ADAGE CAPITAL PARTNERS GP LLC Form SC 13G April 08, 2013

> SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE

13G

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

MONOLITHIC POWER SYSTEMS, INC. (Name of Issuer)

Common Stock, par value \$0.001 per share (Title of Class of Securities)

609839105 (CUSIP Number)

March 28, 2013 (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) S Rule 13d-1(c) £ Rule 13d-1(d)

(Page 1 of 11 Pages)

*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).

NAME OF

CUSIP No. 609839105 13GPage 2 of 11 Pages

		ODEDIC	
		ORTING	
1	PERSON		
1			
	Adag	ge Capital	
	Partn	iers, L.P.	
	CHE	·	
	THE		
		ROPR LAT E	
2			
2	BOX IF A		
	MEMBER(b) £ OF A		
	GRO		
2			
3	SEC USE ONLY		
	CITIZENSHIP OR		
	PLACE OF		
4	ORGANIZATION		
	Dela	ware	
		SOLE	
		VOTING	
	5	POWER	
		0	
		SHARED	
		VOTING	
NUMBER OF	6	POWER	
SHARES		1011211	
BENEFICIALLY	•	2,044,527	
OWNED BY		SOLE	
EACH		DISPOSITIVE	
REPORTING	7	POWER	
PERSON WITH:	7	FOWER	
		0	
		0	
		SHARED	
	0	DISPOSITIVE	
	8	POWER	
_		2,044,527	
9	AGGREGATE AMOUNT BENEFICIALLY		
	OWNED BY EACH		
	REPORTING PERSON		

2,044,527 CHECK BOX IF THE AGGREGATE AMOUNT IN £ 10 ROW (9) **EXCLUDES CERTAIN SHARES** PERCENT OF **CLASS** REPRESENTED BY 11 AMOUNT IN ROW (9) 5.60% TYPE OF REPORTING

PN

PERSON

12

NAME OF REPORTING

CUSIP No. 609839105 13GPage 3 of 11 Pages

1	PERSON		
2	Adage Capital Partners GP, L.L.C. CHECK THE APPROPRIATE BOX IF A MEMBER(b) £		
3	OF A GROUP SEC USE ONLY CITIZENSHIP OR PLACE OF		
4	ORGANIZATION		
	Delav	ware SOLE VOTING POWER	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	6	0 SHARED VOTING POWER 2,044,527 SOLE DISPOSITIVE POWER	
9		SHARED DISPOSITIVE POWER 2,044,527 GREGATE DUNT	
	BENEFICIALLY OWNED BY EACH REPORTING PERSON		

2,044,527 CHECK BOX IF THE AGGREGATE AMOUNT IN £ 10 ROW (9) **EXCLUDES CERTAIN SHARES** PERCENT OF **CLASS** REPRESENTED BY 11 AMOUNT IN ROW (9) 5.60% TYPE OF REPORTING 12 **PERSON**

OO

CUSIP No. 609839105 13GPage 4 of 11 Pages

	1	NAME OF REPORTING PERSON		
		Advis CHEO THE		
	2	APPROPREATE BOX IF A MEMBER(b) £ OF A GROUP SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION		
	3			
	4			
		Delav	vare SOLE	
		5	VOTING POWER	
NUMBER OF SHARES	6	0 SHARED VOTING POWER		
	BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	7	2,044,527 SOLE DISPOSITIVE POWER	
		8	0 SHARED DISPOSITIVE POWER	
			2,044,527 REGATE	
9		AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		
	10	2,044	•	
	10		£	

CHECK BOX

IF THE

AGGREGATE

AMOUNT IN

ROW (9)

EXCLUDES

CERTAIN

SHARES

PERCENT OF

CLASS

REPRESENTED BY

11 AMOUNT IN ROW

(9)

5.60%

TYPE OF

REPORTING

12 PERSON

00

CUSIP No. 609839105 13GPage 5 of 11 Pages

1	NAME OF REPORTING PERSON		
2	CHE THE APP BOX MEN	ROPRIME TIF A MBER(b) £	
3	CITI PLA		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	Unite	ed States SOLE VOTING POWER	
	6	0 SHARED VOTING POWER	
	7	2,044,527 SOLE DISPOSITIVE POWER	
	8	0 SHARED DISPOSITIVE POWER	
9	2,044,527 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		
10	2,044,527 CHECK BOX £ IF THE		

AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES PERCENT OF

CLASS

REPRESENTED BY AMOUNT IN ROW

(9)

