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): July 27, 2010

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 July 28, 2010, Monolithic Power Systems, Inc. ("MPS"), a Delaware corporation, issued a press release regarding its financial results for the quarter and half year ended June 30, 2010. 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 8.01 Other Events.

On July 27, 2010, the Board of Directors of MPS approved the repurchase of up to \$50 million dollars of the Company's Common Stock between August 2, 2010 and December 31, 2011. The Company may repurchase its Common Stock on the open market in accordance with Rule 10b-18 of the Securities and Exchange Commission Act of 1934, as amended. A copy of the press release is attached hereto as Exhibit 99.2.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit	Description
99.1	Press Release issued on July 28, 2010, announcing the financial results for the quarter and half year ended June 30, 2010
99.2	Press Release issued on July 28, 2010, announcing the approval of the stock repurchase program

Index to Exhibits

Exhibit Description

- 99.1 Press Release issued on July 28, 2010, announcing the financial results for the quarter and half year ended June 30, 2010
- 99.2 Press Release issued on July 28, 2010, announcing the approval of the stock repurchase program

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: July 28, 2010

By: <u>/S/ C. RICHARD NEELY, JR.</u>

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



Monolithic Power Systems Announces Consecutive Record Revenue Results for the Quarter and Half Year ended June 30, 2010

SAN JOSE, Calif. July 28, 2010—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 half year ended June 30, 2010.

The results for the quarter ended June 30, 2010 are as follows:

- Net revenues of \$55.7 million, an increase of 10.8% sequentially from \$50.3 million in the first quarter of 2010 and 35.3% from \$41.2 million in the second quarter of 2009.
- Gross margin of 58.2%, compared to 58.3% in the first quarter of 2010 and 59.1% in the second quarter of 2009.
- GAAP operating expenses of \$25.6 million, including \$23.4 million for research and development and selling, general and administrative expenses, which includes \$5.4 million for stock-based compensation and \$2.2 million for litigation expenses.
- Non-GAAP(1) operating expenses of \$20.2 million, excluding \$5.4 million for stock-based compensation, compared to \$17.5 million for the three months ended June 30, 2009.
- GAAP net income of \$6.4 million, with GAAP earnings per share of \$0.17 per diluted share.
- Non-GAAP(1) net income of \$11.7 million, with non-GAAP earnings per share of \$0.31 per diluted share, excluding stock-based compensation and related tax effects.

The results for the half year ended June 30, 2010 are as follows:

- Net revenues of \$105.9 million, compared to \$70.5 million for the half year ended June 30, 2009, an increase of 50.3%
- Gross margin of 58.3%, compared to 58.5% for the half year ended June 30, 2009
- GAAP operating expenses of \$48.6 million, including \$44.8 million for research and development and selling, general and administrative expenses, which includes \$9.4 million for stock-based compensation and \$3.8 million for patent litigation expenses
- Non-GAAP(1) operating expenses of \$39.3 million, excluding \$9.4 million for stock-based compensation, compared to \$32.1 million for the half year ended June 30, 2009, an increase of 22.2%.
- GAAP net income of \$12.8 million, with GAAP EPS of \$0.33 per diluted share
- Non-GAAP(1) net income of \$21.6 million, with non-GAAP earnings per share of \$0.57 per diluted share, excluding stock-based compensation and related tax effects

"Our outstanding revenue performance is driven by our new product releases of the last two years", said Michael Hsing, CEO of MPS. "We are now seeing the dramatic top line and bottom line growth from these successful products."

Business Outlook

The following are MPS' financial targets for the third quarter ending September 30, 2010:

- Revenues in the range of \$66.0 million to \$70.0 million.
- Non-GAAP net profit at the mid to upper end of our new net margin target model of 22 to 27 percent of sales. Gross margin is likely to be in the range of 54 to 56 percent due to increased input costs.
- Research and development and selling, general and administrative expenses between \$23.2 million and \$24.7 million. Non-GAAP(1) research
 and development and selling, general and administrative expenses between \$18.5 million and \$19.5 million. This excludes an estimate of stockbased compensation expense in the range of \$4.7 million to \$5.2 million.
- Litigation expense in the range of \$0.5 million to \$0.7 million.

