



2004
ANNUAL REPORT



TO OUR SHAREHOLDERS

Improving volumes and productivity in Vicor's 1st and 2nd Generation products led to a higher top and bottom line for 2004. Revenues increased to \$171,580,000 from \$151,421,000 in 2003. The loss before tax of \$2,403,000 in 2004 compared with a loss before tax of \$24,891,000 in 2003. The net loss of \$3,723,000 compared with a net loss of \$19,535,000 in 2003. The diluted loss per share of \$.09 compared with a diluted loss per share of \$.47 in 2003.

Gross margins improved by 11 points to 37%, driven primarily by a combination of increased revenues from 1st and 2nd Generation legacy "brick" products and continued improvements in manufacturing costs and productivity. These improvements were achieved in the face of inconsistent demand and price erosion in the standard "bricks" that indirectly compete with Vicor's legacy products.

The commoditization of the "brick" paradigm, pioneered 23 years ago by Vicor, reflects widespread availability of relatively undifferentiated products, based upon a mature technology base, from a growing number of competing players. While there is continuing opportunity for modest growth in revenues and profits for Vicor's legacy products, our focus since 2000 has been on reinventing our core power technology as a means of positioning the Company for what we believe will be greater future growth and profitability. With the introduction by Vicor in 2003 of its Factorized Power Architecture ("FPA") and of the first highly integrated V•I Chip FPA building blocks, we are setting the stage for a redefined competitive landscape based on a new paradigm for efficient power conversion and distribution.

Factorized Power Architecture with V•I Chips is aimed at satisfying customer demands for improved density, efficiency, speed and cost-effective modularity in power systems for consumer, communications, information technology and automotive electronic products. By aggressively, but judiciously, investing in fundamental research and product development (with R&D at 15% of 2004 revenues), Vicor is leveraging its insight and creativity to enable what it believes will be a new era in the power conversion marketplace. Vicor's vision is of power systems characterized by unprecedented application flexibility and performance, enabled by cost-effective, high density, power components – FPA and V•I Chips are the manifestation of this vision.

Following Vicor's introduction of Factorized Power and the first V•I Chip during 2003, the pace of new FPA product introductions accelerated throughout 2004. Voltage Transformation Modules (VTMs) capable of sourcing up to 100 Amperes at the point of load (POL) set new standards for speed, density and efficiency to meet the demands of advanced DSP, FPGA, ASIC, processor cores and

microprocessor applications. Pre-Regulator Modules (PRMs) complement VTMs to create flexible V•I Chip sets capable of performing all of the essential functions of contemporary power systems, including isolation, voltage transformation and regulation. Initial V•I Chip products, offered in a surface mount "full-VIC" V•I Chip package with a power processing capability of up to 300 W or 100 A, paved the way for broader arrays of future products, including packages scaled down in size and cost for lower power applications.

As we approach 2006, we anticipate revenues from FPA products. To date, in the early stages of FPA product availability, we have generated interest, or achieved early acceptance of, V•I Chips with leading companies in the Consumer Electronics, Information Technology and Automotive market segments. In June 2004, Sony Corporation took a license with rights to design and manufacture power converters, using V•I Chip technology and Factorized Power, for use within its products and in certain agreed-upon applications. In December, a major information technology company praised the benefits of V•I Chips and took initial steps aimed at designing them into certain of its products. Other customers, potential partners and licensees are evaluating V•I Chips in their designs as a means of gaining competitive advantages in their future products.

While resources within many functional areas inside Vicor were focused on the design, development, pilot production and introduction of the new FPA products, significant contributions were also made in other important areas. Vicor's brick business continued to improve its profitability and generate the cash needed to fund development of V•I Chips and of related entities. Vicor, in addition to developing a portfolio of advanced ASICs in support of V•I Chips, has also created the premise for its own future families of power management products.

