

**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):
February 3, 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)
 - 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 February 3, 2011, Monolithic Power Systems, Inc. ("MPS"), a Delaware corporation, issued a press release regarding its financial results for the quarter and year ended December 31, 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 February 1, 2011, the Board of Directors of MPS approved an increase to the stock repurchase program from \$50 million to \$70 million through 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 February 3, 2011, announcing the financial results for the quarter and year ended December 31, 2010
99.2	Press Release issued on February 3, 2011, announcing an increase to the stock repurchase program from \$50 million to \$70 million

Index to Exhibits

Exhibit	Description
99.1	Press Release issued on February 3, 2011, announcing the financial results for the quarter and year ended December 31, 2010
99.2	Press Release issued on February 3, 2011, announcing an increase to the stock repurchase program from \$50 million to \$70 million

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: February 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 Announces Results for the Quarter and Year ended December 31, 2010

SAN JOSE, Calif. February 3, 2011—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 year ended December 31, 2010.

The results for the quarter ended December 31, 2010 are as follows:

- Net revenues of \$47.1 million, a decrease from \$65.8 million in the third quarter of 2010 and flat to the fourth quarter of 2009.
- Gross margin of 50.5%, a decrease from 54.7% in the third quarter of 2010 and 58.7% in the fourth quarter of 2009.
- GAAP operating expenses of \$19.8 million, including \$19.1 million for research and development and selling, general and administrative expenses, which includes \$3.0 million for stock-based compensation, and \$0.7 million for litigation expenses. Comparatively, for the three months ended December 31, 2009, GAAP operating expenses were \$22.9 million, including \$20.6 million for research and development and selling, general and administrative expenses, which includes \$4.2 million for stock-based compensation and \$2.4 million for litigation expenses.
- Non-GAAP(1) operating expenses of \$16.8 million, excluding \$3.0 million for stock-based compensation, compared to \$18.8 million, excluding \$4.2 million for stock-based compensation for the three months ended December 31, 2009.
- GAAP net income of \$3.6 million, with GAAP earnings per share of \$0.10 per diluted share. Comparatively, GAAP net income was \$4.7 million, with GAAP earnings per share of \$0.12 per diluted share for the quarter ended December 31, 2009.
- Non-GAAP(1) net income of \$6.7 million, with non-GAAP earnings per share of \$0.18 per diluted share, excluding stock-based compensation and related tax effects.

The results for the year ended December 31, 2010 are as follows:

- Net revenues of \$218.8 million, compared to \$165.0 million for the year ended December 31, 2009, an increase of 32.6%.
 - Gross margin of 55.5%, compared to 59.2% for the year ended December 31, 2009.
 - GAAP operating expenses of \$91.0 million, including \$85.5 million for research and development and selling, general and administrative expenses, which includes \$16.4 million for stock-based compensation, and \$5.4 million for patent litigation expenses. Comparatively, GAAP operating expenses of \$78.1 million, including \$75.0 million for research and development and selling, general and administrative expenses, which includes \$14.4 million for stock-based compensation, \$9.5 million for patent litigation expenses and a credit of \$6.4 million for the net effect of a litigation provision reversal.
 - Non-GAAP(1) operating expenses of \$74.5 million, excluding \$16.4 million for stock-based compensation, compared to \$70.1 million, excluding \$14.4 million in stock-based compensation and an add back of a litigation provision reversal of \$6.4 million for the year ended December 31, 2009, an increase of 6.3%.
 - GAAP net income of \$29.6 million, with GAAP EPS of \$0.78 per diluted share compared to GAAP net income of \$19.7 million, with GAAP EPS of \$0.54 per diluted share for the year ended December 31, 2009.
 - Non-GAAP(1) net income of \$44.6 million, with non-GAAP earnings per share of \$1.18 per diluted share, excluding stock-based compensation and related tax effects.
-

“2010 was a growth year for MPS, and 2011 is a transitional year. We are now focused on our ongoing efforts to diversify into new markets, and improve our internal systems”, said Michael Hsing, CEO of MPS. “And by the end of 2011, we will be better positioned for the future.”

Business Outlook

The following are MPS’ financial targets for the first quarter ending March 31, 2011:

- Revenues in the range of \$40 million to \$44 million.
- Gross margin is expected to be in a similar range to the prior quarter.
- Research and development and selling, general and administrative expenses between \$19.1 million and \$20.5 million. Non-GAAP(1) research and development and selling, general and administrative expenses between \$16.3 million and \$17.3 million. This excludes an estimate of stock-based compensation expense in the range of \$2.8 million to \$3.2 million.
- Litigation expense in the range of \$0.5 million to \$0.7 million.
- Non-GAAP tax rate in the range of 5 to 10 per cent.

