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): August 2, 2011

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)

D 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 August 2, 2011, Monolithic Power Systems, Inc. ("MPS"), a Delaware corporation, issued a press release, updating the research and development and selling, general and administrative guidance for the quarter ending September 30, 2011. 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
	Press Release issued on August 2, 2011, updating the research and development and selling, general and administrative guidance for the quarter
99.1	ending September 30, 2011.

Exhibit Description 99.1 Press Release issued on August 2, 2011, updating the research and development and selling, general and administrative guidance for the quarter ending September 30, 2011.

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: August 3, 2011

By:

/s/ Meera Rao

Meera Rao 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

PRESS RELEASE For Immediate Release

Monolithic Power Systems Updates Guidance for the Quarter Ending September 30, 2011

SAN JOSE, Calif. August 2, 2011--Monolithic Power Systems (MPS) (Nasdaq: MPWR), a leading fabless manufacturer of high-performance analog and mixed-signal semiconductors, today updates it guidance related to research and development and selling, general and administrative expenses. The entire guidance for the third quarter ending September 30, 2011 is as follows:

Business Outlook

The following are MPS' financial targets for the third quarter ending September 30, 2011:

- Revenues in the range of \$56 million to \$60 million.
- Gross margin in the range of 52.0% to 52.5%.
- Litigation expense in the range of \$0.6 million to \$0.8 million.
- Research and development and selling, general and administrative expenses between \$21.5 million and \$23.9 million. Non-GAAP(1) research and development and selling, general and administrative expenses between \$18.5 million and \$20.5 million. This excludes an estimate of stock-based compensation expense in the range of \$3.0 million to \$3.4 million.

	Three	Three months ended September 30, 2011		
		Low	High	
R&D and SG&A	\$	21,500	\$	23,900
Adjustments to reconcile R&D and SG&A to non-GAAP R&D and SG&A				
Stock-based compensation		(3,000)		(3,400)
Non-GAAP R&D and SG&A	\$	18,500	\$	20,500

(1) Projected non-GAAP research and development and selling, general and administrative expenses exclude the effect of stock-based compensation expense. These non-GAAP financial measures are not prepared in accordance with GAAP and should not be considered as a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP. A schedule reconciling non-GAAP financial measures 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 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.

Safe Harbor Statement

This press release contains forward-looking statements, as that term is defined in the Private Securities Litigation Reform Act of 1995, including, among other things, projected 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 September 30, 2011. 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 significant 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, our ability to attract new customers and retain existing customers; acceptance of, or demand for, MPS' products, in particular the new products launched within the past 18 months, being different than expected; competition generally and the increasingly competitive nature of our industry; any market disruptions or interruptions in MPS' schedule of new product release development; adverse changes in production and testing efficiency of our products; adverse changes in government regulations in foreign countries where MPS has offices or operations; the effect of catastrophic events; adequate supply of our products from our third-party manufacturer; the risks, uncertainties and costs of litigation in which the Company is involved; the outcome of any upcoming trials, hearings, motions and appeals; the adverse impact on MPS' financial performance if its tax and litigation provisions are inadequate; adverse changes or developments in the semiconductor industry generally; difficulty in predicting or budgeting for future customer demand and channel inventories, 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 March 4, 2011 and its Form 10-Q filed on April 28, 2011.

The forward-looking statements in this press release represent MPS' projections 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.

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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.

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