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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

Sciammas Maurice			2. Issuer Name and Ticker or Trading Symbol MONOLITHIC POWER SYSTEMS INC [MPWR]		ationship of Reporting Person(s) to Issuer « all applicable) Director 10% Owner		
(Last) (First) (Middle) 6409 GUADALUPE MINES ROAD		· · · ·	3. Date of Earliest Transaction (Month/Day/Year) 07/25/2011	Х	Officer (give title below) Sr. V.P.of Sales an	Other (specify below) d Marketing	
(Street) SAN JOSE (City)	CA (State)	95120 (Zip)	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Ind Line) X	ividual or Joint/Group Fil Form filed by One Re Form filed by More th Person	porting 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. Securitie Disposed O		red (A) or str. 3, 4 and 5)	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	Reported Transaction(s) (Instr. 3 and 4)	(1150.4)	(1150.4)		
Common Stock	07/25/2011		S ⁽¹⁾		885	D	\$13.7535 ⁽²⁾	80,889	Ι	by Family Trust ⁽³⁾		
Common Stock	07/25/2011		S ⁽¹⁾		350	D	\$13.7535 ⁽²⁾	18,721	I	byC Sciammas 04 TRST ⁽⁴⁾		
Common Stock	07/25/2011		S ⁽¹⁾		350	D	\$13.7535 ⁽²⁾	18,721	I	byM Sciammas 04 Trst ⁽⁵⁾		
Common Stock								115,658	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. Transact Code (In 8)		of Deriv Secu Acqu (A) o Disp of (D (Instr	Derivative (Month/Day/Year) Securities Acquired (A) or		Amour Securi Underl Deriva	nt of ties ying tive ty (Instr.	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	Ownership Form: Direct (D)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				

Explanation of Responses:

1. In accordance with the reporting person's 10b5-1 trading plan.

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 \$13.69 to \$13.81. 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.

3. Shares held by Sciammas Family Living Trust, Maurice Sciammas and Christina Sciammas, Trustees

4. Shares held by Christina Sciammas 2004 Trust, Christina Sciammas and Maurice Sciammas, Trustees

5. Shares held by Maurice Sciammas 2004 Trust, Maurice Sciammas and Christina Sciammas, Trustees

By: Saria Tseng For: Maurice <u>07/25/2011</u>

** 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.