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): May 1, 2006

MONOLITHIC POWER SYSTEMS, INC.

(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

Delaware (State or other jurisdiction of incorporation or organization) 000-51026 (Commission file number) 77-0466789 (I.R.S. Employer Identification Number)

983 University Avenue, Building A, Los Gatos, CA 95032 (ADDRESS OF PRINCIPAL EXECUTIVE OFFICES) (ZIP CODE)

(408) 357-6600

(REGISTRANT'S TELEPHONE NUMBER, INCLUDING AREA CODE)

(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 240.113e-4(c))

Item 2.02 Results of Operations and Financial Condition.

On May 1, 2006, Monolithic Power Systems, Inc., a Delaware corporation, issued a press release and held a conference call regarding its financial results for the quarter ended March 31, 2006. A copy of the press release is attached hereto as Exhibit 99.1.

The information under this Item 2.02 of this Current Report on Form 8-K and the exhibit attached hereto are being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "1934 Act"), nor shall they be deemed incorporated by reference in any filing with the Securities and Exchange Commission under the 1934 Act or the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits.

(c) Exhibits.

Exhibit	Description		

99.1 Press Release issued on May 1, 2006

SIGNATURES

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

By:

Date: May 1, 2006

/s/ C. Richard Neely Jr.

C. Richard Neely Jr. Chief Financial Officer (Principal Financial and Accounting Officer and Duly Authorized Officer) Index to Exhibits

Exhibit 99.1 Description

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Press Release issued on May 1, 2006

Contact:

Rick Neely Chief Financial Officer Monolithic Power Systems, Inc. 408-357-6777

Monolithic Power Systems, Inc. Announces Financial Results for First Fiscal Quarter of 2006

LOS GATOS, Calif., May 1, 2006 – Monolithic Power Systems, Inc. (MPS) (Nasdaq: MPWR), a leading fabless manufacturer of high-performance analog and mixed-signal semiconductors, today announced its financial results for the first quarter ended March 31, 2006:

- Net revenues of \$24.8 million, up 69% from \$14.6 million for the same quarter of 2005
- Gross margin of 62.1%, compared with 62.1% for the same quarter of 2005
- GAAP operating expenses of \$16.6 million, including \$10.0 million for research and development, selling, general and administrative; \$4.1 million for patent litigation; \$2.5 million for stock-based compensation
- Non-GAAP⁽¹⁾ operating expenses of \$14.0 million, excluding \$2.5 million for stock-based compensation
- GAAP net loss of \$408 thousand, or (\$0.01) per diluted share, compared with a GAAP net loss of \$1.4 million, or (\$0.05) per diluted share, for the same quarter of 2005
- Non-GAAP⁽¹⁾ net income of \$2.2 million, or \$0.07 per diluted share, compared with non-GAAP net income of \$ 0.2 million, or \$0.01 per diluted share, for the same quarter of 2005
- Cash, cash equivalents, restricted cash and investments of \$68.2 million, compared with \$66.8 million at December 31, 2005,

"We are pleased to have achieved 69% revenue growth year over year." said MPS Chief Executive Officer Michael Hsing. "Our DC to DC product family grew 125% year over year, reflecting very positive market acceptance of our power management solutions. In the first quarter, we also qualified our new BCD Plus[™] process technology, which enables higher current density and increased switching frequencies using a smaller die size. We believe that this technology provides a competitive advantage that will allow us to address additional networking and high-volume consumer applications."

Business Outlook

The following are MPS' financial targets for the second quarter ending June 30, 2006:

- Net revenues in the range of approximately \$25 million to \$27 million
 - Gross margin in the middle of our target range of 58% to 63%
 - Non-GAAP operating expense between \$8.75 million and \$9.50 million, which excludes an estimate of litigation expense in the range of \$2.5 million to \$3.5 million and excludes an estimate of stock-based compensation expense in the range of \$2.5 million to \$3.0 million.

