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): March 31, 2009

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)

6409 Guadalupe Mines Road, San Jose, CA 95120 (Address of principal executive offices) (Zip Code)

(408) 826-0600

(Registrant's telephone number, including area code)

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:

Ш	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))

Item 2.02 Results of Operations and Financial Condition.

On April 28, 2009, Monolithic Power Systems, Inc. ("MPS"), a Delaware corporation, issued a press release and held a conference call regarding its financial results for the quarter ended March 31, 2009. 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.

(d) Exhibits.

Exhibit	Description
99.1	Press Release issued on April 28, 2009, announcing the financial results for the quarter ended March 31, 2009

Index to	Exhibits
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Exhibit Description

Press Release issued on April 28, 2009, announcing the financial results for the quarter ended March 31, 2009

SIGNATURES		
Pursuant to the requirements of the Securities Exchange Act of 1 undersigned, thereunto duly authorized.	934, as amended, the registrant has	duly caused this report to be signed on its behalf by the
Date: April 28, 2009	By:	/s/ C. Richard Neely, Jr.
	·	C. Richard Neely, Jr.

C. Richard Neely, Jr.
Chief Financial Officer
(Principal Financial and Accounting Officer and
Duly Authorized Officer)



Monolithic Power Systems, Inc. 6409 Guadalupe Mines Road San Jose, CA 95120 USA T: 408-826-0600, F: 408-826-0601 www.monolithicpower.com

Monolithic Power Systems Announces First Quarter 2009 Results

SAN JOSE, Calif. April 28, 2009—Monolithic Power Systems (MPS) (Nasdaq: MPWR), a leading fabless manufacturer of high-performance analog and mixed-signal semiconductors, today announced financial results for the quarter ended March 31, 2009.

The results for the quarter ended March 31, 2009 are as follows:

- Net revenues of \$29.3 million, down 17.2% from \$35.4 million in the first quarter of 2008 and down 15.5% sequentially from \$34.7 million in the fourth quarter of 2008
- Gross margin of 57.6%, compared to 63.2% in the first quarter of 2008 and 58.0% in the fourth quarter of 2008
- GAAP operating expenses of \$18.0 million, including \$15.9 million for research and development and selling, general and administrative expenses, which includes \$3.3 million for stock-based compensation, and \$2.0 million for patent litigation expenses
- Non-GAAP(1) operating expenses of \$14.6 million, excluding \$3.3 million for stock-based compensation
- GAAP net loss of \$0.7 million, with GAAP loss per share of \$0.02 per diluted share
- Non-GAAP(1) net income of \$2.3 million, or \$0.06 per diluted share, excluding stock-based compensation and related tax effects

"In the second half of the quarter, we saw increased turns activities. As a result, our Q1 revenue was better than we expected" said Michael Hsing, chief executive officer and founder of MPS. "We are still cautiously optimistic about the next quarter. However, MPS is always ready for fast changing environments either in up or down markets. The last two quarters proved that. Despite a significant reduction in product demand, MPS will continue to focus on generating cash and delivering profits".

Business Outlook

The following are MPS' financial targets for the second quarter ending June 30, 2009:

- Revenues in the range of \$36.0 million to \$40.0 million
- Gross margin slightly below the lower end of the company's target range of 60% to 63%

- Research and development and selling, general and administrative expenses between \$17.5 million and \$19.8 million. Non-GAAP(1) research and development and selling, general and administrative expenses between \$14 million and \$16 million. This excludes an estimate of stock-based compensation expense in the range of \$3.5 million to \$3.8 million
- Litigation expense in the range of \$2.3 million to \$2.7 million

(1) Non-GAAP net income, non-GAAP operating expenses and non-GAAP research and development and selling, general and administrative expense differ from net income, operating expenses, and research and development and selling, general and administrative expense determined in accordance with GAAP (Generally Accepted Accounting Principles in the United States). Non-GAAP net income for the quarter ended March 31, 2009 and 2008 excludes the effect of stock-based compensation expense and their related tax effects. Non-GAAP operating expenses for the quarter ended March 31, 2009 and 2008 exclude the effect of stock-based compensation expense. Projected non-GAAP research and development and selling, general and administrative expenses exclude the effect of stock-based compensation expense. A schedule reconciling these amounts is included in this news release. 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 financial measures to assess 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.

