Hsing Michael Form 4 April 14, 2010

FORM 4

OMB APPROVAL

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

OMB 3235-0287 Number:

Check this box if no longer subject to Section 16.

Washington, D.C. 20549

January 31, Expires: 2005

Form 4 or Form 5

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF **SECURITIES**

Estimated average burden hours per response... 0.5

obligations may continue. See Instruction

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

1(b).

(Print or Type Responses)

1. Name and Address of Reporting Person * Hsing Michael			2. Issuer Name and Ticker or Trading Symbol MONOLITHIC DOWED SYSTEMS	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)		
	MONOLITHIC POWER SYSTEMS INC [MPWR]					
(Last)	(First)	(Middle)	3. Date of Earliest Transaction	_X_ Director 10% Owner		
6409 GUADALUPE MINES ROAD		ES ROAD	(Month/Day/Year) 04/14/2010	X Officer (give title Other (specially below) CEO		
(Street)			4. If Amendment, Date Original	6. Individual or Joint/Group Filing(Check		
			Filed(Month/Day/Year)	Applicable Line) _X_ Form filed by One Reporting Person		
SAN JOSE, CA 95120				Form filed by More than One Reporting Person		

(City)	(State)	(Zip) Tab	le I - Nor	ı-D	erivative S	Secur	ities Acqu	iired, Disposed o	f, or Beneficial	lly Owned
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transactio Code (Instr. 8)		4. Securities Acquired on(A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	or (D)	Price	Transaction(s) (Instr. 3 and 4)		
Common Stock	04/14/2010		M(1)		30,000	A	\$ 5	312,842	D	
Common Stock	04/14/2010		S <u>(1)</u>		30,000	D	\$ 24.25	282,842	D	
Common Stock								498,566	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

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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 control number.

SEC 1474

(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)	2 3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transactio Code (Instr. 8)	5. Number of orDerivative Securities Acquired (A) or Disposed of (D)	6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Ar Underlying Se (Instr. 3 and 4)	
				Code V	(Instr. 3, 4, and 5) (A) (D)	Date Exercisable	Expiration Date	Title]	
Non-Qualified Stock Option (right to buy)	\$ 5	04/14/2010		M	30,000	01/13/2005(1)	01/13/2014	Common Stock	

Reporting Owners

Reporting Owner Name / Address	Relationships						
	Director	10% Owner	Officer	Other			
Hsing Michael							
6409 GUADALUPE MINES ROAD	X		CEO				
SAN JOSE, CA 95120							

Signatures

By: Rick Neely For: Michael 04/14/2010 Hsing

**Signature of Reporting Person Dat

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.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.

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