and development projects are related to its Formalcheck and Clover technologies. BLDA has two major enhancements underway for Formalcheck. This effort is expected to yield a revenue-generating product by the year 2000. BLDA's research and development related to Clover involved the design and development of new design rule checking and parasitic extraction tools, which are expected to substantially improve the performance and functionality of the technology. This effort is expected to be complete by late 1999. The nature of the efforts to complete the next generation version of Formalcheck and Clover relate to the completion of all planning, designing, prototyping, verification, and testing activities that are necessary to establish that the proposed technologies meet their design specifications including functional, technical, and economic performance requirements.

As evidenced by their continued support for these projects, management believes Cadence is well positioned to successfully complete each of the major research and development programs. However, there is risk associated with the completion of the projects and there is no assurance that each will meet with either technological or commercial success.

The net cash flows resulting from the projects underway at Ambit and BLDA, which were used to value the purchased research and development, were based on management's estimates of revenue, cost of revenue, research and development costs, selling, general and administrative costs, and income taxes from such projects. The revenue

projections are based on the potential market size that the projects are addressing, Cadence's ability to gain market acceptance in these segments, and the life cycle of in-process technology.

Estimated total revenue from the acquired in-process product areas peak in years 2003–2004 and decline rapidly in years 2005–2006 as other new products are expected to enter the market. In addition, a portion of the anticipated revenue has been attributed to enhancements of the base technology under development, and has been excluded from net cash flow calculations. Existing technology was valued at \$50.3 million and \$23.2 million in connection with the Ambit and BLDA acquisitions, respectively. There can be no assurance that these assumptions will prove accurate, or that Cadence will realize the anticipated benefit of the acquisitions. See "Factors That May Affect Future Results." The net cash flows generated from the in-process technology are expected to reflect earnings before interest, taxes, and depreciation of approximately 38% to 49% for the sales generated from in-process technology.

The discount of the net cash flows to their present value is based on the weighted average cost of capital (WACC). The WACC calculation produces the average required rate of return of an investment in an operating enterprise, based on various required rates of return from investments in various areas of the enterprise. The discount rates used to discount the net cash flows from the business enterprise, specifically acquired in-process technology, were 28% and 25% for Ambit and BLDA, respectively. These discount rates reflect the uncertainty surrounding the successful development of the acquired in-process technology, the useful life of such technology, the profitability levels of such technology, if any, and the uncertainty of technological advances, all of which are unknown at this time.

If these projects are not successfully developed, Cadence's business, operating results, and financial condition may be negatively affected in future periods. In addition, the value of other intangible assets acquired may become impaired.

To date, Ambit's and BLDA's results have not differed significantly from the forecast assumptions. Cadence's research and development expenditures since the acquisitions have not differed materially from expectations. The risks associated with the research and development are still considered high and no assurance can be made that upcoming products will meet market expectations.

In March 1998, Cadence acquired all of the outstanding stock of EXD for cash. The total purchase price was \$40.9 million, and the acquisition was accounted for as a purchase.

Upon consummation of the EXD acquisition, Cadence immediately charged to expense \$28.4 million representing acquired in-process technology that had not yet reached technological feasibility and had no alternative future use. See "Notes to Consolidated Financial Statements." The value was determined by estimating the costs to develop the acquired in-process technology into commercially viable products, estimating the resulting net cash flows from such projects, and discounting the net cash flows back to their present value. The discount rate included a factor that took into account the uncertainty surrounding the successful development of the acquired in-process technology. The in-process projects were expected to be commercially viable on dates ranging from the end of 1998 through the year 2000. Expenditures to complete these projects are expected to total approximately \$7 million.

At the time of its acquisition by Cadence, EXD was working on several significant research and development projects that, if successful, would represent the introduction of new products and technologies to meet tomorrow's market needs. These efforts included the development of new tools for library generation, delay calculation, memory compilation, and semiconductor intellectual property technology. These new technologies were intended to be fully supportive of deep submicron design functions, which are a critical market requirement. The nature of the efforts required to complete the research and development projects relate, to varying degrees, to the completion of all planning, designing, prototyping, verification, and testing activities that are necessary to establish that the proposed technologies meet their design specifications including functional, technical, and economic performance requirements.

In February 1998, Cadence acquired all of the outstanding stock of Symbionics for approximately 1 million shares of Cadence's common stock and \$21.3 million of cash. The total purchase price was \$46.1 million, and the acquisition was accounted for as a purchase.

Upon consummation of the Symbionics acquisition, Cadence immediately charged to expense \$28.5 million representing acquired in-process technology that had not yet reached technological feasibility and had no alternative future use. See "Notes to Consolidated Financial Statements." The value was determined by estimating the costs to

develop the acquired in-process technology into commercially viable products, estimating the resulting net cash flows from such projects, and discounting the net cash flows back to their present value. The discount rate includes a factor that took into account the uncertainty surrounding the successful development of the acquired in-process technology. The in-process projects were expected to be commercially viable on dates ranging from the end of 1998 through the year 2000. Expenditures to complete these projects are expected to total approximately \$6 million.

At the time of its acquisition by Cadence, Symbionics was working on several significant research and development projects that, if successful, would meet future market needs. These efforts involve digital television, wireless home networking, cellular roaming, and digital voice technologies, which were intended to ensure the long-term success and survival of the organization. The nature of the efforts required to complete the research and development projects relate, to varying degrees, to the completion of all planning, designing, prototyping, verification, and testing activities that are necessary to establish that the proposed technologies meet their design specifications including functional, technical, and economic performance requirements.

As evidenced by their continued support for these projects, management believes Cadence is well positioned to successfully complete the remaining major research and development programs. However, there is risk associated with the completion of the projects and there is no assurance that each will meet with either technological or commercial success.

The net cash flows resulting from the projects underway at EXD and Symbionics, which were used to value the acquired in-process technology, were based on management's estimates of revenue, cost of revenue, research and development costs, selling, general and administrative costs, and income taxes from such projects. The revenue projections are based on the potential market size that the projects are addressing, Cadence's ability to gain market acceptance in these segments, and the life cycle of in-process technology.

Estimated total revenue from the acquired in-process product areas peak in years 2001–2002 and decline rapidly thereafter as other new products are expected to enter the market. In addition, a portion of the anticipated revenue has been attributed to enhancements of the base technology under development, and has been excluded from net cash flow calculations. Existing technology was valued at \$9.1 million and \$6 million related to the EXD and Symbionics acquisitions, respectively. There can be no assurance that these assumptions will prove accurate, or that Cadence will realize the anticipated benefit of the acquisitions. The net cash flows generated from the in-process technology are expected to reflect earnings before interest and taxes are estimated to be approximately 31% to 39% for the sales generated from EXD's and Symbionics' in-process technology.

The discount applied to the net cash flows to calculate their present value was based on the wacc. The discount rates used to discount the net cash flows from acquired in-process technology range from 22% to 30% for EXD and Symbionics. The discount rates are sometimes higher than the wacc due to the inherent uncertainties in the estimates, including the uncertainty surrounding the successful development of the acquired in-process technology, the useful life of such technology, the profitability levels of such technology, if any, and the uncertainty of technological advances, all of which are unknown at this time.

If these projects are not successfully developed, Cadence's business, operating results, and financial condition may be adversely affected in future periods. In addition, the value of other intangible assets acquired may become impaired.

To date, EXD's and Symbionics' results have not differed significantly from the forecast assumptions. Cadence's research and development expenditures since the acquisitions have not differed materially from expectations. The risks associated with the research and development are still considered high, and no assurance can be made that upcoming products will meet market expectations.

In 1997, Cadence wrote off \$6.6 million of acquired in-process technology associated with its acquisitions of Synthesia AB and Advanced Microelectronics. These costs reflected in-process technology that had not reached technological feasibility and, in management's opinion, had no probable alternative future use.

In December 1996, Cadence acquired all of the outstanding stock of HLDs, for approximately 5.2 million shares of Cadence's common stock. The total purchase price was approximately \$101.4 million and the transaction was accounted for as a purchase.

Upon consummation of the HLDs acquisition, Cadence immediately charged to expense \$95.7 million representing acquired in-process technology that had not yet reached technological feasibility and had no alternative future use. The value was determined by estimating the costs to develop the acquired in-process technology into commercially viable products, estimating the resulting net cash flows from such projects, and discounting the net cash flows back to their present value. The discount rate includes a factor that takes into account the uncertainty surrounding the successful development of the acquired in-process technology.

At the time of its acquisition by Cadence, HLDS was developing new design planning technology, with the goal of delivering an integrated register transfer level-to-silicon deep submicron design technology. This research and development project was intended to enable the creation, verification, and integration of complex functional blocks onto system-level chips. This project required the creation of a completely new product architecture as well as advanced, new design planning delay calculation methodologies. The nature of the efforts required to complete the research and development projects relate, to varying degrees, to the completion of all planning, designing, prototyping, verification, and testing activities that are necessary to establish that the proposed technologies meet their design specifications including functional, technical, and economic performance requirements.

The net cash flows of the projects underway at HLDS, which were used to value the acquired in-process technology, were based on management's estimates of revenue, cost of revenue, research and development costs, selling, general and administrative costs, and income taxes from such projects. The revenue projections were based on the potential market size that the projects addressed, Cadence's ability to gain market acceptance in these segments, and the life cycle of in-process technology. Estimated total revenue from the acquired in-process product areas were expected to peak in 2001 and decline rapidly thereafter as other new products are expected to enter the market. In addition, a portion of the anticipated revenue has been attributed to enhancements of the base technology under development and has been excluded from net cash flow calculations.

The net cash flows generated from the in-process technology were expected to reflect earnings before interest, taxes, and depreciation at approximately 45% to 60% for the sales generated from the in-process technology. The discount rate used to discount the net cash flows from acquired in-process technology was 25%. Cadence believes that expenses incurred to date associated with the development of the in-process technology projects are approximately consistent with Cadence's previous estimates.

To date, HLDs' results have not differed significantly from the forecast assumptions. Cadence's research and development expenditures since the HLDs acquisition have not differed materially from expectations.

Restructuring In 1998, Cadence recorded \$69.5 million of restructuring charges primarily associated with Cadence's worldwide restructuring plan in the second half of 1998. Cadence's restructuring plans and associated costs consisted of \$36.9 million to terminate approximately 700 employees, \$29.9 million to downsize and close excess facilities, and \$2.7 million of other restructuring expenses. Cadence's restructuring plan was primarily aimed at reducing the cost of excess personnel and capacity in its services business. A discussion about Cadence's gross margin trends for its services business can be found under "Cost of Revenue" within this section. Cadence anticipates that the restructuring actions will save approximately \$75 million in fiscal 1999.

Severance costs of \$36.9 million include severance benefits, notice pay, and outplacement services. Approximately \$10.1 million of these costs resulted from the acceleration of stock option vesting under employment agreements. All terminations and termination benefits were communicated to the affected employees prior to year-end, and severance benefits are expected to be paid by 1999.

Cadence also incurred charges totaling \$29.9 million in connection with the closure of 58 sales and engineering facilities, including \$16.7 million to downsize and close facilities, and \$13.2 million in abandonment costs for the related leasehold improvements. Closure and exit costs include payments required under lease contracts (less any applicable sublease income) after the properties were abandoned, lease buyout costs, restoration costs associated with certain lease arrangements, and costs to maintain facilities during the period after abandonment. Asset related costs written-off consist of leasehold improvements to facilities that were abandoned and whose estimated fair market value is zero. Through the first quarter of 1999, 90% of the sites have been vacated and the remaining sites will be downsized or vacated during the second and third quarter of 1999. Noncancelable lease payments on vacated facilities will be paid out through 2008.

Cadence also recorded \$2.7 million of other restructuring charges consisting primarily of cancellation fees associated with certain vendor and conference arrangements and abandoned software.

In 1997, Cadence recorded restructuring charges of \$34.4 million. These charges relate to restructuring plans primarily aimed at reducing costs after Cadence merged with CCT and acquired HLDs. Cadence's restructuring plans and associated costs consisted of \$11.9 million to terminate approximately 230 employees, \$4.4 million to close duplicate and excess facilities, and \$3.7 million of other expenses associated with the business combinations. Also included in the restructuring costs were fees of \$14.4 million related to the CCT combination for financial advisors, attorneys, and accountants. The remaining severance balances were paid out in 1998 and all facilities were vacated. Noncancelable lease payments on vacated facilities will be paid out through the year 2000.

In 1996, Cadence recorded restructuring charges of \$2.1 million consisting of employee termination costs associated with the outsourcing of the Company's management information technology services and costs associated with excess facilities.

Liabilities for excess facilities and other restructuring charges are included in other current and non-current liabilities, while severance and benefits liabilities are included in payroll and payroll related accruals.

Actual amounts of termination benefits, facilities, and other restructuring related payments can be found in Notes to Consolidated Financial Statements under "Restructuring."

Capitalized Software Development Costs In 1997 and 1996, Cadence wrote-off capitalized software development costs of \$3.1 and \$2.7 million, respectively, for products developed by Cadence that were replaced by CCT and HLDS products or by license of replacement technology.

Other Income, Net Other income, net for 1998, 1997, and 1996 is as follows:

(in millions)	 1998	1997	1996
Interest income	\$ 10.5	\$ 18.5	\$ 5.4
Gain (loss) on foreign exchange	2.6	(1.4)	0.2
Equity earnings from investments	(0.9)	1.9	
Gain on sale of IMS stock	—	13.1	
Minority interest expense	(0.3)	(0.4)	(3.0)
Other expense, net	(0.8)	(3.0)	(0.5)
Interest expense	(3.6)	(2.5)	(1.9)
Total other income, net	\$ 7.5	\$ 26.2	\$ 0.2

Interest income decreased in 1998, as compared to 1997, by \$8 million, primarily due to lower average cash and investment balances throughout 1998, due in part to the payments made for acquisitions. The increase in 1997 of \$13.1 million, as compared to 1996, was primarily attributable to higher average cash and investment balances throughout 1997.

In February 1997, Cadence and IMS sold to the public 1.7 million shares of IMS common stock at \$20.75 per share, of which I million shares were sold by Cadence, netting Cadence \$18.6 million in cash. In connection with this transaction, Cadence recorded a pre-tax realized gain of \$13.1 million, which is included in other income, net in the consolidated statements of operations. Cadence also recorded a \$2.3 million unrealized gain, net of deferred taxes, which represented Cadence's proportionate share of IMS' equity as a result of IMS' sale of stock. This unrealized gain is reflected in the consolidated statements of stockholders'equity. Although Cadence has no current intent to enter into similar transactions, the likelihood of such transactions in the future is dependent upon the state of financial markets as well as liquidity and other considerations of each of Cadence and IMS.

The gain on foreign exchange increased in 1998, as compared to 1997, due to favorable exchange rate movements for Asian currencies, primarily the Japanese yen. The loss on foreign exchange in 1997 was attributable to unfavorable exchange rate movements for Asian currencies, primarily the Japanese yen and Korean won, as compared to 1996. Other expense in 1998, 1997, and 1996, was due primarily to investment losses from a venture capital partnership.

Income Taxes The provision for income taxes and the effective tax rates for 1998, 1997, and 1996 are as follows:

(in millions)	1998	1997	1996
Provision for income taxes <sup>1</sup>	\$ 80.7	\$ 73.1	\$ 64.2
Effective tax rate	72%	30%	65%

<sup>1</sup>Includes tax benefit in 1997 of \$5.3 million on cumulative effect of change in accounting method.

