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

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person [*] Xiao Deming					2. Issuer Name and Ticker or Trading Symbol <u>MONOLITHIC POWER SYSTEMS INC</u> [MPWR]										neck all a Dire	oplicable) ector	ng Perso	erson(s) to Issuer 10% Owner	
(Last) 79 GREA	(Last) (First) (Middle) 79 GREAT OAKS BLVD				3. Date of Earliest Transaction (Month/Day/Year) 01/26/2015										A bel	Officer (give title below) Pres. of MPS As		Other (specify below) sia Operations	
(Street) SAN JOS (City)		CA 95119 (State) (Zip)			4. If A	4. If Amendment, Date of Original Filed (Month/Day/Year)						ar)	6. Lin	ie) X Foi Foi	or Joint/Group Filing (Check Applicable m filed by One Reporting Person m filed by More than One Reporting rson				
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)		Transaction Disp			curities Acquired (osed Of (D) (Instr. 3 5)			Secu Ben Own		6. Ownership Form: Direct (D) or Indirect (I)		7. Nature of Indirect Beneficial Ownership	
								Code	v	Amount	(A (D) or) F	Price	Rep Trar	owing orted saction(s) r. 3 and 4)	(Instr. 4)		(Instr. 4)	
Common Stock 01/26/2					015				S ⁽¹⁾		12	:	D	\$47.	82	1,706			by Spouse
Common Stock																134,153)	
	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)	Execu if any	eemed tion Date, h/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 Expiration Date (Month/Day/Year)		ite	Amount of Securities Underlying Derivative Security (Ins 3 and 4)			8. Price of Derivativ Security (Instr. 5)	9. Number derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)	Ownersh Form: Direct (E or Indire (I) (Instr 4)	m: ect (D) ndirect	Beneficial Ownership
					Code	v	(A)	(D)	Date Exercisa		Expiration Date	Title	or Num of Shar						

Explanation of Responses:

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

By: Saria Tseng For: Deming Xiao 01/27/2015

** Signature of Reporting Person Date

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

 * 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).

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

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 Number.