

**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

1. Name and Address of Reporting Person*			2. Issuer Name and Ticker or Trading Symbol			5. Relationship of Reporting Person(s) to Issuer (Check all applicable)		
<u>Hsing Michael</u>			<u>MONOLITHIC POWER SYSTEMS INC</u>			<input checked="" type="checkbox"/> Director 10% Owner		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year)			<input checked="" type="checkbox"/> Officer (give title below) Other (specify below)		
<u>6409 GUADALUPE MINES ROAD</u>			<u>05/28/2009</u>			<u>CEO</u>		
(Street)			4. If Amendment, Date of Original Filed (Month/Day/Year)			6. Individual or Joint/Group Filing (Check Applicable Line)		
<u>SAN JOSE CA 95120</u>						<input checked="" type="checkbox"/> Form filed by One Reporting Person		
(City)	(State)	(Zip)				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	05/28/2009		M		41,600	A	\$5	128,744	D	
Common Stock	05/28/2009		M		15,226	A	\$7.77	143,970	D	
Common Stock	05/28/2009		S		56,826	D	\$19.9854 <sup>(1)</sup>	87,144	D	
Common Stock								624,816	I	By Jointly w/Spouse
Common Stock								133,040	I	By S. Hsing 04 Trust
Common Stock								133,040	I	by M Hsing 04 Trust

**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					
Incentive Stock Option (right to buy)	\$7.77	05/28/2009		M		15,226	01/26/2006	01/16/2015	Common Stock	\$0	19,774	D	
Non-Qualified Stock Option (right to buy)	\$5	05/28/2009		M		41,600	01/13/2005	01/13/2014	Common Stock	\$0	300,000	D	

**Explanation of Responses:**

1. 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 \$19.66 to \$20.20. 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: Adriana Chiochi For:  
Michael Hsing

05/28/2009

\*\* 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 information contained in this form are not required to respond unless the form displays a currently valid OMB Number.**