FRONTIER CAPITAL MANAGEMENT CO LLC
Form SC 13G/A
February 14, 2013

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G/A

Under the Securities Exchange Act of 1934

(Amendment No. 2)

MONOLITHIC POWER SYSTEMS INC

(Name of Issuer)

COMMON STOCKS

(Title of Class of Securities)

609839105

(CUSIP Number)

DECEMBER 31, 2012

(Date of Event Which Requires Filing of this Statement)

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

x 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 disclosures provided in a prior cover page.

The information required on 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).

Potential persons who are to 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 (3-98)

1 Name of reporting persons

IRS IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

FRONTIER CAPITAL MANAGEMENT CO., 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

DELAWARE

Number of shares beneficially owned by each reporting person with	5	Sole voting power
	6	Shared voting power 1,399,456
	7	Sole dispositive power
	8	Shared dispositive power 2,078,206

9 Aggregate amount beneficially owned by each reporting person

2,078,206

10 Check if the aggregate amount in Row (9) excludes certain shares (see instructions)

11 Percent of class represented by amount in Row 9

5.857%

12 Type of reporting person (see instructions)

IA

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CUSIP No. 609839105

ITEM 1.

(a) Name of Issuer: MONOLITHIC POWER SYSTEMS INC

(b) Address of Issuer s Principal Executive Offices:
6409 Guadalupe Mines Road

San Jose, CA 95120

ITEM 2.

(a) Name of Person Filing: FRONTIER CAPITAL MANAGEMENT CO., LLC

(b) Address of Principal Business Office: 99 SUMMER STREET, BOSTON, MA 02110

(c) Citizenship: DELAWARE

(d) Title of Class of Securities: COMMON STOCKS

(e) CUSIP Number: 609839105

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CUSIP No. 609839105

ITEM 3. If this statement is filed pursuant to rule 240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

(a) ¨ Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).

(b) ¨ Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).

(c) ¨ Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).

(d) ¨ Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).

(e) x An investment adviser in accordance with 240.13d-1(b)(1)(ii)(E).

(f) ¨ An employee benefit plan or endowment fund in accordance with 240.13d-1(b)(1)(ii)(F).

(g) ¨ A parent holding company or control person in accordance with 240.13d-1(b)(1)(ii)(G)

(h) ¨ A savings association as defined in section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813).

(i) ¨ A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3).

(j) ¨ Group, in accordance with section 240.13d-1(b)(1)(ii)(J)

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CUSIP No. 609839105

ITEM 4. OWNERSHIP
(a) Amount beneficially owned:

2,078,206

(b) Percent of class:

5.857%

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote.

1,399,456

(ii) Shared power to vote or to direct the vote.

(iii) Sole power to dispose or to direct the disposition of.

2,078,206

(iv) Shared power to dispose or to direct the disposition of.

ITEM 5. OWNERSHIP OF FIVE 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 five percent of the class of securities, check the following ¨.

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON

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CUSIP No. 609839105

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP

ITEM 9. NOTICE OF DISSOLUTION OF GROUP

ITEM 10. CERTIFICATION

By signing below I certify that, to the best of my 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.

DATED:
FEBRUARY 14, 2013

By: /s/ William J. Ballou
Name: William Ballou
Title: CHIEF OPERATING OFFICER & GENERAL COUNSEL