

MICROSEMI CORPORATION

NOTICE OF ANNUAL MEETING ON FEBRUARY 23, 2005
AND PROXY STATEMENT

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MICROSEMI CORPORATION
2381 Morse Avenue
Irvine, California 92614

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
To Be Held on February 23, 2005

TO THE STOCKHOLDERS OF MICROSEMI CORPORATION:

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of MICROSEMI CORPORATION (the "Company") will be held at the Hyatt Regency Irvine, 17900 Jamboree Road, Irvine, California 92614, on Wednesday, February 23, 2005 at 10:00 a.m., Pacific Standard Time, for the following purposes:

1. To elect seven (7) directors, each to serve for the term of one (1) year or until his successor shall have been duly elected and qualified (Proposal 1); and
2. Ratification of the appointment of PricewaterhouseCoopers LLP as independent registered public accountants to audit our financial statements (Proposal 2); and
3. To transact such other business as may properly come before the meeting or any adjournments or postponements thereof.

Only stockholders of record at the close of business on January 7, 2005 are entitled to notice of and to vote at the meeting or any adjournments or postponements thereof.

By Order of the Board of Directors,



David R. Sonksen
Secretary

Irvine, California
January 21, 2005

IT IS IMPORTANT THAT ALL OF OUR STOCKHOLDERS BE REPRESENTED AT OUR ANNUAL MEETING AND AT ANY ADJOURNMENTS OR POSTPONEMENTS THEREOF. STOCKHOLDERS, WHETHER YOU EXPECT TO ATTEND THE MEETING IN PERSON OR NOT, ARE REQUESTED TO PLEASE MARK, SIGN, DATE AND RETURN THE ENCLOSED PROXY TO ASSURE THAT YOU ARE REPRESENTED, OR TAKE ADVANTAGE OF THE INTERNET OR TELEPHONIC VOTING PROCEDURES DESCRIBED ON THE PROXY CARD. PROXIES ARE REVOCABLE BY HOLDERS AT ANY TIME PRIOR TO BEING VOTED AT THE ANNUAL MEETING BY DELIVERY OF A NOTICE OF REVOCATION OF THE PROXY OR A LATER-DATED PROXY, WHICH MAY BE DELIVERED IN WRITING, ELECTRONICALLY OR TELEPHONICALLY. ALSO STOCKHOLDERS OF RECORD WHO ARE PRESENT AT THE MEETING MAY WITHDRAW THEIR PROXIES AND VOTE IN PERSON IF THEY NOTIFY US AT THE MEETING.

Additional copies of proxy materials should be requested in writing, addressed to:

Microsemi Corporation, 2381 Morse Avenue, Irvine, California 92614,
Attention: David R. Sonksen, Secretary.

MICROSEMI CORPORATION
2381 Morse Avenue
Irvine, California 92614

PROXY STATEMENT

GENERAL INFORMATION

The accompanying Proxy is solicited by the Board of Directors and Management of Microsemi Corporation (the “Company”) to be used at the Annual Meeting of Stockholders to be held on Wednesday, February 23, 2005, at 10:00 a.m., Pacific Standard Time, at the Hyatt Regency Irvine, 17900 Jamboree Road, Irvine, California 92614 and at any adjournments or postponements thereof (the “Meeting”). Shares represented by a valid Proxy (“Proxy”) will be voted as specified if received in time for the Meeting. If a choice is not specified in the Proxy, the Proxy will be voted FOR the election of all the director nominees listed in this Proxy Statement and FOR Proposal 2. The Proxy may be voted in the discretion of the proxy holders named therein on any other business as may properly come before the Meeting.

A stockholder who executes and returns the accompanying Proxy, or submits a Proxy electronically or by telephone, may revoke it prior to its being voted by (a) signing another Proxy bearing a later date, or a written notice of revocation and, in either case, delivering the later Proxy or notice to the Secretary of the Company by mail prior to the Meeting or (b) voting in person at the Meeting, or (c) prior to 9:00pm Pacific Time on February 22, 2005, submitting a later Proxy or revoking an earlier Proxy either electronically or telephonically. Giving us a Proxy or revoking a Proxy will not in any way affect a stockholder’s privilege to attend the Meeting and to vote in person, provided that the stock can only be voted in person when held of record in the stockholder’s name on the Record Date or when the stockholder has been given an appropriate proxy from the record holder to vote at the Meeting.

The costs of Proxy solicitation will be paid by the Company. It is contemplated that Proxies will be solicited principally through the use of the mail. The Company will reimburse banks, brokerage houses, and other custodians, nominees or fiduciaries for their reasonable expenses in forwarding proxy material to the beneficial owners of the shares held by them. Proxies may be solicited by directors, officers or other regular employees of the Company in person or by telephone, facsimile or e-mail as part of their regular duties and without special payment therefor, except reimbursement of incidental costs.

This Notice of Annual Meeting, Proxy Statement and Proxy are first being mailed to stockholders on or about January 21, 2005.

ANNUAL REPORT

The Annual Report to Stockholders and Form 10-K for the fiscal year ended September 26, 2004 accompany this Proxy Statement. Such Reports are not to be regarded as proxy soliciting material and are not incorporated into this Proxy Statement. Such Reports do not incorporate the information of the sections of this Proxy Statement entitled "Report of Compensation Committee" or "Performance Comparison." THE ANNUAL REPORT TO STOCKHOLDERS AND THE FORM 10-K, INCLUDING ANNUAL FINANCIAL STATEMENTS, CAN BE OBTAINED ON OUR WEBSITE AT <http://www.microsemi.com> OR BY ANY STOCKHOLDER ENTITLED TO VOTE AT THE MEETING UPON WRITTEN REQUEST. YOU MAY EITHER DOWNLOAD A COPY FROM OUR WEBSITE OR YOU MAY SEND A WRITTEN REQUEST TO MICROSEMI CORPORATION, 2381 MORSE AVENUE, IRVINE, CALIFORNIA 92614, ATTENTION: DAVID R. SONKSEN, SECRETARY.

