

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

Monolithic Power Systems, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

609839 10 5

(CUSIP Number)

December 31, 2004

(Date of Event Which Requires Filing of this Statement)

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

Rule 13d-1(b)

Rule 13d-1(c)

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).

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 1745 (12-02)

American LegalNet, Inc.  
www.USCourtForms.com

1. Names of Reporting Persons.  
I.R.S. Identification Nos. of above persons (entities only).

Ronald Chwang

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

5. Sole Voting Power

-0-

Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person  
With:

6. Shared Voting Power

1,899,302<sup>(1)(2)</sup>

7. Sole Dispositive Power

-0-

8. Shared Dispositive Power

1,899,302<sup>(1)(2)</sup>

9. Aggregate Amount Beneficially Owned by Each Reporting Person

1,899,302<sup>(1)(2)</sup>

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

6.9%

12. Type of Reporting Person (See Instructions)

IN

1. Names of Reporting Persons.  
I.R.S. Identification Nos. of above persons (entities only).

James C. Lu

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

5. Sole Voting Power

-0-

Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person  
With:

6. Shared Voting Power

1,899,302<sup>(1)(2)</sup>

7. Sole Dispositive Power

-0-

8. Shared Dispositive Power

1,899,302<sup>(1)(2)</sup>

9. Aggregate Amount Beneficially Owned by Each Reporting Person

1,899,302<sup>(1)(2)</sup>

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

6.9%

12. Type of Reporting Person (See Instructions)

IN

1. Names of Reporting Persons.  
I.R.S. Identification Nos. of above persons (entities only).

Acer Technology Ventures Management, LLC

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

5. Sole Voting Power

-0-

Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person  
With:

6. Shared Voting Power

1,250,000<sup>(1)</sup>

7. Sole Dispositive Power

-0-

8. Shared Dispositive Power

1,250,000<sup>(1)</sup>

9. Aggregate Amount Beneficially Owned by Each Reporting Person

1,250,000<sup>(1)</sup>

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

4.5%

12. Type of Reporting Person (See Instructions)

OO

1. Names of Reporting Persons.  
I.R.S. Identification Nos. of above persons (entities only).

Acer Technology Venture Fund L.P.

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

5. Sole Voting Power

-0-

Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person  
With:

6. Shared Voting Power

1,250,000

7. Sole Dispositive Power

-0-

8. Shared Dispositive Power

1,250,000

9. Aggregate Amount Beneficially Owned by Each Reporting Person

1,250,000

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

4.5%

12. Type of Reporting Person (See Instructions)

PN

1. Names of Reporting Persons.  
I.R.S. Identification Nos. of above persons (entities only).

Acer Technology Ventures America, LLC

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

5. Sole Voting Power

649,302<sup>(2)</sup>

Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person  
With:

6. Shared Voting Power

-0-

7. Sole Dispositive Power

649,302<sup>(2)</sup>

8. Shared Dispositive Power

-0-

9. Aggregate Amount Beneficially Owned by Each Reporting Person

649,302<sup>(2)</sup>

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

2.3%

12. Type of Reporting Person (See Instructions)

OO

1. Names of Reporting Persons.  
I.R.S. Identification Nos. of above persons (entities only).

IP Fund One, L.P.

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

5. Sole Voting Power

649,302

Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person  
With:

6. Shared Voting Power

-0-

7. Sole Dispositive Power

649,302

8. Shared Dispositive Power

-0-

9. Aggregate Amount Beneficially Owned by Each Reporting Person

649,302

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

2.3%

12. Type of Reporting Person (See Instructions)

PN

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- Item 1.** (a) Name of Issuer  
Monolithic Power Systems, Inc.
- (b) Address of Issuer's Principal Executive Offices  
983 University Avenue, Building A, Los Gatos, CA 95032

**Item 2.** (a)-(c) This Statement is Filed by:  
Acer Technology Venture Fund L.P., Acer Technology Ventures Management, LLC and Acer Technology Ventures America, LLC (collectively, "Acer"); IP Fund One, L.P. ("IP Fund One"); Ronald Chwang ("Chwang"); and James C. Lu ("Lu").