At January 2, 1999, Cadence had total net deferred tax assets of approximately \$63.3 million. Realization of the deferred tax assets will be dependent on generating sufficient taxable income prior to the expiration of certain net operating loss and tax credit carryforwards. The net valuation allowance increased by \$15.4 million in 1998 due to the uncertainty of certain foreign subsidiaries generating sufficient taxable income to realize certain foreign deferred tax assets. Although realization is not assured, management believes that it is more likely than not that the net deferred tax assets will be realized. The amount of the net deferred tax assets, however, could be reduced or increased in the near term if actual facts, including the estimate of future taxable income, differ from those estimated.

The effective tax rate for 1998, 1997, and 1996, includes the write-off of in-process technology of approximately \$194.1 million, \$6.6 million, and \$95.7 million, respectively. The 1998, 1997, and 1996 effective tax rates, excluding the write-off of acquired in-process technology, are 28.5%, 30%, and 33%, respectively. The decrease in the 1998 effective tax rate, as compared to 1997, was primarily due to differences in tax rates between domestic and foreign operations being applied to proportionally changing amounts of domestic and foreign taxable income, and to non-deductible acquisition costs of the CCT merger in 1997. The decrease in the 1997 effective tax rate, as compared to the 1996 effective tax rate, was primarily due to foreign earnings generating a higher proportion of total earnings in 1997, and those earnings being taxed at a lower rate.

Change in Accounting Method In November 1997, the Emerging Issues Task Force of the Financial Accounting Standards Board issued Ruling 97-13 "Accounting for Costs Incurred in Connection with a Consulting Contract or an Internal Project That Combines Business Process Reengineering and Information Technology Transformation," which requires companies to expense costs incurred for business process reengineering projects. As a result, Cadence recorded a \$12.3 million charge in 1997, net of taxes of \$5.3 million, as a cumulative effect of change in accounting method for reengineering project costs that had been previously capitalized by Cadence associated with its implementation of enterprise-wide information systems.

#### Disclosures About Market Risk

Interest Rate Risk Cadence's exposure to market risk for changes in interest rates relates primarily to its investment portfolio and long-term debt obligations.

Cadence places its investments with high quality credit issuers and, by policy, limits the amount of credit exposure to any one issuer. As stated in its policy, Cadence's first priority is to reduce the risk of principal loss. Consequently, Cadence seeks to preserve its invested funds by limiting default risk, market risk, and reinvestment risk. Cadence mitigates default risk by investing in only high quality credit securities that it believes to be low risk and by positioning its portfolio to respond appropriately to a significant reduction in a credit rating of any investment issuer or guarantor. The portfolio includes only marketable securities with active secondary or resale markets to ensure portfolio liquidity.

In October 1998, Cadence entered into a senior unsecured credit facility (the 1998 Facility) with a syndicate of banks that allows Cadence to borrow up to \$355 million. The 1998 Facility is divided between a \$177.5 million three year revolving credit facility (the Three Year Facility) and a \$177.5 million 364-day revolving credit facility convertible to a three year term loan (the 364-Day Facility). The Three Year Facility expires September 29, 2001. The 364-Day Facility will either expire on September 29, 1999 and be converted to a three year term loan with a maturity date of September 29, 2002 or, at the option of the bank group, be renewed for an additional one year period. Cadence has the option to pay interest based on LIBOR plus a spread of between 0.50% and 1.00%, based on a pricing grid tied to a financial covenant, or the higher of the Federal Funds Rate plus 0.50% or the prime rate. As a result, Cadence's interest rate expenses associated with this borrowing will vary with market rates. In addition,

commitment fees are payable on the unutilized portions of the Three Year Facility at rates between 0.18% and 0.30% based on a pricing grid tied to a financial covenant and on the unutilized portion of the 364-Day Facility at a fixed rate of 0.10%. The 1998 Facility contains certain financial and other covenants.

The table below presents the carrying value and related weighted average interest rates for Cadence's investment portfolio and its long-term debt obligations. The carrying value approximates fair value at January 2, 1999. All investments mature in one year or less.

(in millions)		Carrying Value	Average Interest Rate
Investment Securities:			
Cash equivalents—fixed rate	\$	16.0	3.61%
Short-term investments—fixed rate		26.7	5.71%
Total investment securities		42.7	4.25%
Cash equivalents—variable rate		53.4	4.38%
Total interest bearing instruments	\$	96.1	4.32%
Debt:	_	:	
Revolving credit facility	\$	135.0	6.07%

Interest Rate Swap Risk Cadence entered into a 4.8% fixed interest rate-swap in connection with its accounts receivable financing program to modify the interest rate characteristics of the receivables sold to a financing institution on a non-recourse basis. At January 2, 1999, the maturity distribution of the \$26 million notional amount payable to Cadence by the institution was in quarterly installments of approximately \$2.2 million commencing in January 1999 and ending in October 2001. The estimated fair value at January 2, 1999 was negligible.

Foreign Currency Risk Cadence transacts business in various foreign currencies, primarily in Japanese yen and certain European currencies. Cadence has established a foreign currency hedging program, utilizing foreign currency forward exchange contracts (forward contracts) to hedge certain foreign currency transaction exposures in Japan, Canada, Asia, and certain European countries. Under this program, increases or decreases in Cadence's foreign currency transactions are partially offset by gains and losses on the forward contracts, so as to mitigate the possibility of foreign currency transaction gains and losses. Cadence does not use forward contracts for trading purposes. All outstanding forward contracts at the end of a period are marked-to-market with unrealized gains and losses included in other income, net, and thus are recognized in income in advance of the actual foreign currency cash flows. As these forward contracts mature, the realized gains and losses are recorded and are included in net income as a component of other income, net. Cadence's ultimate realized gain or loss with respect to currency fluctuations will depend on the currency exchange rates and other factors in effect as the contracts mature.

The table below provides information as of January 2, 1999 about Cadence's material forward contracts. The information is provided in u.s. dollar equivalent amounts. The table presents the notional amounts (at contract exchange rates) and the weighted average contractual foreign currency exchange rates. These forward contracts mature prior to March 31, 1999.

(in millions)	 Notional Amount	Average Contract Rate
Forward Contracts:		
Japanese yen	\$ 36.2	117.63
British pound sterling	\$ IO.I	1.67
French francs	\$ (4.9)	5.50
Italian lira	\$ 4.I	1,627.45
Canadian dollars	\$ (2.8)	1.54
German deutschemarks	\$ 1.8	1.65
Dutch guilder	\$ (1.5)	1.85

The unrealized gain (loss) on the outstanding forward contracts at January 2, 1999 was immaterial to Cadence's consolidated financial statements. Due to the short-term nature of the forward contracts, the fair value at January 2,

1999 was negligible. The realized gain (loss) on these contracts as they matured was not material to the consolidated operations of Cadence.

Equity Price Risk As part of its authorized repurchase program, Cadence has sold put warrants through private placements. Additionally, Cadence has purchased call options that entitle Cadence to buy on a specified day one share of common stock at a specified price to satisfy anticipated stock repurchase requirements under Cadence's seasoned systematic repurchase programs.

Cadence repurchases shares of its common stock under stock repurchase programs in order to make sure it has enough shares for issuance under its Employee Stock Purchase Plan (ESPP), its 1997 Stock Option Plan (the 1997 Plan), and for other corporate purposes. This may result in sales of a large number of shares and consequent decline in the market price of Cadence common stock. As part of these repurchase programs, Cadence has purchased and will purchase call options or has sold and will sell put warrants.

- Call options allow Cadence to buy shares of its stock on a specified day at a specified price. If the market price of the stock is greater than the exercise price of a call option, Cadence will typically exercise the option and receive shares of stock. If the market price of the stock is less than the exercise price of a call option, Cadence typically will not exercise the option.
- Call option issuers may accumulate a substantial number of shares of Cadence common stock in anticipation of Cadence's exercising its call option and may dispose of these shares if and when Cadence fails to exercise its call option. This could cause the market price of Cadence common stock to fall.
- Put warrants allow the holder to sell to Cadence shares of Cadence common stock on a specified day at a specified price. Cadence has the right to settle the put warrants with shares of Cadence common stock valued at the difference between the exercise price and the fair value of the stock at the date of exercise.
- Depending on the exercise price of the put warrants and the market price of the stock at the time of exercise, settlement of the put warrants with stock could cause Cadence to issue a substantial number of shares to the holder of the put warrant. The holder may sell these shares in the market, which could cause the price of Cadence common stock to fall.
- Put warrant holders may accumulate a substantial number of shares of stock in anticipation of exercising their put warrants and may dispose of these shares if and when they exercise their put warrants and Cadence issues shares in settlement of their put warrants. This could also cause the market price of Cadence common stock to fall.

The table below provides information at January 2, 1999 about Cadence's put warrants and call options. The table presents the contract amounts and the weighted average strike prices. The put warrants and call options expire at various dates through November 1999 and Cadence has the contractual ability to settle the options prior to their maturity.

(shares and contract amounts in millions)	1999 Maturity	Estimated Fair Value
Put Warrants:		
Shares	4.2	
Weighted average strike price	\$ 27.22	
Contract amount	\$ 114.3	\$ 16.6
Call Options:		
Shares	2.9	
Weighted average strike price	\$ 27.19	
Contract amount	\$ 78.8	\$ 20.9

#### Year 2000 Update

The Year 2000 computer issue creates risks for Cadence, the full extent and scope of which have not yet been fully assessed. In the event that internal products and systems, or those products and systems provided by, or utilized by third parties, do not correctly recognize and process date data information beyond the year 1999, it could have a material adverse effect on Cadence's business, operating results, and financial condition.

To address Year 2000 issues, Cadence initiated a program designed to address the most critical Year 2000 items that would affect Cadence's products, its worldwide business systems, and the operations of the following functions: research and development, finance, sales, manufacturing, and human resources. Assessment and remediation efforts regarding these critical items are proceeding in parallel. Cadence is also creating a plan to work with critical suppliers and customers to determine that such suppliers' and customers' operations and the products and services they provide are Year 2000 capable, or to monitor their progress towards Year 2000 capability. Cadence has commenced work on contingency plans to address potential problems with its internal systems or with suppliers, customers, and other third parties.

In 1997, Cadence commenced a program to inventory, assess, remediate, and test the Year 2000 capability of its products. As a result of those efforts, Cadence believes that the most current release of Cadence's software products, as set forth in the Year 2000 Software Compliance List (available on Cadence's web site), are Year 2000 Compliant. Cadence defines the term "Year 2000 Compliant" to mean that the software will not: (a) cease to perform due solely to a change in date to or after January 1, 2000, nor (b) generate incorrect or ambiguous data or results with respect to same-century and/or multi-century formulas, functions, date values, and date data interfaces. Cadence does not believe that customers are using a significant amount of products that are not determined to be Year 2000 Compliant. Cadence continues to further validate current products, as well as new products, products acquired through acquisitions, such as Ambit and BLDA, and releases through testing and code reviews. All Cadence Year 2000 activities concerning Cadence's products are expected to be completed by October 1999.

In 1995, Cadence also commenced a worldwide business systems replacement project with systems that use programs primarily from SAP America, Inc. (SAP), PeopleSoft, Inc. (PeopleSoft), and Siebel Systems, Inc. (Siebel). The new systems are expected to make approximately 70% of Cadence's business computer systems Year 2000 Compliant. In addition, during September 1997, Cadence commenced an investigation of the condition of Year 2000 readiness for all of its other internal business applications. This effort began with an inventory to identify current business applications, an evaluation of their Year 2000 readiness status, and development of plans for remediation and testing of all discovered issues. As of February 1999, of the 60 business application systems that had been identified, 54 had been modified or replaced and determined to be Year 2000 ready. Recently, Cadence has identified additional areas requiring Year 2000 assessment, remediation, and testing, specifically software interfaces and applications used to interact with vendors, as well as applications that are unique to the various international operations. Cadence expects that all business critical applications shall be Year 2000 Compliant by the third quarter of 1999.

In July 1998, Cadence established a cross functional Year 2000 Project Team to identify and resolve all remaining Year 2000 readiness issues. The primary remaining issues consist of assessing the Year 2000 impact for outside vendors, customers, facilities, and the remaining internal business systems that are not yet assessed as Year 2000 compliant. Project plans have been developed and include the process of identifying and prioritizing critical suppliers and customers at the direct interface level, and communicating with them about their plans and progress in addressing Year 2000 issues. Detailed evaluations of the most critical third parties have been initiated. It is expected that all Year 2000 project inventories will be completed by the end of the second quarter of 1999. This effort is being followed by each business function conducting a focused level of ranking and functional assessment of its inventory to establish the methods and actions required to resolve any Year 2000 issues discovered. The assessment efforts are estimated to be completed by the second quarter of 1999. The remediation (modification or replacement of existing software or systems) efforts are expected to be completed by the third quarter of 1999, and the testing phases of the Year 2000 Project Plans are expected to take place throughout most of 1999, and estimated to be completed, for all business critical items, by the fourth quarter of 1999. All remaining issues (which are considered low priority or low risk to the business) are planned to be addressed as time permits and could continue through the first half of 2000.

It is estimated that the 1999 budget for Year 2000 related costs to resolve remaining readiness issues will be approximately \$13 million. The costs of implementing the SAP, PeopleSoft, and Siebel business application systems are not included in these cost estimates. The total cost associated with required modifications to become Year 2000 Compliant is not expected to have a material adverse effect on Cadence's business, operating results, and financial condition. Cadence's current estimates of the amount of time and costs necessary to implement and test its systems are based on the facts and circumstances existing at this time. The estimates were derived utilizing multiple assumptions of future events including the continued availability of certain resources, implementation success, and other factors. New developments may occur that could affect Cadence's estimates for Year 2000 compliance. These developments include, but are not limited to: (a) the availability and cost of personnel trained in this area, (b) the ability to locate and correct all relevant computer code and equipment, and (c) the planning and modification success needed to achieve full implementation.

Readers are cautioned that the foregoing discussion regarding Year 2000 Update contains forward-looking statements based on current expectations that involve risks and uncertainties and should be considered in conjunction with the following. The failure to correct a material Year 2000 problem could result in an interruption in, or a failure of, certain normal business activities or operations of Cadence. Such failures could materially and adversely affect Cadence's business, operating results, and financial condition. Due in large part to the uncertainty of the Year 2000 readiness of third-party suppliers and customers, as well as the lack of remediation and testing for the remaining internal business systems that are not yet assessed as Year 2000 Compliant, Cadence is currently unable to determine whether the consequences of Year 2000 issues will have a material impact on Cadence's business, operating results, or financial condition.

Cadence's risks associated with non-information technology systems and embedded systems are generally limited to systems that typically involve environmental control systems, interruptible power systems, elevator systems, and security systems. Cadence feels confident that through its research, testing, and corrective actions, the realized risks from embedded systems will be low.

The reasonably likely worst case scenario of a Year 2000 problem for all of Cadence's material systems is that Cadence's operations could be disrupted for a few days before the problem could be identified and remediated. The reasonably likely worst case scenario associated with Cadence products for a Year 2000 problem is that a customer project could be delayed for a short period of time before the problem can be identified and remediated by Cadence's support process. Because of the small amount of software code that could be involved, it is anticipated that problems will be remediated within 5 business days from when the problem is recreated by Cadence's support organization. Cadence uses contract terms to limit indirect damages that may be incurred by customers, although no assurance can be given that such terms are enforceable.

The Year 2000 project is expected to significantly reduce Cadence's level of uncertainty regarding Year 2000 issues and, in particular, about the Year 2000 readiness of its material internal operations and external agents. In addition, Cadence believes that the current Year 2000 activities surrounding Cadence's software products and internal systems have significantly reduced the risk of any interruption caused by any Year 2000 issues in these areas. However, because of uncertainties with Year 2000 issues, Cadence is currently unable to determine whether and to what extent the Year 2000 problem will harm its business, operating results, or financial condition.