OUTSTANDING VOTING SECURITIES

The Company's Common Stock, \$.20 par value per share ("Common Stock"), constitutes the only class of outstanding securities of the Company whose holders are entitled to notice of and to vote at the Meeting, including any adjournments or postponements thereof. Each such holder of record is entitled, for all purposes, to one vote for each share so held on each matter submitted to a vote of stockholders. On January 7, 2005 ("Record Date") the Company had issued and outstanding 61,089,998 shares of Common Stock (exclusive of shares held in the treasury).

VOTING PROCEDURES

A quorum sufficient for the conduct of business at the Meeting will consist of a majority of the outstanding shares of Common Stock at the close of business on the Record Date in accordance with our Certificate of Incorporation, our Bylaws and the Delaware General Corporation Law.

The record holder can submit a Proxy in any of three ways:

1. Execute and deliver the Proxy to our transfer agent, Mellon Investor Services, P.O. Box 3582, South Hackensack, NJ 07606-9282. A postage-pre-paid envelope is enclosed for that purpose. (The record holder must SIGN and DATE the Proxy.)
2. Connect to the Internet at <http://www.proxyvoting.com/mscc> and follow instructions for submitting an electronic Proxy.
3. Call (866) 540-5760 from within the U.S. and follow instructions for submitting a telephonic Proxy.

Proxies marked as abstentions and Proxies for shares held in street name designated by brokers as not voted will be treated as shares present for purposes of determining the presence of a quorum at the Meeting.

Proposal 1, the election of directors, will be determined by a plurality vote, i.e., the seven (7) candidates in the election of directors receiving the highest number of affirmative votes will be elected. The stockholders each can cast one (1) vote per share of Common Stock FOR up to seven (7) individuals who are nominated for election. In this election, any votes cast against a candidate or votes withheld, including abstentions and broker non-votes, shall have no legal effect.

Proposal 2, ratification of the appointment of PricewaterhouseCoopers LLP as independent registered public accountants to audit our financial statements, will be decided by a majority of the votes cast for or against Proposal 2. As for Proposal 2, votes withheld, including abstentions and broker non-votes, shall have no legal effect.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL
OWNERS AND MANAGEMENT

The following table sets forth as of December 1, 2004, information concerning ownership of the Company's Common Stock by each person known by the Company to own beneficially more than 5% of its outstanding Common Stock, each director or executive officer and all directors and executive officers as a group.

Name of Beneficial Owner (and Address of Each 5% Beneficial Owner) or Number of Persons in Group	Amount and Nature of Beneficial Ownership	Percentage of Class
Philip Frey Jr. 48 Braeburn Lane Newport Beach, CA 92660	3,350,056 ⁽¹⁾	5.5%
Thomas R. Anderson	84,000 ⁽²⁾	*
William E. Bendush	32,000 ⁽³⁾	*
Harold A. Blomquist	32,000 ⁽⁴⁾	*
Paul F. Folino	32,000 ⁽⁵⁾	*
William L. Healey	72,000 ⁽⁶⁾	*
Dennis R. Leibel	99,500 ⁽⁷⁾	*
James J. Peterson	422,800 ⁽⁸⁾	*
David R. Sonksen	356,572 ⁽⁹⁾	*
Ralph Brandi	212,210 ⁽¹⁰⁾	*
James H. Gentile	68,750 ⁽¹¹⁾	*
John M. Holtrust	148,850 ⁽¹²⁾	*
All Directors and executive officers as a group (14 persons)	1,733,372 ⁽¹³⁾	2.8%

* Indicates less than 1%

(1) Includes 208,750 shares under options exercisable as of the date of this information or within 60 days thereafter.

(2) Includes 84,000 shares under options exercisable as of the date of this information or within 60 days thereafter.

(3) Includes 32,000 shares under options exercisable as of the date of this information or within 60 days thereafter.

- (4) Includes 32,000 shares under options exercisable as of the date of this information or within 60 days thereafter.
- (5) Includes 32,000 shares under options exercisable as of the date of this information or within 60 days thereafter.
- (6) Includes 72,000 shares under options exercisable as of the date of this information or within 60 days thereafter.
- (7) Includes 99,500 shares under options exercisable as of the date of this information or within 60 days thereafter.
- (8) Includes 422,800 shares under options exercisable as of the date of this information or within 60 days thereafter.
- (9) Includes 352,012 shares under options exercisable as of the date of this information or within 60 days thereafter.
- (10) Includes 212,210 shares under options exercisable as of the date of this information or within 60 days thereafter.
- (11) Includes 68,750 shares under options exercisable as of the date of this information or within 60 days thereafter.
- (12) Includes 148,850 shares under options exercisable as of the date of this information or within 60 days thereafter.
- (13) Includes 1,487,612 shares under options exercisable as of the date of this information or within 60 days thereafter.

ELECTION OF DIRECTORS

(Proposal 1)

The Bylaws of the Company allow for a Board of Directors consisting of not less than three (3) and up to thirteen (13) members as fixed by the Board from time to time, and the Board has fixed the number of directors at seven (7), effective as of the beginning of the Meeting, or any adjournments or postponements thereof. Accordingly, seven (7) directors shall be elected at the Meeting, and the seven (7) nominees named below are proposed by our Company's current Board of Directors and Management. The nominees proposed for election as directors will serve for a term of one year and until their respective successors are elected and qualified. All nominees have consented to be named and have indicated their intent to serve if elected. While Management has no reason to believe that any proposed nominee will be unable to or will not serve as a director, should any nominee become unable to serve or will not, for good cause, so serve, then the persons named in the enclosed Proxy will have authority to vote for any substitute nominee designated by the Company's current Board of Directors.

The seven (7) candidates in the election of directors receiving the highest number of affirmative votes will be elected. Votes against a candidate or votes withheld, including abstentions and broker non-votes, have no legal effect on the election; however all such votes count as a part of the quorum. The names and certain information concerning the persons to be nominated as directors by the Board of Directors at the Meeting are set forth below.

YOUR BOARD OF DIRECTORS RECOMMENDS THAT YOU VOTE FOR THE ELECTION OF EACH OF THE NOMINEES NAMED BELOW.

