UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): December 29, 2006

MICROSEMI CORPORATION

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction

0-8866 (Commission File Number) 95-2110371 (IRS Employer

of incorporation)

Identification No.)

2381 Morse Avenue, Irvine, California (Address of principal executive offices)

92614 (Zip Code)

Registrant s telephone number, including area code

(949) 221-7100

 $(Former\ name\ or\ former\ address,\ if\ changed\ since\ last\ report.)$

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- " Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- " Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- " Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- " Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

INFORMATION TO BE INCLUDED IN THE REPORT

Section 1 - Registrant s Business and Operations

Item 1.01 Entry into a Material Definitive Agreement.

We entered into a \$75 million Revolving Credit Agreement dated as of December 29, 2006 with Comerica Bank (the Revolving Credit Agreement or the New Credit Facility). The New Credit Facility s Stated Maturity date is January 1, 2010.

The New Credit Facility replaces the Company s existing Credit Agreement dated April 2, 1999, as amended, which had a Stated Maturity Date of March 31, 2008. (See Item 1.02.)

Proceeds of borrowing under the New Credit Facility can be used for working capital and other lawful corporate purposes, and initial borrowings will be used to finance a portion of the Company s acquisition of PowerDsine Ltd., an Israeli company.

Interest accruing on the amount of each revolving borrowing under the New Credit Facility is determined based upon the Company s choice of either a Prime-based Advance or Eurodollar-based Advance. Prime-based Advances incur interest at a rate equal to an Applicable Margin of 100 basis points plus the Prime Rate as defined in the Revolving Credit Agreement. If the Company elects a Eurodollar-based Advance, the borrowing bears interest at the Eurodollar-based Rate, also defined in the Revolving Credit Agreement, which is determined, in part, by an Applicable Margin that fluctuates with the Company s Funded Debt to EBITDA ratio.

Financial covenants, which include for example maintaining (i) a minimum EBITDA (ii) and a Maximum Funded Debt to EBITDA ratio, establish both conditions and current limitations on available amounts of borrowings. \$75 million is the maximum that may be borrowed ever, but the amount actually available to us for borrowing at any given time could be less than the amount stated, or even a small fraction of this amount or nothing at all.

The New Credit Facility is subject to our satisfaction and performance of various affirmative and negative covenants. The negative covenants include, among others, limitations on material corporate transactions, borrowing, the creation of liens, sales of assets, acquisitions, mergers, and investments. There is no assurance possible that such restrictions will be waived. These covenants might, unless waived, deter some strategic corporate transactions or acquisitions that could have otherwise possibly enhanced value for our stockholders.

Any real or alleged default by us under our any of our obligations under the New Credit Facility could have material adverse consequences for our business and could materially adversely affect the value of an investment in our common stock.

The New Credit Facility is unsecured, which means that each of our assets is no longer subject to a lien, security interest or other encumbrance under the Terminated Credit Agreement. The obvious benefits to us include principally administrative costs and occasionally that our assets become available for disposition or other financings. However, we are subject to restrictions under the New Credit Facility against asset dispositions or financings, without the lender s prior written consent, or waiver, which may be granted or denied in the lender s discretion.

In addition to our corporate parent company, Microsemi Corporation, several our subsidiaries are also parties to the New Credit Facility, as follows: Microsemi Corp. Power Products Group, Microsemi Corp. Integrated Products, Microsemi Corp. Massachusetts and Microsemi Corp. Scottsdale. The obligations of each company are joint and several under the New Credit Facility. Unless we are in compliance with the terms of the New Credit Facility, our subsidiaries cannot pay us any dividends. The position of the lender is and always shall be superior to our position as a stockholder of the subsidiaries. A sale or transfer of any of the parties to the New Credit Facility is subject to the lender s consent and approval. This may, depending on the circumstances, possibly impede a strategic corporate transaction that otherwise might have been possible and might have been in the best interest of our stockholders. In the future there may be from time to time other persons who may become parties to the New Credit Facility, as lenders or otherwise.

The lender s interests may not be the same as those of our stockholders. There can be no assurance that the lender will waive a restriction or give consent where its waiver or consent would be required in order for us to be able to conduct in the future any number of transactions we might seek to conduct that, in our opinion, could materially improve stockholder value.

The Revolving Credit Agreement is filed herewith as Exhibit 10.113 and is incorporated herein by this reference.

The above general description of the material terms of the New Credit Facility is qualified in its entirety by reference to the terms in full as set forth in Exhibit 10.113.

Item 1.02 Termination of a Material Definitive Agreement.

Pursuant to the New Credit Facility, effective as of December 29, 2006, we terminated our pre-existing \$30 million credit facility with Comerica Bank, in favor of the New Credit Facility. The Terminated Credit Agreement had a Stated Maturity Date of March 31, 2008 compared with the New Credit Facility s Stated Maturity Date of January 1, 2010. The Terminated Credit Agreement involved secured indebtedness. The New Credit Facility is unsecured.

The Terminated Credit Agreement and amendments were filed with the SEC as Exhibits 10.85 to 10.85.12, inclusive.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

The Exhibit Index that immediately follows the signature page of this report is incorporated herein by this reference.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

MICROSEMI CORPORATION (Registrant)

Date: January 4, 2007

/s/ DAVID R. SONKSEN David R. Sonksen Executive Vice President, Chief Financial Officer, Treasurer and Secretary

Exhibit Index

Exhibit No. Description

Revolving Credit Agreement Dated as Of December 29, 2006, between Comerica Bank, on the one hand, and the Registrant and certain subsidiaries, on the other hand 10.113