(1) Non-GAAP net income, non-GAAP earnings, non-GAAP operating expenses and non-GAAP research and development and selling, general and administrative expense differ from net income, earnings, 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 year ended December 31, 2010 and 2009 excludes the effect of stock-based compensation expense and its related tax effect. Non-GAAP net income for the year ended December 31, 2009 also excludes a litigation provision reversal and its related tax effect. Non-GAAP operating expenses for the quarter and year ended December 31, 2010 and 2009 exclude the effect of stock-based compensation expense. Non-GAAP operating expenses for the year ended December 31, 2009 also excludes a litigation provision reversal. 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.

Conference Call

MPS plans to conduct an investor teleconference covering its quarter ended December 31, 2010 results at 2:00 p.m. PT / 5:00 p.m. ET today, February 3, 2011. To access the conference call and the following replay of the conference call, go to <http://ir.monolithicpower.com> 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 20214306. 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, including, among other things, (i) projected revenues, gross margin, GAAP and non-GAAP research and development and selling, general and administrative expenses, stock-based compensation expense, litigation expense and non-GAAP tax rate for the quarter ending March 31, 2011, (ii) our outlook for the long term prospects of the company, including the prospects of our new product families, (iii) our ability to penetrate new markets and expand our market share, (iv) our expected pricing practices in 2011, (v) the seasonality of our business, (vi) our ability to reduce our manufacturing costs, and (vii) statements of the assumptions underlying or relating to any statement described in (i), (ii), (iii), (iv), (v) or (vi). 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-Q filed on November 3, 2010.

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.

###

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:

Meera Rao
Chief Financial Officer
Monolithic Power Systems, Inc.
408-826-0777
investors@monolithicpower.com

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

	December 31,	
	2010	2009
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 48,010	\$ 46,717
Short-term investments	129,709	118,914
Accounts receivable, net of allowances of \$0 in both 2010 and 2009	18,347	15,521
Inventories	25,789	19,616
Deferred income tax assets, net - current	204	5
Prepaid expenses and other current assets	2,314	2,726
Total current assets	224,373	203,499
Property and equipment, net	37,262	17,968
Long-term investments	19,180	19,445
Deferred income tax assets, net - long-term	39	175
Other assets	749	734
Total assets	\$ 281,603	\$ 241,821
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 8,979	\$ 7,787
Accrued compensation and related benefits	8,792	8,454
Accrued liabilities	11,199	7,681
Total current liabilities	28,970	23,922
Non-current income tax liability	5,015	4,915
Other long-term liabilities	723	27
Total liabilities	34,708	28,864
Stockholders' equity:		
Common stock, \$0.001 par value, \$35 and \$35 in 2010 and 2009, respectively; shares authorized: 150,000,000; shares issued and outstanding: 35,063,033 and 35,165,316 in 2010 and 2009, respectively	178,269	175,518
Retained earnings	66,647	37,085
Accumulated other comprehensive income	1,979	354
Total stockholders' equity	246,895	212,957
Total liabilities and stockholders' equity	\$ 281,603	\$ 241,821

Consolidated Statement of Operations
(Unaudited, in thousands, except per share amounts)

	<u>Three months ended December 31,</u>		<u>Year ended December 31,</u>	
	<u>2010</u>	<u>2009</u>	<u>2010</u>	<u>2009</u>
Revenue	\$ 47,057	\$ 46,547	\$ 218,840	\$ 165,008
Cost of revenue*	23,316	19,208	97,383	67,330
Gross profit	<u>23,741</u>	<u>27,339</u>	<u>121,457</u>	<u>97,678</u>
Operating expenses:				
Research and development*	10,256	10,366	44,372	38,295
Selling, general and administrative*	8,865	10,185	41,169	36,752
Litigation expense	659	2,367	5,418	9,457
Litigation provision reversal, net	-	-	-	(6,356)
Total operating expenses	<u>19,780</u>	<u>22,918</u>	<u>90,959</u>	<u>78,148</u>
Income from operations	3,961	4,421	30,498	19,530
Other income (expense):				
Interest and other income	231	220	1,156	1,047
Interest and other expense	(71)	(74)	(234)	(429)
Total other income, net	<u>160</u>	<u>146</u>	<u>922</u>	<u>618</u>
Income before income taxes	4,121	4,567	31,420	20,148
Income tax provision (benefit)	540	(87)	1,857	474
Net income	<u>\$ 3,581</u>	<u>\$ 4,654</u>	<u>\$ 29,563</u>	<u>\$ 19,674</u>
Basic net income per share	<u>\$ 0.10</u>	<u>\$ 0.13</u>	<u>\$ 0.83</u>	<u>\$ 0.57</u>
Diluted net income per share	<u>\$ 0.10</u>	<u>\$ 0.12</u>	<u>\$ 0.78</u>	<u>\$ 0.54</u>
Weighted average common shares outstanding	35,420	34,987	35,830	34,310
Stock options	1,309	2,418	1,996	2,324
Diluted weighted-average common equivalent shares outstanding	<u>36,729</u>	<u>37,405</u>	<u>37,826</u>	<u>36,634</u>
* Stock-based compensation has been included in the following line items:				
Cost of revenue	\$ 128	\$ 29	\$ 393	\$ 246
Research and development	1,365	1,752	6,742	6,408
Selling, general and administrative	1,592	2,399	9,675	7,957
Total	<u>\$ 3,085</u>	<u>\$ 4,180</u>	<u>\$ 16,810</u>	<u>\$ 14,611</u>