CURRENT DIRECTORS STANDING FOR RE-ELECTION (NOMINEES)

Name	Position With Company (in Addition to Director) and Principal Occupation during Last Five Years	Age	Director Since
James J. Peterson	President and Chief Executive Officer since December 2000; Vice President and General Manager of the Linfinity Division from 1999 to 2000; President of Linfinity Microelectronics from 1997 to 1999; Vice President of Sales of Linfinity Microelectronics from 1996 to 1997. Director of Simple Tech, Inc. since January 2003.	49	2000
Thomas R. Anderson	A retired executive, consultant and private investor; Vice President and Chief Financial Officer of QLogic Corporation from 1993 to 2002.	60	2002

Name	Position With Company (in Addition to Director) and Principal Occupation during Last Five Years	Age	Director Since
Dennis R. Leibel	A retired financial and legal executive, Private investor and consultant; Founding partner of Esquire Associates LLC, since 1999.	60	2002
William E. Bendush	Private investor; Former Senior Vice President and Chief Financial Officer of Applied Micro Circuits Corporation from 1999 to 2003; Senior Vice President and Chief Financial Officer of Silicon Systems, Inc. from 1985 to 1999.	55	2003
William L. Healey	President and Chief Executive Officer of Cal Quality Electronics, Inc. since 2002; Chairman of Smart Flex Systems, Inc. from 1996 to 1999; President and Chief Executive Officer of Smart Flex Systems, Inc. from 1989 to 1999; Director of Sypris Solutions, Inc.	60	2003
Harold A. Blomquist	Private Investor and consultant; President and Chief Executive Officer of Morpho Technologies from December 2003 until December 2004; Chief Executive Officer of Tower Semiconductor from December 2002 to November 2003; Management Consultant for HAB Ventures, Inc. since 2001; President, Chief Executive Officer and Director of ZMD America, Inc. in 2001; Senior Vice President, Business Operations of American Microsystems, Inc. from 1996 to 2001 and Vice President from 1990 to 1996; Director of Interworks Computer Products from 1999 to 2000; Director of Advanced Photonix, Inc. from 1998 to 1999; Director of GA-Tek, holding company to AMI and Gould from 1998 to 2000; Director of AMI from 1996 to 2000; Director of Simtek Corporation since 1996 and Chairman since 2002.	52	2003
Paul F. Folino	Chairman of the Board of Emulex Corporation since 2002. Chief Executive Officer and Director of Emulex Corporation since 1993.	59	2003

EXECUTIVE OFFICERS

Officers are elected on an annual basis by the Board of Directors and serve at the discretion of the Board. Information is provided under the heading “Directors” for Mr. James J. Peterson.

Name	Position with Company and Principal Occupation during Last Five Years	Age	Officer Since
David R. Sonksen	Executive Vice President since 2000; Vice President-Finance, Chief Financial Officer, Treasurer and Secretary since 1986.	59	1986
Ralph Brandi	Executive Vice President, Chief Operating Officer since 2002; Vice President–Operations since 2000; Vice President–Operations of Linfinity Division from 1999 to 2000; Vice President–Operations of Linfinity Microelectronics, Inc. from 1995 to 1999.	60	2000
John M. Holtrust	Vice President–Human Resources since 2000; Vice President–Human Resources of Silicon Systems Inc. from 1990 to 2000.	54	2000
James H. Gentile	Vice President–Worldwide Sales since 2001; Vice President, Sales and Marketing of Micro Power Products Division from 1999 to 2001; North America Sales Manager of Mitel Semiconductor, Inc. from 1997 to 1999.	48	2001
John J. Petersen	Vice President–Quality and Business Process Improvement since 2001; Vice President, Quality and Technology Storage Products Group of Texas Instruments, Inc. from 1994 to 2001.	60	2001
Steven G. Litchfield	Vice President–Corporate Marketing & Business Development since 2003; Director of Business Development from 2001 to 2003; Semiconductor Research Analyst for Banc of America Securities from 2000 to 2001; Engineering Manager, Toyota Motor Corporation from 1992 to 2000.	35	2003

INFORMATION REGARDING THE BOARD OF
DIRECTORS AND ITS COMMITTEES

During the 2004 fiscal year, the Board of Directors held a total of seven (7) regularly scheduled or special meetings.

AUDIT COMMITTEE

The Audit Committee, which consisted of directors Thomas R. Anderson, William E. Bendush and Dennis R. Leibel during the 2004 fiscal year, reviews matters relating to the Company's internal and external audits. The Audit Committee held a total of six (6) meetings in fiscal year 2004. The Audit Committee met to review the financial statements and the audit of fiscal year 2003, to review each of the quarterly financial statements of fiscal year 2004, to review the plan of the audit for fiscal year 2004, as well as to review the status of our internal controls and procedures project pursuant to the requirements of Section 404 of the Sarbanes-Oxley Act of 2002. The Company's Board of Directors has adopted a written charter for the Audit Committee, a current copy of which is available on the Company's website at <http://www.microsemi.com>. The members of the Audit Committee are independent, as independence is defined in Rule 4200(a)(15) of the National Association of Securities Dealers listing standards. The Audit Committee Report for the 2004 fiscal year is included in this Proxy Statement. The Board of Directors determined that each of the three (3) Audit Committee members meets the criteria in Item 401 of Regulation S-K for being considered a financial expert.

COMPENSATION COMMITTEE

The Compensation Committee, which consisted of directors Thomas R. Anderson, Paul F. Folino, William L. Healey and Dennis R. Leibel during the 2004 fiscal year, considers and approves the grant of stock options, compensation as well as other matters related to compensation for the Company's executive officers and key employees and to recommend to the Board of Directors the compensation of the Board of Directors. The Compensation Committee held ten (10) meetings in fiscal year 2004. The Company's Board of Directors has adopted a written charter for the Compensation Committee, a current copy of which is available on the Company's website at <http://www.microsemi.com>. The members of the Compensation Committee are independent, as independence is defined in Rule 4200(a)(15) of the National Association of Securities Dealers listing standards.

