UNITED STATES	
SECURITIES AND EXCHANGE COMMISS	ION
Washington, D.C. 20549	
FORM 8-K	
CURRENT REPORT	
Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 19	934
Date of Report (Date of earliest event reported): November 2, 2005	
MICROSEMI CORPORATION	
(Exact name of registrant as specified in its charter)	
Delaware 0-8866 other jurisdiction (Commission File Number)	95-2110371 (IRS Employer
corporation) Id	dentification No.)

D (State or

of in

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:

- x 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

THIS IS NEITHER A SOLICITATION OF ANY PROXIES NOR AN OFFER OF ANY SECURITIES FOR SALE. NO SECURITIES MENTIONED HEREIN HAVE BEEN REGISTERED OR AUTHORIZED OR APPROVED BY ANY FEDERAL OR STATE SECURITIES REGULATOR OR COMMISSION, AND NO SECURITIES CAN BE OFFERED OR SOLD IN THE UNITED STATES UNTIL A REGISTRATION STATEMENT IS FILED WITH THE SEC AND DECLARED EFFECTIVE BY THE SEC. THIS COMMUNICATION IS NOT AN OFFER OF SECURITIES IN ANY STATE WHICH MAKES OFFERS ILLEGAL BEFORE REGISTRATION OR QUALIFICATION UNDER THE LAWS OF SUCH STATE, AND SECURITIES CANNOT BE OFFERED UNTIL REGISTRATION OR QUALIFICATION IN EACH SUCH STATE. ADVANCED POWER TECHNOLOGY, INC. STRONGLY URGES ITS STOCKHOLDERS TO READ THE RELEVANT DOCUMENTS RELATED TO THIS TRANSACTION AS AND WHEN FILED WITH THE SEC BY MICROSEMI OR ADVANCED POWER TECHNOLOGY, INCLUDING ESPECIALLY A FORM S-4 REGISTRATION STATEMENT TO BE FILED BY MICROSEMI, CONTAINING A PROXY STATEMENT/PROSPECTUS RELATED TO THIS PROPOSED TRANSACTION, BECAUSE THEY SHALL CONTAIN IMPORTANT INFORMATION THAT ALL THE ADVANCED POWER TECHNOLOGY STOCKHOLDERS SHOULD CONSIDER. ALL SUCH SEC FILINGS, WHEN MADE, ARE AND WILL BE MADE AVAILABLE FREE OF CHARGE AT THE SEC WEBSITE (WWW.SEC.GOV). SUCH DOCUMENTS, WHEN FILED, ALSO ARE MADE AVAILABLE FREE OF CHARGE BY ADVANCED POWER TECHNOLOGY AND MICROSEMI.

Section 1 Registrant s Business and Operations

Item 1.01 Entry into a Material Definitive Agreement.

On November 2, 2005, after the close of business, Microsemi Corporation, a Delaware corporation (the Registrant) entered into an Agreement and Plan of Merger that provides for the Registrant to acquire, upon the consummation of the triangular merger transaction, Advanced Power Technology, Inc., a Delaware corporation.

The transaction contemplated by this agreement is subject to closing conditions which include an affirmative vote of a majority of the outstanding shares of Advanced Power Technology, Inc., pre-merger notification and clearance pursuant to the Hart-Scott Rodino Act, any other necessary governmental approvals, and the absence of any material adverse changes, unless that condition is waived by the other party.

Upon consummation of the transaction as contemplated, the Registrant estimates that it would

- 1) pay approximately \$21,652,128 in cash and issue approximately 4,709,338 shares of Registrant s common stock pro rata to the holders of outstanding shares of Advanced Power Technology, Inc., and
- 2) assume options and reserve for purchase thereunder approximately 799,021 shares of Registrant s common stock (as estimated as of November 3, 2005), and
- 3) assume a warrant and reserve for purchase thereunder an aggregate of 750 shares of Registrant s common stock and \$3,450 in cash.

The Registrant had, as of November 1, 2005, approximately 63,574,526 shares outstanding.

The form of agreement mentioned above is filed as an exhibit to this Report pursuant to Rule 601 of Regulation S-K and incorporated herein by this reference.

On November 2, 2005, the Registrant announced the agreement mentioned above and its intention to consummate the transaction.

The form of news release mentioned above is filed as an exhibit to this Report pursuant to Rule 601 of Regulation S-K.

The descriptions in this Report are qualified in their entirety by this reference to the exhibits.

Section 9 Financial Statements and Exhibits

Item 9.01 Financial Statements and Exhibits.

Exh. No.	Description
2.6	Agreement and Plan of Merger dated November 2, 2005 among the Registrant, APT Acquisition Corp., a Delaware corporation that is a wholly owned subsidiary of the Registrant, and Advanced Power Technology, Inc., a Delaware corporation, including (except as noted) the following exhibits:
	Voting Agreement
	Non-Competition Agreement
	Lock-up Agreement
	Employment Agreement*
	Option Assumption Agreement
	Certificate of Merger*
	List of Parties to Ancillary Agreements*
99.1	News Release dated November 2, 2005.

^{*} Omitted from this filing but to be made available to the SEC at the SEC s request.

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: November 4, 2005 /s/ DAVID R. SONKSEN

(Signature)

David R. Sonksen,

Executive Vice President,

Chief Financial Officer,

Treasurer and Secretary

(Name and Title)

EXHIBIT INDEX

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