#### Liquidity and Capital Resources

At January 2, 1999, Cadence's principal sources of liquidity consisted of \$209.8 million of cash and cash equivalents and short-term investments, as compared with \$304.2 million and \$318.4 million at January 3, 1998 and December 28, 1996, respectively, and a new \$355 million senior unsecured credit facility entered into in October 1998. As of January 2, 1999, Cadence had outstanding borrowings of \$135 million under the credit facility.

Cash provided by operating activities increased \$44.3 million to \$246.1 million in the year ended January 2, 1999, as compared to the year ended January 3, 1998, primarily due to increases in net income before unusual items, prepaid expenses and other, depreciation and amortization, and a decrease in accounts payable and accrued liabilities, partially offset by increases in receivables and installment contract receivables. Cash provided by operating activities increased \$22.7 million to \$201.8 million for the year ended January 3, 1998, as compared to the year ended

December 28, 1996. The increase was primarily due to increases in net income before unusual items, accrued liabilities and payables, and income taxes payable, partially offset by increases in receivables and installment contract receivables and deferred income taxes.

At January 2, 1999, Cadence had net working capital of \$251.8 million, as compared with \$340.3 million at January 3, 1998. The primary reasons for the decrease were decreases in short-term investments of \$70.5 million, cash and cash equivalents of \$24 million, and accounts receivable of \$13.3 million and increases in accounts payable and accrued liabilities of \$54.8 million, partially offset by an increase in installment contract receivables, current of \$86.9 million. The increase in accounts payable and accrued liabilities was primarily attributable to bonus and commissions payments to be paid in early 1999, restructuring charges, sales taxes, and withholdings for issuance of stock under Cadence's ESPP.

In addition to its short-term investments, Cadence's primary investing activities were acquisitions and the related acquired intangibles, purchases of property and equipment, capitalization of software development costs, and venture capital partnership investments, which combined represented \$587.1 million, \$95.8 million, and \$98 million of cash used for investing activities in the years ended January 2, 1999, January 3, 1998, and December 28, 1996, respectively.

In the first quarter of 1999, Cadence completed the construction of a new building and improvements on the San Jose, California campus with an estimated total cost of approximately \$15.4 million. Also in the first quarter of 1999, Cadence purchased an additional facility adjacent to its San Jose, California campus for \$27.5 million, which it expects to occupy in the third quarter of 1999. Additionally, the construction of a new Cadence design center was commenced in 1998 in Scotland.

In May 1997, Cadence announced that its board of directors had rescinded Cadence's previously-announced stock repurchase program, with the exception of continued systematic stock repurchases under its seasoned stock repurchase program for Cadence's ESPP. Cadence rescinded the stock repurchase program in connection with its merger with CCT in order to comply with requirements for the pooling of interests accounting treatment. Cadence announced a new seasoned systematic stock repurchase program in September of 1997 in connection with the establishment of the 1997 Plan. The shares acquired by Cadence under this new program will be used to meet the recurring share issuance requirements of the 1997 Plan. The repurchase authorization for the 1997 Plan is 4 million shares over a two year period; 2.4 million additional shares are authorized for repurchase for the ESPP over a two year period. In November 1997, Cadence announced a new 10 million share stock repurchase program.

In connection with and prior to the consummation of the merger with Quickturn, Cadence will rescind its stock repurchase program, with the exception of continued systematic stock repurchases under its seasoned stock repurchase programs for Cadence's 1997 Plan and ESPP.

Since 1994, as part of its previously discussed authorized stock repurchase program, Cadence has sold put warrants and purchased call options through private placements. Cadence had a maximum potential obligation related to the put warrants at January 2, 1999 to buy back 4.2 million shares of its common stock at an aggregate price of approximately \$114.3 million. The put warrants will expire at various dates through November 1999 and Cadence has the contractual ability to settle the options prior to their maturity. Cadence has the ability to settle these put warrants with stock and, therefore, no amount was classified out of stockholders' equity in the consolidated balance sheets. The effect of the exercise of these put warrants and call options is reported in the line titled "Purchase of treasury stock" within the consolidated statements of stockholders' equity.

Anticipated cash requirements for 1999 include the repurchase of stock for Cadence's stock repurchase programs and the contemplated additions of property, plant, and equipment of approximately \$152 million.

As part of its overall investment strategy, Cadence has committed to invest \$50 million in a venture capital partnership as a limited partner over the next three to four years. At January 2, 1999, Cadence had contributed approximately \$26 million of this amount, which is reflected in other assets in the consolidated balance sheets, net of operating losses.

Cadence anticipates that current cash and short-term investment balances, cash flows from operations, and the remaining amounts available under its \$355 million revolving line of credit should be sufficient to meet its working capital and capital expenditure requirements on a short- and long-term basis.

#### New Accounting Standards

In 1998, Cadence adopted Statement on Financial Accounting Standards (SFAS) No. 131, "Disclosures about Segments of an Enterprise and Related Information," issued by the Financial Accounting Standards Board (FASB), which requires companies to report financial and descriptive information about its reportable operating segments, including segment profit or loss, certain specific revenue and expense items and segment assets, as well as information about the revenue derived from Cadence's products and services, the countries in which Cadence earns revenue and holds assets, and major customers. SFAS No. 131 did not have a material impact on Cadence's consolidated financial statements.

In 1998, Cadence adopted Statement of Position (SOP) 97-2, "Software Revenue Recognition" issued by the Accounting Standards Executive Committee of the American Institute of Certified Public Accountants. SOP 97-2 provides guidance on applying generally accepted accounting principles in recognizing revenue on software transactions. The adoption of SOP 97-2 did not have a material impact on Cadence's consolidated financial position or results of operations.

In 1998, Cadence adopted SOP 98-1, "Accounting for the Costs of Computer Software Developed or Obtained for Internal Use." Adoption of SOP 98-1 did not have a material impact on its consolidated financial statements.

In 1998, the FASB issued SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities." SFAS No. 133 establishes accounting and reporting standards requiring that every derivative instrument be recorded in the balance sheet as either an asset or liability measured at its fair value. It requires that changes in the derivative's fair value be recognized currently in earnings unless specific hedge accounting criteria are met and that a company must formally document, designate, and assess the effectiveness of transactions that receive hedge accounting. SFAS No. 133 is effective for fiscal years beginning after June 15, 1999 and cannot be applied retroactively. Cadence has not yet determined the impact SFAS No. 133 will have on its financial position, results of operations or cash flows.

In 1998, Cadence adopted SFAS No. 130, "Comprehensive Income," which requires companies to report a new, additional measure of income on the income statement or to create a new financial statement that has the new measure of income on it. SFAS No. 130 did not have a material impact on Cadence's consolidated financial statements.

## Factors That May Affect Future Results

Certain statements contained in this Annual Report on Form 10-K, including, without limitation, statements containing the words "believes," "anticipates," "estimates," "intends," "expects," and words of similar import, constitute forward-looking statements within the meaning of the Private Securities Reform Act of 1995. Actual results could vary materially from those expressed in those statements. Readers are referred to "Marketing and Sales," "Research and Development," "Competition," "Proprietary Technology," "Manufacturing," and "Management's Discussion and Analysis of Financial Condition and Results of Operation" sections contained herein as well as the factors described below, which identify some of the important factors or events that could cause actual results or performances to differ materially from those contained in the forward-looking statements.

Cadence lacks long-term experience in its electronics design and consulting services business. Cadence only recently began to focus on offering electronics design and consulting services and therefore may not be as experienced in this business as others. The market for these services is relatively new and rapidly evolving. Cadence's failure to succeed in these services businesses may seriously harm Cadence's business, operating results and financial condition.

The success of Cadence's electronic design and consulting services businesses depends on many factors that are beyond its control. In order to be successful with its electronics design and consulting services, Cadence must overcome several factors that are beyond its control, including the following:

- Many service contracts generally represent large amounts of revenue. Cadence's electronics design and consulting services contracts generally represent a relatively large amount of revenue per order. Therefore, the loss of individual orders could seriously hurt Cadence's revenue and operating results.
- Many service contracts are at a fixed price. A substantial portion of these service contracts are fixed-price contracts. This means that the customer pays a fixed price that has been agreed upon ahead of time, no matter how much time or how many resources Cadence must devote to perform the contract. If Cadence's cost in performing the services consistently and significantly exceeds the amount the customer has agreed to pay, it could seriously harm Cadence's business, operating results, and financial condition.
- Cadence's cost of service personnel is high and reduces gross margin. Gross margins represent the difference between the amount of revenue from the sale of services and Cadence's cost of providing those services. Cadence must pay high salaries to professional services personnel to attract and retain them. This results in lower gross margins than the gross margins in Cadence's software business. In addition, the high cost of training new services personnel or not fully utilizing these personnel can significantly lower gross margins.

Fluctuations in quarterly results of operations could hurt Cadence's business and the market price of its stock. Cadence has experienced, and may continue to experience, varied quarterly operating results. Various factors affect Cadence's quarterly operating results and some of them are not within Cadence's control, including the mix of products and services sold and the timing of significant orders for its software products by customers. Quarterly operating results are affected by the mix of products sold because there are significant differences in margins from the sale of products and services. Cadence realizes gross margins on product sales of approximately 90%, but realizes gross margins of approximately 30% on its performance of services. In addition, Cadence's quarterly operating results are affected by the timing of significant orders for its software products because a significant number of contracts for software products are in excess of \$5 million. The failure to close a contract for the sale of one or more orders of Cadence's software products could seriously hurt its quarterly operating results.

In addition, Cadence bases its expense budgets partially on its expectations of future revenue. However, it is difficult to predict revenue levels or growth. Revenue levels that are below Cadence's expectations could seriously hurt Cadence's business, operating results, and financial condition. If revenue or operating results fall short of the levels expected by public market analysts and investors, the trading price of Cadence common stock could decline dramatically. Also, because of the large order size and its customers' buying patterns, Cadence may not learn of revenue shortfalls, earnings shortfalls, or other failures to meet market expectations until late in a fiscal quarter, which could cause even more immediate and serious harm to the trading price of Cadence common stock.

Because Cadence's focus on providing services is relatively recent, it believes that quarter-to-quarter comparisons of its results of operations may not be meaningful. Therefore, stockholders should not view Cadence's historical results of operations as reliable indicators of its future performance.

Cadence expects to acquire other companies and may not successfully integrate them. Cadence has acquired other businesses before and may do so again. While Cadence expects to analyze carefully all potential transactions before committing to them, Cadence cannot assure you that any transaction that is completed will result in long-term benefits to Cadence or its stockholders or that Cadence's management will be able to manage the acquired businesses effectively. In addition, growth through acquisition involves a number of risks. If any of the following events occurs after Cadence acquires another business, it could seriously harm Cadence's business, operating results, and financial condition:

- Difficulties in combining previously separate businesses into a single unit;
- The substantial diversion of management's attention from day-to-day business when negotiating these transactions and later integrating an acquired business;

- The discovery after the acquisition has been completed of liabilities assumed from the acquired business;
- The failure to realize anticipated benefits such as cost savings and revenue enhancements;
- Difficulties related to assimilating the products of an acquired business. For example, in distribution, engineering, and customer support areas; and,
- The failure to identify or correct a material Year 2000 problem of an acquired business.

Failure to obtain export licenses could harm Cadence's business. Cadence must comply with United States Department of Commerce regulations in shipping its software products and other technologies outside the United States. Although Cadence has not had any significant difficulty complying with these regulations so far, any significant future difficulty in complying could harm Cadence's business, operating results, and financial condition.

"Year 2000 computer problems" could interrupt Cadence's business operations. The so-called Year 2000 problem occurs when computer programs and embedded microprocessors fail to process date information correctly beginning in 1999. If Cadence experiences a Year 2000 problem, it could result in an interruption in, or a failure of, normal business operations. This could seriously harm Cadence's business, operating results, and financial condition.

While Cadence has established a Year 2000 project team to identify and resolve its potential Year 2000 issues, Cadence has not fully assessed the risks the Year 2000 problem poses to its business. Cadence believes that its own internally-developed software products generally will not have Year 2000 problems. However, Cadence is uncertain as to the Year 2000 readiness of third-party suppliers and customers, approximately 30% of its internal information business systems, and products acquired through recent acquisitions. Because of these uncertainties, Cadence is currently unable to determine whether and to what extent the Year 2000 problem will harm its business, operating results, or financial condition.

Anti-takeover defenses in Cadence's charter and under Delaware law could prevent an acquisition of Cadence or limit the price that investors might be willing to pay for Cadence common stock. Provisions of the Delaware General Corporation Law that apply to Cadence and its Certificate of Incorporation could make it difficult for another company to acquire control of Cadence. For example:

- Section 203 of the Delaware General Corporation Law generally prohibits a Delaware corporation from engaging in any business combination with a person owning 15% or more of the voting stock of the corporation, or who is affiliated with the corporation and owned 15% or more of its voting stock at any time within 3 years prior to the proposed business combination, for a period of three years from the date the person became a 15% owner, unless specified conditions are met.
- Cadence's Certificate of Incorporation allows the Cadence Board of Directors to issue at any time and without stockholder approval, preferred stock with such terms as it may determine. No shares of Cadence preferred stock are currently outstanding. However, the rights of holders of any Cadence preferred stock that may be issued in the future may be superior to the rights of holders of Cadence common stock.
- Cadence has a rights plan, commonly known as a "poison pill," which would make it difficult for someone to acquire Cadence without the approval of Cadence's Board of Directors.

All of these factors could limit the price that certain investors would be willing to pay for shares of Cadence common stock and could delay, prevent, or allow the Board of Directors of Cadence to resist an acquisition of Cadence, even if the proposed transaction was favored by a majority of Cadence's independent stockholders.