GOVERNANCE AND NOMINATING COMMITTEE

The Governance and Nominating Committee, which consisted of directors Dennis R. Leibel, William E. Bendush, Thomas R. Anderson and Harold A. Blomquist during the 2004 fiscal year, considers matters related to selection of individuals to be nominated for election to the Board of Directors and our corporate governance policies. The

Governance and Nominating Committee was established in 2002 and held eleven (11) meetings in fiscal year 2004. The Company's Board of Directors has adopted a written charter for the Governance and Nominating Committee, a current copy of which is available on the Company's website at <http://www.microsemi.com>. In identifying and evaluating possible candidates for election as a director of the Company, the Governance and Nominating Committee considers factors related to the general composition of the Board as well as specific selection criteria related to the character and capacities of the individual candidates. The Governance and Nominating Committee Charter provides, among other things, that the Company's Board of Directors should be composed of:

1. Directors chosen with a view to bringing to the Board a variety of experience and backgrounds; and
2. Directors who will represent the balanced, best interests of the stockholders as a whole rather than special interest groups or constituencies; and
3. Directors who are independent, as independence is defined in Rule 4200(a)(15) of the National Association of Securities Dealers listing standards, with the only exception to this guideline normally being the nomination of the Company's Chief Executive Officer.

The Governance and Nominating Committee Charter also provides that, in considering possible candidates for election to the Board of Directors of the Company, the Governance and Nominating Committee and other directors should be guided in general by the composition guidelines established above and by, including but not limited to, the following:

1. Each director should be chosen without regard to sex, race, age, religion or national origin;
2. Each director should be an individual of the highest character and integrity and have an inquiring mind, vision and the ability to work well with others;
3. Each director should be free of any conflict of interests which would violate applicable law or regulations or interfere with the proper performance of the responsibilities of a director;
4. Each director should possess substantial and significant experience which would be of particular importance to the Company in the performance of the duties of a director;
5. Each director should have sufficient time available to devote to the affairs of the Company in order to carry out the responsibilities of a director; and
6. Each director should have the capacity and desire to represent the balanced, best interests of the stockholders of the Company as a whole and not primarily a special interest group or constituency.

The members of the Governance and Nominating Committee are independent, as independence is defined in Rule 4200(a)(15) of the National Association of Securities

Dealers listing standards. The Governance and Nominating Committee recommended and approved the Board's nomination of each of the Nominees named in this Proxy Statement.

The Governance and Nominating Committee will consider for nomination persons recommended by the Company's security holders in writing. These recommendations should be addressed to Microsemi Corporation, Attention: David R. Sonksen, Secretary, and must include that person's resume and your statement in writing of the reasons that the person being recommended is well qualified.

INDEPENDENT DIRECTORS COMMITTEE.

The independent directors also constitute a committee that meets in executive session following all regularly scheduled Board meetings, and whenever a majority of the independent directors considers it necessary or desirable. The committee considers and may make recommendations to the full Board on any and all matters that its committee members determine to be necessary or appropriate. The independent directors are comprised of Dennis R. Leibel, Thomas R. Anderson, William L. Healey, William E. Bendush, Harold A. Blomquist and Paul F. Folino. The Independent Directors Committee held seven (7) meetings in fiscal year 2004.

While serving as a director or on any committees, no director attended fewer than 75% of the aggregated number of meetings held in fiscal year 2004 of the Board of Directors and of all such committees.

On the last day of each fiscal year, each non-employee director receives a 10-year option to purchase 12,000 shares of Common Stock at the closing market price of the Common Stock on that date.

Directors who are also officers or employees of the Company or its subsidiaries receive no additional compensation for their services as directors. The non-employee directors of the Company receive a \$20,000 annual retainer, except that the Chairman of the Board receives a \$40,000 annual retainer. In addition the Chairman receives \$2,700 and each of the other non-employee directors receives \$1,800 for each Board meeting attended in person and \$1,200 for each committee meeting attended in person, except that directors serving as a committee Chair receive \$1,800 per committee meeting attended in person, other than the Audit Committee Chair who receives \$2,400. All directors receive only 60% of the in-person compensation for meetings attended by telephone. All directors are reimbursed for out-of-pocket and travel expenses. No additional compensation is paid for actions taken by the Board or any committee by written consent.

Pursuant to the Company's 1987 Stock Option Plan, as amended, and the Board's compensation plan, upon initial appointment or initial election to the Board of Directors, as the case may be, each non-employee director receives a one-time grant of a stock option to purchase 20,000 shares of the Company's Common Stock. On the last day of

each fiscal year, each non-employee director receives an additional stock option to purchase 12,000 shares of the Company's Common Stock. Following the annual stockholders' meeting, upon election as Chairman, the Chairman of the Board receives an additional stock option to purchase an additional number of shares as determined by the Board. On the date of the annual meeting in the previous year, the Chairman received an additional option to purchase 10,000 shares. All of such option grants to directors have had an exercise price equal to the fair market value of the Common Stock on the date of grant, have been fully vested upon grant, and have had a term of ten (10) years, subject to earlier termination in certain events.

On June 30, 2004, Mr. Nick E. Yocca was granted an option to purchase 15,000 shares when he retired as Chairman of the Board of Directors, and Mr. Dennis R. Leibel was granted an option to purchase 7,500 shares when he was elected Chairman of the Board of Directors.

For a period of seven (7) years after retirement from the Board of Directors, each non-employee director who served on the Board, or in another capacity as approved by the Board, for at least five (5) years is paid fifty percent (50%) of the retainer that the director was paid immediately prior to retirement, on the condition that the director continues to be available to provide up to twenty-five hours of consulting support quarterly, and continues to be eligible to exercise stock options that were received by the director prior to retirement. Pursuant to this retirement policy, in fiscal year 2004 the Company paid a total of \$60,600 apportioned among six (6) former directors.

The Company and each of its directors have entered into indemnification agreements that are intended to supplement the financial protection of directors afforded by liability insurance. Under the agreements, the Company shall provide each director or former director the fullest indemnification allowed by Delaware law from the costs of suits and proceedings against the director on account of having been a director of the Company.

EXECUTIVE COMPENSATION

The following table sets forth, for the fiscal year ended September 26, 2004, compensation received by Messrs. Peterson, Sonksen, Brandi, Gentile and Holtrust. The notes to these tables provide additional specific information regarding compensation.

