

Ueunten Paul  
Form 5  
January 13, 2010

**FORM 5**

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

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).  
Form 3 Holdings Reported Form 4 Transactions Reported

**ANNUAL STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person \*  
Ueunten Paul  
(Last) (First) (Middle)

2. Issuer Name and Ticker or Trading Symbol  
MONOLITHIC POWER SYSTEMS INC [MPWR]

3. Statement for Issuer's Fiscal Year Ended (Month/Day/Year)  
12/31/2009

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer  
(Check all applicable)  
 Director  10% Owner  
 Officer (give title below)  Other (specify below)  
Sr. V.P. Design Engineering

6. Individual or Joint/Group Reporting  
(check applicable line)

6409 GUADALUPE MINES ROAD  
(Street)

SAN JOSE, CA 95120  
(City) (State) (Zip)

Form Filed by One Reporting Person  
 Form Filed by More than One Reporting Person

**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 at end of Issuer's Fiscal Year (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
				Amount	(A) or (D)	Price			
Common Stock	08/17/2009	^	J <sup>(1)</sup>	234	A	\$ 11.1435	58,329	D	^
Common Stock	^	^	^	^	^	^	153,556	I	Ueunten Trust I
Common Stock	^	^	^	^	^	^	123,900	I	Ueunten Trust II
Common Stock	^	^	^	^	^	^	30,550	I	Ueunten Trust III

