

FORM 4**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

OMB APPROVAL

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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>Sciammas Maurice</u> (Last) (First) (Middle) <u>6409 GUADALUPE MINES ROAD</u> (Street) <u>SAN JOSE CA 95120</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>MONOLITHIC POWER SYSTEMS INC</u> <u>[MPWR]</u> 3. Date of Earliest Transaction (Month/Day/Year) <u>02/08/2011</u> 4. If Amendment, Date of Original Filed (Month/Day/Year)	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner X Officer (give title below) Other (specify below) <u>Sr. V.P. of Sales and Marketing</u> 6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person
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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	02/08/2011		A		49,000 ⁽¹⁾	A	\$0	120,776	D	
Common Stock								95,934	I	by Family Trust ⁽²⁾
Common Stock								24,671	I	byC Sciammas 04 TRST ⁽³⁾
Common Stock								24,671	I	byM Sciammas 04 Trst ⁽⁴⁾

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		Date Exercisable	Expiration Date					
									Amount or Number of Shares				

Explanation of Responses:

- 1/16 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.
- Shares held by Sciammas Family Living Trust, Maurice Sciammas and Christina Sciammas, Trustees
- Shares held by Christina Sciammas 2004 Trust, Christina Sciammas and Maurice Sciammas, Trustees
- Shares held by Maurice Sciammas 2004 Trust, Maurice Sciammas and Christina Sciammas, Trustees

By: Saria Tseng For: Maurice Sciammas 02/08/2011

** 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.

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