## **Consolidated Balance Sheets**

(in thousands, except per share amounts)  1998	1997
Assets	
Current Assets:	
Cash and cash equivalents \$ 183,066 \$ 20	07,024
Short-term investments 26,686	97,180
Receivables, net 277,599 20	05,006
Prepaid expenses and other 92,359	99,849
Total current assets 579,710 66	09,059
Property, plant, and equipment, net 262,675	97,421
Software development costs, net	15,068
Acquired intangibles, net 282,489	10,117
Installment contract receivables 100,529	61,326
Other assets 167,510 I	30,859
\$ 1,405,958 \$ 1,0.	23,850
Liabilities and Stockholders' Equity	
Current Liabilities:	
Notes payable and current portion of capital leases \$ 1,273 \$	794
	56,426
Income taxes payable 19,133	5,161
Deferred revenue 96,286 I	06,414
	58,795
Long-Term Liabilities:	
Long-term debt and capital leases 136,380	1,599
Deferred income taxes 58,927	
Minority interest liability 377	121
Other long-term liabilities 24,883	26,238
Total long-term liabilities 220,567	27,958
Commitments and Contingencies	
Stockholders'Equity:	
Preferred stock—\$0.01 par value; authorized 400 shares in 1998 and 1997,	
none issued or outstanding —	
Common stock and capital in excess of \$0.01 par value	
Authorized: 600,000 shares	
Issued: 224,585 shares in 1998 and 214,405 shares in 1997	
Outstanding: 214,438 shares in 1998 and 207,666 shares in 1997 725,325 50	02,602
Treasury stock at cost: 10,147 shares in 1998 and 6,739 shares in 1997 (219,417)	97,285)
Retained earnings 360,916 33	28,934
Accumulated other comprehensive loss (9,345)	(7,154)
Total stockholders' equity 857,479 72	27,097
\$ 1,405,958 \$ 1,0	23,850

## Consolidated Statements of Operations

For the three fiscal	years ended January 2, 1999
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(in thousands, except per share amounts)		1998		1997		1996
Revenue						
Product	\$	695,036	\$	537,490	\$	441,263
Services		255,787		160,890		114,620
Maintenance		265,247		227,989		223,181
Total revenue		1,216,070		926,369		779,064
Costs and Expenses		-				
Cost of product		51,539		40,064		49,469
Cost of services		185,683		114,711		80,963
Cost of maintenance		43,453		27,838		25,067
Amortization of acquired intangibles		17,443		1,946		929
Marketing and sales		302,332		263,054		240,740
Research and development		179,394		143,746		123,065
General and administrative		67,444		58,412		60,049
Unusual items		263,594		44,053		100,543
Total costs and expenses		1,110,882		693,824		680,825
Income from operations		105,188		232,545		98,239
Other income, net		7,479		26,215		226
Income before provision for income taxes and cumulative effect of						
change in accounting method		112,667		258,760		98,465
Provision for income taxes		80,685		78,384		64,155
Income before cumulative effect of change in accounting method		31,982		180,376		34,310
Cumulative effect of change in accounting method, net of taxes						
of \$5,261 in 1997		_		12,276		_
Net income	\$	31,982	\$	168,100	\$	34,310
Basic Net Income Per Share						
Net income before cumulative effect of change in accounting method	\$	0.15	\$	0.93	\$	0.19
AT				. 0.6		
Net income	\$	0.15	\$	0.86	\$	0.19
Diluted Net Income Per Share						
Net income before cumulative effect of change in accounting method	\$	0.14	4	0.82	\$	0.16
The mediae before cumulative effect of change in accounting method	Φ	0.14	\$	0.82	Φ	0.10
Net income	\$	0.14	\$	0.77	\$	0.16
Weighted average common shares outstanding	_	211,975		194,900		178,399
Weighted average common and potential common shares outstanding—						
assuming dilution		233,647		219,552		208,444
	=	557:17		7,00		7111

# Consolidated Statements of Stockholders' Equity

		Comi	non Stock				Accumulated
For the three fiscal years ended January 2, 1999 (in thousands)	Comprehensive Income	Shares	Par Value and Capital In Excess of Par	Treas Shares	ury Stock Amount	Retained Earnings	Other Comprehensive Loss
Balance, December 30, 1995 Purchase of treasury stock		248,536	\$ 324,957	(70,460) (10,314)	\$ (290,884) (124,204)	\$ 128,451	\$ 972
Issuance of common stock Tax benefits from employee		9,920	34,235	1,205	5,401	(17)	_
stock transactions		_	60,418	_	_	_	_
Purchase of warrant Treasury stock issued in connection with		_	(2,437)	_	_	(1,910)	_
acquisitions Stock issued in secondary		_	73,492	5,124	25,906	_	_
offering, net of expenses Amortization of deferred		_	143,915	11,500	58,144	_	_
compensation		_	96		_	_	_
Net income	\$ 34,310	_		_	_	34,310	_
Translation loss	(2,807) \$ 31,503		_	_		_	(2,807)
Balance, December 28, 1996		258,456	634,676	(62,945)	(325,637)	160,834	(1,835)
Purchase of treasury stock			(720)	(4,592)	(104,526)		
Issuance of common stock		15,452	67,196	1,167	7,308	_	_
Tax benefits from employee							
stock transactions			123,180	_	_	_	_
Retirement of treasury stock							
in connection with the							
CCT acquisition		(22,778)	(32,429)	22,778	32,429	_	_
Treasury stock issued in							
connection with							
acquisitions		_		128	1,755	_	_
Unrealized gain on							
investment in subsidiary		_	2,304	_	_	_	_
Use of treasury stock for							
common stock dividend		(36,725)	(291,636)	36,725	291,386	_	_
Amortization of deferred							
compensation		_	31	_	_	_	_
Net income	\$ 168,100	_	_	_	_	168,100	_
Translation loss	(5,319) \$ 162,781		_				(5,319)
Balance, January 3, 1998		214,405	502,602	(6,739)	(97,285)	328,934	(7,154)
Purchase of treasury stock		_	(121)	(6,231)	(170,710)	_	_
Issuance of common stock Tax benefits from employee		10,180	83,727	1,568	28,939	_	_
stock transactions Treasury stock issued in connection with		_	109,344	_	_	_	_
acquisitions Treasury stock issued in		_	29,451	1,155	19,639	_	_
connection with warrants							
exercised		_	322	100	_	_	_
Net income	\$ 31,982	_	_	_	_	31,982	_
Translation loss	(2,191)						(2,191)
	\$ 29,791						
Balance, January 2, 1999		224,585	\$ 725,325	(10,147)	\$ (219,417)	\$ 360,916	\$ (9,345)

## Consolidated Statements of Cash Flows

For the three fiscal years ended January 2, 1999

For the three fiscal years ended January 2, 1999			
(in thousands)	1998	1997	1996
Cash and Cash Equivalents at Beginning of Year	\$ 207,024	\$ 289,118	\$ 88,454
Cash Flows From Operating Activities			7121
Net income	31,982	168,100	34,310
Adjustments to reconcile net income to net cash provided	5 72		0.770
by operating activities:			
Depreciation and amortization	102,414	57,116	53,214
Gain on sale of stock of subsidiary		(13,061)	
Deferred income taxes	29,229	(68,465)	(16,394)
Write-off of acquired in-process technology	194,100	6,571	95,700
Write-off of capitalized software development costs		3,065	2,724
Write-off of business process re-engineering costs		17,537	2,724
Equity income from investments	889	(1,934)	
Increase in other long-term liabilities and minority interest expense	(1,697)	2,691	5,734
Write-offs of equipment and other long-term assets	4,037	1,087	1,719
Provisions for doubtful accounts and inventory write-offs			
Non-cash restructuring charges	7,687	12,428	2,672
Changes in current assets and liabilities, net of effect of acquired	13,321	2,347	_
and disposed businesses: Receivables	(700 =60)	(22.254)	(6)
	(189,769)	(33,354)	(65,751)
Inventories		(	(981)
Prepaid expenses and other	20,946	(29,452)	(35,399)
Installment contract receivables	(126,128)	(105,711)	
Accounts payable and accrued liabilities	45,982	60,102	34,040
Income taxes payable	125,001	127,068	50,552
Deferred revenue	(11,923)	(4,356)	16,920
Net cash provided by operating activities	246,071	201,779	179,060
Cash Flows From Investing Activities			
Maturities of short-term investments—held-to-maturity	60,367	37,039	18,618
Purchases of short-term investments—held-to-maturity	(35,872)	(82,204)	(7,859)
Maturities of short-term investments—available-for-sale	537,552	128,170	26,940
Purchases of short-term investments—available-for-sale	(491,553)	(185,917)	(31,778)
Purchases of property, plant, and equipment	(114,433)	(92,428)	(63,688)
Capitalization of software development costs	(21,695)	(15,011)	(13,560)
Increase in acquired intangibles and other assets	(91,042)	(4,586)	(13,326)
Net proceeds from sale of subsidiary stock	_	18,582	_
Effect of deconsolidation on cash	_	(25,118)	_
Investment in venture capital partnership	(7,596)	(10,974)	(7,471)
Net cash paid for acquisitions	(352,326)	27,227	
Sale of put warrants	14,812	19,016	13,870
Purchase of call options	(14,812)	(19,016)	(13,870)
Net cash used for investing activities	(516,598)	(205,220)	(92,124)
Cash Flows From Financing Activities			
Proceeds from line of credit and long-term debt	150,000	53	19,763
Principal payments on line of credit and long-term debt	(16,662)	(22,921)	(2,676)
Sale of common stock	81,325	56,558	230,487
Purchases of treasury stock	(170,831)	(105,118)	(124,204)
Proceeds from transfer of financial assets in exchange for cash	204,841		
Purchase of warrant	_	_	(4,347)
Net cash provided by (used for) financing activities	248,673	(71,428)	119,023
Effect of exchange rate changes on cash	(2,104)	(7,225)	(5,295)
Increase (decrease) in cash and cash equivalents	(23,958)	(82,094)	200,664
Cash and Cash Equivalents at End of Year	\$ 183,066	\$ 207,024	\$ 289,118
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#### Notes to Consolidated Financial Statements

January 2, 1999

#### Cadence

Cadence Design Systems, Inc. (Cadence®) provides software technology and comprehensive design and consulting services and technology for the product development requirements of the world's leading electronics companies. Cadence licenses its leading-edge electronic design automation software technology and provides a range of professional services to companies throughout the world, ranging from consulting services to help optimize the customer's product to design services to create the actual design of the electronic system for the customer's product. Cadence is a supplier of "design realization" solutions, which are used by companies to design and develop complex chips and electronic systems, including semiconductors, computer systems and peripherals, telecommunications and networking equipment, mobile and wireless devices, automotive electronics, consumer products, and other advanced electronics.

### Summary of Significant Accounting Policies

Principles of Consolidation and Basis of Presentation The consolidated financial statements include the accounts of Cadence and its majority-owned subsidiaries after elimination of intercompany accounts and transactions. Investments in companies in which ownership interests range from 20 to 50 percent are accounted for using the equity method of accounting.

Cadence's fiscal year end is the Saturday closest to December 31. Certain prior year consolidated financial statement balances have been reclassified to conform to the 1998 presentation.

In May 1997, Cadence merged with Coopers & Chyan Technology, Inc. (CCT), whose software products are used to design sophisticated integrated circuits and high-speed printed circuit boards. In connection therewith, Cadence issued approximately 22.8 million shares of common stock. The merger was accounted for using the pooling of interests method of accounting. At the time of the transaction, Cadence believed that the operations of CCT were not material to Cadence's consolidated operations and financial position. Therefore, prior period consolidated financial statements were not restated and the results of CCT were only recorded in Cadence's consolidated financial statements prospectively from the date of acquisition. Following discussions with the staff of the Securities and Exchange Commission, Cadence has restated all prior period financial statements as if the merger took place at the beginning of such periods, in accordance with required pooling of interests accounting and disclosures. See additional information in Notes to Consolidated Financial Statements under "Acquisitions."

Stock Splits In October 1997, Cadence's Board of Directors declared a two-for-one stock split, payable in the form of a dividend of one additional share of Cadence's common stock for every share owned by stockholders. Par value remained at \$0.01 per share. The stock split resulted in the issuance of approximately 104.4 million additional shares of common stock from authorized but unissued shares and treasury shares. In May 1996, Cadence's Board of Directors effected a three-for-two stock split payable in the form of a dividend of one additional share of Cadence's common stock for every two shares owned by stockholders. The stock split resulted in the issuance of approximately 51.6 million additional shares of common stock from authorized but unissued shares. Accordingly, all share and per share data have been adjusted to retroactively reflect the stock splits.

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

Foreign Currency Translation Assets and liabilities of foreign subsidiaries, where the functional currency is the local currency, are translated using exchange rates in effect at the end of the period and revenue and costs are translated using average exchange rates for the period. Gains and losses on the translation into u.s. dollars of amounts denominated in foreign currencies are included in net income for those operations whose functional currency is the u.s. dollar, and as a separate component of stockholders' equity for those operations whose functional currency is the local currency.

Derivative Financial Instruments Cadence enters into foreign currency forward exchange contracts (forward contracts) to manage exposure related to certain foreign currency transactions. Cadence does not enter into derivative financial instruments for trading purposes. All outstanding forward contracts at the end of the period are marked-to-market, with unrealized gains and losses included in net income as a component of other income, net. Cadence may, from time to time, adjust its foreign currency hedging position by taking out additional contracts or by terminating or offsetting existing forward contracts. These adjustments may result from changes in the underlying foreign currency exposures or from fundamental shifts in the economics of particular exchange rates. Realized gains and losses on terminated forward contracts, or on contracts that are offset, are recognized in income in the period of contract termination or offset.

Revenue Recognition Effective January 4, 1998, Cadence adopted sop 97–2, "Software Revenue Recognition." SOP 97–2 provides guidance on applying generally accepted accounting principles in recognizing revenue on software transactions. The adoption of SOP 97–2 did not have a material impact on Cadence's financial position, results of operations, or cash flows.

Product revenue consists principally of revenue earned under fixed-term and perpetual software license agreements and is generally recognized upon shipment of the software if collection of the resulting receivable is probable, the fee is fixed or determinable, and vendor-specific objective evidence exists to allocate the total fee to all delivered and undelivered elements of the arrangement. Installment contract receivables result from customer contracts with Cadence's top-rated credit customers. Cadence uses installment contracts as a standard business practice and has a history of successfully collecting under the original payment terms without making concessions on payments, products, or services. Revenue from subscription license agreements which include software, and may include rights to exchange licensed products for future software products, and maintenance is deferred and recognized ratably over the term of the subscription period. Test equipment revenue was recognized upon shipment.

Services revenue consists primarily of revenue received for performing consulting and design services. Fixed-price consulting and design service contracts are accounted for using contract accounting, which is generally the percentage-of-completion method versus the completed-contract method, and time and materials contracts which are accounted for on a monthly basis as work is performed. In addition, for small fixed-price-projects, such as training classes and small, standard consulting service engagements of approximately \$10,000 in size, revenue is recognized when the work is completed.

Maintenance revenue consists of fees for providing technical support for software products and software product updates and is recognized ratably over the term of the support agreement.

Comprehensive Income In 1997, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 130, "Reporting Comprehensive Income," which was adopted by Cadence in the first quarter of 1998. SFAS No. 130 establishes new rules for the reporting and display of comprehensive income and its components; however, the adoption of this Statement had no impact on Cadence's results of operations or stockholders' equity. SFAS No. 130 requires companies to report a new, additional measure of income on the income statement or to create a new financial statement that has the new measure of income on it. "Comprehensive income" includes foreign currency translation gains and losses and other unrealized gains and losses that have been previously excluded from net income and reflected instead in equity. Cadence has reported the components of comprehensive income on its consolidated statements of stockholders' equity.

Net Income Per Share Basic net income per share is calculated by dividing net income by the weighted average shares of common stock outstanding during the year, and for diluted net income per share, net income is divided by the weighted average shares of common stock outstanding and potential common shares outstanding during the year. Potential common shares outstanding included in the dilution calculation consist of dilutive shares issuable upon the exercise of outstanding common stock options, warrants, contingent issuances of common stock, and put warrants computed using the treasury stock method.

Cash, Cash Equivalents, and Short-Term Investments Cadence considers all highly liquid debt instruments, including commercial paper, Euro time deposits, repurchase agreements, and certificates of deposit with an original maturity of ninety days or less to be cash equivalents. Investments with original maturities greater than ninety days and less than one year are classified as short-term investments. At January 2, 1999, there were no investments with maturities greater than one year.

Management determines the appropriate classification of its investments in debt and marketable equity securities at the time of purchase. Cadence has classified all marketable debt securities as held-to-maturity and has accounted for these investments at amortized cost. Cadence has classified its auction rate securities as available-for-sale. These securities are carried at fair value, with the unrealized gains and losses reported as a component of stockholders' equity when these unrealized gains and losses are material to consolidated financial operations of Cadence.

**Property, Plant, and Equipment** Land, property, plant, and equipment is stated at cost. Depreciation and amortization are provided over the estimated useful lives, using the straight-line method, as follows:

Buildings 10–32 years

Leasehold and building improvements Shorter of the lease term or the estimated useful life

Software 3–8 years

Equipment 3–5 years

Furniture and fixtures 3–5 years

Software Development Costs and Acquired Intangibles Cadence capitalizes software development costs in compliance with SFAS No. 86, "Accounting for the Costs of Computer Software to be Sold, Leased, or Otherwise Marketed." Capitalization of software development costs begins upon the establishment of technological feasibility of the product. Technological feasibility is established at the completion of detail program design and testing. The establishment of technological feasibility and the ongoing assessment of the recoverability of these costs requires considerable judgment by management with respect to certain external factors including, but not limited to, anticipated future gross product revenue, estimated economic life, and changes in software and hardware technology. Amortization of capitalized software development costs begins when the products are available for general release to customers and is computed on a straight-line basis over the remaining estimated economic life of the product, which is generally three years.

