

OMB APPROVAL	
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**INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES**

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* <u>Tseng Saria</u> <hr/> (Last) (First) (Middle) 6409 GUADALUPE MINES ROAD <hr/> (Street) SAN JOSE CA 95120 <hr/> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 02/09/2010	3. Issuer Name and Ticker or Trading Symbol <u>MONOLITHIC POWER SYSTEMS INC [ MPWR ]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>VP and General Counsel</u>	5. If Amendment, Date of Original Filed (Month/Day/Year) <hr/> 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person

**Table I - Non-Derivative Securities Beneficially Owned**

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Common Stock	15,138 <sup>(1)</sup>	D	

**Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)	4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date				
Incentive Stock Option (right to buy)	10/15/2005 <sup>(2)</sup>	10/15/2014	Common Stock	6,747	8	D
Non Qualified Stock Option (right to buy)	10/15/2005 <sup>(2)</sup>	10/15/2014	Common Stock	49,001	8	D
Non Qualified Stock Option (right to buy)	07/27/2009 <sup>(3)</sup>	07/27/2014	Common Stock	37,000	16	D
Non Qualified Stock Option (right to buy)	01/31/2010 <sup>(4)</sup>	01/31/2015	Common Stock	10,000	15.64	D
Non Qualified Stock Option (right to buy)	10/22/2010 <sup>(5)</sup>	10/22/2015	Common Stock	20,000	13.01	D

**Explanation of Responses:**

- Includes 3,000 restricted stock units. The restricted stock units vest in three equal installments on July 29, 2010, 2011 and 2012.
- A total of 150,000 shares were granted on 11/17/04. 50,000 shares vested on 10/15/05, and 1/24th of the shares vested monthly thereafter.
- A total of 37,000 shares were granted on 7/27/07. Fifty percent (50%) of the shares vested twenty-four (24) months after the grant date, and 1/48th of the shares vest monthly thereafter.
- A total of 10,000 shares were granted on 1/31/08. Fifty percent (50%) of the shares vested twenty-four (24) months after the grant date, and 1/48th of the shares vest monthly thereafter.
- A total of 20,000 shares were granted on 10/22/08. Fifty percent (50%) of the shares vest twenty-four (24) months after the grant date, and 1/48th of the shares vest monthly thereafter.

/s/ Saria Tseng 02/10/2010

\*\* 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 5 (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.

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