## 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 ar Hsing	2. Issuer Name and Ticker or Trading Symbol MONOLITHIC POWER SYSTEMS INC [MPWR]							5. Relationship of Repo (Check all applicable) X Director			10%		Owner			
(Last) (First) (Middle) 79 GREAT OAKS BLVD				3. Date of Earliest Transaction (Month/Day/Year) 02/04/2014							2	x	Officer (give title below)		Othe belov	r (specify v)
(Street) SAN JOSE CA 95119			5119	4. If Amendment, Date of Original Filed (Month/Day/Year)							6. Individual or Joint/Group Line) X Form filed by One F Form filed by More Person					
(City) (State) (Zi			(ip)													
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 Acquir Disposed Of (D) (In:				5. Amount of Securities Beneficially Owned Following		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		Reporte Transac (Instr. 3	d tion(s)	(Instr.	. 4)	Instr. 4)
Common	Stock		02/04/2014			<b>S</b> <sup>(1)</sup>		730	D	\$32.	19	307	,706		D	
Common Stock			02/04/2014			Α		138,162(2)	Α	\$ <mark>0</mark> .	0 445,868		,868	D		
Common Stock			02/04/2014			Α		40,849(3)	Α	\$ <mark>0</mark> .	0 486,717		,717	D		
Common Stock			02/05/2014					32,131	D	\$31.1	1686 454,586		,586		D	
Common Stock			02/06/2014					2,060		\$31.	27	452,526			D	
Common Stock												465,566				By Jointly w/Spouse
Common Stock												133,040			I By S. Hsing 04 Trust	
Common Stock												29,000				Hsing Fam Foundation
Common Stock												133,040		I H		oy M Hsing 04 Frust
		Та	ble II - Derivat (e.g., pເ					isposed of, s, converti				Owned				
1. Title of Derivative Security (Instr. 3)	ve Conversion Date or Exercise (Month/Day/Year) if any		3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Num of Deriva Securi Acquin (A) or Dispos of (D) (Instr. and 5)	Expiration Date (Month/Day/Year) ities irred seed . 3, 4			7. Title and Amount of Securities Underlying Derivative Security (Instr 3 and 4)		o D S (I	. Price f erivative ecurity nstr. 5) 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		e s illy g	10. Ownershij Form: Direct (D) or Indirec (I) (Instr. 4)	Beneficial Ownership

Explanation of Responses:

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

2. On February 14, 2012, the reporting person was granted a target of 76,450 shares of restricted stock units subject to satisfaction of pre-determined, performance-based vesting criteria. On February 4, 2014, the Company's Board of Directors determined that those performance criteria for the restricted stock units had been satisfied, which resulted in 55,502 additional shares being achieved and granted to the reporting person. In addition, 6,210 shares were granted as a result of an equitable stock dividend adjustment approved by the Board of Directors on December 28, 2012. Of the restricted stock units that were awarded, 69,081 will vest immediately and 69,081 will vest quarterly in the next two years.

Date

Exercisable

(A) (D)

Code

Expiration

Date

Amount or Number

Shares

of

Title

3. 1/8 of the Restricted Stock Units shall vest quarterly following the Vesting Commencement Date, provided that the Grantee continues to be a Service Provider from the Grant Date through each applicable vesting date. Additionally, 122,546 shares of Restricted Stock Units were granted and shall be subject to satisfaction of performance-based vesting criteria based on achievement of certain long term Company performance targets, as determined by the Compensation Committee of the Company, and additional time vesting subsequent to the achievement of those performance targets, provided that the Grantee continues to be a Service Provider from the grant date through each applicable vesting date.

By: Saria Tseng For: Michael 02/06/2014

Date

<u>Hsing</u>

\*\* Signature of Reporting Person

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.