UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 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 20, 2011

MONOLITHIC POWER SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

000-51026

(Commission File Number)

Delaware (State or other jurisdiction of incorporation)

77-0466789 (I.R.S. Employer Identification No.)

6409 Guadalupe Mines Road, San Jose, CA 95120

(Address of principal executive offices, including 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 (see General Instruction A.2. below):

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 8.01 Other Events.

On September 20, 2011, Monolithic Power Systems, Inc. announced updated revenue guidance for the third fiscal quarter ending September 30, 2011. A copy of the press release is attached hereto as Exhibit 99.1 and incorporated herein by reference.

Item 9.01. Exhibits.

- (d) Exhibits.
- 99.1 Press release dated September 20, 2011, announcing updated revenue guidance for the third fiscal quarter ending September 30, 2011.

SIGNATURES

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

Date: September 20, 2011 /s/ Meera Rao

Meera Rao Chief Financial Officer (Principal Financial and Accounting Officer and Duly Authorized Officer)

EXHIBIT INDEX

99.1 Press release dated September 20, 2011, announcing updated revenue guidance for the third fiscal quarter ending September 30, 2011.



Monolithic Power Systems Updates Revenue Guidance for the Third Quarter ending September 30, 2011

SAN JOSE, Calif. September 20, 2011—Monolithic Power Systems (MPS) (Nasdaq: MPWR), a leading fabless manufacturer of high-performance analog and mixed-signal semiconductors, today announced updated revenue guidance for the third fiscal quarter ending September 30, 2011.

Based on the current demand outlook, the company expects its third quarter revenues to be in the range of \$52 to \$54 million.

"The economy is slowing down considerably," said Michael Hsing, chief executive officer and founder of MPS. "We are slowing down channel inventory to reflect the uncertain business climate."

No conference call will be held in conjunction with this business update. Additional commentary pertaining to this quarter will be available when the company reports its third quarter 2011 results.

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, and demand outlook and market conditions 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 are cautioned not to place undue reliance on any forward-looking statements, which speak only as of the date hereof. Current uncertainty in global economic conditions poses a risk to the overall economy and to MPS, as consumers and businesses may defer purchases in response to tighter credit and negative financial news, which could adversely affect product demand. Consequently, the demand for MPS' products could be materially and adversely different from MPS' current expectations due to changes in business and economic conditions, including, among others, conditions in the credit market that could affect consumer confidence; changes in order patterns including order cancellations; and changes in the level of inventory at MPS' customers. Other 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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Contact:

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