In summary, subject to steady demand from key end markets, we believe that we will continue to improve productivity and margins for our legacy products and, with exciting potential for V•I Chips and other innovative products, we also believe that Vicor, and its affiliates, partners and licensees, have genuine opportunities for dynamic growth in the years ahead.



Patrizio Vinciarelli
President and Chairman of the Board
April 30, 2005



CORPORATE PROFILE

Vicor Corporation designs, manufactures and markets modular power components and complete power systems used primarily by original equipment manufacturers (OEMs) in the communications, data processing, industrial control, test equipment, medical and defense electronics markets. Built into virtually all electronic products, power systems convert electric power from a primary source — a wall outlet, for example — into low, stable voltages required by electronic circuits.



At the heart of Vicor's product line are high density DC-DC converters that come in thousands of combinations of input voltage, output voltage, and power levels. Accessory components integrate other power system functions. Together, these products allow users to meet their unique power requirements by selecting and interconnecting standard, modular parts. The benefits include rapid, flexible design of complete power systems at any power level; the high performance and reliability of Vicor's field-proven technology; and low cost associated with automated component manufacture and simplified power system design.

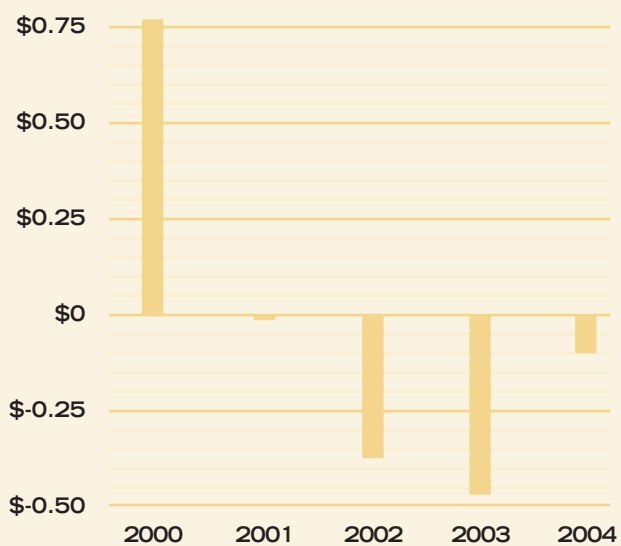
Engineers use the combined advantages of Vicor component power to create compact, highly functional, economical products with streamlined development cycles that minimize time to market.



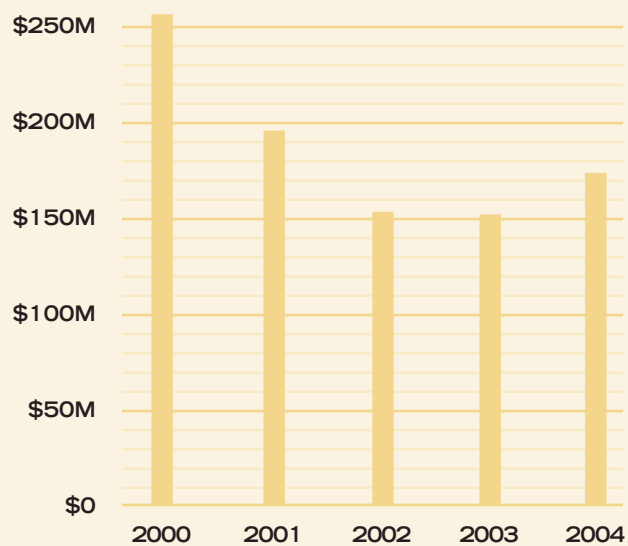
2000-2004 FINANCIAL HIGHLIGHTS

(in thousands, except per share amounts)

