

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* <b>MCBURNIE DOUGLAS M</b> <hr/> (Last) (First) (Middle) <b>79 GREAT OAKS BLVD</b> <hr/> (Street) <b>SAN JOSE CA 95119</b> <hr/> (City) (State) (Zip)			2. Issuer Name and Ticker or Trading Symbol <b>MONOLITHIC POWER SYSTEMS INC</b> <b>[ MPWR ]</b>		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) <b>02/19/2014</b>			
			4. If Amendment, Date of Original Filed (Month/Day/Year)		6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> 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	02/19/2014		M		20,000	A	\$16.2 <sup>(1)</sup>	27,520	D	
Common Stock	02/19/2014		S		20,000	D	\$34.5475 <sup>(2)</sup>	7,520	D	
Common Stock	02/19/2014		M		15,000	A	\$22.01 <sup>(1)</sup>	22,520	D	
Common Stock	02/19/2014		S		15,000	D	\$34.5475 <sup>(2)</sup>	7,520	D	
Common Stock	02/19/2014		M		25,000	A	\$19.29 <sup>(1)</sup>	32,520	D	
Common Stock	02/19/2014		S		25,000	D	\$34.5475 <sup>(2)</sup>	7,520	D	
Common Stock	02/19/2014		M		705	A	\$22.01	8,225	D	
Common Stock	02/19/2014		S		705	D	\$34.5475 <sup>(2)</sup>	7,520	D	
Common Stock	02/19/2014		M		941	A	\$16.2	8,461	D	
Common Stock	02/19/2014		S		941	D	\$34.5475 <sup>(2)</sup>	7,520	D	
Common Stock	02/19/2014		M		1,176	A	\$19.29	8,696	D	
Common Stock	02/19/2014		S		1,176	D	\$34.5475 <sup>(2)</sup>	7,520	D	
Common Stock	02/19/2014		M		1,176	A	\$12.28	8,696	D	
Common Stock	02/19/2014		S		1,176	D	\$34.5475 <sup>(2)</sup>	7,520	D	
Common Stock	02/19/2014		S		4,027	D	\$34.5254 <sup>(3)</sup>	3,493	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					

**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	Title	Amount or Number of Shares				
Non-Qualified Stock Option (right to buy)	\$12.28	02/19/2014		M			1,176	12/28/2012	02/18/2016	Common Stock	1,176	\$0.0	0	D	
Non-Qualified Stock Option (right to buy)	\$16.2	02/19/2014		M			941	12/28/2012	05/24/2014	Common Stock	941	\$0.0	0	D	
Non-Qualified Stock Option (right to buy)	\$16.97 <sup>(1)</sup>	02/19/2014		M			20,000	05/24/2008	05/24/2014	Common Stock	20,000	\$0.0	0	D	
Non-Qualified Stock Option (right to buy)	\$19.29	02/19/2014		M			1,176	12/28/2012	02/09/2017	Common Stock	1,176	\$0.0	0	D	
Non-Qualified Stock Option (right to buy)	\$20.2 <sup>(1)</sup>	02/19/2014		M			25,000	02/02/2011	02/09/2017	Common Stock	25,000	\$0.0	0	D	
Non-Qualified Stock Option (right to buy)	\$22.01	02/19/2014		M			705	12/28/2012	05/22/2015	Common Stock	705	\$0.0	0	D	
Non-Qualified Stock Option (right to buy)	\$23.05 <sup>(1)</sup>	02/19/2014		M			15,000	05/22/2009	05/22/2015	Common Stock	15,000	\$0.0	0	D	

**Explanation of Responses:**

- 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.
- 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 \$34.30 to \$34.97. 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.
- 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 \$34.51 to \$34.535. 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: Douglas 02/20/2014  
McBumie

\*\* 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.**