

Xiao Deming  
Form 4  
May 10, 2011

**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  
Number: 3235-0287  
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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

3. Date of Earliest Transaction  
(Month/Day/Year)  
05/10/2011

\_\_\_\_ Director \_\_\_\_ 10% Owner  
\_X\_ Officer (give title below) \_\_\_\_ Other (specify below)  
Pres. of MPS Asia Operations

(Street)  
SAN JOSE, CA 95120

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

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

(City) (State) (Zip)

**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	05/10/2011		S <sup>(1)</sup>		1,388	D	\$ 16.1406	148,553 D
Common Stock	05/10/2011		S <sup>(1)</sup>		240	D	\$ 16.1409	22,235 I

by Spouse  
(2)

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  
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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 Repo 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: 05/10/2011  
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).

(1) Shares sold to pay tax obligations resulting from the vesting of restricted stock units.

(2) Represent shares owned by the reporting person's spouse.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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