SUMMARY COMPENSATION TABLE

Name and Principal Position	Fiscal Year	Annual Compensation			Long Term Compensation			
		Salary (\$)	Bonus (\$)	Other (\$)	Restricted Stock Award(s) (\$)	Stock Options (#)	Long-Term Incentive Plan Payouts (\$)	All Other Compensation (\$)
				(1)		(2)		(3)
James J. Peterson	2004	487,495	350,000	56,000	—	440,000	—	6,683
President and Chief	2003	450,008	—	54,000	—	165,000	—	6,243
Executive Officer	2002	459,063	—	52,000	—	36,800	—	10,026
David R. Sonksen	2004	298,491	150,000	41,000	—	125,000	—	8,431
Executive Vice President,	2003	264,812	—	39,000	—	100,000	—	7,368
Chief Financial Officer, Treasurer and Secretary	2002	270,110	—	37,000	—	24,300	—	5,674
Ralph Brandi	2004	298,506	150,000	47,000	—	145,000	—	8,955
Executive Vice President,	2003	253,389	—	45,000	—	60,000	—	5,296
Chief Operating Officer	2002	235,986	—	43,000	—	93,700	—	3,309
James H. Gentile	2004	272,756	25,000	45,000	—	25,000	—	6,819
Vice President, Worldwide Sales	2003	199,499	—	43,000	—	32,000	—	4,867
	2002	206,389	—	97,000	—	19,300	—	5,604
John M. Holtrust	2004	199,748	100,000	51,000	—	45,000	—	5,992
Vice President, Human Resources	2003	174,900	—	49,000	—	56,000	—	5,250
	2002	174,260	—	47,000	—	38,600	—	3,733

- (1) “Other compensation” consists of auto allowance, life insurance, health insurance and, in addition for Mr. Gentile in 2002 includes \$62,000 of assistance in sale and purchase of his principal residence due to a job relocation within the Company.
- (2) The number of options granted have been adjusted to reflect a 2-for-1 stock split which became effective as of February 20, 2004.
- (3) Represents amounts contributed by the Company in the period under the Company’s 401(k) plan under which the Company matches an employee’s contributions of up to 3% of such employee’s annual salary.

OPTION GRANTS IN LAST FISCAL YEAR

Individual Grants

Name	Options Granted (#)	% of Total Options Granted to Employees in Fiscal Year	Price (\$/Share)	Exercise Expiration Date	Grant Date Present Value (\$)	Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation For Option Term(1)	
						5%(\$)	10%(\$)
James J. Peterson	170,000	4.01%	11.36	08/18/14	1,931,200	1,214,521	3,077,835
James J. Peterson	270,000	6.36%	13.72	09/26/14	3,704,400	2,329,677	5,903,860
David R. Sonksen	15,000	0.35%	11.36	08/18/14	170,400	107,164	271,574
David R. Sonksen	110,000	2.59%	13.72	09/26/14	1,509,200	949,128	2,405,276
Ralph Brandi	15,000	0.35%	11.36	08/18/14	170,400	107,164	271,574
Ralph Brandi	130,000	3.06%	13.72	09/26/14	1,783,600	1,121,696	2,842,599
James H. Gentile	5,000	0.12%	11.36	08/18/14	56,800	35,721	90,525
James H. Gentile	20,000	0.47%	13.72	09/26/14	274,400	172,569	437,323
John M. Holtrust	5,000	0.12%	11.36	08/18/14	56,800	35,721	90,525
John M. Holtrust	40,000	0.94%	13.72	09/26/14	548,800	345,137	874,646

- (1) The Potential Realizable Value is calculated based on the fair market value of the Common Stock on the date of grant, which is equal to the exercise price of options granted in fiscal year 2004, assuming that the stock appreciates in value from the date of grant until the end of the option term at the specified annual rates (5% and 10%). Potential Realizable Value is net of the option exercise price. The assumed rates of appreciation are specified in rules of the SEC, and do not represent the Company's estimate or projection of future stock price. Actual gains, if any, resulting from stock option exercises and Common Stock holdings are dependent on the future performance of the Common Stock, overall stock market conditions, as well as the option holders' continued employment through the exercise/vesting period. There can be no assurance that the amounts reflected in this table will be achieved.

AGGREGATED OPTION EXERCISES IN LAST FISCAL YEAR AND
FISCAL YEAR END OPTION VALUES

Name	Total Exercised (#)	Realized Value (\$)	Exercisable (#)	Non Exercisable (#)	Exercisable Value (\$)	Non Exercisable Value (\$)
James J. Peterson	117,844	1,029,267	289,468	794,300	2,432,808	7,838,122
David R. Sonksen	88,080	955,133	245,700	339,300	1,890,747	2,991,366
Ralph Brandi	104,700	1,065,201	173,700	346,700	1,133,187	3,115,110
James H. Gentile	0	0	98,300	85,300	711,129	797,790
John M. Holtrust	0	0	128,300	191,300	929,952	1,578,878

EXECUTIVE COMPENSATION AGREEMENTS

The Company and each of its executive officers have entered into indemnification agreements that are intended to supplement the financial protection of executive officers afforded by liability insurance. Under the agreements, the Company shall provide each executive or former executive the fullest indemnification allowed by Delaware law from the costs of suits and proceedings against the executive on account of having been the Company's executive officer.

The Company has entered into retention agreements with six (6) executive officers intended to assure their unbiased counsel and continued dedication in the event of an unsolicited tender offer or other occurrence that may result in a change of control. Each agreement will continue in effect until two (2) years after the Company notifies the executive of an intention to terminate that agreement. The terms of each agreement provide that, in the event of a change of control, as defined therein, and the subsequent termination of the executive's employment at any time during the term of such agreement, the executive will be paid amounts equal to a multiplier (the "Multiplier") times the sum of his annual salary rate in effect prior to termination of employment and his highest annual bonus paid during the prior 3-year period.