Conference Call

MPS plans to conduct a management teleconference covering its quarter ended March 31, 2009 results at 2:00 p.m. PT / 5:00 p.m. ET today, April 28, 2009. To access the conference call and following replay, go to http://ir.monolithicpower.com and click the webcast link. From this site, you can listen to the teleconference, assuming that your computer system is configured properly. In addition to the webcast replay, which will be archived for all investors for one year on the MPS website, a phone replay will be available for seven days after the live call at 617-801-6888, code number 307272222. This press release and any other information related to the call will also be posted on the website.

Safe Harbor Statement

This press release contains forward-looking statements regarding targeted revenues, gross margin, GAAP and non-GAAP research and development and selling, general and administrative expenses, stock-based compensation expense and litigation expense for the quarter ending June 30, 2009, and our outlook for the next quarter. 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 market disruptions or interruptions in MPS' schedule of new product release development; adverse changes in production and testing efficiency; adverse changes in government regulations in foreign countries where MPS has offices; acceptance of, or demand for, MPS' products being lower than expected; the adverse impact on MPS' 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 MPS' SEC filings, including, but not limited to, its Form 10-K filed on February 27, 2009.

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.

About Monolithic Power Systems, Inc.

Monolithic Power Systems, Inc. (MPS) develops and markets proprietary, advanced analog and mixed-signal semiconductors. The company combines advanced process technology with its highly experienced analog designers to produce high-performance power management integrated circuits (ICs) for DC to DC converters, LED drivers, Cold Cathode Fluorescent Lamp (CCFL) backlight controllers, Class D audio amplifiers, and Linear ICs. MPS products are used extensively in computing and network communications products, LCD monitors and TVs, and a wide variety of consumer and portable electronics products. MPS partners with world-class manufacturing organizations to deliver top quality, ultra-compact, high-performance solutions through the most productive, cost-efficient channels. Founded in 1997 and headquartered in San Jose, California, the company has expanded its global presence with sales offices in Taiwan, China, Korea, Japan, and Europe, which operate under MPS International, Ltd.

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

Contact:

Rick Neely Chief Financial Officer Monolithic Power Systems, Inc. 408-826-0777 investors@monolithicpower.com

Consolidated Balance Sheet (Unaudited, in thousands, except par value)

	March 31, 2009	December 31, 2008	
ASSETS			
Current assets:			
Cash and cash equivalents	\$ 68,094	\$ 83,266	
Short-term investments	38,002	21,922	
Accounts receivable, net of allowances of \$8 and \$0 in 2009 and 2008, respectively	13,367	9,115	
Inventories	18,559	18,887	
Deferred income tax assets, net - current	74	75	
Prepaid expenses and other current assets	2,791	2,622	
Restricted cash	7,350	7,360	
Total current assets	148,237	143,247	
Property and equipment, net	13,967	14,163	
Long-term investments	37,340	37,425	
Deferred income tax assets, net - long-term	19	19	
Other assets	427	438	
Restricted assets	7	7	
Total assets	\$ 199,997	\$ 195,299	
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current liabilities:			
Accounts payable	\$ 8,363	\$ 4,674	
Accrued compensation and related benefits	3,789	7,848	
Accrued liabilities	14,392	13,360	
Total current liabilities	26,544	25,882	
Non-current income tax liability	4,773	4,762	
Other long-term liabilities	9	10	
Total liabilities	31,326	30,654	
Stockholders' equity:			
Common stock, \$0.001 par value, \$34 and \$34 in 2009 and 2008, respectively; shares authorized: 150,000,000; shares issued and outstanding: 33,863,182 and 33,646,821 in 2009 and 2008,			
respectively	152,236	147,298	
Retained earnings	16,683	17,411	
Accumulated other comprehensive income (loss)	(248)	(64)	
Total stockholders' equity	168,671	164,645	
Total liabilities and stockholders' equity	\$ 199,997	\$ 195,299	

