FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL							
OMB Number: 3235-028							
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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* Sciammas Maurice (Last) (First) (Middle) 6409 GUADALUPE MINES ROAD				2. Issuer Name and Ticker or Trading Symbol MONOLITHIC POWER SYSTEMS INC [MPWR] 3. Date of Earliest Transaction (Month/Day/Year) 08/20/2009 4. If Amendment, Date of Original Filed (Month/Day/Year)							ar)	5. Relationship of Reportin (Check all applicable) Director X Officer (give title below) Sr. V.P.of Sales 6. Individual or Joint/Grou			10% Othe belov s and Market	Owner r (specify v) ing		
(Street) SAN JOS (City)			5120 (ip)										Line) X					
	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																	
1. Title of Security (Instr. 3)		2. Transaction Date (Month/Day/Yea	r) Exe	2A. Deemed Execution Date, if any (Month/Day/Yea		Code (Instr.						nd 5) Secur Bene Owne		ficially ed	6. Ownership Form: Direct (D) or Indirect (I)	7. Nature of Indirect Beneficial Ownership		
							Co	de	v	Amount	(A) or (D)	Price				(Instr. 4)	(Instr. 4)	
Common	Stock		08/20/2009					S		15,000	D	\$23.05	12(1)	9	5,934	I	by Family Trust ⁽²⁾	
Common	Stock		08/20/2009					S		5,000	D	\$23.05	312 ⁽¹⁾	2	4,671	I	byC Sciammas 04 TRST ⁽³⁾	
Common	Stock		08/20/2009					S		5,000	D	\$23.05	12(1)	2	4,671	I	byM Sciammas 04 Trst ⁽⁴⁾	
Common	Stock													5	7,281	D		
		Та	ble II - Derivat				•		,	• ′			•	wned				
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	(e.g., pt	4. Transa	ction	5. Num of Derive Secur Acqui (A) or Dispo of (D) (Instr. and 5	mber ative ities ired sed	6. D Expi (Mor	ate Ex iration nth/Da	ercisable and Date and Parkers	7. Tit Amou Secur Unde Deriv Secur 3 and	le and int of rities rlying ative rity (Instr.	8. For Der Sec (Ins	Price rivative surity str. 5)	9. Number derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)	Ownership Form: y Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership	

Explanation of Responses:

- 1. The price is the weighted average sale price for the transactions reported for the Sciammas Family Living Trust, Christina Sciammas 2004 Trust and Maurice Sciammas 2004 Trust. The prices for the transactions reported in this Form range from \$23.00 to \$23.28. 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.
- 2. Shares held by Sciammas Family Living Trust, Maurice Sciammas and Christina Sciammas, Trustees
- 3. Shares held by Christina Sciammas 2004 Trust, Christina Sciammas and Maurice Sciammas, Trustees
- 4. Shares held by Maurice Sciammas 2004 Trust, Maurice Sciammas and Christina Sciammas, Trustees

By: Adriana Chiocchi For: Maurice Sciammas 08/20/2009

** 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 ir	nformation contained in this form	n are not required to respond	unless the form displays a curre	ntly valid OMB Number.