APPLICABLE MULTIPLIER

Termination

	<u>Involuntary</u>	<u>Good Reason</u>	<u>Voluntary</u>
James J. Peterson	2	2	*
David R. Sonksen	2	2	*
Ralph Brandi	2	2	NA
John Holtrust	1	1	NA
James H. Gentile	1	1	NA
Steven G. Litchfield	1	1	NA

* The Multiplier is the greater of one (1) or the sum of three plus the number of years of service of the executive, all divided by twelve. Presently Mr. Peterson has 6 years of service (a Multiplier of 1) and Mr. Sonksen has 18 years of service (a Multiplier of 1.8333). In any case, the Multiplier cannot exceed two (2).

Additionally: (i) all options that the executive has received under any option plans will remain exercisable for a number of years equal to the Multiplier; (ii) medical, dental, vision and life insurance premiums will continue to be paid by the Company for a number of years equal to the Multiplier; (iii) his automobile allowance continues, subject to earlier termination if the executive becomes a full time employee elsewhere, up to a number of years equal to the Multiplier; and (iv) he will receive all other benefits then accrued at the time of a termination under the Company's compensation plans.

Upon an involuntary termination or a termination for "Good Reason," in either case only following a change of control, all of the executive's unvested stock options, or

similar equity incentives, vest and become exercisable. Also, to the extent that payments to the executive pursuant to his agreement (together with any other payments or benefits) would result in the triggering of the provisions of Sections 280G and 4999 of the Internal Revenue Code (“Code”), the agreement provides for the payment of an additional amount such that the executive would receive, net of excise taxes, the amount he would have been entitled to receive in the absence of the excise tax provided in Section 4999 of the Code. Mr. Sonksen’s current agreement restates and supersedes a similar agreement entered into in 1997.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934 requires the Company’s executive officers, directors and persons who own beneficially more than ten percent of a registered class of the Company’s equity securities to file reports of ownership and changes in ownership with the Securities and Exchange Commission (the “SEC”) and the NASDAQ Stock Market (“NASDAQ”). Executive officers, directors and greater than ten-percent stockholders are required by SEC regulation to furnish the Company with copies of all Section 16(a) forms concurrently when they file them with the SEC and NASDAQ.

To the Company’s knowledge, based solely on its review of the copies of Section 16(a) forms furnished to the Company and any written representations that no Form 5 reports were required, none of the Company’s officers, directors or greater than ten-percent beneficial owners known to the Company failed to file in a timely manner Section 16(a) reports during or with respect to fiscal year 2004 except for the following: Steven G. Litchfield filed one late Form 3 and John J. Petersen filed one late Form 4.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

Concerning this proxy statement, the SEC regulations do not require the Company to make any disclosure under the heading immediately above, and accordingly no disclosure is made here.

COMPENSATION COMMITTEE REPORT FOR FISCAL YEAR 2004 OF MICROSEMI CORPORATION

The compensation programs for executive management and certain other key employees are reviewed each year by the Compensation Committee. The compensation programs establish the rewards to be received by each key executive relative to their contributions to earnings from both their direct operating responsibility and the overall Company. The Compensation Program attempts to link the awards with the performance of the Company and align executive compensation with the interests of the stockholders. The committee considers the potential impact of each operating unit as well as the effect on corporate wide growth, profit, market position and goals set for that year, as well as changes in corporate market focus and goals for the next fiscal year. The committee reviews with the management of the Company the business plans for the new fiscal year relative to the prior year.

In addition, each executive officer is responsible for meeting other goals mutually agreed to between that executive officer and the chief executive officer. The goals typically are strategic opportunities and challenges available to the Company in a changing market in a competitive environment. In every reward review, the executive officer is evaluated on corporate earnings, and the committee's subjective analysis of the progress achieved. Compensation of the chief executive officer is determined in a manner similar to that for all other executive officers. The chief executive officer's goals are established by consensus among the chief executive officer, the Compensation Committee and the Board of Directors.

Executive Compensation Philosophy:

The primary thrust of the executive compensation programs in the Company continues to be that compensation must reflect the value created for the stockholders—both short term and long term. Consequently, the program utilizes short-term achievement awards and long-term incentives; and normally it includes stock options granted each year.

Options, which can provide incentives for executives and key employees to increase the value of the Company over the long term, are included in our philosophy to establish a direct relationship between current Company performance and incentive compensation. The stock option grants are made by the Compensation Committee, which administers

the stock option program. Grants to employees can be in either or both qualified “incentive stock options” and non-qualified stock options. Options are granted to executives and key employees with the potential to impact the future growth and profitability of the Company. Options typically become fully vested over a four-year period in four equal installments starting one year after the option is granted and expiring ten years after the grant date.

The Compensation Committee conducts salary reviews for the chief executive officer and the other executive officers each year. The committee utilizes data from established salary surveys and consults at times with independently chosen experts. In order to attract or retain talented executives, the Company considers industry comparatives when making adjustments in pay and benefits. In addition, the Compensation Committee reviewed both the performance of the Company and the performance of its executives for fiscal year 2004.

The Cash Bonus Program is designed to reward employees for overall business results and individual contributions, as measured against individual performance objectives and improvement of pro forma earnings (which excludes acquisition-related charges, restructuring charges and other special charges and credits).

The Executive Compensation components are:

- **Base Salary:** Salaries are targeted between the fiftieth and the seventy-fifth percentile for similarly situated companies. Factors considered for salary increases, although subjectively and informally applied, are actual achievement, level of market opportunity, management skill in achieving goals and contributions to the overall corporate success.
- **The Cash Bonus Program:** This program provides cash awards to executives as a means of achieving superior corporate results. These programs are formalized and consistently administered throughout the Company. The bonus award can range from 0% to 150% of an executive’s annual salary. The bonus award components are based on overall corporate profit performance on a pro forma basis, direct profit results controlled by the executive and on individual-specific goals.
- **Stock Options:** The exercise price of each stock option is equal to 100% of the fair market value of the Common Stock as of the date when the option was granted. Based on the current stock option plan as approved by the stockholders, 4% of the currently outstanding shares of Common Stock are annually added to the pool available for award to new and existing key employees, executives and directors. Under this program, key executives are allocated portions of the total annual award based upon the recipient’s responsibility level, performance and other subjective measures.

