## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

## Washington, D.C. 20549

## **SCHEDULE 13G**

Under the Securities Exchange Act of 1934 (Amendment No. 1)\*

## Monolithic Power Systems, Inc.

(Name of Issuer)

Common Stock (Title of Class of Securities)

> 609839105 (CUSIP Number)

December 31, 2008 (Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

 $\Box$  Rule 13d-1(b)

☑ Rule 13d-1(c)

 $\square$  Rule 13d-1(d)

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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1	NAMES OF REPORTING PERSONS Taiwan Semiconductor Manufacturing Company Limited					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) □ (b) □					
3	SEC USE ONLY					
4	CITIZENSHIP OR PLACE OF ORGANIZATION Taiwan, Republic of China					
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:		5 6 7 8	SOLE VOTING POWER 0 SHARED VOTING POWER 0 SOLE DISPOSITIVE POWER 0 SHARED DISPOSITIVE POWER 0			
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 0 (beneficially owned indirectly through a wholly owned subsidiary, TSMC International Investment Ltd.)					
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)					
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0%					
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO					

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1	NAMES OF REPORTING PERSONS TSMC International Investment Ltd.					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) □ (b) □					
3	SEC USE ONLY					
4	CITIZENSHIP OR PLACE OF ORGANIZATION British Virgin Islands					
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:		5 6 7 8	SOLE VOTING POWER 0 SHARED VOTING POWER 0 SOLE DISPOSITIVE POWER 0 SHARED DISPOSITIVE POWER 0			
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 0					
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)					
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0%					
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO					

CUSIP No. 609839105

## Item 1(a). Name of Issuer:

Monolithic Power Systems, Inc.

## Item 1(b). Address of Issuer's Principal Executive Offices:

6409 Guadalupe Mines Road, San Jose, CA 95120

## Item 2(a). Name of Persons Filing:

- I Taiwan Semiconductor Manufacturing Company Limited
- II TSMC International Investment Ltd.

### Item 2(b). Address of Principal Business Office or, if None, Residence:

- I No.8 Li-Hsin 6 Road Hsinchu Science Park, Hsinchu, Taiwan Republic of China
- II P.O. Box 3151 Road Town, Tortola British Virgin Islands

## Item 2(c). Citizenship:

- I: Taiwan, Republic of China
- II: British Virgin Islands

#### Item 2(d). Title of Class of Securities:

Common Stock

## Item 2(e). CUSIP Number:

609839105

## Item 3. If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b) or (c), check whether the person filing is a:

N.A.

Item 4. Ownership.

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Enclosed below is the aggregate number and percentage of the class of securities of the issuer identified in Item 1 beneficially owned by each Reporting Person identified in Item 2 for each such Reporting Person.

- (a) Amount beneficially owned: 0
- (b) Percent of class: 0%
- (c) Number of shares as to which such person has:

Sole power to vote or to direct the vote: 0

Shared power to vote or to direct the vote: 0

Sole power to dispose or direct the disposition of: 0

Shared power to dispose or direct the disposition of: 0

TSMC International Investment Ltd. is a wholly-owned subsidiary of Taiwan Semiconductor Manufacturing Company Limited, a Republic of China company whose common shares and American depositary shares are publicly traded on the Taiwan Stock Exchange and New York Stock Exchange, respectively.

Monolithic Power Systems, Inc. was invested by InveStar Semiconductor Development Fund and InveStar Semiconductor Development Fund II since early 1999. In turn, these two venture capital funds have been invested by Taiwan Semiconductor Manufacturing Company Limited through TSMC International Investment Ltd. and managed by InveStar Capital who makes investment decisions independently. As is a common practice in the venture capital industry, these two funds have made a distribution of their publicly listed shares back to the fund investors, from which TSMC International received 1,850,623 shares of Monolithic Power Systems, Inc. on May 29, 2008. TSMC International Investment Ltd. has subsequently disposed all the shares so distributed.

#### Item 5. Ownership of 5 Percent or Less of a Class.

Ownership of 5 Percent or Less of a Class. If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than 5 percent of the class of securities, check the following [X].

## Item 6. Ownership of More than 5 Percent on Behalf of Another Person.

N.A.

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# Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

N.A.

Item 8. Identification and Classification of Members of the Group.

N.A.

Item 9. Notice of Dissolution of Group.

N.A

#### Item 10. Certification.

By signing below the undersigned, in each of her capacity, certifies that, to the best of her knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

#### SIGNATURE

After reasonable inquiry to the best of my knowledge, I certify that the information set forth in this statement is true, complete and correct.

February 6, 2009

## TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED

BY: /s/ Lora Ho

Lora Ho Vice President & Chief Financial Officer

#### TSMC INTERNATIONAL INVESTMENT LTD.

BY: /s/ Lora Ho

Lora Ho Director

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of

#### EXHIBIT 1 JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, each of the undersigned hereby agrees to the joint filing with the other reporting person of a statement on Schedule 13G (including amendments thereto) with respect to the common stock of Monolithic Power Systems, Inc. and that this Agreement be included as an Exhibit to such joint filing.

## TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED

BY: <u>/s/ Lora Ho</u> Lora Ho Vice President & Chief Financial Officer

TSMC INTERNATIONAL INVESTMENT LTD.

BY: /s/ Lora Ho

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Lora Ho Director