Conference Call

MPS plans to conduct a management teleconference covering first-quarter results at 2:00 p.m. PDT / 5:00 p.m. EDT today, May 1, 2006. Dial-in number: 719-457-2692, code number 4858858. The call will be webcast live and archived for all investors for one year on the MPS website at http://www.monolithicpower.com/cmp_02_inv_rel.htm. This press release and any other information related to the call will also be posted on the website at that location. In addition, a phone replay of the call will be available for seven days at 719-457-0820, code number 4858858.

(1) Non-GAAP net income and non-GAAP operating expenses differ from net income and operating expenses determined in accordance with GAAP (Generally Accepted Accounting Principles in the United States). A schedule reconciling these amounts is included in this news release. MPS' non-GAAP net income and non-GAAP operating expenses differ from GAAP net income and operating expenses in that the non-GAAP financial measures exclude stock-based compensation expense. Non-GAAP financial measures should not be considered as a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP. MPS utilizes both GAAP and non-GAAP net income and operating expenses in assessing what it believes to be its core operating performance and to evaluate and manage its internal business and assist in making financial operating decisions. MPS believes that the inclusion of non-GAAP financial measures, together with GAAP measures, provides investors with an alternative presentation useful to investors' understanding of MPS' core operating results and trends. Additionally, MPS believes that the inclusion of non-GAAP measures, together with GAAP measures, provides investors with an additional dimension of comparability to similar companies. However, investors should be aware that non-GAAP financial measures utilized by other companies are not likely to be comparable in most cases to the non-GAAP financials measures used by MPS.

About MPS

Monolithic Power Systems, Inc. (MPS) develops and markets proprietary, advanced analog and mixed-signal semiconductors. The company's advanced process technology and highly experienced analog designers provide high-performance power management integrated circuits (ICs) for automotive, industrial, consumer, computing, and communications products. MPS partners with world-class foundries to deliver high-quality, cost-effective solutions to meet the demanding standards set by its customers. Founded in 1997 and headquartered in Los Gatos, California, the company has expanded its global presence with sales offices in Taiwan, China, Korea, and Japan, and France, which operate under MPS International, Ltd.

Safe Harbor Statement

This press release contains forward-looking statements regarding the company's targeted net revenues, gross margin, non-GAAP operating expenses and litigation expenses for the fiscal quarter ending June, 30 2006. These statements are not historical facts or guarantees of future performance or events, are based on current expectations, estimates, beliefs, assumptions, goals, and objectives, and involve known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from the results expressed by these statements. Readers of this press release and listeners to the accompanying conference call are cautioned not to place undue reliance on any forward-looking statements. Factors that could cause actual results to differ include, but are not limited to, the risks, uncertainties and costs of litigation in which the company is involved; the outcome of any upcoming trials, hearings, motions, and appeals; any interruptions in the company's schedule of new product development; adverse changes in government regulations in foreign countries where the

company has offices; acceptance of, or demand for, the company's products being lower than expected; the adverse impact that excess inventory in the company's distribution channel would have on its financial performance; the adverse impact on the company's financial performance if its tax and litigation provisions are inadequate; difficulty in predicting or budgeting for future expenses and financial contingencies; and other important risk factors identified in the company's SEC filings, including, but not limited to, its Annual Report on Form 10-K filed on March 28, 2006.

The forward-looking statements in this press release represent MPS' targets, not predictions of actual performance. MPS assumes no obligation to update the information in this press release or in the accompanying conference call. Any statements by persons outside of MPS speculating on the progress of the quarter or other aspects of MPS' business are not based on internal MPS information and should be assessed accordingly by investors.

Trademarks

MPS, Monolithic Power Systems, the MPS logo and BCD Plus are trademarks of Monolithic Power Systems, Inc. in the U.S. and certain other countries.