Acquired intangibles represent purchase price in excess of acquired tangible assets and in-process technology in connection with business combinations accounted for as purchases and are amortized on a straight-line basis over the remaining estimated economic life of the underlying products and technologies (original lives assigned are one to seven years).

It is reasonably possible that the estimates of anticipated future gross revenue, the remaining estimated economic life of the products and technologies, or both, could differ from those used to assess the recoverability of these costs and result in a write-down of the carrying amount or a shortened life of both the software development costs and acquired intangibles in the near term.

Long-lived Assets Cadence reviews long-lived assets, certain identifiable intangibles, and goodwill related to these assets for impairment in accordance with SFAS No. 121, "Accounting for the Impairment of Long-lived Assets and For Long-lived Assets to be Disposed Of."

For assets to be held and used, including acquired intangibles, Cadence initiates its review whenever events or changes in circumstances indicate that the carrying amount of a long-lived asset may not be recoverable. Recoverability of an asset is measured by comparison of its carrying amount to the future undiscounted cash flows that the asset is expected to generate. Any impairment to be recognized is measured by the amount by which the carrying amount of the asset exceeds its fair market value.

Assets to be disposed of and for which management has committed to a plan to dispose of the assets, whether through sale or abandonment, are reported at the lower of carrying amount or fair value less cost to sell.

Concentrations of Credit Risk Financial instruments, including derivative financial instruments, that may potentially subject Cadence to concentrations of credit risk, consist principally of cash investments, short-term investments, accounts receivable, forward contracts, and call options purchased in conjunction with Cadence's stock repurchase program. Cadence's investment policy limits investments to short-term, low-risk instruments. Concentration of credit risk related to accounts receivable is limited, due to the varied customers comprising Cadence's customer base and their dispersion across geographies. Credit exposure related to the forward contracts and the call options is limited to the unrealized gains on these contracts. All financial instruments are executed with financial institutions with strong credit ratings, which minimizes risk of loss due to nonpayment. Cadence has not experienced any losses due to credit impairment related to its financial instruments.

New Accounting Standards In June 1998, the FASB issued SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities." SFAS No. 133 establishes accounting and reporting standards requiring that every derivative instrument be recorded in the balance sheet as either an asset or liability measured at its fair value. It requires that changes in the derivative's fair value be recognized currently in earnings unless specific hedge accounting criteria are met and that a company must formally document, designate, and assess the effectiveness of transactions that receive hedge accounting. SFAS No. 133 is effective for fiscal years beginning after June 15, 1999 and cannot be applied retroactively. Cadence has not yet determined the effect SFAS No. 133 will have on its financial position, results of operations, or cash flows.

In April 1998, the American Institute of Certified Public Accountants issued Statement of Position (sop) 98-1, "Accounting for the Costs of Computer Software Developed or Obtained for Internal Use." The adoption of sop 98-1 in 1998 did not have a material impact on Cadence's financial position, results of operations or cash flows.

## Balance Sheet Components

## A summary of balance sheet components follows:

(in thousands)	1998	1997
Receivables		<u> </u>
Accounts receivables	\$ 168,514	\$ 181,821
Installment contract receivables—current	131,310	44,385
Total receivables	299,824	226,206
Less:Allowances	22,225	21,200
Receivables,net	\$ 277,599	\$ 205,006
Property, Plant, and Equipment	<del></del>	
Computer equipment and related software	\$ 201,329	\$ 153,196
Leasehold and building improvements	50,508	28,232
Land	48,485	47,754
Furniture and fixtures	47,527	28,282
Buildings	46,672	45,324
Equipment	38,398	8,830
Construction in progress	22,264	23,028
Total cost	455,183	334,646
Less:Accumulated depreciation and amortization	192,508	137,225
Property, plant, and equipment, net	\$ 262,675	\$ 197,421
Software Development Costs		
Cost	\$ 39,254	\$ 40,545
Less:Accumulated amortization	26,209	25,477
Software development costs, net	\$ 13,045	\$ 15,068
Acquired Intangibles		
Cost	\$ 324,500	\$ 31,888
Less:Accumulated amortization	42,011	21,771
Acquired intangibles, net	\$ 282,489	\$ 10,117
Other Assets		
Deferred income taxes	\$ 99,562	\$ 74,860
Other assets	67,948	55,999
Other assets	\$ 167,510	\$ 130,859
Accounts Payable and Accrued Liabilities		
Payroll and payroll related accruals	\$ 117,174	\$ 87,076
Other accrued liabilities	75,433	47,402
Accounts payable	18,613	21,948
Accounts payable and accrued liabilities	\$ 211,220	\$ 156,426

#### Financial Instruments

Short-Term Investments A summary of Cadence's held-to-maturity and available-for-sale investment portfolios follows:

(in thousands)	1998	1997
Held-to-maturity:		
Corporate debt securities	\$ 11,607	\$ 18,020
Foreign debt securities	10,080	8,602
Repurchase agreements	8,000	60,094
Commercial paper	7,992	23,732
u.s. Government notes	4,999	7,488
State and local municipalities notes	_	6,075
Corporate equity securities		3,000
Certificates of deposit		1,000
Total held-to-maturity	 42,678	128,011
Available-for-sale:		
Auction rate securities	_	51,000
Total available-for-sale	_	51,000
Total investment securities	 42,678	179,011
Less: Cash equivalents	15,992	81,831
Total short-term investments	\$ 26,686	\$ 97,180

The cost of the securities held is based on the specific identification method. The carrying value of cash and cash equivalents and short-term investments approximate the fair value (based on quoted market prices) of such investments. Accordingly, unrealized gains and losses were immaterial at January 2, 1999.

Financing Cadence has entered into agreements whereby it may transfer qualifying accounts receivables, for which Cadence has recognized the related revenue, to certain financing institutions on a non-recourse basis. These transfers are recorded as sales and accounted for in accordance with SFAS No. 125, "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities." During the year ended January 2, 1999, Cadence transferred accounts receivable totaling \$204.9 million, which approximated fair value, to financing institutions on a non-recourse basis. Transfers of accounts receivable for cash are reported in Cadence's statements of cash flows as a financing activity.

Derivative Financial Instruments Cadence enters into forward contracts to hedge the impact of foreign currency fluctuations. Cadence does not enter into derivative financial instruments for trading purposes. At January 2, 1999, Cadence had outstanding forward contracts with notional amounts totaling approximately \$44.9 million. These contracts, which mature in less than thirty days from year-end, are hedges of certain foreign currency transaction exposures in the British pound sterling, Canadian dollar, Dutch guilder, French franc, German deutschemark, Italian lira, and Japanese yen. The estimated fair value of the contracts at January 2, 1999 was negligible.

#### Acquisitions

Quickturn Design Systems, Inc., a Delaware corporation (Quickturn). Quickturn designs, manufactures, sells, and supports products that verify the design of computer chips and electronic systems. Cadence will acquire Quickturn in a tax-free, stock-for-stock transaction. Each share of Quickturn common stock will be converted into \$15 worth of Cadence common stock. Cadence common stock will be valued at the average of its closing prices over a five day period that ends two business days before the merger closes. There were 18,380,083 shares of Quickturn common stock outstanding as of March 12, 1999. In addition, Cadence will assume outstanding stock options of Quickturn. The merger, which is subject to various conditions, including the approval of Quickturn stockholders, is expected to be accounted for as a pooling of interests. There can be no assurance that Quickturn stockholder approval will be obtained, or the other conditions will be satisfied, and that the merger will be consummated.

Ambit Design Systems, Inc. In September 1998, Cadence acquired all of the outstanding stock of Ambit Design Systems, Inc., a California corporation (Ambit\*), for cash. The total purchase price was \$255 million, and the acquisition was accounted for as a purchase. The results of operations of Ambit and the estimated fair value of the assets acquired and liabilities assumed are included in Cadence's financial statements from the date of acquisition. Intangibles arising from the acquisition are being amortized on a straight-line basis over seven years.

Management estimates that \$106.5 million of the purchase price represents acquired in-process technology that has not yet reached technological feasibility and has no alternative future use. Accordingly, this amount was immediately charged to expense upon consummation of the acquisition. The value assigned to acquired in-process technology was determined by identifying research projects in areas for which technological feasibility has not been established. The value was determined by estimating the costs to develop the acquired in-process technology into commercially viable products, estimating the resulting net cash flows from such projects, and discounting the net cash flows back to their present value. The discount rate includes a factor that takes into account the uncertainty surrounding the successful development of the acquired in-process technology. If these projects are not successfully developed, future revenue and profitability of Cadence may be adversely affected. Additionally, the value of other intangible assets acquired may become impaired.

In connection with the acquisition, net assets acquired were as follows:

#### (in thousands)

Acquired intangibles, including in-process technology	\$ 308,678
Property, plant, and equipment, net and other non-current assets	9,333
Cash, receivables and other current assets	8,349
Current liabilities assumed	(13,605)
Deferred income taxes	(57,765)
Net assets acquired	\$ 254,990

The following table represents unaudited consolidated pro forma financial information as if Cadence and Ambit had been combined as of the beginning of the periods presented. The pro forma data are presented for illustrative purposes only and are not necessarily indicative of the combined financial position or results of operations of future periods or the results that actually would have resulted had Cadence and Ambit been a combined company during the specified periods. The pro forma results include the effects of the amortization of acquired intangible assets and adjustments to the income tax provision. The pro forma combined results exclude acquisition-related charges for acquired in-process technology related to Ambit.

		Fiscal Yea		ed	
(in thousands, except per share amounts)		nuary 2, 1999	January 3, 199		
Revenue	\$ 1	,226,886	\$	929,282	
Net income	\$	119,630	\$	143,588	
Net income per common share:					
Basic	\$	0.56	\$	0.74	
Diluted	\$	0.51	\$	0.65	

Bell Labs' Integrated Circuit Design Automation Group In September 1998, Cadence acquired Bell Labs' Integrated Circuit Design Automation Group of Lucent Technologies Inc. (BLDA) for cash. The total purchase price was \$58 million, and the acquisition was accounted for as a purchase. The results of operations of BLDA and the estimated fair value of the assets acquired and liabilities assumed are included in Cadence's financial statements from the date of acquisition. Intangibles arising from the acquisition are being amortized on a straight-line basis over five years.

Management estimates that \$30.3 million of the purchase price represents acquired in-process technology that has not yet reached technological feasibility and has no alternative future use. Accordingly, this amount was immediately charged to expense upon consummation of the acquisition. The value assigned to acquired in-process technology was determined by identifying research projects in areas for which technological feasibility has not been established. The value was determined by estimating the costs to develop the acquired in-process technology into commercially viable products, estimating the resulting net cash flows from such projects, and discounting the net

cash flows back to their present value. The discount rate includes a factor that takes into account the uncertainty surrounding the successful development of the acquired in-process technology. If these projects are not successfully developed, future revenue and profitability of Cadence may be adversely affected. Additionally, the value of other intangible assets acquired may become impaired.

Excellent Design, Inc. In March 1998, Cadence acquired all of the outstanding stock of Excellent Design, Inc., a Japanese corporation (EXD), for cash. The total purchase price was \$40.9 million, and the acquisition was accounted for as a purchase. The results of operations of EXD and the estimated fair value of the assets acquired and liabilities assumed are included in Cadence's financial statements from the date of acquisition. Intangibles arising from the acquisition are being amortized on a straight-line basis over five years.

Management estimates that \$28.4 million of the purchase price represents acquired in-process technology that has not yet reached technological feasibility and has no alternative future use. Accordingly, this amount was immediately charged to expense in the consolidated statements of operations upon consummation of the acquisition. The value assigned to acquired in-process technology was determined by identifying research projects in areas for which technological feasibility has not been established. The value was determined by estimating the costs to develop the acquired in-process technology into commercially viable products, estimating the resulting net cash flows from such projects, and discounting the net cash flows back to their present value. The discount rate includes a factor that takes into account the uncertainty surrounding the successful development of the acquired in-process technology. If these projects are not successfully developed, future revenue and profitability of Cadence may be adversely affected. Additionally, the value of other intangible assets acquired may become impaired.

Symbionics Group Limited In February 1998, Cadence acquired all of the outstanding stock of Symbionics Group Limited, a U.K. corporation (Symbionics), for approximately 1 million shares of Cadence's common stock and \$21.3 million of cash. The total purchase price was \$46.1 million, and the acquisition was accounted for as a purchase. The results of operations of Symbionics and the estimated fair value of the assets acquired and liabilities assumed are included in Cadence's financial statements from the date of acquisition. Intangibles arising from the acquisition are being amortized on a straight-line basis over five years.

Management estimates that \$28.5 million of the purchase price represents acquired in-process technology that has not yet reached technological feasibility and has no alternative future use. Accordingly, this amount was immediately charged to expense in the consolidated statements of operations upon consummation of the acquisition. The value assigned to acquired in-process technology was determined by identifying research projects in areas for which technological feasibility has not been established. The value was determined by estimating the costs to develop the acquired in-process technology into commercially viable products, estimating the resulting net cash flows from such projects, and discounting the net cash flows back to their present value. The discount rate includes a factor that takes into account the uncertainty surrounding the successful development of the acquired in-process technology. If these projects are not successfully developed, future revenue and profitability of Cadence may be adversely affected. Additionally, the value of other intangible assets acquired may become impaired.

Comparative pro forma financial information has not been presented as the results of operations of BLDA, EXD, and Symbionics were not material to Cadence's consolidated financial statements, either individually or in the aggregate.

Advanced Microelectronics In October 1997, Cadence acquired certain assets and related business from the Advanced Microelectronics division of the Institute for Technology Development, a non-profit corporation organized to conduct and transfer scientific research into usable high technology for commercial application. This division provided contract engineering services on a time-and-materials basis for the design and development of integrated circuits. The total purchase price was \$2.4 million and the acquisition was accounted for as a purchase; accordingly, the results of Advanced Microelectronics from the date of acquisition forward have been included in the consolidated financial statements. The excess of purchase price over net assets acquired was \$2.1 million, of which \$1.7 million related to the write-off of in-process technology that had not reached technological feasibility and, in management's opinion, had no probable alternative future use. Comparative pro forma financial information has not been

presented as the results of operations of Advanced Microelectronics were not material to Cadence's consolidated financial statements.

Cooper & Chyan Technology, Inc. In May 1997, Cadence merged with Cooper & Chyan Technology, Inc. (CCT), whose software products are used to design sophisticated integrated circuits and high-speed printed circuit boards. In connection therewith, Cadence issued approximately 22.8 million shares of common stock. The merger was accounted for using the pooling of interests method of accounting. At the time of the transaction, Cadence believed that the operations of CCT were not material to Cadence's consolidated operations and financial position. Therefore, prior period consolidated financial statements were not restated and the results of CCT were only recorded in Cadence's consolidated financial statements prospectively from the date of acquisition. Following discussions with the staff of the Securities and Exchange Commission, Cadence has restated all prior period financial statements as if the merger took place at the beginning of such periods, in accordance with required pooling of interests accounting and disclosures. Reconciliation of the current consolidated financial statements with previously reported separate company information is presented below:

(in thousands)	1997	1996
Revenue:		
Cadence	\$ 915,893	\$ 741,459
CCT	10,476	37,605
Combined and restated	\$ 926,369	\$ 779,064
Net Income (Loss):		=
Cadence	\$ 169,466	\$ 29,038
CCT	(1,366)	5,272
Combined and restated	\$ 168,100	\$ 34,310

Synthesia AB In February 1997, Cadence acquired all of the outstanding stock of Synthesia AB (Synthesia) for 115,166 shares of Cadence's common stock and cash. The total purchase price was \$4.7 million, and the acquisition was accounted for as a purchase; accordingly, the results of Synthesia from the date of acquisition forward have been included in the consolidated financial statements. In connection with the acquisition, net intangibles of \$5.6 million were acquired, of which \$4.9 million was reflected as a one-time charge to operations for the write-off of in-process technology that had not reached technological feasibility and, in management's opinion, had no probable alternative future use. Comparative pro forma financial information has not been presented as the results of operations of Synthesia were not material to Cadence's consolidated financial statements.

