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 19, 2007

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 September 19, 2007, Monolithic Power Systems, Inc., a Delaware corporation, issued a press release announcing increased revenue expectations for the third quarter of 2007. 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 September 19, 2007

Exhibit	Description
99.1	Press Release issued on September 19, 2007

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.

By:

Date: September 19, 2007

/s/ 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, Inc. Increases Third Quarter 2007 Revenue Outlook Company to announce Q307 results Oct. 30th

SAN JOSE, Calif. September 19, 2007—Monolithic Power Systems (MPS) (Nasdaq: MPWR), a leading fabless manufacturer of high-performance analog and mixed-signal semiconductors, today announced increased revenue expectations for the third quarter of 2007.

"We are benefiting from strong demand in the notebook and flat panel TV markets, and are growing our revenues across all product lines this quarter", said Michael Hsing, chief executive officer of MPS. As a result, the company now expects third quarter revenue to be in the range of \$38 million to \$39 million. Prior revenue guidance for the third quarter was a range of \$33 million to \$35 million.

MPS will report its third quarter earnings in a conference call scheduled for Tuesday, October 30, 2007 at 2:00 pm PST. Additional details on the conference call will be provided at a later date.

Safe Harbor Statement

This press release contains preliminary and un-audited potential financial results and forward-looking statements regarding the estimated net revenue for the third quarter of 2007 and the distribution of revenue between various MPS product lines. 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 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, production risks, backlog uncertainties, unexpected customer cancellations, less than expected end customer demand, unanticipated returns or credits, audit adjustments or other financial contingencies; and other important risk factors identified in MPS' SEC filings, including, but not limited to, its Annual Report on Form 10-K filed on March 16, 2007 and Quarterly Report on Form 10-Q filed on August 1, 2007.

The forward-looking statements in this press release represent MPS' best estimates of its third quarter 2007 net revenue at this time, not predictions of actual performance. MPS assumes no obligation to update the information in this press release.

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