MICROSEMI CORP Form SC 13G February 11, 2011

# SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 SCHEDULE 13G Under the Securities and Exchange Act of 1934 Microsemi Corp.

(Name of Issuer) Common Stock

(Title of Class of Securities) 595137100

(CUSIP Number) December 31, 2010

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

This Schedule is filed pursuant to Rule 13d-1(b)

The information required in the remainder of this cover page (except any items to which the form provides a cross-reference) shall not be deemed to be filed for the purpose of Section 18 of the Securities Exchange Act of 1934 ( Act ) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act.

CUSIP No. 595137100

NAME OF REPORTING PERSON

Ameriprise Financial, Inc.

S.S. or I.R.S. Identification IRS No. 13-3180631

No. of Above Person

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) p\*

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

Delaware

SOLE VOTING POWER

5

NUMBER OF -0-

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 6,407,277

EACH SOLE DISPOSITIVE POWER

REPORTING 7

PERSON -0-

WITH SHARED DISPOSITIVE POWER

8

6,876,699

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

6,876,699

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

Not Applicable

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

8.22%

TYPE OF REPORTING PERSON

12

CO

\*This filing describes the reporting person s relationship with other persons, but the reporting person does not affirm

the existence of a group.

CUSIP No. 595137100

NAME OF REPORTING PERSON

Columbia Management Investment Advisers, LLC

S.S. or I.R.S. Identification IRS No. 41-1533211

No. of Above Person

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

2

(a) o

(b) p\*

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

Minnesota

SOLE VOTING POWER

5

NUMBER OF -0-

SHARES SHARED VOTING POWER

BENEFICIALLY 6

OWNED BY 6,407,277

EACH SOLE DISPOSITIVE POWER

REPORTING 7

PERSON -0-

WITH SHARED DISPOSITIVE POWER

8

6,876,699

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

6,876,699

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

Not Applicable

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

8.22%

TYPE OF REPORTING PERSON

12

IA

<sup>\*</sup>This filing describes the reporting person s relationship with other persons, but the reporting person does not affirm the existence of a group.

1(a) Name of Issuer: Microsemi Corp.

1(b) Address of Issuer s Principal 2381 Morse Ave.

Executive Offices: Irvine, CA 92614

2(a) Name of Person Filing: (a) Ameriprise Financial, Inc. (AFI)

(b) Columbia Management Investment Advisers, LLC ( CMIA )

Address of Principal Business

(a) Ameriprise Financial, Inc.

2(b) Office:

145 Ameriprise Financial Center

Minneapolis, MN 55474 (b) 100 Federal St. Boston, MA 02110

2(c) Citizenship: (a) Delaware

(b) Minnesota

2(d) Title of Class of Securities: Common Stock

2(e) Cusip Number: 595137100

Information if statement is filed pursuant to Rules 13d-1(b) or 13d-2(b):

(a) Ameriprise Financial, Inc.

A parent holding company in accordance with Rule 13d-1(b)(1)(ii)(G). (Note: See Item 7)

(b) Columbia Management Investment Advisers, LLC

An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E)

Incorporated by reference to Items (5)-(9) and (11) of the cover page pertaining to each reporting person. AFI, as the parent company of CMIA, may be deemed to beneficially own the shares reported herein by CMIA. Accordingly, the shares reported herein by AFI include those shares separately reported herein by CMIA

Each of AFI and CMIA disclaims beneficial ownership of any shares reported on this Schedule.

5 Ownership of 5% or Less of a Class:

If this statement is being filed to report the fact as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following ().

- 6 Ownership of more than 5% on Behalf of Another Person: Not Applicable
- 7 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company:

AFI: See Exhibit I

8 Identification and Classification of Members of the Group:

Not Applicable

9 Notice of Dissolution of Group:

Not Applicable

10 Certification:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purposes or effect.

## Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: February 11, 2011

Ameriprise Financial, Inc.

By: /s/ Wade M. Voigt

Name: Wade M. Voigt

Title: Director Fund Administration

Columbia Management Investment

Advisers, LLC

By: /s/ Amy Johnson

Name: Amy Johnson

Title: Chief Operating Officer

Contact Information

Wade M. Voigt

Director Fund Administration

Telephone: (612) 671-5682

# Exhibit Index

Exhibit I Identification and Classification of the Subsidiary which Acquired the Security Being Reported on by the Parent Holding Company.

Exhibit II Joint Filing Agreement