Consolidated Income Statement (Unaudited, in thousands, except per share amounts)

		Three months ended March 31,		
	•	2009	•	2008
Revenue	\$	29,322	\$	35,409
Cost of revenue*	_	12,431	_	13,044
Gross profit	_	16,891	_	22,365
Operating expenses:		0.115		7.570
Research and development*		8,117		7,572
Selling, general and administrative*		7,808		8,728
Provision for litigation expense	_	2,046	_	736
Total operating expenses	_	17,971	_	17,036
Income (loss) from operations		(1,080)		5,329
Other income (expense):		205		1 424
Interest and other income		385		1,434
Interest and other expense	_	(94)	_	(6)
Total other income, net	_	291	_	1,428
Income (loss) before income taxes		(789)		6,757
Income tax provision (benefit)	_	(61)		822
Net income (loss)	\$	(728)	\$	5,935
Basic net income (loss) per share	\$	(0.02)	\$	0.18
Diluted net income (loss) per share	\$	(0.02)	\$	0.17
	Ψ		Ψ	
Weighted average common shares outstanding		33,696		33,340
Stock options and restricted stock	_		_	2,551
Diluted weighted-average common equivalent shares outstanding	_	33,696	_	35,891
* Stock-based compensation has been included in the following line items:				
Cost of revenue	\$	81	\$	45
	-			
Research and development		1,560		1,207
Research and development Selling, general and administrative	_	1,772		1,535
Research and development Selling, general and administrative Total	\$		\$	
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts)	\$	1,772 3,413	\$	1,535 2,787
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME	_	1,772		1,535
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts) Net income (loss) Adjustments to reconcile net income to non-GAAP net income	\$	1,772 3,413	\$	1,535 2,787 5,935
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts) Net income (loss) Adjustments to reconcile net income to non-GAAP net income Stock-based compensation	\$	1,772 3,413 (728)	\$	1,535 2,787 5,935 2,787
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts) Net income (loss) Adjustments to reconcile net income to non-GAAP net income	<u>\$</u>	1,772 3,413 (728)	\$	1,535 2,787 5,935 2,787
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts) Net income (loss) Adjustments to reconcile net income to non-GAAP net income Stock-based compensation	<u>\$</u>	1,772 3,413 (728)	\$	1,535 2,787 5,935 2,787
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts) Net income (loss) Adjustments to reconcile net income to non-GAAP net income Stock-based compensation Tax effect Non-GAAP net income	<u>\$</u> <u>\$</u> \$	1,772 3,413 (728) 3,413 (389)	<u>\$</u>	1,535 2,787 5,935 2,787 (1,087)
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts) Net income (loss) Adjustments to reconcile net income to non-GAAP net income Stock-based compensation Tax effect Non-GAAP net income Non-GAAP net income Non-GAAP earnings per share, excluding stock-based compensation and related tax effects:	\$ \$ \$	1,772 3,413 (728) 3,413 (389) 2,296	\$ \$ \$	1,535 2,787 5,935 2,787 (1,087 7,635
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts) Net income (loss) Adjustments to reconcile net income to non-GAAP net income Stock-based compensation Tax effect Non-GAAP net income Non-GAAP net income Non-GAAP earnings per share, excluding stock-based compensation and related tax effects: Basic	\$ \$ \$ \$	1,772 3,413 (728) 3,413 (389) 2,296	\$ <u>\$</u> \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,535 2,787 5,935 2,787 (1,087 7,635
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts) Net income (loss) Adjustments to reconcile net income to non-GAAP net income Stock-based compensation Tax effect Non-GAAP net income Non-GAAP net income Non-GAAP earnings per share, excluding stock-based compensation and related tax effects: Basic Diluted	\$ \$ \$	1,772 3,413 (728) 3,413 (389) 2,296	\$ \$ \$	1,535 2,787 5,935 2,787 (1,087 7,635