- **Other Compensation:** Compensation of the chief executive officer in 2004 included 401(k) matching, medical insurance, and car allowance, all of which are included in total compensation in the Summary Compensation Table.
- **Retention:** Executive officers, in the event of a change in control, have certain rights to continue to receive compensation and benefits following termination. (See section on Executive Compensation Agreements).

Compensation of the Chief Executive Officer in Fiscal Year 2004:

The Compensation Committee believes, based on its review of publicly available information concerning companies in its industry that its chief executive officer's compensation is within the range of compensation packages provided to executives of similar rank and responsibility in comparable companies.

In January 2004, Mr. Peterson's salary was increased from \$450,000 to \$500,000, and in December 2004, Mr. Peterson received a cash bonus of \$350,000. His bonus was based upon sales exceeding plan, operating earnings on a pro forma basis significantly exceeding plan, and successful execution of the Capacity Utilization Enhancement Program from its inception through the date of the award.

The long-term portion of Mr. Peterson's compensation is based primarily on stock options. Mr. Peterson was granted stock options for 440,000 shares of common stock during fiscal year 2004. This reflected both above plan performance and a catch up portion due to prior year grants being below market. The options vest based on continuous service and lapse of time, with possible acceleration in the event of a corporate change of control.

Other compensation, including 401(k) matching, for Mr. Peterson in fiscal year 2004 was \$62,683.

The Compensation Committee reviewed all the compensation paid or payable to the CEO in 2004, and determined that the amounts are reasonable and appropriate. The Compensation Committee also has considered the potential payouts to the CEO and other Executive Officers under retention agreements related to a change of control and considered them to be reasonable and appropriate.

Section 162(m) of the Internal Revenue Code of 1986, as amended, imposes a limitation on the deductibility of certain executive compensation. The Compensation Committee has considered the potential impact of Section 162(m), and the regulations thereunder, which is to disallow a tax deduction for any publicly held corporation for individual compensation exceeding \$1 million in any taxable year for any of the Named Executive Officers, as defined in Regulation S-K, unless such compensation is performance based. Since the cash compensation of each of the Named Executive

Officers is below the \$1 million threshold and the Compensation Committee believes that any options granted under the 1987 Stock Plan would meet the requirements of being performance-based, the Compensation Committee believes that Section 162(m) will not reduce the tax deduction available to the Company for current compensation. The Company's policy is to qualify, to the extent reasonable, its executive officers' compensation for deductibility under applicable tax laws. However, the Compensation Committee believes that its primary responsibility is to provide a compensation program that will attract, retain and reward the executive talent necessary to the Company's success. Consequently, the Compensation Committee recognizes that the loss of a tax deduction could be necessary or appropriate in some circumstances.

The Compensation Committee members during fiscal year 2004 are identified below.

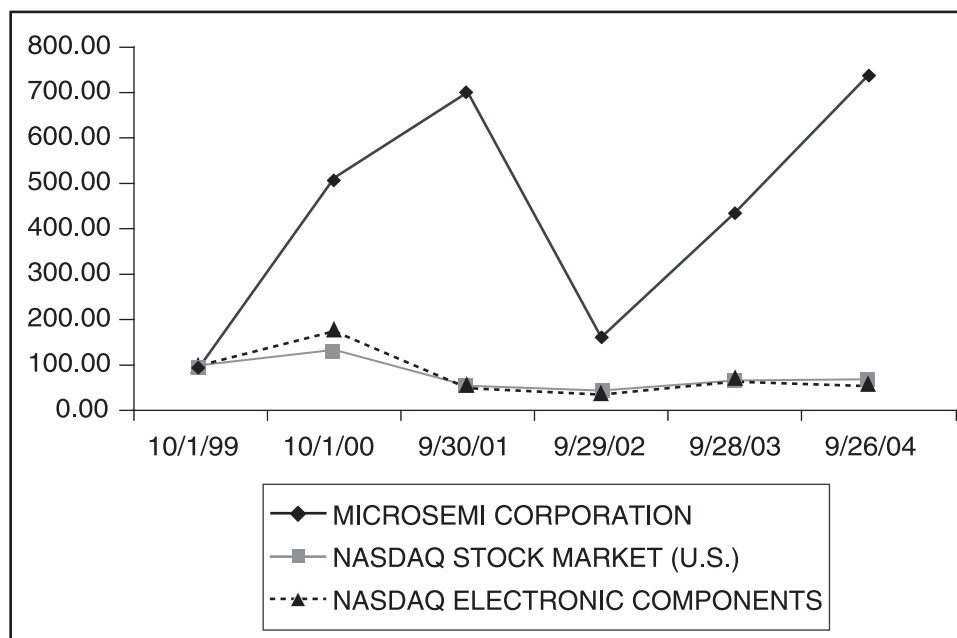
THE COMPENSATION COMMITTEE

Dennis R. Leibel Thomas R. Anderson Paul F. Folino William L. Healey

PERFORMANCE GRAPH

The following graph compares the five-year cumulative total return on the Company's Common Stock to the total returns of 1) NASDAQ Stock Market and 2) NASDAQ Stock Market– Electronics & Electrical Equipment & Components Index, excluding Computer Equipment. This comparison assumes in each case that \$100 was invested on or about September 30, 1999 and all dividends were reinvested. The Company's fiscal year ends on or about September 30 each year.

COMPARISON OF 5 YEARS' CUMULATIVE TOTAL RETURN * Among Microsemi Corporation, the NASDAQ stock market (US) index and the NASDAQ Electronic Components Index



* \$100 invested on October 1, 1999 in stock or index, including reinvestment of dividends

	Cumulative Total Return					
	10/1/99	10/1/00	9/30/01	9/29/02	9/28/03	9/26/04
MICROSEMI CORPORATION	100.00	512.61	700.50	160.81	434.82	737.88
NASDAQ STOCK MARKET (U.S.)	100.00	133.50	54.55	43.98	65.66	68.94
NASDAQ ELECTRONIC COMPONENTS	100.00	174.19	49.23	34.52	63.64	53.83

RATIFICATION OF APPOINTMENT OF INDEPENDENT
REGISTERED PUBLIC ACCOUNTANTS
(Proposal 2)

The Audit Committee has appointed PricewaterhouseCoopers LLP to serve as independent registered public accountants for the Company for its 2005 fiscal year and yearend. Although stockholder ratification will not affect the employment of PricewaterhouseCoopers LLP through the end of the fiscal year ending October 2, 2005, the Audit Committee shall consider our stockholders' vote on this Proposal when determining future appointments.

