

MONOLITHIC POWER SYSTEMS INC  
 Form 4  
 August 16, 2007

**FORM 4**

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

OMB APPROVAL

OMB Number: 3235-0287  
 Expires: January 31, 2005  
 Estimated average burden hours per response... 0.5

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

(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)

3. Date of Earliest Transaction (Month/Day/Year)  
 08/14/2007

\_\_\_\_ Director \_\_\_\_\_ 10% Owner  
 Officer (give title below) \_\_\_\_\_ Other (specify below)  
 VP, Operations

SAN JOSE, CA 95120  
 (City) (State) (Zip)

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

6. Individual or Joint/Group Filing(Check Applicable Line)  
 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	08/14/2007		M		14,000	A	\$ 0.8	40,375	D	
Common Stock	08/14/2007		S		14,000	D	\$ 18.5155 (1)	26,375	D	
Common Stock	08/15/2007		M		2,456	A	\$ 0.8	28,831	D	
Common Stock	08/15/2007		S		2,456	D	\$ 19.1226 (2)	26,375	D	
								86,333	I	By Parent

Common  
Stock

Common Stock 2,568 I by Spouse <sup>(3)</sup>

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 displays a currently valid OMB control number.** SEC 1474 (9-02)

**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)	Amount or Number of Shares	
				Code	V (A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares
Incentive Stock Option (right to buy)	\$ 0.8	08/14/2007		M	14,000	11/01/2004 06/05/2011	Common Stock	14,000	
Incentive Stock Option (right to buy)	\$ 0.8	08/15/2007		M	2,456	11/17/2004 01/16/2012	Common Stock	2,456	

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Xiao Deming 6409 GUADALUPE MINES ROAD SAN JOSE, CA 95120			VP, Operations	

## Signatures

Deming Xiao

08/16/2007

\*\*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) Price is the weighted average selling price of all sales by the reporting person on the transaction date. The range of selling prices was \$18.50 to \$18.61 per share.
  - (2) Price is the weighted average selling price of all sales by the reporting person on the transaction date. The range of selling prices was \$19.10 to \$19.15 per share.
  - (3) 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.

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.