

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* <u>Moyer James C</u> _____ (Last) (First) (Middle) <u>79 GREAT OAKS BLVD</u> _____ (Street) <u>SAN JOSE CA 95119</u> _____ (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>MONOLITHIC POWER SYSTEMS INC</u> [MPWR]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) <u>03/08/2011</u>	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

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	03/08/2011		M		12,000 ⁽¹⁾	A	\$7.77	495,383	I	by Moyer FamilyTrust ⁽²⁾
Common Stock	03/08/2011		M		99,999 ⁽¹⁾	A	\$5	595,382	I	by Moyer FamilyTrust ⁽²⁾
Common Stock	11/26/2013		S ⁽³⁾		8,500	D	\$32.5954 ⁽⁴⁾	344,282	I	by Moyer FamilyTrust ⁽²⁾
Common Stock	06/24/2014		M		20,000 ⁽¹⁾	A	\$17.92 ⁽⁵⁾	143,282	I	by Moyer FamilyTrust ⁽²⁾
Common Stock	06/24/2014		M		941 ⁽¹⁾	A	\$17.92	144,223	I	by Moyer FamilyTrust ⁽²⁾
Common Stock	12/10/2014		S ⁽³⁾		4,600	D	\$49.2752 ⁽⁶⁾	121,223	I	by Moyer FamilyTrust
Common Stock	12/11/2014		S ⁽³⁾		4,600	D	\$49.3037 ⁽⁷⁾	116,623	I	by Moyer FamilyTrust
Common Stock								894,302	D	

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 Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date					

Explanation of Responses:

- Represents vested shares acquired through the cash exercise of a stock option in compliance with the Company's Insider Trading Compliance Program.
- Amended ownership from Direct to Indirect.
- In accordance with the reporting person's 10b5-1 trading plan.
- 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 \$32.28 to \$32.76. 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.
- On December 11, 2012, the Company's Board declared a special cash dividend of \$1.00 per common share, which was paid on December 28, 2012 to all shareholders of record as of the close of business on December 21, 2012. The Board approved a modification whereby each outstanding option as of December 28, 2012 was increased by a ratio of 1.0471 with a corresponding reduction in the exercise price.

6. 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 \$48.75 to \$49.69. 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.

7. 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 \$48.97 to \$49.71. 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: Saria Tseng For: James 12/12/2014
Moyer

** 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.