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts) Net income (loss) Adjustments to reconcile net income to non-GAAP net income Stock-based compensation Tax effect Non-GAAP net income Non-GAAP net income Non-GAAP earnings per share, excluding stock-based compensation and related tax effects: Basic Diluted Shares used in the calculation of non-GAAP earnings per share:	\$ \$ \$ \$	1,772 3,413 (728) 3,413 (389) 2,296 0.07 0.06	\$ <u>\$</u> \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,535 2,787 5,935 2,787 (1,087) 7,635 0.23 0.21
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts) Net income (loss) Adjustments to reconcile net income to non-GAAP net income Stock-based compensation Tax effect Non-GAAP net income Non-GAAP earnings per share, excluding stock-based compensation and related tax effects: Basic Diluted Shares used in the calculation of non-GAAP earnings per share: Basic	\$ \$ \$ \$	1,772 3,413 (728) 3,413 (389) 2,296 0.07 0.06	\$ <u>\$</u> \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,535 2,787 5,935 2,787 (1,087 7,635 0.23 0.21
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts) Net income (loss) Adjustments to reconcile net income to non-GAAP net income Stock-based compensation Tax effect Non-GAAP net income Non-GAAP net income Non-GAAP earnings per share, excluding stock-based compensation and related tax effects: Basic Diluted Shares used in the calculation of non-GAAP earnings per share:	\$ \$ \$ \$	1,772 3,413 (728) 3,413 (389) 2,296 0.07 0.06	\$ <u>\$</u> \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,535 2,787 5,935 2,787 (1,087 7,635 0.23 0.21
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts) Net income (loss) Adjustments to reconcile net income to non-GAAP net income Stock-based compensation Tax effect Non-GAAP net income Non-GAAP earnings per share, excluding stock-based compensation and related tax effects: Basic Diluted Shares used in the calculation of non-GAAP earnings per share: Basic	\$ \$ \$ \$	1,772 3,413 (728) 3,413 (389) 2,296 0.07 0.06	\$	1,535 2,787 5,935 2,787 (1,087 7,635 0.23 0.21
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts) Net income (loss) Adjustments to reconcile net income to non-GAAP net income Stock-based compensation Tax effect Non-GAAP net income Non-GAAP earnings per share, excluding stock-based compensation and related tax effects: Basic Diluted Shares used in the calculation of non-GAAP earnings per share: Basic Diluted RECONCILIATION OF OPERATING EXPENSES TO NON-GAAP OPERATING EXPENSES (in thousands, except per share amounts)	\$ \$ \$ \$ \$	1,772 3,413 (728) 3,413 (389) 2,296 0.07 0.06 33,696 35,420	\$	1,535 2,787 5,935 2,787 (1,087) 7,635 0.23 0.21 33,340 35,891
Research and development Selling, general and administrative Total RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts) Net income (loss) Adjustments to reconcile net income to non-GAAP net income Stock-based compensation Tax effect Non-GAAP net income Non-GAAP net income Non-GAAP earnings per share, excluding stock-based compensation and related tax effects: Basic Diluted Shares used in the calculation of non-GAAP earnings per share: Basic Diluted RECONCILIATION OF OPERATING EXPENSES TO NON-GAAP OPERATING EXPENSES (in thousands, except per share amounts)	\$ \$ \$ \$	1,772 3,413 (728) 3,413 (389) 2,296 0.07 0.06	\$	1,535 2,787 5,935 2,787 (1,087) 7,635 0.23 0.21 33,340 35,891
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2009 Second Quarter Outlook

RECONCILIATION OF R&D AND SG&A EXPENSES TO NON-GAAP R&D AND SG&A EXPENSES (in thousands, except per share amounts)

	Three mon	Three months ending	
	June 3	June 30, 2009	
	Low	High	
R&D and SG&A	\$17,500	\$19,800	
A1'			
Adjustments to reconcile R&D and SG&A to non-GAAP R&D and SG&A			
Stock-based compensation	(3,500)	(3,800)	
Non-GAAP R&D and SG&A	\$14,000	\$16,000	