(1) Non-GAAP net income, non-GAAP net profit, 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 six months ended June 30, 2010 and 2009 excludes the effect of stock-based compensation expense and their related tax effects. Non-GAAP operating expenses for the quarter and six months ended June 30, 2010 and 2009 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. This information is not in accordance with, or an alternative for, information prepared using GAAP. A schedule reconciling these amounts is included at the end of this press 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 financial 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 an investor teleconference covering its quarter ended June 30, 2010 results at 2:00 p.m. PT / 5:00 p.m. ET today, July 28, 2010. To access the conference call and the following replay of the conference call, go to <u>http://ir.monolithicpower.com</u> and click on 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 68963211. 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, as that term is defined in the Private Securities Litigation Reform Act of 1995, regarding, among other things, (i) targeted revenues, revenue growth rates, net 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 September 30, 2010, (ii) our outlook for the long term prospects of the company, (iii) our ability to accelerate our revenue and net income growth rates; (iv) our ability to penetrate new markets and expand our market share, (v) our expected pricing practices in 2010, (vi) the seasonality of our business, (vii) our ability to reduce our manufacturing costs, (viii) our ability to obtain adequate supplies of our products from our third-party manufacturer, and (ix) statements of the assumptions underlying or relating to any statement described in (i), (ii), (iii), (iv), (v), (vi), (vii) or (viii). These forward-looking 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, which speak only as of the date hereof. 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, in particular the new products launched within the past 18 months, being lower than expected; competition generally and the increasingly competitive nature of our industry; the effect of catastrophic events; adequate supply of our products from our third-party manufacturer; 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 April 29, 2010.

The forward-looking statements in this press release represent MPS' targets and current expectations, as of the date hereof, 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.

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 Sheets (Unaudited, in thousands, except par value)

	June 30, 2010	Decer	mber 31, 2009	
ASSETS				
Current assets:				
Cash and cash equivalents	\$ 48,962	\$	46,717	
Short-term investments	140,829		118,914	
Accounts receivable, net of allowances of \$0 in both 2010 and 2009	30,322		15,521	
Inventories	14,458		19,616	
Deferred income tax assets, net - current	5		5	
Prepaid expenses and other current assets	2,820		2,726	
Total current assets	237,396		203,499	
Property and equipment, net	27,253		17,968	
Long-term investments	19,495		19,445	
Deferred income tax assets, net - long-term	175		175	
Other assets	731		734	
Total assets	\$ 285,050	\$	241,821	
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$ 11,001	\$	7,787	
Accrued compensation and related benefits	9,388		8,454	
Accrued liabilities	9,116		7,681	
Total current liabilities	29,505		23,922	
Non-current income tax liability	4,915		4,915	
Other long-term liabilities	662		27	
Total liabilities	35,082		28,864	
Stockholders' equity:				
Common stock, \$0.001 par value, \$37 and \$35 in 2010 and 2009, respectively; shares authorized:				
150,000,000; shares issued and outstanding: 36,545,581 and 35,165,316 in 2010 and 2009, respectively	199,330		175,518	
Retained earnings	49,848		37,085	
Accumulated other comprehensive income	790		354	
Total stockholders' equity	249,968		212,957	
Total liabilities and stockholders' equity	\$ 285,050	\$	241,821	

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

	Т	Three months ended June 30,			Six months ended June 30,			
		2010	_	2009		2010		2009
Revenue	\$	55,690	\$	41,173	\$ 1	05,940	\$	70,495
Cost of revenue*		23,256		16,823		44,210	_	29,254
Gross profit		32,434		24,350		61,730		41,241
Operating expenses:								
Research and development*		11,785		9,732		22,825		17,849
Selling, general and administrative*		11,615		9,321		22,008		17,129
Litigation expense		2,228		2,233		3,795		4,279
Total operating expenses		25,628		21,286		48,628	_	39,257
Income from operations		6,806		3,064		13,102		1,984
Other income (expense):								
Interest and other income		338		281		685		666
Interest and other expense		(4)		(185)		(4)	_	(279)
Total other income, net		334		96		681		387
Income before income taxes		7,140		3,160		13,783		2,371
Income tax provision (benefit)		733		(26)		1,020		(87)
Net income	\$	6,407	\$	3,186	\$	12,763	\$	2,458
Basic net income per share	\$	0.18	\$	0.09	\$	0.36	\$	0.07
Diluted net income per share	\$	0.17	\$	0.09	\$	0.33	\$	0.07
Weighted average common shares outstanding		36,291		34,070		35,858		33,842
Stock options		2,064		2,319		2,293	_	2,036
Diluted weighted-average common equivalent shares outstanding	_	38,355		36,389		38,151		35,878
* Starly hand a managedian has been included in the fallowing line items								
* Stock-based compensation has been included in the following line items: Cost of revenue	¢	110	¢	(7	¢	105	¢	140
	\$	116 1,995	\$	67	\$	195 3,730	\$	148
Research and development Selling, general and administrative		3,428		1,687 2,098		5,638		3,247 3,870
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Total	\$	5,539	\$	3,852	\$	9,563	\$	7,265

