Xiao Deming
Form 4
February 27, 2007

FORM 4

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

OMB APPROVAL
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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

(Last) (First) (Middle)

6409 GUADALUPE MINES ROAD

(Street)

SAN JOSE, CA 95120

(City) (State) (Zip)

2. Issuer Name **and** Ticker or Trading Symbol
MONOLITHIC POWER SYSTEMS INC [MPWR]

3. Date of Earliest Transaction (Month/Day/Year)
02/26/2007

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

5. Relationship of Reporting Person(s) to Issuer
(Check all applicable)
_____ Director _____ 10% Owner
__X__ Officer (give title below) _____ Other (specify below)
VP, 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	02/26/2007		M		8,334	A	$ 1.2	25,209	D	
Common Stock	02/26/2007		S		8,334	D	$ 13.45 (1)	16,875	D	
Common Stock	02/26/2007		M		11,666	A	$ 1.2	28,541	D	
Common Stock	02/26/2007		S		11,666	D	$ 13.45 (1)	16,875	D	
								86,333	I	By Parent

Common Stock					
Common Stock			2,568	I	by Spouse (2)

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

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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)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares
Incentive Stock Option (right to buy)	$ 1.2	02/26/2007		M			8,334	10/16/2003 (3)	10/15/2012	Common Stock	8,334
Incentive Stock Option (right to buy)	$ 1.2	02/26/2007		M			11,666	09/10/2004	10/15/2012	Common Stock	11,666

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 02/27/2007

**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) Average price per share

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

(3) 18,334 of the shares subject to the option are vested on 11/16/04; the remaining shares vest at a rate of 1,666.67 shares per month over 23 months.

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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