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): September 30, 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:

□ 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))

D 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 October 22, 2009, Monolithic Power Systems, Inc. ("MPS"), a Delaware corporation, issued a press release and held a conference call regarding its financial results for the three and nine months ended September 30, 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 October 22, 2009, announcing the financial results for the three and nine months ended September 30, 2009

Exhibit 99.1 Description Press Release issued on October 22, 2009, announcing the financial results for the three and nine months ended September 30, 2009

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.

Date: October 22, 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)

PRESS RELEASE For Immediate Release



Monolithic Power Systems Announces Results for the Quarter and Nine Months ended September 30, 2009

SAN JOSE, Calif. October 22, 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 and nine months ended September 30, 2009.

The results for the quarter ended September 30, 2009 are as follows:

- Net revenues of \$48.0 million, up 16.5% sequentially from \$41.2 million in the second quarter of 2009 and down 1.9% from \$48.9 million in the third quarter of 2008
- Gross margin of 60.7%, compared to 59.1% in the second quarter of 2009 and 62.8% in the third quarter of 2008
- GAAP operating expenses of \$16.0 million, including \$19.5 million for research and development and selling, general and administrative expenses, which includes \$3.1 million for stock-based compensation, \$2.8 million for litigation expenses and a credit of \$6.4 million for the net effect of a litigation provision reversal.
- Non-GAAP(1) operating expenses of \$19.2 million, excluding \$3.1 million for stock-based compensation and a credit of \$6.4 million for the net effect of a litigation provision reversal, compared to \$16.8 million for the three months ended September 30, 2008.
- GAAP net income of \$12.6 million, with GAAP earnings per share of \$0.34 per diluted share
- Non-GAAP(1) net income of \$8.8 million, or \$0.24 per diluted share, excluding stock-based compensation and related tax effects and a credit of \$6.4 million for the net effect of a litigation provision reversal.

The results for the nine months ended September 30, 2009 are as follows:

- Net revenues of \$118.5 million, compared to \$125.8 million for the nine months ended September 30, 2008, a decrease of 5.8%
- Gross margin of 59.4%, compared to 62.9% for the nine months ended September 30, 2008
- GAAP operating expenses of \$55.2 million, including \$54.5 million for research and development and selling, general and administrative expenses, which includes \$10.2 million for stock-based compensation, \$7.1 million for litigation expenses and a credit of \$6.4 million for the net effect of a litigation provision reversal.
- Non-GAAP(1) operating expenses of \$51.4 million, excluding \$10.2 million for stock-based compensation and a credit of \$6.4 million for the net effect of a litigation provision reversal, compared to \$49.7 million for the nine months ended September 30, 2008, an increase of 3.4%

- GAAP net income of \$15.0 million, with GAAP EPS of \$0.41 per diluted share
- Non-GAAP(1) net income of \$17.2 million, or \$0.47 per diluted share, excluding stock-based compensation and related tax effects and a credit of \$6.4 million for the net effect of a litigation provision reversal.

"MPS had an outstanding third quarter, as we almost matched our all time high in quarterly revenue" said Michael Hsing, chief executive officer and founder of MPS. "We are executing very well, as we released a record number of new products this quarter. The future for MPS continues to look great."

Business Outlook

The following are MPS' financial targets for the fourth quarter ending December 31, 2009:

- Revenues in the range of \$43.0 million to \$46.0 million.
- Gross margin at similar levels to the third quarter of 2009.
- Research and development and selling, general and administrative expenses between \$19.3 million and \$20.7 million. Non-GAAP(1) research and development and selling, general and administrative expenses between \$16.2 million and \$17.2 million. This excludes an estimate of stock-based compensation expense in the range of \$3.1 million to \$3.5 million.
- Litigation expense in the range of \$2.6 million to \$3.0 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 and nine months ended September 30, 2009 and 2008 excludes the effect of stock-based compensation expense, a credit for the net effect of a litigation provision reversal and their related tax effects. Non-GAAP operating expenses for the quarter and nine months ended September 30, 2009 and 2008 exclude the effect of stock-based compensation expense and a credit for the net effect of a litigation provision reversal. 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 comparabile in most cases to the non-GAAP financials measures used by MPS.

Conference Call

MPS plans to conduct a management teleconference covering its quarter and nine months ended September 30, 2009 results at 2:00 p.m. PT / 5:00 p.m. ET today, October 22, 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 75482076. 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 December 31, 2009, and our outlook for the long term prospects of the company. 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-Q filed on July 30, 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:

