I

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL OMB Number: 3235-0287 Estimated average burden hours per response: 0.5

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 [*] Hsing Michael | | | 2. Issuer Name and Ticker or Trading Symbol MONOLITHIC POWER SYSTEMS INC | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) | | | | | |
|---|---------------|---------|---|--|--|--------------------------|--|--|--|
| | | | [MPWR] | X | Director | 10% Owner | | | |
| | | · · · · | 3. Date of Earliest Transaction (Month/Day/Year) 09/01/2005 | X | Officer (give title below) CEO | Other (specify below) | | | |
| (Street) | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Ind Line) | vidual or Joint/Group F | ling (Check Applicable | | | |
| LOS GATOS | CA | 95032 | | X | Form filed by One Re | eporting 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 Disposed Of 5) | | | 5. Amount of Securities Beneficially Owned Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership |
|---------------------------------|--|---|---|---|------------------------------------|---------------|--------------------------------|--|--|---|
| | | | Code | v | Amount | (A) or (D) | Price | Reported Transaction(s) (Instr. 3 and 4) | (1150.4) | (Instr. 4) |
| Common Stock | 09/01/2005 | | S ⁽¹⁾ | | 1,000 | D | \$ 8.506 ⁽²⁾ | 348,506 | Ι | By Jointly w/Spouse |
| Common Stock | | | | | | | | 822,144 | D | |
| Common Stock | | | | | | | | 199,219 | I | By S. Hsing 04 Trust |
| Common Stock | | | | | | | | 199,219 | 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. Transact Code (In 8) | | 5. Nu of Deriv Secur Acqu (A) of Dispo of (D) (Instr and 5 | Expiration Date (Month/Day/Year) iried osed . 3, 4 | | Amour Securi Underl Deriva | nt of ties ying tive ty (Instr. | of | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Beneficial Ownership | |
|---|---|--|---|----------------------------------|---|---|--|---------------------|-------------------------------------|---|--|--|--|-------------------------|--|
| | | | | 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. Average price per share

Michael Hsing

09/02/2005

** 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.