High Level Design Systems, Inc. (HLDS) for approximately 5.2 million shares of Cadence's common stock. The total purchase price was approximately \$101.4 million. HLDS developed, marketed, and supported electronic design automation software for the design of high-density, high-performance integrated circuits. The acquisition was accounted for as a purchase and, accordingly, the results of HLDS from the date of acquisition forward have been recorded in Cadence's consolidated financial statements. The results of operations of HLDS and the estimated fair value of the assets acquired and liabilities assumed are included in Cadence's consolidated financial statements from the date of acquisition. Intangibles arising from the acquisition are being amortized on a straight-line basis over five years.

Management estimates that \$95.7 million of the purchase price represents acquired in-process technology that has not yet reached technological feasibility and has no alternative future use. Accordingly, this amount was immediately charged to expense in the consolidated statements of operations upon consummation of the acquisition. The value assigned to acquired in-process technology was determined by identifying research projects in areas for which technological feasibility has not been established. The value was determined by estimating the costs to develop the acquired in-process technology into commercially viable products, estimating the resulting net cash flows from such projects, and discounting the net cash flows back to their present value. The discount rate includes a factor that takes into account the uncertainty surrounding the successful development of the acquired in-process technology. If these

projects are not successfully developed, future revenue and profitability of Cadence may be adversely affected. Additionally, the value of other intangible assets acquired may become impaired.

## Credit Facility and Long-Term Debt

In October 1998, Cadence entered into a senior unsecured credit facility (the 1998 Facility) with a syndicate of banks that allows Cadence to borrow up to \$355 million. The 1998 Facility is divided between a \$177.5 million three year revolving credit facility (the Three Year Facility) and a \$177.5 million 364-day revolving credit facility convertible to a three year term loan (the 364-Day Facility). The Three Year Facility expires September 29, 2001 and the 364-Day Facility will either expire on September 29, 1999 and be converted to a three year term loan with a maturity date of September 29, 2002 or, at the option of the bank group, be renewed for an additional one year period. Cadence has the option to pay interest based on LIBOR plus a spread of between 0.50% and 1.00%, based on a pricing grid tied to a financial covenant or the higher of the Federal Funds Rate plus 0.50% or the prime rate. In addition, commitment fees are payable on the unutilized portions of the Three Year Facility at rates between 0.18% and 0.30% based on a pricing grid tied to a financial covenant and on the unutilized portion of the 364-Day Facility at a fixed rate of 0.10%. The 1998 Facility contains certain financial and other covenants. As of January 2, 1999, Cadence had \$135 million outstanding under the Three Year Facility at a weighted average interest rate of 6.07%.

In April 1996, Cadence entered into a senior secured revolving credit facility (the 1996 Facility), which allowed Cadence to borrow up to \$120 million through April 1999. As a result of Cadence securing the 1998 Facility, the 1996 Facility was terminated in September 1998.

A summary of long-term debt and capital leases follows:

(in thousands)	1998	1997
Revolving credit facility	\$ 135,000	\$ 
Capital lease obligations	2,653	1,693
Other long-term debt	_	700
Total	137,653	2,393
Less: Current portion	1,273	794
Long-term debt	\$ 136,380	\$ 1,599

## Commitments

Equipment and facilities are leased under various capital and operating leases expiring at various dates through the year 2008. Certain of these leases contain renewal options. Rental expense was \$20.8 million, \$15.9 million, and \$12.3 million for 1998, 1997, and 1996, respectively.

At January 2, 1999, future minimum lease payments under capital and operating leases and the present value of the capital lease payments were as follows:

(in thousands)	 Capital Leases	Operating Leases
For the years:		
1999	\$ 1,319	\$ 32,493
2000	1,020	25,852
2001	377	20,444
2002	7	13,749
2003	I	10,305
Thereafter		53,574
Total lease payments	2,724	\$ 156,417
Less: Amount representing interest (Average interest rate of 4.0%)	71	
Present value of lease payments	2,653	
Less: Current portion	1,273	
Long-term portion	\$ 1,380	

The cost of equipment under capital leases included in the consolidated balance sheets as property, plant, and equipment at January 2, 1999 and January 3, 1998 was approximately \$6 million and \$3.6 million, respectively.

Accumulated amortization of the leased equipment at January 2, 1999 and January 3, 1998 was approximately \$3.5 million and \$2 million, respectively.

In the first quarter of 1999, Cadence completed the construction of a new building and improvements on the San Jose, California campus with an estimated cost of approximately \$15.4 million. Also in the first quarter of 1999, Cadence purchased an additional facility adjacent to its San Jose campus for \$27.5 million, which it expects to occupy in the third quarter of 1999.

#### Contingencies

From time to time, Cadence is involved in various disputes and litigation matters which arise in the ordinary course of business. These include disputes and lawsuits related to intellectual property, licensing, contract law, distribution arrangements, and employee relations matters.

Cadence filed a complaint in the United States District Court for the Northern District of California (the District Court) on December 6, 1995 against Avant! Corporation (Avant!) and certain of its employees for misappropriation of trade secrets, copyright infringement, conspiracy, and other illegal acts.

On January 16, 1996, Avant! filed various counterclaims against Cadence and Cadence's former President and Chief Executive Officer, and with leave of the court, on January 29, 1998, filed a second amended counterclaim. The second amended counterclaim alleges, *inter alia*, that Cadence and its former President and Chief Executive Officer had cooperated with the Santa Clara County, California, District Attorney and initiated and pursued its complaint against Avant! for anticompetitive reasons, engaged in wrongful activity in an attempt to manipulate Avant!'s stock price, and utilized certain pricing policies and other acts to unfairly compete against Avant! in the marketplace. The second amended counterclaim also alleges that certain Cadence insiders engaged in illegal insider trading with respect to Avant!'s stock. Cadence and its former President and Chief Executive Officer believe that each has meritorious defenses to Avant!'s claims, and each intends to defend such action vigorously. By an order dated July 13, 1996, the court bifurcated Avant!'s counterclaim from Cadence's complaint and stayed the counterclaim pending resolution of Cadence's complaint. The counterclaim remains stayed.

On April 19, 1996, Cadence filed a motion seeking a preliminary injunction to prevent further use of Cadence copyrighted code and trade secrets by Avant!. On March 18, 1997, the District Court issued an order in which it granted in part and denied in part that motion. On September 23, 1997, the United States Court of Appeals for the Ninth Circuit reversed the District Court's decision and directed the District Court (a) to issue an order enjoining the sale of Avant!'s ArcCell products and (b) to determine whether Avant!'s Aquarius software infringes Cadence's code and, if so, to enter an order enjoining the sale of that software. In an order issued on December 19, 1997, as modified on January 26, 1998, the District Court entered a preliminary injunction barring any further infringement of Cadence's copyrights in Design Framework II software, or selling, licensing, or copying such product derived from Design Framework II, including but not limited to, Avant!'s ArcCell products. On February 19, 1998, Avant! filed a petition for writ of certiorari to the United States Supreme Court, requesting a review of the Ninth Circuit Court's decision. The Supreme Court denied that petition without comment. On July 9, 1998, Cadence filed further motions to enjoin Avant!'s Aquarius product line on copyright and trade secret grounds. On December 7, 1998, the District Court issued a further preliminary injunction, which enjoined Avant! from selling its Aquarius product line. Cadence posted a \$10 million bond in connection with the issuance of the preliminary injunction.

By an order dated July 22, 1997, the District Court stayed most activity in the case pending in that Court and ordered Avant! to post a \$5 million bond, in light of related criminal proceedings pending against Avant! and several of its executives. The District Court's December 7, 1998 order lifted that stay in part, allowing the matter to proceed to trial as to certain allegations against Avant! only, but not with respect to certain matters involving the Avant! executives and other individuals against whom criminal charges are pending. Cadence intends to pursue its claims vigorously.

Management believes that the ultimate resolution of the disputes and litigation matters discussed above will not have a material adverse impact on Cadence's business, operating results, or financial condition.

## Stockholders' Equity

Repricing of Stock Options In order to continue to attract and retain employees, the Board of Directors authorized the repricing of options to purchase shares of common stock effective as of the close of business on September 4, 1998 to the then fair market value of \$22.59 per share. Under the terms of the repricing, optionees were required to extend their existing vesting schedules in exchange for the repriced options. All repriced options maintained the same expiration terms. Approximately 3.7 million options were repriced under this program which accounted for approximately 9% of options outstanding as of the effective date. The Board of Directors and Executive Officers were excluded from the repricing.

Net Income per Share The following is a reconciliation of the weighted average common shares used to calculate basic net income per share to the weighted average common and potential common shares used to calculate diluted net income per share for the years 1998, 1997, and 1996:

(in thousands)	1998	1997	1996
Weighted average common shares used to calculate basic net			
income per share	211,975	194,900	178,399
Options	21,206	24,362	29,541
Puts	258	58	163
Warrants and other contingent common shares	208	232	341
Weighted average common and potential common shares used to			
calculate diluted net income per share	233,647	219,552	208,444

Options to purchase 432,598 shares of common stock at the weighted average price of \$33.86 per share were outstanding at January 2, 1999, but were not included in the computation of diluted net income per share because the options' exercise prices were greater than the average market price of the common shares. The options, which expire in 2007 and 2008, remained outstanding at January 2, 1999. Warrants to purchase 170,400 shares of common stock at the weighted average price of \$28.79 were outstanding at January 2, 1999, but were not included in the computation of diluted income per share because the warrants' exercise prices were greater than the average market price of the common shares. The warrants outstanding expire in August 1999. Put warrants to purchase 2,588,820 shares of common stock at the weighted average price of \$22.75 per share were outstanding at January 2, 1999, but were not included in the computation of diluted income per share because the put warrants' exercise prices were less than the average market price of the common shares. The put warrants outstanding expire at various dates through November 1999.

Stock Compensation Plans Fixed Stock Option Plans Cadence's 1997 Nonstatutory Stock Option Plan (the 1997 Plan) provides for the issuance of non-qualified options to its employees to purchase up to 20,000,000 shares of common stock at an exercise price not less than the fair market value of the stock on the date of grant. Options granted under the 1997 Plan become exercisable over periods up to five years, with, generally, one-fifth of the shares vesting one year from the vesting commencement date with respect to initial grants, and the remaining shares vesting in 48 equal monthly installments. Options under the 1997 Plan generally expire ten years from the date of grant.

Cadence's Employee Stock Option Plan (the 1987 Plan) provides for the issuance of either incentive or non-qualified options to its employees to purchase up to 71,370,100 shares of common stock at an exercise price not less than fair market value of the stock on the date of grant. Options granted under the 1987 Plan become exercisable over periods of up to five years and expire five to ten years from the date of grant.

Cadence's Non-Statutory Stock Option Plan (the 1993 Non-Statutory Plan) provides for the issuance of non-qualified options to its employees to purchase up to 24,750,000 shares of common stock at an exercise price not less than the fair market value of the stock on the date of grant. Options granted under the Non-Statutory Plan become exercisable over a four year period, with one-fourth of the shares vesting one year from the vesting commencement date, and the remaining shares vesting in 36 equal monthly installments. Options under the 1993 Non-Statutory Plan generally expire ten years from the date of grant.

Under the Directors' Stock Option Plans (the Directors' Plans), Cadence may grant non-qualified options to its non-employee directors for up to 3,352,496 shares of common stock at an exercise price not less than the fair market value of the stock on the date of grant. Options granted under the Directors' Plans have a term of up to ten years. Certain of the option grants vest one year from the date of grant, and certain other option grants vest one-third one year from the date of grant and two-thirds ratably over the subsequent two years.

Cadence has assumed certain options granted to former employees of acquired companies (Acquired Options). The Acquired Options were assumed by Cadence outside of its stock option plans, and all are administered as if issued under their original plans. All of the Acquired Options have been adjusted to effectuate the conversion under the terms of the Agreements and Plans of Reorganization between Cadence and the companies acquired. The Acquired Options generally become exercisable over a four or five year period and generally expire either five or ten years from the date of grant. No additional options will be granted under any of the acquired companies' plans.

A summary of the status of all of Cadence's fixed stock option plans as of and during the years ended January 2, 1999, January 3, 1998, and December 28, 1996 follows:

	<b>1998</b> 1997				1996	1996						
		Shares		Weighted Average rcise Price		Shares		Weighted Average rcise Price		Shares		Weighted Average rcise Price
Outstanding at beginning of year Assumption of acquired	42,	570,821	\$	11.75	42,	714,932	\$	6.57	44,	942,888	\$	3.95
companies options		816,334	\$	2.83			\$		Ι,	012,220	\$	7.45
Granted	10,	204,758	\$	21.21	17,5	524,449	\$	17.31	8,	171,771	\$	16.00
Exercised	(10,	746,041)	\$	7.27	(15,2	203,465)	\$	3.47	(9,	496,992)	\$	2.55
Forfeited	(4,8	862,434)	\$	16.61	(2,	465,095)	\$	12.55	(1,	,914,955)	\$	6.54
Outstanding at end of year	37,	983,438	\$	15.15	42,	570,821	\$	11.75	42,	714,932	\$	6.57
Options exercisable at year end	15,	530,044			15,	863,817			20,	298,078		
Options available for future grant Weighted average fair value of	19,	261,461			14,	853,922			9,	955,568		
options granted during the year	\$	16.23			\$	7.52			\$	5.90		

A summary of the status of all of Cadence's fixed stock option plans at January 2, 1999 follows:

		Options Outstandi	Options Exercisable					
Range of Exercise Prices	Number Outstanding at 1/2/99	Weighted Average Remaining Contractual Life		Weighted Average xercise Price	Number Exercisable at 1/2/99	Ex	Weighted Average sercise Price	
\$ 0.14-\$ 5.00	5,480,463	4.9	\$	2.32	5,033,209	\$	2.35	
\$ 5.01-\$10.00	5,401,384	6.5	\$	7.69	4,193,744	\$	7.63	
\$10.01-\$15.00	7,956,869	7.3	\$	14.38	2,972,910	\$	14.26	
\$15.01-\$20.00	8,067,746	7.7	\$	17.68	2,303,524	\$	17.50	
\$20.01-\$25.00	9,089,335	8.6	\$	22.67	762,321	\$	22.68	
\$25.01-\$30.00	1,727,491	9.2	\$	25.58	260,336	\$	25.18	
\$30.01-\$35.00	229,350	9.4	\$	33.29	_	\$		
\$35.01-\$40.00	30,800	9.3	\$	35.07	4,000	\$	35.06	
Total	37,983,438				15,530,044			

Stock Repurchase Plan Cadence has authorized two seasoned systematic stock repurchase programs under which it repurchases common stock to satisfy estimated requirements for shares to be issued under its Employee Stock Purchase Plan (ESPP) and the 1997 Plan, respectively. Such repurchases are intended to cover Cadence's expected reissuances under the ESPP and the 1997 Plan for the next 12 months and 24 months, respectively.