5.60% TYPE OF REPORTING

12 PERSON

11

IN

CUSIP No. 609839105 13GPage 6 of 11 Pages

1	NAME OF REPORTING PERSON		
2	CHE THE APP BOX MEN	Phillip Gross CHECK THE APPROPRIATE BOX IF A MEMBER(b) £ OF A GROUP SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION	
3	GRC SEC CITI PLA		
	Unite	ed States SOLE VOTING	
	5	POWER	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	6	0 SHARED VOTING POWER 2,044,527 SOLE DISPOSITIVE	
	7	POWER	
	8	0 SHARED DISPOSITIVE POWER	
9	2,044,527 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		
10	2,044,527 CHECK BOX £ IF THE		

AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES PERCENT OF

CLASS

REPRESENTED BY AMOUNT IN ROW

(9)

5.60% TYPE OF REPORTING

12 PERSON

11

IN

CUSIP No. 609839105 13GPage 7 of 11 Pages

Item 1(a). NAME OF ISSUER

The name of the issuer is MONOLITHIC POWER SYSTEMS, INC. (the "Company").

Item 1(b). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES

The Company's principal executive offices are located at 79 Great Oaks Boulevard, San Jose, CA 95119.

Item 2(a). NAME OF PERSON FILING

This statement is filed by:

- (i) Adage Capital Partners, L.P., a Delaware limited partnership ("ACP") with respect to the shares of Common Stock directly owned by it;
- Adage Capital Partners GP, L.L.C., a limited liability company organized under the laws of the
 (ii) State of Delaware ("ACPGP"), as general partner of ACP with respect to the shares of Common Stock directly owned by ACP;
- Adage Capital Advisors, L.L.C., a limited liability company organized under the laws of the State of Delaware ("ACA"), as managing member of ACPGP, general partner of ACP, with respect to the shares of Common Stock directly owned by ACP;
- Robert Atchinson ("Mr. Atchinson"), as managing member of ACA, managing member of (iv) ACPGP, general partner of ACP with respect to the shares of Common Stock directly owned by ACP; and
- (v) Phillip Gross ("Mr. Gross"), as managing member of ACA, managing member of ACPGP, general partner of ACP with respect to the shares of Common Stock directly owned by ACP.

The foregoing persons are hereinafter sometimes collectively referred to as the "Reporting Persons." Any disclosures herein with respect to persons other than the Reporting Persons are made on information and belief after making inquiry to the appropriate party.

Item 2(b). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE

The address of the business office of each of the Reporting Persons is 200 Clarendon Street, 52nd floor, Boston, Massachusetts 02116.

Item 2(c). CITIZENSHIP

ACP is a limited partnership organized under the laws of the State of Delaware. ACPGP and ACA are limited liability companies organized under the laws of the State of Delaware. Messrs. Gross and Atchinson are citizens of the United States.

Item 2(d). TITLE OF CLASS OF SECURITIES

Common Stock, par value \$0.001 per share (the "Common Stock").

CUSIP No. 609839105 13GPage 8 of 11 Pages

Item 2(e). CUSIP NUMBER 609839105

Item IF THIS STATEMENT IS FILED PURSUANT TO Rules 13d-1(b), OR 13d-2(b) OR (c), CHECK WHETHER 3. THE PERSON FILING IS A:

- (a) £Broker or dealer registered under Section 15 of the Act;
- (b) £Bank as defined in Section 3(a)(6) of the Act;
- (c) £Insurance company as defined in Section 3(a)(19) of the Act;
- (d)£Investment company registered under Section 8 of the Investment Company Act of 1940;
- (e) £ An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);
- (f) £ An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
- (g)£ A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
- (h)£A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act;
- (i) £ A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act;
- (j) £A non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J);
- (k) £Group, in accordance with Rule 13d-1(b)(1)(ii)(K).

If filing as a non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J), please

specify the type of institution: Not applicable.

Item OWNERSHIP

Adage Capital Partners, L.P., Adage Capital A. Partners GP, L.L.C. and Adage Capital Advisors,

L.L.C.

- (a) Amount beneficially owned: 2,044,527
- (b) Percent of class: 5.60%. The percentages used herein and in the rest of Item 4 are calculated based upon the 36,501,530 shares of Common Stock issued and outstanding as of

February 20, 2013 as reflected in the Company's Annual report on Form 10-K for the fiscal year ended December 31, 2012 filed by the Company on March 5, 2013.

