

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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>Blegen Theodore</u> <hr/> (Last) (First) (Middle) 79 GREAT OAKS BLVD <hr/> (Street) SAN JOSE CA 95119 <hr/> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>MONOLITHIC POWER SYSTEMS INC</u> [MPWR]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title below) Other (specify below) CFO
	3. Date of Earliest Transaction (Month/Day/Year) 02/07/2018	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	02/07/2018		A		29,650 ⁽¹⁾	A	\$20	69,536	D	
Common Stock	02/07/2018		A		999 ⁽²⁾	A	\$20	70,535	D	

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date					

Explanation of Responses:

- On July 19, 2016, the reporting person was granted a target of 12,067 shares of restricted stock units, with the right to earn up to 300% of the target shares, subject to satisfaction of pre-determined, performance-based vesting criteria. On February 7, 2018, the Company's Board of Directors determined that those performance criteria for the restricted stock units had been satisfied, which resulted in 17,583 additional shares being achieved and earned by the reporting person. Of the restricted stock units that were awarded, 14,825 will vest immediately and 14,825 will vest quarterly over two years beginning on July 19, 2018.
- On February 2, 2016, the reporting person was granted a target of 641 shares of restricted stock units, with the right to earn up to 200% of the target shares, subject to satisfaction of pre-determined, performance-based vesting criteria. On February 7, 2018, the Company's Board of Directors determined that those performance criteria for the restricted stock units had been satisfied, which resulted in 358 additional shares being achieved and earned by the reporting person. Of the restricted stock units that were awarded, 500 will vest February 17, 2018 and 499 will vest quarterly over two years.

By: Saria Tseng For: Bemie Blegen 02/08/2018

** 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 4 (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.

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 Number.