As part of its authorized repurchase program, Cadence has sold put warrants through private placements. At January 2, 1999, there were 4.2 million put warrants outstanding that entitle the holder to sell one share of common stock to Cadence on a specified date and at a specified price ranging from \$20.88 to \$35.14 per share. Additionally, during this same period, Cadence purchased call options that entitle Cadence to buy one share of common stock

at a specified price to satisfy anticipated stock repurchase requirements under Cadence's systematic repurchase programs. At January 2, 1999, Cadence had 2.9 million call options outstanding at prices ranging from \$21.13 to \$35.39 per share. The put warrants and call options outstanding at January 2, 1999 are exercisable on various dates through November 1999 and Cadence has the contractual ability to settle the options prior to their maturity. At January 2, 1999, the fair value of the call options was approximately \$20.9 million and the fair value of the put warrants was approximately \$16.6 million. The fair value of put warrants and call options was estimated by Cadence's investment bankers.

If exercised, Cadence has the right to settle the put warrants with stock equal to the difference between the exercise price and the fair value at the date of exercise. Settlement of the put warrants with stock could cause Cadence to issue a substantial number of shares, depending on the exercise price of the put warrants and the per share fair value of Cadence's common stock at the time of exercise. In addition, settlement of put warrants in stock could lead to the disposition by put warrant holders of shares of Cadence's common stock that such holders may have accumulated in anticipation of the exercise of the put warrants or call options, which may adversely affect the price of Cadence's common stock. At January 2, 1999, Cadence had the ability to settle these put warrants with stock and, therefore, no amount was classified out of stockholders' equity in the consolidated balance sheets. The effect of the exercise of these put warrants and call options is reported in the line titled "Purchase of treasury stock" within the consolidated statements of stockholders' equity.

Employee Stock Purchase Plan Under the Employee Stock Purchase Plan (ESPP), Cadence is authorized to issue up to 17,500,000 shares of common stock to its employees. Under the terms of the ESPP, each six month offering period, employees can choose to have up to 12% of their annual base earnings plus bonuses withheld to purchase Cadence's common stock. The purchase price of the stock is 85% of the lesser of the fair market value as of the beginning or the end of the offering periods. Under the ESPP, Cadence issued 1,001,702, 1,167,474, and 1,211,074 shares to employees in 1998, 1997, and 1996, respectively. The weighted average purchase price and the weighted average fair value of shares issued in 1998 was \$21.82 and \$28.38, respectively.

In November 1998, Cadence amended its ESPP providing for concurrent 24 month offering periods with a new 24 month offering period starting every six months. Each offering period will be divided into four consecutive six month purchase periods commencing in February 1999.

Pro Forma Information This information is required to illustrate the financial results of operations as if Cadence had accounted for its grants of employee stock options under the fair value method of SFAS No. 123. The fair value of Cadence's options granted and shares purchased under the ESPP program for years ended January 2, 1999, January 3, 1998, and December 28, 1996 reported below was estimated at the date of grant using a Black-Scholes option pricing model with the following weighted average assumptions assuming a dividend yield of zero for all periods:

	1998	1997	1996
Risk-free interest rate	5.22%	6.20%	6.16%
Volatility factors of the expected market price of Cadence's			
common stock	59%	44%	35%
Weighted average expected life of an option	4 years	4 years	4 years

The Black-Scholes option valuation model was developed by the financial markets for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility. Cadence's options have characteristics significantly different from those of exchange traded options, and changes in the subjective input assumptions can materially affect the fair value estimate. In management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its stock options granted to its employees.

For purposes of pro forma disclosures, the estimated fair value of the options is amortized over the options' vesting period. Had Cadence's fixed stock option and employee stock purchase plans been accounted for under SFAS No. 123, net income (loss) and earnings per share would have been adjusted to the following pro forma amounts:

(in thousands, except per share amounts)	1998	1997	1996
Net income (loss):			
As reported	\$ 31,982	\$ 168,100	\$ 34,310
Pro forma	\$ (47,735)	\$ 126,004	\$ 10,451
Basic net income (loss) per share:			
As reported	\$ 0.15	\$ 0.86	\$ 0.19
Pro forma	\$ (0.23)	\$ 0.65	\$ 0.06
Diluted net income (loss) per share:			
As reported	\$ 0.14	\$ 0.77	\$ 0.16
Pro forma	\$ (0.23)	\$ 0.57	\$ 0.05

The effects of applying SFAS No. 123 on pro forma disclosures of net income (loss) and net income (loss) per share for 1998, 1997, and 1996 are not likely to be representative of the pro forma effects on net income and earnings per share in future years.

Warrants In connection with the acquisition of High Level Design Systems, Inc., in December 1996, Cadence issued a warrant to Goldman, Sachs & Co. (Goldman warrant) to purchase 170,400 shares of Cadence's common stock at \$28.79 per share. The warrant expires in August 1999 and can be exercised at any time, in whole or in part. The warrant was valued at the time of the acquisition at approximately \$0.6 million and was included as part of the total purchase price of HLDS.

In connection with the purchase of the business and certain assets of Comdisco Systems, Inc. (Comdisco), a subsidiary of Comdisco, Inc., in June 1993, Cadence issued a warrant (Comdisco Warrant) to purchase 5,850,000 shares of Cadence's common stock at \$3.23 per share. Pursuant to the original terms of the warrant agreement, during 1996 and 1995, Cadence repurchased portions of the warrant applicable to 300,000 and 5,310,000 shares, respectively, for approximately \$4.3 million and \$17.2 million, respectively. In 1998, Comdisco exercised 100,000 warrants. The warrant for the remaining 140,000 shares expires in June 2003 and can be exercised at any time in increments of not less than 50,000 shares. The warrant was valued at the time of issuance at approximately \$1.8 million and was included as part of the total purchase price of Comdisco.

Reserved for Future Issuance At January 2, 1999, Cadence had reserved the following shares of authorized but unissued common stock for future issuance:

Sharos

	Shares
Employee stock option plans	55,735,229
ESPP	4,525,122
Put warrants	4,197,379
Directors stock option plans	1,502,170
Goldman warrant	170,400
Comdisco warrant	140,000
Other option agreements	7,500
Total	66,277,800

Stockholder Rights Plan In February 1996, Cadence adopted a new Stockholder Rights Plan to protect stockholders' rights in the event of a proposed or actual acquisition of 15% or more of the outstanding shares of Cadence's common stock. As part of this plan, each share of Cadence's common stock carries a right to purchase one

one-thousandth (1/1000) of a share of Series A Junior Participating Preferred Stock (the Right), par value \$0.01 per share, of Cadence at a price of \$240 per one one-thousandth of a share, subject to adjustment. The Rights are subject to redemption at the option of the Board of Directors at a price of \$0.01 per Right until the occurrence of certain events. The Rights expire on February 20, 2006.

## Cumulative Effect of Change in Accounting Method

In November 1997, the FASB Emerging Issues Task Force issued Ruling 97-13 "Accounting for Costs Incurred in Connection with a Consulting Contract or an Internal Project That Combines Business Process Reengineering and Information Technology Transformation," which requires companies to expense costs incurred for business process reengineering projects. As a result, Cadence recorded a \$12.3 million charge in 1997, net of income taxes of \$5.3 million, as a cumulative effect of change in accounting method for reengineering project costs that had been previously capitalized by Cadence associated with its implementation of enterprise-wide information systems. This change in accounting method reduced basic net income per share and diluted net income per share by \$0.07 and \$0.05, respectively.

#### Income Taxes

The provision for income taxes consisted of the following components:

(in thousands)	1998	1997	1996
Current:			
Federal	\$ 71,094	\$ 106,548	\$ 61,941
State	14,879	15,772	10,325
Foreign	27,664	19,268	8,283
Total current	113,637	141,588	80,549
Deferred (prepaid):			
Federal	(34,650)	(64, 363)	(15,700)
State	(5,681)	(2,818)	(810)
Foreign	7,379	(1,284)	116
Total deferred (prepaid)	(32,952)	(68,465)	(16,394)
Total provision for income taxes	\$ 80,685	\$ 73,123	\$ 64,155

Income before income taxes for 1998, 1997, and 1996 included income (loss) of approximately \$(2.4) million, \$144.3 million, and \$25.3 million, respectively, from Cadence's foreign subsidiaries.

The provision for income taxes is net of the benefit of operating loss carryforwards totaling \$3.9 million, \$3.6 million, and \$2.6 million for 1998, 1997, and 1996, respectively.

The provision for income taxes differs from the amount estimated by applying the statutory federal income tax rate to income before income taxes as follows:

(in thousands)		1998	1997	1996
Provision computed at federal statutory rate	\$	39,434	\$ 84,733	\$ 34,463
State income tax, net of federal tax effect		8,147	10,251	6,323
Write-off of in-process technology		46,615	_	33,495
Change in valuation allowance		15,371	(1,714)	(11,835)
Foreign withholding taxes		1,110	5,049	2,823
Amortization of acquired intangibles		1,020	706	897
Foreign tax credit		(1,110)	(5,049)	
Acquisition costs		(2,679)	6,005	_
Research and development tax credit		(6,109)	(4,112)	(352)
Foreign income tax at a lower rate		(21,768)	(25,608)	
Other		654	2,862	(1,659)
Provision for income taxes	\$	80,685	\$ 73,123	\$ 64,155
Effective tax rate	_	72%	30%	65%

The components of deferred tax assets and liabilities consisted of the following:

(in thousands)	1998	1997
Deferred Tax Assets:		
Accrued intercompany royalty	\$ 37,430	\$ 24,714
Intangibles	27,520	2,613
Sales returns and allowance	19,890	14,412
Accruals and reserves	15,196	8,408
Net operating losses	14,959	2,802
Tax credits	14,809	27,622
Depreciation and amortization	13,692	7,969
Restructure reserves	12,920	3,431
Other	9,110	7,603
Total deferred tax assets	165,526	99,574
Valuation allowance—provision for income taxes	(9,676)	
Valuation allowance—equity and intangibles	(5,695)	
Net deferred tax assets	150,155	99,574
Deferred Tax Liabilities:		
Intangibles	(58,928)	
Accrued intercompany royalty	(10,694)	
Capitalized software	(7,483)	(9,127)
Other	(9,744)	(2,337)
Total deferred tax liabilities	(86,849)	(11,464)
Total net deferred tax assets	\$ 63,306	\$ 88,110

Cadence provides United States income taxes on the earnings of foreign subsidiaries unless they are considered permanently invested outside of the United States. At January 2, 1999, the cumulative amount of earnings upon which United States income taxes have not been provided are approximately \$115.8 million. At January 2, 1999, the unrecognized deferred tax liability for these earnings was approximately \$29.3 million.

The net valuation allowance increased by \$15.4 million in 1998. The increase in valuation allowance—provision for income taxes and valuation allowance—equity and intangibles of \$15.4 million is due to the uncertainty of certain foreign subsidiaries generating sufficient taxable income to realize certain foreign deferred tax assets. A portion of the valuation allowance, if realizable, may reduce other intangibles and may not be available to offset future provision for income taxes and is identified in the above table as "valuation allowance—equity and intangibles."

The remaining net operating loss carryforwards will expire at various dates from 1999 through 2018 and federal tax credit carryforwards will expire at various dates from 1999 through 2013.

Cadence's federal income tax returns for 1989 through 1991 have been examined by the Internal Revenue Service (IRS). Tax credits of \$15.6 million have been disallowed by the IRS. Cadence is contesting these adjustments and is pursuing administrative remedies. Management believes that adequate provision has been made for any deficiency that may result from this examination and that the resolution of this matter will not have a material adverse impact on Cadence's consolidated financial position or results of operations.

#### Statement of Cash Flows

The supplemental cash flow information for 1998, 1997, and 1996 follows:

(in thousands)	1998	1997	1996
Cash Paid During the Year for:			
Interest	\$ 3,043	\$ 1,229	\$ 2,185
Income taxes (including foreign withholding tax)	\$ 11,987	\$ 13,204	\$ 26,025
Non-Cash Investing and Financing Activities:			
Capital lease obligations incurred for equipment	\$ 1,505	\$ 2,570	\$ 3,070
Common and treasury stock issued under the ESPP and for acquisitions	\$ 70,955	\$ 52,594	\$ 110,607
Tax benefits from employee stock transactions	\$ 109,344	\$ 123,180	\$ 60,418

#### Integrated Measurement Systems, Inc.

In February 1997, Cadence and its subsidiary, Integrated Measurement Systems, Inc. (IMS), sold to the public 1.7 million shares of IMS common stock, of which approximately 1 million shares were sold by Cadence, netting Cadence approximately \$18.6 million in cash. As a result of the offering and sale of shares by Cadence, Cadence's ownership interest in IMS decreased to approximately 37% from approximately 55%. Accordingly, Cadence changed the accounting for its investment in IMS from consolidation to the equity method of accounting in fiscal 1997. The consolidated financial statements of Cadence for fiscal year 1996 included the accounts of IMS after elimination of intercompany accounts and transactions and minority interest adjustments. Although Cadence has no current intent to enter into similar transactions, the likelihood of such transactions in the future is dependent upon the state of the financial markets as well as liquidity and other considerations of each of Cadence and IMS. IMS manufactures and markets verification systems used in testing prototype ASICS.

## Unusual Items and Restructuring

Described below are unusual items and restructuring charges in 1998, 1997, and 1996:

(in thousands)	1998	1997	1996
Write-off of acquired in-process technology	\$ 194,100	\$ 6,571	\$ 95,700
Restructuring charges	69,494	34,417	2,119
Write-off of capitalized software development costs	_	3,065	2,724
Total unusual items	\$ 263,594	\$ 44,053	\$ 100,543

Restructuring In 1998, Cadence recorded \$69.5 million of restructuring charges primarily associated with Cadence's worldwide restructuring plan in the second half of 1998. Cadence's restructuring plans and associated costs consisted of \$36.9 million to terminate approximately 700 employees, \$29.9 million to downsize and close excess facilities, and \$2.7 million of other restructuring expenses. Cadence's restructuring plan was primarily aimed at reducing the cost of excess personnel and capacity in its services business.

Severance costs of \$36.9 million include severance benefits, notice pay, and outplacement services. Approximately \$10.1 million of these costs resulted from the acceleration of stock options vesting under employment agreements and are reflected as non-cash charges in the following table of restructuring activity. All terminations and termination benefits were communicated to the affected employees prior to year-end and severance benefits are expected to be paid in 1999.

Cadence also incurred charges totaling \$29.9 million in connection with the closure of 58 sales and engineering facilities—including \$16.7 million to downsize and close facilities and \$13.2 million in abandonment costs for the related leasehold improvements. Closure and exit costs include payments required under lease contracts (less any applicable sublease income) after the properties were abandoned, lease buyout costs, restoration costs associated with certain lease arrangements, and costs to maintain facilities during the period after abandonment. Asset related costs written-off consist of leasehold improvements to facilities that were abandoned and whose estimated fair market value is zero. Through the first quarter of 1999, 90% of the sites have been vacated and the remaining sites will be downsized or vacated primarily during the second and third quarter of 1999. Noncancelable lease payments on vacated facilities will be paid out through 2008.

Cadence also recorded \$2.7 million of other restructuring charges consisting primarily of cancellation fees associated with certain vendor and conference arrangements and abandoned software.

In 1997, Cadence recorded restructuring charges of \$3.4.4 million. These charges relate to restructuring plans primarily aimed at reducing costs after Cadence merged with CCT and acquired HLDS. Cadence's restructuring plans and associated costs consisted of \$11.9 million to terminate approximately 230 employees, \$4.4 million to close duplicate and excess facilities, and \$3.7 million of other expenses associated with the business combinations. Also included in the restructuring costs were fees related to the CCT combination for financial advisors, attorneys, and accountants of \$14.4 million. The remaining severance balances were paid out in 1998 and all facilities were vacated. Noncancelable lease payments on vacated facilities will be paid out through the year 2000.

In 1996, Cadence recorded restructuring charges of \$2.1 million consisting of employees termination costs associated with the outsourcing of Cadence's management information technology services and costs associated with excess facilities.