The Business Address of Acer, IP Fund One, Chwang and Lu is 5201 Great America Parkway, Suite 270, Santa Clara, CA 95054.

Chwang is a citizen of Canada; Lu is a citizen of the United States; Acer Technology Venture Fund L.P. and IP Fund One are Cayman Island limited partnerships; Acer Technology Ventures Management, LLC is a California limited liability company and Acer Technology Ventures America, LLC is a Delaware limited liability company.

Acer, IP Fund One, Chwang and Lu are individually referred to herein as "Reporting Person" and collectively, as the "Reporting Persons."

- (d) Title of Class of Securities  
Common Stock
- (e) CUSIP Number  
609839 10 5

**Item 3.** N/A



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**Item 4. Ownership.**

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) Amount beneficially owned: See Row 9 for the amount beneficially owned by each Reporting Person.
- (b) Percent of class: See Row 11 for the percentage of class beneficially owned by each Reporting Person.
- (c) Number of shares as to which the person has: See Rows 5-8 for the voting and dispositive power for each Reporting Person.

**Item 5. Ownership of Five Percent or Less of a Class**

N/A

**Item 6. Ownership of More than Five Percent on Behalf of Another Person.**

N/A

**Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company**

N/A

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

The Reporting Persons may be deemed to be a “group” for the purposes of Section 13(g) of the Act and the rules thereunder, although each expressly disclaims any assertion or presumption that it or the other person on whose behalf this statement is filed constitute a “group.” The filing of this statement should not be construed to be an admission that any of the Reporting Persons is a member of a “group” consisting of one or more of such persons. A copy of the Agreement Relating to Joint Filing of Schedule 13(G) is attached hereto as Exhibit A.

**Item 9. Notice of Dissolution of Group**

N/A

**Item 10. Certification**

N/A

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- (1) Includes 1,250,000 shares of Common Stock held of record by Acer Technology Venture Fund L.P., the voting and/or dispositive power of which may be deemed to be shared by Ronald Chwang and/or James C. Lu.
  - (2) Includes 649,302 shares of Common Stock held of record by IP Fund One, L.P., the voting and/or dispositive power of which may be deemed to be shared by Ronald Chwang, Roger Liao, James C. Lu and/or Pyramyth Liu.

**SIGNATURE**

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

February 11, 2005

Acer Technology Fund L.P.

By: /s/ Ronald Chwang

Title: President and Chairman

IP Fund One L.P.

By: /s/ Ronald Chwang

Title: President and Chairman

Acer Technology Ventures Management LLC

By: /s/ Ronald Chwang

Title: President and Chairman

Acer Technology Ventures America, LLC

By: /s/ Ronald Chwang

Title: President and Chairman

/s/ Ronald Chwang

Ronald Chwang

/s/ James C. Lu

James C. Lu

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative other than an executive officer or general partner of the filing person, evidence of the representative's authority to sign on behalf of such person shall be filed with the statement, provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

*NOTE:* Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. *See* §240.13d-7 for other parties for whom copies are to be sent.

**Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001)**

**AGREEMENT RELATING TO JOINT FILING OF SCHEDULE 13G**

The undersigned hereby agree that a single Schedule 13G (or any amendment thereto) relating to the Common Stock of Monolithic Power Systems, Inc. shall be filed on behalf of each of the undersigned and that this Agreement shall be filed as an Exhibit to such Schedule 13G.

This Agreement and the filing of the Schedule 13G shall not be construed to be an admission that any of the undersigned is a member of a "group" consisting of one or more of such persons pursuant to Section 13(g) of the Securities Exchange Act of 1934, as amended and the rules thereunder.

Dated: February 11, 2005

Acer Technology Fund L.P.

By: /s/ Ronald Chwang

Title: President and Chairman

IP Fund One L.P.

By: /s/ Ronald Chwang

Title: President and Chairman

Acer Technology Ventures Management LLC

By: /s/ Ronald Chwang

Title: President and Chairman

Acer Technology Ventures America, LLC

By: /s/ Ronald Chwang

Title: President and Chairman

/s/ Ronald Chwang

Ronald Chwang

/s/ James C. Lu

James C. Lu