### 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 <sup>®</sup><br>Hsing Michael |         |            | 2. Issuer Name and Ticker or Trading Symbol<br>MONOLITHIC POWER SYSTEMS INC | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable) |   |                          |  |  |  |
|---|---------|------------|---|--|---|--------------------------|--|--|--|
|   |         |            | [MPWR]  | X  | Director                                      | 10% Owner                |  |  |  |
| (Last) (First) (Middle)<br>983 UNIVERSITY AVENUE, BUILDING A          |         | ( <i>)</i> | 3. Date of Earliest Transaction (Month/Day/Year)<br>05/15/2006              | X  | Officer (give title<br>below)<br>CEC          | Other (specify<br>below) |  |  |  |
| (Street)  |         |            | 4. If Amendment, Date of Original Filed (Month/Day/Year)                    | 6. Ind<br>Line)  | ividual or Joint/Group F                      | ling (Check Applicable   |  |  |  |
| LOS GATOS   | CA      | 95032      | _   |  | Form filed by One Re<br>Form filed by More th |                          |  |  |  |
| (City)  | (State) | (Zip)      |   |  | Person  |                          |  |  |  |

### Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

|                                 |  |   | •                                       |   |        |               |             |  |  |   |  |  |
|---------------------------------|--|---|---|---|--------|---------------|-------------|--|--|---|--|--|
| 1. Title of Security (Instr. 3) | 2. Transaction<br>Date<br>(Month/Day/Year) | 2A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | 3.<br>Transaction<br>Code (Instr.<br>8) |   |        |               |             | 5. Amount of<br>Securities<br>Beneficially<br>Owned<br>Following | Form: Direct<br>(D) or<br>Indirect (I) | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership |  |  |
|                                 |  |   | Code                                    | v | Amount | (A) or<br>(D) | Price       | Reported<br>Transaction(s)<br>(Instr. 3 and 4)                   | (Instr. 4)                             | (Instr. 4)  |  |  |
| Common Stock                    | 05/15/2006                                 |   | <b>S</b> <sup>(1)</sup>                 |   | 7,000  | D             | \$16.423(2) | 179,539  | Ι                                      | By<br>Jointly<br>w/Spouse                           |  |  |
| Common Stock                    |  |   |   |   |        |               |             | 822,144  | D                                      |   |  |  |
| Common Stock                    |  |   |   |   |        |               |             | 199,219  | I                                      | By S.<br>Hsing 04<br>Trust                          |  |  |
| Common Stock                    |  |   |   |   |        |               |             | 199,219  | I                                      | by M<br>Hsing 04<br>Trust                           |  |  |

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of<br>Derivative<br>Security<br>(Instr. 3) | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | 4.<br>Transact<br>Code (In<br>8) |   | 5. Number 6. Date Exercisable and<br>of Expiration Date<br>Derivative (Month/Day/Year)<br>Securities<br>Acquired<br>(A) or Disposed<br>of (D)<br>(Instr. 3, 4<br>and 5) |     | ate                 | 7. Title and<br>Amount of<br>Securities<br>Underlying<br>Derivative<br>Security (Instr.<br>3 and 4) |       | 8. Price<br>of<br>Derivative<br>Security<br>(Instr. 5) | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s)<br>(Instr. 4) | Ownership<br>Form:<br>Direct (D) | Beneficial<br>Ownership |  |
|---|---|--|---|----------------------------------|---|---|-----|---------------------|---|-------|--|--|----------------------------------|-------------------------|--|
|   |   |  |   | Code                             | v | (A)   | (D) | Date<br>Exercisable | Expiration<br>Date  | Title | Amount<br>or<br>Number<br>of<br>Shares                 |  |                                  |                         |  |

#### Explanation of Responses:

1. In accordance with the reporting person's 10b5-1 trading plan.

2. Average price per share

Michael Hsing

05/16/2006

\*\* Signature of Reporting Person Date

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

 $^{\ast}$  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.