	2000	2001	2002	2003	2004
Net Revenues	\$257,583	\$195,910	\$152,591	\$151,421	\$171,580
Income (Loss) from Operations	46,010	(5,017)	(24,502)	(25,703)	(4,035)
Net Income (Loss)	33,920	(559)	(15,942)	(19,535)	(3,723)
Net Income (Loss) Per Share, Diluted	0.78	(0.01)	(0.38)	(0.47)	(0.09)
Weighted Average Shares, Diluted	43,265	42,342	42,337	41,896	42,022
Working Capital	146,692	153,478	153,167	141,547	148,419
Total Assets	294,113	289,622	278,445	251,464	244,882
Total Liabilities	31,192	24,785	30,412	24,806	24,259
Stockholders' Equity	\$262,921	\$264,837	\$248,033	\$226,658	\$220,623
Return on Average Equity	13.4%	(0.2%)	(6.2%)	(8.2%)	(1.7%)



Income (Loss) per Share



Net Revenues

CORPORATE OFFICERS & VICE PRESIDENTS

Mark A. Glazer
Chief Financial Officer, Treasurer and Secretary

H. Allen Henderson
*Vice President, Vicor Corporation
President, Westcor Division*

Barry Kelleher
Senior Vice President, Global Operations

David W. Nesbitt
*Senior Vice President,
North and South American Sales*

Jay M. Prager
Senior Vice President, Technology

Douglas W. Richardson
Vice President, Chief Information Officer

Thomas A. St. Germain
Vice President, Financial Services

Patrizio Vinciarelli
*Chairman of the Board,
President and Chief Executive Officer*

Richard E. Zengilowski
Vice President, Human Resources

BOARD OF DIRECTORS

Samuel Anderson
*President and Chief Executive Officer,
Great Wall Semiconductor*

M. Michael Ansour ^{a,c}
Managing Member, March Partners LLC

Estia J. Eichten ^{a,c}
*Senior Scientist,
Fermi National Accelerator Laboratory*

Barry Kelleher
Senior Vice President, Vicor Corporation

Jay M. Prager
Senior Vice President, Vicor Corporation

David T. Riddiford ^{a,c}
General Partner, PR Venture Partners, L.P.

Patrizio Vinciarelli
*Chairman of the Board,
President and Chief Executive Officer*

^a Audit Committee

^c Compensation Committee

COMMON STOCK

Vicor shares are traded on The NASDAQ Stock Market[®] under the symbol "VICR"

TRANSFER AGENT

EquiServe Trust Co., N.A.
Canton, Massachusetts
1-877-282-1169

COUNSEL

Goodwin Procter LLP
Boston, Massachusetts

AUDITORS

Ernst & Young LLP
Boston, Massachusetts

FORM 10-K

A copy of the Company's Form 10-K, filed with the Securities and Exchange Commission, is enclosed. Additional copies are available by contacting Investor Relations.



This report contains certain forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. You can identify these statements by our use of the words "may," "will," "would," "plans," "expects," "anticipates," "believes," "continue," "estimate," "prospective," "project," "intend," and similar expressions. These forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those projected or anticipated. These risks and uncertainties include our ability to develop and market new products and technologies cost-effectively, to leverage design wins into increased product sales, to decrease manufacturing costs, to enter into licensing agreements that amplify the market opportunity and accelerate market penetration, to realize significant royalties under license agreements, to achieve a sustainable increased bookings rate over a longer period, and to successfully leverage the V•I Chips in standard products to promote market acceptance of Factorized Power, factors impacting the Company's various end markets, including Consumer Electronics, Information Technology and Automotive, as well as those risks and uncertainties identified in the Company's Annual Report on Form 10-K.

You should read the risk factors that are set forth in the Company's most recent Form 10-K, a copy of which is enclosed. However, the risk factors contained in that Form 10-K may not be exhaustive. Therefore, we recommend that you read the information in that Form 10-K together with other reports and documents that we file with the SEC from time to time, including our Forms 10-Q and 8-K and Proxy Statements, which may supplement, modify, supersede or update those risk factors. Copies of the Company's recent SEC filings may be obtained without charge by contacting Investor Relations or through the Investor Relations section of the Company's website at vicorpower.com under the section titled "SEC Filings".



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VCRCM-AR-05