### FORM 4

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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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 <sup>®</sup> <u>CHANG KUO WEI HERBERT</u>						2. Issuer Name and Ticker or Trading Symbol MONOLITHIC POWER SYSTEMS INC [MPWR]								Relation heck all a X Di	cable)			ssuer wner		
(Last) (First) (Middle) 79 GREAT OAKS BLVD				3. D 08/	3. Date of Earliest Transaction (Month/Day/Year) 08/09/2012								Officer (give title Other (specify below) below)							
(Street) SAN JOSE CA 95119 (City) (State) (Zip)					_ 4. If	4. If Amendment, Date of Original Filed (Month/Day/Year)									<ol> <li>Individual or Joint/Group Filing (Check Applicable Line)</li> <li>X Form filed by One Reporting Person</li> <li>Form filed by More than One Reporting Person</li> </ol>					
		Tab	le l	- Non-Deriv	vative	Sec	uri	ties A	cquire	ed, D	isposed	of, or B	eneficia	ally Ow	/ne	d				
1. Title of Security (Instr. 3) Date (Month/Day/Yea					ear) if	2A. Deemed Execution Date, if any (Month/Day/Year)			3. Transac Code (In 8)		4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4			and 5) Securi Benefi Owned		ties cially	6. Ownership Form: Direct (D) or Indirect (I)		7. Nature of Indirect Beneficial Ownership	
								Code	v	Amount	(A) or (D)	Price	Following (Instr. 4 Reported Transaction(s) (Instr. 3 and 4)		tr. 4)	(Instr. 4)				
Common Stock 08/09/20					2	2			М		12,000	A	\$12.8	6	10	03,035		D		
Common Stock 08/09/201					2	1			S		12,000	D	\$21.1	(1)	91	91,035		D		
Common Stock 08/10/2012					2	:			М	<u> </u>	8,000	A	\$12.8	6	99,035			D		
Common Stock 08/10/2012					2				S		8,000	D	\$21.053	1.0538(2)		91,035		D		
		т	abl	e II - Deriva (e.g., p							posed of , converti				ed					
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	Exe if a	Deemed ecution Date, ny	4. Transa	4. Transaction Code (Instr. 8)		Numbe civative curities quired or posed D) str. 3, 4	Expiration D (Month/Day/		cisable and Date	7. Title a Amount Securitie Underlyi Derivativ Security and 4)	and of es ing ve	8. Price of Derivati Security (Instr. 5		9. Number derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)	y Direct (D) or Indirec (I) (Instr. 4)		11. Nature of Indirect Beneficial Ownership (Instr. 4)	
					Code	v	(A)	(D)	Date Exerc	isable	Expiration Date	Title	Amount or Number of Shares							
Non- Qualified Stock Option (right to buy)	\$12.86	08/09/2012			М			12,00	0 02/18	/2010	02/18/2016	Common Stock	<sup>1</sup> 12,000	\$0.0		13,000		D		
Non- Qualified Stock Option (right to	\$12.86	08/10/2012			М			8,000	0 02/18	3/2010	02/18/2016	Common Stock	8,000	\$0.0	,	5,000		D		

#### Explanation of Responses:

buy)

1. The price is the weighted average sale price for the transactions reported on this line. The prices for the transactions reported on this line range from \$21.00 to \$21.20. The reporting person undertakes to provide, upon request by the staff of the Securities and Exchange Commission, the issuer, or a security holder of the issuer, full information regarding the number of shares sold at each separate price. 2. The price is the weighted average sale price for the transactions reported on this line. The prices for the transactions reported on this line range from \$21.00 to \$21.10. The reporting person undertakes to provide, upon request by the staff of the Securities and Exchange Commission, the issuer, or a security holder of the issuer, full information regarding the number of shares sold at each separate price.

#### By: Meera Rao For: Herbert Chang

\*\* Signature of Reporting Person

08/10/2012

Date

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

 $^{\ast}$  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.