

Xiao Deming  
Form 4  
February 27, 2012

**FORM 4**

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

Check this box  
if no longer  
subject to  
Section 16.  
Form 4 or  
Form 5  
obligations  
may continue.  
See Instruction  
1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF  
SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,  
Section 17(a) of the Public Utility Holding Company Act of 1935 or Section  
30(h) of the Investment Company Act of 1940

## OMB APPROVAL

OMB  
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response... 0.5

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
Xiao Deming

2. Issuer Name **and** Ticker or Trading  
Symbol

MONOLITHIC POWER SYSTEMS  
INC [MPWR]

5. Relationship of Reporting Person(s) to  
Issuer

(Check all applicable)

(Last) (First) (Middle)

6409 GUADALUPE MINES ROAD

(Street)

SAN JOSE, CA 95120

(City)

(State)

(Zip)

3. Date of Earliest Transaction  
(Month/Day/Year)

02/27/2012

4. If Amendment, Date Original  
Filed(Month/Day/Year)

\_\_\_\_ Director \_\_\_\_ 10% Owner  
\_\_\_\_X\_\_\_\_ Officer (give title \_\_\_\_ Other (specify  
below) below)

Pres. of MPS Asia Operations

6. Individual or Joint/Group Filing(Check  
Applicable Line)  
\_\_\_\_X\_\_\_\_ Form filed by One Reporting Person  
\_\_\_\_ Form filed by More than One Reporting  
Person

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price
Common Stock	02/27/2012		S		18,303	D	\$ 19.4552 (1)
Common Stock							18,760
						I	by Spouse

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

**Persons who respond to the collection of  
information contained in this form are not  
required to respond unless the form  
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SEC 1474  
(9-02)

## Edgar Filing: Xiao Deming - Form 4

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned**  
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Nu Deriv Secur Bene Own Follo Repor Trans (Instr
				Code	V (A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares

## Reporting Owners

Reporting Owner Name / Address	Relationships
	Director 10% Owner Officer Other
Xiao Deming 6409 GUADALUPE MINES ROAD SAN JOSE, CA 95120	Pres. of MPS Asia Operations

## Signatures

By: Saria Tseng For: 02/27/2012  
Deming Xiao

\_\_Signature of Reporting Person

Date

## Explanation of Responses:

\* If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

The price is the weighted average sale price for the transactions reported on this line. The prices for the transactions reported on this line (1) range from \$19.45 to \$19.50. The reporting person undertakes to provide, upon request by the staff of the Securities and Exchange Commission, the issuer, or a security holder of the issuer, full information regarding the number of shares sold at each separate price.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.