	<u>Three months ended December 31,</u>		<u>Year ended December 31,</u>	
	<u>2010</u>	<u>2009</u>	<u>2010</u>	<u>2009</u>

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

Net income	\$ 3,581	\$ 4,654	\$ 29,563	\$ 19,674
Net income as a percentage of revenue	7.61%	10.00%	13.51%	11.92%
Adjustments to reconcile net income to non-GAAP net income				
Stock-based compensation	\$ 3,085	\$ 4,180	\$ 16,810	\$ 14,611
Litigation provision reversal, net	-	-	-	(6,356)
Tax effect	(0)	(1,180)	(1,760)	(3,076)
Non-GAAP net income	\$ 6,666	\$ 7,654	\$ 44,613	\$ 24,853
Non-GAAP net income as a percentage of revenue	14.2%	16.4%	20.4%	15.1%
Non-GAAP earnings per share, excluding stock-based compensation and related tax effects:				
Basic	\$ 0.19	\$ 0.22	\$ 1.25	\$ 0.72
Diluted	\$ 0.18	\$ 0.20	\$ 1.18	\$ 0.68
Shares used in the calculation of non-GAAP earnings per share:				
Basic	35,420	34,987	35,830	34,310
Diluted	36,729	37,405	37,826	36,634

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

Total operating expenses	\$ 19,780	\$ 22,918	\$ 90,959	\$ 78,148
Adjustments to reconcile total operating expenses to non-GAAP total operating expenses				
Stock-based compensation	\$ (2,957)	\$ (4,151)	\$ (16,417)	\$ (14,365)
Litigation provision reversal, net	-	-	-	6,356
Non-GAAP operating expenses	\$ 16,823	\$ 18,767	\$ 74,542	\$ 70,139

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

Total operating income	\$ 3,961	\$ 4,421	\$ 30,498	\$ 19,530
Operating income as a percentage of revenue	8.4%	9.5%	13.9%	11.8%
Adjustments to reconcile total operating income to non-GAAP total operating income				
Stock-based compensation	\$ 2,957	\$ 4,151	\$ 16,417	\$ 14,365
Litigation provision reversal, net	-	-	-	(6,356)
Non-GAAP operating income	\$ 6,918	\$ 8,572	\$ 46,915	\$ 27,539
Non-GAAP operating income as a percentage of revenue	14.7%	18.4%	21.4%	16.7%

2011 First Quarter Outlook

RECONCILIATION OF R&D AND SG&A EXPENSES TO NON-GAAP R&D AND SG&A EXPENSES
(in thousands)

	Three months ended March 31, 2011	
	Low	High
R&D and SG&A	<u>\$ 19,100</u>	<u>\$ 20,500</u>
Adjustments to reconcile R&D and SG&A to non-GAAP R&D and SG&A		
Stock-based compensation	<u>(2,800)</u>	<u>(3,200)</u>
Non-GAAP R&D and SG&A	<u>\$ 16,300</u>	<u>\$ 17,300</u>



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 Announces an Increase to Stock Repurchase Program from \$50 Million to \$70 Million

SAN JOSE, Calif. — February 2, 2011 — Monolithic Power Systems, Inc. (Nasdaq:MPWR) (“MPS”) today announced that its Board of Directors has approved an increase to the stock repurchase program, previously announced in August 2010, from \$50 million to \$70 million through December 31, 2011. From August 2, 2010 through December 31, 2010, the Company repurchased shares totaling \$31.5 million.

“MPS is in a very strong cash position and we believe that it is in the best interest of our shareholders to increase the repurchase amount,” said Meera Rao, chief financial officer of MPS.

The repurchases will be funded from available working capital. As of December 31, 2010, MPS had cash, cash equivalents and investments of approximately \$196.9 million, and approximately 36.7 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:

Meera Rao

Chief Financial Officer

Monolithic Power Systems, Inc.

408-826-0777

investors@monolithicpower.com