PricewaterhouseCoopers LLP has served as the Company's independent registered public accountants since 1983. Representatives of PricewaterhouseCoopers LLP are expected to be present at the Annual Meeting, will have the opportunity to make a statement, if they desire to do so, and will be available to respond to appropriate questions.

Before making its decision for appointment of the accountants, the Audit Committee carefully considered that firm's qualifications as independent registered public accountants for the Company, which included a review of their overall performance last year, as well as its reputation for integrity and competence in the fields of accounting and auditing. The Audit Committee expressed satisfaction with PricewaterhouseCoopers LLP in all these respects.

The affirmative vote to the majority of the votes cast by the holders of the Company's Common Stock on this proposal shall constitute ratification of the appointment of PricewaterhouseCoopers LLP.

THE BOARD RECOMMENDS A VOTE "FOR" PROPOSAL 2.

AUDIT COMMITTEE REPORT

The Audit Committee has reviewed and discussed the audited financial statements with management. The Audit Committee has also discussed with the independent accountants the matters required to be discussed by SAS 61. The Audit Committee has received the written disclosures and the letter from the independent accountants required by Independence Standards Board Standard No. 1 and has discussed with the independent accountants the independent accountants' independence. Based on the review and discussions of the foregoing, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the 2004 fiscal year for filing with the Securities and Exchange Commission.

The Audit Committee solely engages the independent accountants on behalf of the Company to provide any audit and non-audit services.

The Audit Committee has approved an engagement agreement with the independent accountants. The engagement agreement establishes certain particular services that are required of the independent accountants. The engagement agreement further requires the independent accountants to inform the Audit Committee of each particular other service they will render, and in each instance these other particular services shall be subject to prior review and approval of the Audit Committee. The Audit Committee has never delegated, and shall not delegate, this responsibility to the Company's management.

Thomas R. Anderson

William E. Bendush

Dennis R. Leibel

The foregoing Compensation Committee Report, Performance Graph and Audit Committee Report are not deemed to be "soliciting material" or to be "filed" with the Securities and Exchange Commission or subject to Regulation 14A or to the liabilities of Section 18 of the Securities Exchange Act. They shall not be deemed to be incorporated by reference into any document that the Company may file at any time with the Securities and Exchange Commission, unless in a particular instance it is therein expressly and specifically incorporated by reference by the Company.

STOCKHOLDER PROPOSALS

The Company must receive stockholder proposals intended to be considered at the 2006 Annual Meeting of Stockholders no later than September 30, 2005. Such proposals may be included in next year's Proxy Statement if they furthermore comply with certain rules and regulations promulgated by the Securities and Exchange Commission. Subject to the immediately preceding sentence, matters will not be acted upon at the meeting unless the proposal is made timely and in appropriate form in accordance with our then applicable Bylaws and resolutions of our Board.

CONTACTING THE BOARD

Stockholders of the Company may send communications to the Board of Directors via U.S. Mail at the following address: Microsemi Corporation, 2381 Morse Avenue, Irvine, California 92614. Attention: Chairman of the Board.

INDEPENDENT ACCOUNTANTS

PricewaterhouseCoopers LLP, independent accountants for the Company for the fiscal year ended September 26, 2004, has been selected by the Board of Directors to serve in the same capacity for the current fiscal year.

A representative of PricewaterhouseCoopers LLP is expected to be present at the Meeting with the opportunity to make a statement if he or she so desires and to be available to respond to appropriate questions.

AUDIT FEES

PricewaterhouseCoopers LLP billed the Company \$687,000 and \$632,000 for professional services rendered for the audit of the annual financial statements for fiscal years 2004 and 2003, respectively, and the reviews of the financial statements included in Forms 10-Q in each of those respective fiscal years.

AUDIT-RELATED FEES

PricewaterhouseCoopers LLP billed the Company \$32,000 and \$21,000 for the audit of the Company's employee benefit plan for fiscal years 2004 and 2003, respectively.

TAX FEES

PricewaterhouseCoopers LLP billed the Company \$393,000 and \$398,000 for income tax compliance and related tax services for fiscal years 2004 and 2003, respectively. Tax services included preparation of federal and state income tax returns, work concerning research and development tax credits and tax planning.

ALL OTHER FEES

PricewaterhouseCoopers LLP billed the Company \$92,000 in fiscal year 2004 for Sarbanes-Oxley Section 404 related consultation on internal control readiness and nothing in fiscal year 2003 for services or products that are not described under the headings above.

The Audit Committee considered whether the provision of the services included in this category is compatible with maintaining PricewaterhouseCoopers' independence.

The Audit Committee's pre-approval policies are described in the Audit Committee Report. None of the services described under Audit-Related Fees, Tax Fees, and All Other Fees, respectively, were approved by the Audit Committee later than the date of such services pursuant to 17 CFR 210.2-01(c)(7)(i)(C).

CERTAIN RELATIONSHIPS

NONE

OTHER MATTERS

The Board of Directors is not aware of any matter which will be presented for action at the Meeting other than the matters set forth herein; but should any other matter requiring a vote of the stockholders arise, it is intended that the enclosed Proxy shall include discretionary authority to vote on such other matters in accordance with the interests of the Company, in the best judgment of the person or persons voting the Proxies or consistent with any instructions given to such persons by the Board of Directors. In addition, the enclosed Proxy is intended to include discretionary authority to vote for any person's election to a position for which a bona fide nominee is named herein if such nominee named herein is unable to serve or for good cause will not serve, approval of minutes of the prior meeting without ratifying the actions taken at such meeting and the disposition of any matters incident to the conduct of the Meeting, including any adjournments or postponements.

All stockholders are urged to complete, sign, date and promptly return the enclosed Proxy.

By Order of the Board of Directors,

A handwritten signature in cursive script, appearing to read "David R. Sonksen".

David R. Sonksen,
Secretary

Irvine, California
January 21, 2005