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

	September 30, 2009		December 31, 200		
ASSETS					
Current assets:					
Cash and cash equivalents	\$	51,993	\$	83,266	
Short-term investments		97,763		21,922	
Accounts receivable, net of allowances of \$7 and \$0 in 2009 and 2008, respectively		19,493		9,115	
Inventories		20,358		18,887	
Deferred income tax assets, net - current		76		75	
Prepaid expenses and other current assets		2,790		2,622	
Restricted cash				7,360	
Total current assets		192,473		143,247	
Property and equipment, net		17,012		14,163	
Long-term investments		19,465		37,425	
Deferred income tax assets, net - long-term		19		19	
Other assets		431		438	
Restricted assets		7		7	
Total assets	\$	229,407	\$	195,299	
LIABILITIES AND STOCKHOLDERS' EQUITY					
Current liabilities:					
Accounts payable	\$	8,867	\$	4,674	
Accrued compensation and related benefits		6,351		7,848	
Accrued liabilities		8,041		13,360	
Total current liabilities		23,259		25,882	
Non-current income tax liability		4,798		4,762	
Other long-term liabilities		8		10	
Total liabilities		28,065		30,654	
Stockholders' equity:					
Common stock, \$0.001 par value, \$35 and \$34 in 2009 and 2008, respectively; shares authorized: 150,000,000; shares issued and outstanding: 34,841,371 and 33,646,821 in 2009 and 2008,					
respectively		168,472		147,298	
Retained earnings		32,431		17,411	
Accumulated other comprehensive income (loss)		439		(64)	
Total stockholders' equity		201,342		164,645	
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Consolidated Income Statements (Unaudited, in thousands, except per share amounts)

	TI	Three months ended September 30,			Nine months end	ed September 30,
		2009		2008	2009	2008
Revenue	\$	47,966	\$	48,891	\$ 118,461	\$ 125,802
Cost of revenue*		18,868		18,201	48,122	46,620
Gross profit		29,098		30,690	70,339	79,182
Operating expenses:						
Research and development*		10,080		9,420	27,929	25,594
Selling, general and administrative*		9,438		9,560	26,567	27,200
Litigation expense		2,811		1,090	7,090	6,120
Litigation provision reversal, net		(6,356)			(6,356)	
Total operating expenses		15,973		20,070	55,230	58,914
Income from operations		13,125		10,620	15,109	20,268
Other income (expense):						
Interest and other income		161		684	827	2,928
Interest and other expense		(76)		(389)	(355)	(507)
Total other income, net		85		295	472	2,421
Income before income taxes		13,210		10,915	15,581	22,689
Income tax provision		648		458	561	1,697
Net income	\$	12,562	\$	10,457	\$ 15,020	\$ 20,992
Basic net income per share	\$	0.36	\$	0.31	\$ 0.44	\$ 0.63
Diluted net income per share	\$	0.34	\$	0.29	\$ 0.41	\$ 0.58
Weighted average common shares outstanding		34,552		33,869	34,082	33,482
Stock options and restricted stock		2,695		2,733	2,273	2,850
Diluted weighted-average common equivalent shares outstanding	_	37,247		36,602	36,355	36,332

* Stock-based compensation has been included in the following line items:

Cost of revenue	\$ 69	\$ 76	\$ 217	\$ 249
Research and development	1,409	1,471	4,656	4,074
Selling, general and administrative	 1,688	 1,787	 5,558	 5,141
Total	\$ 3,166	\$ 3,334	\$ 10,431	\$ 9,464

RECONCILIATION OF NET INCOME TO NON-GAAP NET INCOME (in thousands, except per share amounts)

Net income	\$ 12,562	\$ 10,457	\$ 15,020	\$ 20,992
Adjustments to reconcile net income to non-GAAP net income				
Stock-based compensation	\$ 3,166	\$ 3,334	\$ 10,431	\$ 9,464
Litigation provision reversal, net	(6,356)		(6,356)	_
Tax effect	 (605)	 (1,679)	 (1,896)	 (3,603)
Non-GAAP net income	\$ 8,767	\$ 12,112	\$ 17,199	\$ 26,853
Non-GAAP earnings per share, excluding stock-based compensation and related tax				
effects:				
Basic	\$ 0.25	\$ 0.36	\$ 0.50	\$ 0.80
Diluted	\$ 0.24	\$ 0.33	\$ 0.47	\$ 0.74
Shares used in the calculation of non-GAAP earnings per share:				
Basic	34,552	33,869	34,082	33,482
Diluted	37,247	36,602	36,355	36,332

RECONCILIATION OF OPERATING EXPENSES TO NON-GAAP OPERATING EXPENSES (in thousands, except per share amounts)

Total operating expenses	\$ 15,973	\$ 20,070	\$ 55,230	\$ 58,914
Adjustments to reconcile total operating expenses to non-GAAP total operating expenses				
Stock-based compensation	\$ (3,097)	\$ (3,258)	\$ (10, 214)	\$ (9,215)
Litigation provision reversal, net	 6,356	 _	 6,356	 —
Non-GAAP total operating expenses	\$ 19,232	\$ 16,812	\$ 51,372	\$ 49,699

2009 Fourth 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)

		ths ending r 31, 2009
	Low	High
R&D and SG&A	\$16,200	\$17,200
Adjustments to reconcile R&D and SG&A to non-GAAP R&D and SG&A		
Stock-based compensation	3,100	3,500
Non-GAAP R&D and SG&A	\$19,300	\$20,700