

Sciammas Maurice  
Form 4  
January 04, 2010

**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 OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
Sciammas Maurice

2. Issuer Name and Ticker or Trading Symbol  
MONOLITHIC POWER SYSTEMS INC [MPWR]

5. Relationship of Reporting Person(s) to Issuer  
(Check all applicable)  
 Director  10% Owner  
 Officer (give title below)  Other (specify below)  
Sr. V.P.of Sales and Marketing

(Last) (First) (Middle)  
6409 GUADALUPE MINES ROAD  
(Street)

3. Date of Earliest Transaction (Month/Day/Year)  
12/31/2009

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)  
 Form filed by One Reporting Person  
 Form filed by More than One Reporting Person

SAN JOSE, CA 95120  
(City) (State) (Zip)

**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)			
				(A) or (D)	Price					
				Code	V	Amount				
Common Stock	12/31/2009		M <sup>(1)</sup>		6,776	A	\$ 1.2	51,267	D	
Common Stock	12/31/2009		M <sup>(1)</sup>		30,000	A	\$ 1.2	81,267	D	
Common Stock	12/31/2009		S <sup>(1)</sup>		36,776	D	\$ 24.1432 <sup>(2)</sup>	44,491	D	
Common Stock								95,934	I	by Family Trust <sup>(3)</sup>
Common Stock								24,671	I	byC Sciammas

Common Stock	24,671	I	04 TRST (4) byM Sciammas 04 Trst (5)
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Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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(9-02)

**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 Underlying Securities (Instr. 3 and 4)	Amount or Number of Shares	
				Code	V (A) (D)	Date Exercisable	Expiration Date	Title	
Incentive Stock Option (right to buy)	\$ 1.2	12/31/2009		M <sup>(1)</sup>	6,776	07/15/2003 07/17/2012	Common Stock	6,776	
Incentive Stock Option (right to buy)	\$ 1.2	12/31/2009		M <sup>(1)</sup>	30,000	09/10/2004 09/11/2013	Common Stock	30,000	

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Sciammas Maurice 6409 GUADALUPE MINES ROAD SAN JOSE, CA 95120			Sr. V.P.of Sales and Marketing	

## Signatures

By: Rick Neely For: Maurice  
Sciammas

01/04/2010

\_\_Signature of Reporting Person

Date

## Explanation of Responses:

\* 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).

(1) 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

(2) range from \$24.04 to \$24.26. 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

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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