Financial Statements Attached

Monolithic Power Systems, INC. CONDENSED CONSOLIDATED BALANCE SHEET (in thousands, except per share amounts) (unaudited)

	Balance at	Balance at Period Ended	
	March 31, 2006	December 31, 2005	
ASSETS		2005	
Current assets:			
Cash and cash equivalents	\$ 25,938	\$ 25,091	
Investments	38,724	38,814	
Accounts receivable, net	7,364	9,537	
Inventories	8,543	6,165	
Deferred income tax asset—current	3,774	3,671	
Prepaid expenses and other current assets	1,751	1,501	
Restricted assets—current	3,502	2,938	
Total current assets	89,596	87,717	
Property and equipment, net	9,480	6,238	
Other assets	403	387	
Restricted assets	6,514	6,433	
TOTAL ASSETS	\$105,993	\$ 100,775	
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current liabilities:			
Accounts payable	\$ 10,655	\$ 6,583	
Accrued compensation and related benefits	2,273	2,974	
Accrued income tax payable	645	2,913	
Accrued liabilities	10,046	9,797	
Total current liabilities	23,619	22,267	
Deferred rent—non-current	212	209	
Deferred income tax liability	212	131	
Total liabilities	24,043	22,607	
Stockholders' equity:			
Common stock	99,231	98,342	
Deferred stock compensation	(1,762)	(4,544)	
Notes receivable from stockholders		(398)	
Accumulated other comprehensive income (loss)	(17)	(138)	
Accumulated deficit	(15,502)	(15,094)	
Total stockholders' equity	81,950	78,168	
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$105,993	\$ 100,775	

Monolithic Power Systems, INC. CONDENSED CONSOLIDATED STATEMENT OF OPERATIONS (in thousands, except per share data) (unaudited)

	Three Months Ending	
	March 31, 2006	March 31, 2005
Net Revenues	\$24,763	\$14,637
Cost of revenues	9,373	5,546
Gross profit	15,390	9,091
Gross profit %	62.1%	62.1%
Operating expenses:		
Research and development	5,067	3,182
Selling, general and administrative	7,427	3,555
Patent litigation	4,064	4,498
Total operating expenses	16,558	11,235
Loss from operations	(1,168)	(2,144)
Other income (expense):		
Interest income	599	372
Other expense	(70)	(41)
Total other income, net	529	331
Loss before income taxes	(639)	(1,813)
Income tax benefit	(231)	(430)
Net loss	(408)	(1,383)
Net loss attributable to common stockholders	\$ (408)	\$ (1,383)
Basic net loss per common share	\$ (0.01)	\$ (0.05)
Diluted net loss per common share	\$ (0.01)	\$ (0.05)
Shares used in basic net loss per common share	28,816	27,537
Shares used in diluted net loss per common share	28,816	27,537

Monolithic Power Systems, INC. NON-GAAP CONDENSED CONSOLIDATED STATEMENT OF OPERATIONS (in thousands, except per share data) (unaudited)

	Three Mon	Three Months Ending	
	March 31, 2006	March 31, 2005	
Net Revenues	\$24,763	\$14,639	
Cost of revenues	9,232	5,417	
Gross profit	15,531	9,222	
Gross profit %	62.7%	63.0%	
Operating expenses:			
Research and development	3,704	2,404	
Selling, general and administrative	6,248	2,803	
Patent litigation	4,064	4,498	
Total operating expenses	14,016	9,705	
Income (loss) from operations	1,515	(483)	
Other income (expense):			
Interest income	599	372	
Other expense	(70)	(41)	
Total other income, net	529	331	
Income (loss) before income taxes	2,044	(152)	
Income tax benefit	(152)	(356)	
Net income	2,196	204	
Net income attributable to common stockholders	\$ 2,196	\$ 204	
Basic net income per common share	\$ 0.08	\$ 0.01	
Diluted net income per common share	\$ 0.07	\$ 0.01	
Shares used in basic net income per common share	28,816	27,537	
Shares used in diluted net income per common share	33,201	30,811	

GAAP TO NON-GAAP RECONCILIATION

	Three Months Ending	
	March 31, 2006	March 31, 2005
Net Loss - GAAP Basis	<u>\$ (408)</u>	\$(1,383)
Non-GAAP Adjustments for Stock-Based Compensation		
Contra Revenues	—	2
Cost of Revenues	141	129
S,G&A	1,179	752
R&D	1,363	778
Tax effect of adjustments	(79)	(74)
Net Income - Non-GAAP Basis	\$ 2,196	\$ 204