Liabilities for excess facilities and other restructuring charges are included in other current and non-current liabilities, while severance and benefits liabilities are included in payroll and payroll related accruals. The following table summarizes the Company's restructuring activity during the fiscal years 1998, 1997, and 1996:

(in thousands)	Severance and Benefits	Excess Facilities	R	Other estructuring	Assets	Total
Balance, December 30, 1995	\$ 	\$ 	\$	_	\$ _	\$ _
1996 restructuring charges	1,047	1,072		_	_	2,119
Cash charges	(392)	_		_	_	(392)
Balance, December 28, 1996	655	1,072				I,727
1997 restructuring charges	11,895	2,102		18,073	2,347	34,417
Non-cash charges					(2,347)	(2,347)
Cash charges	(10,263)	(536)		(14,223)	_	(25,022)
Balance, January 3, 1998	2,287	2,638		3,850		8,775
1998 restructuring charges	36,859	16,749		2,718	13,168	69,494
Non-cash charges	(10,095)	(1,364)			(1,862)	(13,321)
Cash charges	(15,937)	(3,527)		(4,355)	(2)	(23,821)
Balance, January 2, 1999	\$ 13,114	\$ 14,496	\$	2,213	\$ 11,304	\$ 41,127

Capitalized Software Development Costs In 1997 and 1996, Cadence wrote-off capitalized software development costs of \$3.1 and \$2.7 million, respectively, for products developed by Cadence which were replaced by CCT and HLDS products or by license of replacement technology.

#### Other Income, Net

Other income, net components for 1998, 1997, and 1996 follows:

(in thousands)	1998	1997	1996
Interest income	\$ 10,468	\$ 18,552	\$ 5,474
Gain (loss) on foreign exchange	2,637	(1,424)	164
Equity earnings from investments	(889)	1,934	
Gain on sale of IMS stock	_	13,061	_
Minority interest expense	(256)	(353)	(3,016)
Other expense, net	(878)	(3,047)	(456)
Interest expense	(3,603)	(2,508)	(1,940)
Total other income, net	\$ 7,479	\$ 26,215	\$ 226

### Segment Reporting

In 1998, Cadence adopted SFAS No. 131, "Disclosures about Segments of an Enterprise and Related Information." Cadence currently operates in three operating segments: Products, Services, and Maintenance. Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker when deciding how to allocate resources and when assessing performance. Cadence's chief operating decision making group is the Executive Staff, which is comprised of the Chief Executive Officer and Executive Vice Presidents.

Cadence's business activities are organized on the basis of differences in its related products and services. The Products segment designs and sells a variety of electronic design automation software tools that are licensed to customers. The Services segment offers design and consulting services to either assist companies in developing electronic designs or to assume responsibility for the design effort when customers wish to outsource this work. The Maintenance segment is primarily a technical support organization, and maintenance agreements are offered to customers either as part of our product license agreements or separately. Cadence's organizational structure reflects this segmentation, and segments have not been aggregated for purposes of this disclosure.

Segment income from operations is defined as gross margin under generally accepted accounting principles and excludes operating expenses, unusual items, other income, net, and income taxes. Profitability information about Cadence's segments is available only to the extent of gross margin by segment, and operating expenses and other income and expense items are managed on a functional basis. There are no differences between the accounting policies used to measure profit and loss for segments and those used on a consolidated basis. Revenues are defined as revenues from external customers and there are no intersegment revenues or expenses.

Cadence's management does not identify or allocate its assets, including capital expenditures, by operating segment. Accordingly, assets are not being reported by segment because the information is not available by segment and is not reviewed by Cadence's Executive Staff to make decisions about resources to be allocated to the segments and when assessing their performance. Depreciation and amortization is allocated to the segments in order to determine the segments' gross margin.

The following tables present information about reported segments for the years ended January 2, 1999, January 3, 1998, and December 28, 1996:

(in thousands)	Product		Services	Maintenance	Other		Total
1998							
Revenue	\$ 695,036	\$	255,787	\$ 265,247	\$ —	\$	1,216,070
Cost of revenue	51,539		185,683	43,453	_		280,675
Amortization of acquired intangibles	13,771		3,672		_		17,443
Gross margin	629,726		66,432	221,794	_		917,952
Marketing and sales	_			_	(302, 332)		(302,332)
Research and development	_			_	(179,394)		(179,394)
General and administrative			_		(67,444)		(67,444)
Unusual items					(263,594)		(263,594)
Other income, net	_				7,479		7,479
Income (loss) before provision for income							
taxes and cumulative effect of change							
in accounting method	\$ 629,726	\$	66,432	\$ 221,794	\$ (805,285)	\$	112,667
Depreciation and amortization	\$ 40,024	\$	17,106	\$ 2,021	\$ 43,263	\$	102,414
1997							
Revenue	\$ 537,490	\$	160,890	\$ 227,989	s —	\$	926,369
Cost of revenue	40,064		114,711	27,838	_		182,613
Amortization of acquired intangibles	1,910		36		_		1,946
Gross margin	495,516		46,143	200,151			741,810
Marketing and sales	_		_	_	(263,054)		(263,054)
Research and development	_		_		(143,746)		(143,746)
General and administrative	_				(58,412)		(58,412)
Unusual items					(44,053)		(44,053)
Other income, net	_				26,215		26,215
Income (loss) before provision for income	-				· · ·		<u> </u>
taxes and cumulative effect of change							
in accounting method	\$ 495,516	\$	46,143	\$ 200,151	\$ (483,050)	\$	258,760
Depreciation and amortization	\$ 21,408	\$	8,066	\$ 1,466	\$ 26,176	\$	57,116
1996¹							
Revenue	\$ 400,945	\$	114,620	\$ 223,181	\$ 40,318	\$	779,064
Cost of revenue	35,343		80,963	25,067	14,126	-	155,499
Amortization of acquired intangibles	929						929
Gross margin	364,673		33,657	198,114	26,192		622,636
Marketing and sales	_		_		(240,740)		(240,740)
Research and development	_				(123,065)		(123,065)
General and administrative	_				(60,049)		(60,049)
Unusual items	_		_		(100,543)		(100,543)
Other income, net	_		_		226		226
Income (loss) before provision for income taxes and cumulative effect of change							
in accounting method	\$ 364,673	\$	33,657	\$ 198,114	\$ (497,979)	\$	98,465
Depreciation and amortization	\$ 21,212	\$	7,582	\$ I,I20	\$ 23,300	\$	53,214
.1	,-12	717	1,5-2	,-20	3,330	11	3374

<sup>&</sup>lt;sup>1</sup>In February 1997, Cadence reduced its ownership in IMS from 55% to 37% resulting from a public offering. As a result of this offering, the operations of IMS were no longer consolidated with Cadence's results of operations and internal management reporting for 1996 was restated to exclude the historical operations of IMS from its segment reporting.

Internationally (excluding Japan), Cadence markets and supports its products and services primarily through its subsidiaries and various distributors. Following a reorganization of Cadence's distribution channel in Japan in 1997, Cadence now licenses its products through Innotech Corporation (Innotech), in which Cadence is an approximately 18% stockholder. Cadence markets its consulting and design services through a wholly-owned subsidiary.

Revenues are attributed to geographic areas based on the country in which the customer is domiciled. In 1998 and 1997, no one customer accounted for more than 10% of total revenues. In 1996, licensing royalties from Innotech accounted for 13% of total revenue, which is reported within Cadence's Product segment. Long-lived assets are attributed to geographic areas based on the country where the assets are located.

The following table presents a summary of revenue and long-lived assets by geographic region for years ended January 2, 1999, January 3, 1998, and December 28, 1996:

	1998			1997				1996			
		Revenues		Long-lived Assets	Revenues		Long-lived Assets		Revenues		Long-lived Assets
North America:											
United States	\$ 6	12,968	\$	222,453	\$ 439,047	\$	181,145	\$	405,874	\$	152,006
Other		31,420		3,995	15,847		2,164		16,843		415
Total North America	\$ 6	44,388	\$	226,448	\$ 454,894	\$	183,309	\$	422,717	\$	152,421
Europe:											
United Kingdom	\$	83,764	\$	21,128	\$ 38,143	\$	2,530	\$	38,840	\$	1,611
Germany		50,793		1,233	49,090		1,234		38,699		1,138
Other	I	24,056		4,132	96,413		3,089		49,873		2,510
Total Europe	\$ 2	58,613	\$	26,493	\$ 183,646	\$	6,853	\$	127,412	\$	5,259
Japan and Asia:											
Japan	\$ 2	38,861	\$	1,809	\$ 229,428	\$	1,799	\$	178,506	\$	3,435
Asia		74,208		7,925	58,401		5,460		50,429		3,042
Total Japan and Asia	\$ 3	13,069	\$	9,734	\$ 287,829	\$	7,259	\$	228,935	\$	6,477
Total	\$ I,2	16,070	\$	262,675	\$ 926,369	\$	197,421	\$	779,064	\$	164,157

Report of Independent Public Accountants

To the Stockholders and Board of Directors of Cadence Design Systems, Inc.

We have audited the accompanying consolidated balance sheets of Cadence Design Systems, Inc. (a Delaware corporation) and subsidiaries as of January 2, 1999 and January 3, 1998, and the related consolidated statements of operations, stockholders'equity, and cash flows for each of the three years in the period ended January 2, 1999. These financial statements are the responsibility of Cadence's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits. We did not audit the financial statements of Cooper & Chyan Technology, Inc., for the year ended December 31, 1996, a company acquired during 1997 in a transaction accounted for as a pooling of interests, as discussed in Acquisitions in the Notes to the Consolidated Financial Statements. Such statements are included in the consolidated financial statements of Cadence Design Systems, Inc. and reflect total revenues of five percent of the related consolidated total for the year ended December 28, 1996. These statements were audited by other auditors whose report has been furnished to us and our opinion, insofar as it relates to amounts included for Cooper & Chyan Technology, Inc., is based solely upon the report of the other auditors.

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

In our opinion, based on our audits and the report of the other auditors, the financial statements referred to above present fairly, in all material respects, the financial position of Cadence Design Systems, Inc. and subsidiaries as of January 2, 1999 and January 3, 1998, and the results of their operations and their cash flows for each of the three years in the period ended January 2, 1999, in conformity with generally accepted accounting principles.

As explained in Cumulative Change in Accounting Method in the Notes to Consolidated Financial Statements, effective November 1997, Cadence changed its method of accounting for costs incurred for business process reengineering projects. Also, as explained in the Summary of Significant Accounting Policies in the Notes to Consolidated Financial Statements, Cadence has given retroactive effect to the change in accounting for its merger with Cooper & Chyan Technology, Inc.

San Jose, California

Arthur Arderson LLP

March 26, 1999

Report of

## Ernst & Young LLP, Independent Auditors

The Board of Directors and Stockholders of Cooper & Chyan Technology, Inc.

We have audited the consolidated statement of income, stockholders' equity, and cash flows of Cooper & Chyan Technology, Inc. for the year ended December 31, 1996 (not presented separately herein). These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated results of Cooper & Chyan Technology, Inc.'s operations and its cash flows for year ended December 31, 1996, in conformity with generally accepted accounting principles.

Palo Alto, California

Ernst + Young LLP

January 21, 1997

## Corporate Directory

**Board of Directors** 

Donald L. Lucas

Chairman,

Cadence Design Systems, Inc.
Private Venture Capital Investor

H. Raymond Bingham

President and Chief Executive Officer,

Cadence Design Systems, Inc.

Carol Bartz

Chief Executive Officer

and Chairman, Autodesk, Inc.

Dr. Leonard Y.W. Liu

Chairman, President, and

Chief Executive Officer,

Walker Interactive Systems, Inc.

Dr. Alberto Sangiovanni-Vincentelli

Professor of Electrical Engineering

and Computer Science,

University of California, Berkeley

George M. Scalise

President, Semiconductor

Industry Association

Dr. John B. Shoven

Professor of Economics, Stanford University Roger S. Siboni

President, Chief Executive Officer, and Director

Epiphany, Inc.

**Corporate Officers** 

H. Raymond Bingham

President, Chief Executive Officer, and Director

John F. Olsen

President, Design Realization Group and Corporate Development Shane Robison

President, Design Productivity Group

R.L. Smith McKeithen Sr. Vice President, General

Counsel, and Secretary

William Porter

Sr.Vice President and Chief Financial Officer

**Independent Public Accountants** 

Arthur Andersen LLP 333 West San Carlos Street, San Jose, CA 95110

Transfer Agent

Harris Trust and Savings Bank 311 W. Monroe Street, 11th Floor, Chicago, IL 60690

Form 10-K

A copy of the Company's Form 10-K, as filed with the Securities and Exchange Comission for the year ended January 2, 1999 is available without charge upon written request from—Cadence Design Systems, Inc., Attn: Investor Relations, 2655 Seely Avenue, San Jose, California 95134.

Annual Meeting

The Cadence Design Systems, Inc. Annual Meeting of Stockholders will be held July 1, 1999 at 10:00 am at the Company's executive offices—2655 Seely Avenue, San Jose, California.

**Quarterly Reports** 

You'll easily find our quarterly announcements on the world wide web, in the investor relations area of www.cadence.com

## **Corporate Offices**

### **Corporate Headquarters**

2655 Seely Avenue Building 5, San Jose, CA 95134 408.943.1234 http://www.cadence.com

#### **Domestic Sales Offices**

Tempe, AZ	Santa Barbara, CA	Chelmsford, MA	Fishkill, NY
602.413.9550	805.571.1200	978.667.8811	914.897.2738
Berkeley, CA	Broomfield,CO	Columbia, MD	Beaverton,OR
510.647.2800	303.464.6500	410.290.1999	503.439.3100
Irvine, CA	Melbourne, FL	Arden Hills, MN	New Providence, RI
949.752.8473	407.674.2400	651.766.3100	908.898.2400
717 73 173	1 / / 1	3 / 3	
Los Angeles, CA	Orlando, FL	Ridgeland, MS	Austin,TX
310.414.1300	407.345.5262	601.206.1011	512.349.1100
San Jose, CA	Atlanta,GA	Cary, NC	Dallas,TX
408.943.1234	770.353.5888	919.469.5424	972.233.4900
San Diego, CA	Schaumburg,IL	Edison, NJ	Bellevue, WA
619.618.2800	708.619.6600	732.494.8881	425.451.2360
019.010.2000	700.019.0000	/32.494.0001	423.431.2300
International Sales Office			
Ottawa	Bangalore	Shin-Yokohama	Hsin-Chu City
Ontario, Canada	India	Japan	Taiwan,R.O.C.
613.828.5626	011.918.02283652	011.81.454752221	011.886.35778951
TT.Lt.Lt	Noida	C 1	Tr. i.e. i
Helsinki Finland	India	Seoul Korea	Taipei Taiwan, R.O.C.
oii.35.898.211990	oii.9i.ii.8562843	011.82.237700770	011.886.227698250
011.33.090.211990	011.91.11.0302043	011.02.23//00//0	011.000.22/090230
Paris (Velizy)	Dublin	Valkenswaard	Bracknell
France	Ireland	The Netherlands	United Kingdom
011.33.134.885300	011.35.31.8559681	011.31.40.2089211	011.44.1344.360333
Sophia	Herzlia	Livingston	Cambridge
France	Israel	Scotland	United Kingdom
011.33.492.282892	011.972.99511799	011.44.150.6595000	011.44.123.3421025
Munich	Milan	Singapore	Hansarfand
Germany	Italy	o11.65.567.8600	Hungerford United Kingdom
011.49.89.45630	011.390.2575581	011.03.307.8000	011.44.16.72.520101
o11.49.09.43030	011.390.23/3301		011.44.10./2.320101
Kowloon	Rome	Stockholm (Kista)	
Hong Kong	Italy	Sweden	
011.8522.377.7111	011.390.66.8807923	011.46.86.322900	

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