Sole power

- (c) (i) to vote or direct the vote: 0 Shared power to
 - vote or direct the vote:
 2,044,527
 Sole power to dispose or
 - (iii) direct the disposition: 0
 Shared power to dispose or
 - (iv) direct the disposition of: 2,044,527

CUSIP No. 609839105 13GPage 9 of 11 Pages

ACP has the power to dispose of and the power to vote the shares of Common Stock beneficially owned by it, which power may be exercised by its general partner, ACPGP. ACA, as managing member of ACPGP, directs ACPGP's operations. Neither ACPGP nor ACA directly own any shares of Common Stock. By reason of the provisions of Rule 13d-3 of the Securities Exchange Act of 1934 (the "Act"), ACPGP and ACA may be deemed to beneficially own the shares owned by ACP.

- B. Robert Atchinson and Phillip Gross
 - (a) Amount beneficially owned: 2,044,527
 - (b) Percent of class: 5.60%

Sole power

(c) (i) to vote or direct the vote: 0

Shared

power to

(ii) vote or direct the vote:

2,044,527 Sole power

to dispose or

(iii) direct the disposition:

0 Shared

power to

(iv) dispose or direct the disposition: 2,044,527

Messrs. Atchinson and Gross, as managing members of ACA, have shared power to vote the Common Stock beneficially owned by ACP. Neither Mr. Atchinson nor Mr. Gross directly own any shares of Common Stock. By reason of the

provisions of Rule 13d-3 of the Act, each

may be deemed to beneficially own the shares beneficially owned by ACP.

Item 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS Not applicable.

Item 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON Not applicable.

Item IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY
 BEING REPORTED ON BY THE PARENT HOLDING COMPANY OR CONTROL PERSON
 Not applicable.

Item 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP Not applicable.

Item 9. NOTICE OF DISSOLUTION OF GROUP Not applicable.

Item 10. CERTIFICATION

Each of the Reporting Persons hereby makes the following certification:

By signing below each Reporting Person certifies that, to the best of his or its 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.

CUSIP No. 609839105 13GPage 10 of 11 Pages

SIGNATURES

After reasonable inquiry and to the best of his or its knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

DATE: April 8, 2013

ADAGE CAPITAL PARTNERS, L.P. By: Adage Capital Partners GP, L.L.C., its general partner

By: Adage Capital Advisors, L.L.C., its managing member

/s/ Robert Atchinson Name: Robert Atchinson Title: Managing Member

ADAGE CAPITAL PARTNERS GP, L.L.C.

By: Adage Capital Advisors, L.L.C.,

its managing member

/s/ Robert Atchinson Name: Robert Atchinson Title: Managing Member

ADAGE CAPITAL ADVISORS, L.L.C.

/s/ Robert Atchinson Name: Robert Atchinson Title: Managing Member

ROBERT ATCHINSON

/s/ Robert Atchinson ROBERT ATCHINSON, individually

PHILLIP GROSS

/s/ Phillip Gross
PHILLIP GROSS, individually

CUSIP No. 609839105 13GPage 11 of 11 Pages EXHIBIT 1

JOINT FILING AGREEMENT PURSUANT TO RULE 13d-1(k)

The undersigned acknowledge and agree that the foregoing statement on Schedule 13G is filed on behalf of each of the undersigned and that all subsequent amendments to this statement on Schedule 13G shall be filed on behalf of each of the undersigned without the necessity of filing additional joint filing agreements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning him or it contained herein and therein, but shall not be responsible for the completeness and accuracy of the information concerning the others, except to the extent that he or it knows or has reason to believe that such information is inaccurate.

DATE: April 8, 2013

ADAGE CAPITAL PARTNERS, L.P. By: Adage Capital Partners GP, L.L.C., its general partner

By: Adage Capital Advisors, L.L.C., its managing member

/s/ Robert Atchinson Name: Robert Atchinson Title: Managing Member

ADAGE CAPITAL PARTNERS GP, L.L.C.

By: Adage Capital Advisors, L.L.C., its managing member

/s/ Robert Atchinson Name: Robert Atchinson Title: Managing Member

ADAGE CAPITAL ADVISORS, L.L.C.

/s/ Robert Atchinson Name: Robert Atchinson Title: Managing Member

ROBERT ATCHINSON

/s/ Robert Atchinson ROBERT ATCHINSON, individually

PHILLIP GROSS

/s/ Phillip Gross PHILLIP GROSS, individually