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

	 	 			_	
Net income	\$ 6,407	\$ 3,186	\$ 1	12,763	\$	2,458
Adjustments to reconcile net income to non-GAAP net income						
Stock-based compensation	\$ 5,539	\$ 3,852	\$	9,563	\$	7,265
Tax effect	 (218)	 (903)		(731)		(1,292)
Non-GAAP net income	\$ 11,728	\$ 6,135	\$ 2	21,595	\$	8,431
Non-GAAP earnings per share, excluding stock-based compensation and related tax effects:						
Basic	\$ 0.32	\$ 0.18	\$	0.60	\$	0.25
Diluted	\$ 0.31	\$ 0.17	\$	0.57	\$	0.24
Shares used in the calculation of non-GAAP earnings per share:						
Basic	36,291	34,070	3	35,858		33,842
Diluted	38,355	36,389	3	38,151		35,878

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

Total operating expenses	\$ 25,628	\$ 21,286	\$ 48,628	\$ 39,257
Adjustments to reconcile total operating expenses to non-GAAP total operating expenses				
Stock-based compensation	\$ (5,423)	\$ (3,785)	\$ (9,368)	\$ (7,117)
Non-GAAP total operating expenses	\$ 20,205	\$ 17,501	\$ 39,260	\$ 32,140

2010 Third 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)

		nths ended er 30, 2010
	Low	High
R&D and SG&A	\$23,200	\$24,700
Adjustments to reconcile R&D and SG&A to non-GAAP R&D and SG&A		
Stock-based compensation	(4,700)	(5,200)
Non-GAAP R&D and SG&A	\$18,500	\$19,500



PRESS RELEASE For Immediate Release

Monolithic Power Systems Announces \$50 Million Stock Repurchase Program

SAN JOSE, Calif. — July 28, 2010 — Monolithic Power Systems, Inc. (Nasdaq:MPWR) ("MPS") today announced that its Board of Directors has approved a stock repurchase program that authorizes MPS to repurchase up to \$50 million dollars in the aggregate of its common stock between August 2, 2010 and December 31, 2011.

"MPS is in a very strong cash position as a result of the record financial results of the past six months. Our Board concluded that it was in the best interest of our shareholders to engage in this repurchase program," said Rick Neely, chief financial officer of MPS.

The repurchases will be funded from available working capital. As of June 3, 2010, MPS had cash, cash equivalents and investments of approximately \$209 million, and approximately 38.4 million diluted weighted average shares of common stock outstanding.

Stock repurchases under the program may be made through open market repurchases, privately negotiated transactions or other structures in accordance with applicable state and federal securities laws, at times and in amounts as management deems appropriate. The timing and the amount of any repurchased common stock will be determined by MPS' management based on its evaluation of market conditions, legal requirements, share price, and other factors. Repurchases of common stock may be made under a Rule 10b5-1 plan, which would permit common stock to be repurchased when the Company might otherwise be precluded from doing so under insider trading laws. The repurchase program does not obligate MPS to purchase any particular number of shares and may be suspended, modified, or discontinued at any time without prior notice.

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.

Forward-Looking Statements

Actual events may differ materially from those indicated or suggested by such forward looking statements as a result of various important factors including, among others, the market price of the Company's common stock prevailing from time to time, the nature of other investment opportunities presented to the Company from time to time, the Company's cash flows from operations, general economic condition, and other factors as identified in the Company's most recent Quarterly Report on Form 10-Q filed with the SEC (a copy of which may be accessed through the company's website at www.monolithicpower.com). In addition, the forward-looking statements included in this press release represent the Company's views as of the date of this press release and these views could change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date of the press release.

Contact:

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