

OMB APPROVAL	
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

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>Smith William Maxwell</u> (Last) (First) (Middle) FLUIDIGM CORPORATION 7000 SHORELINE COURT SUITE 100 (Street) SOUTH SAN FRANCISCO CA 94080 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>FLUIDIGM CORP [FLDM]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner X Officer (give title below) Other (specify below) <u>EVP, Legal Affairs & GC</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>03/12/2012</u>	
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	03/12/2012		M		3,000	A	\$1.82	52,545	D	
Common Stock	03/12/2012		S ⁽¹⁾		3,000 ⁽²⁾	D	\$15.7227 ⁽²⁾	49,545	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	Title	Amount or Number of Shares				
Employee Stock Option (Right to Buy)	\$1.82	03/12/2012		M		3,000		(3)	07/15/2013	Common	3,000	\$0	15,412	D	
Employee Stock Option (Right to Buy) ⁽⁴⁾	\$4.09	11/17/2009		A		5,780 ⁽⁵⁾		(4)	11/17/2019	Common	5,780 ⁽⁵⁾	\$0	5,780 ⁽⁵⁾	D	

Explanation of Responses:

- The sales reported by Mr. Smith were effected pursuant to a Rule 10b5-1 trading plan adopted on September 6, 2011.
- The "Amount" and "Price" reported in this Column 4 reflect the aggregate number and weighted-average price, respectively, of shares sold. These shares were sold in multiple transactions at prices ranging from \$15.61 to \$15.80, inclusive. The reporting person undertakes to provide to the issuer, any security holder of the issuer, or the SEC staff, upon request, full information regarding the number of shares sold at each separate price within the range set forth herein
- The Option fully vested on April 1, 2007.
- The Option is not a new grant but is listed herein to correct the vesting schedule previously reported on a Form 3 filed by the reporting person on February 9, 2011. The filed Form 3 reported that 70% of the shares subject to the Option vested on December 31, 2009, 25% of the remaining 30% of the shares subject to the Option vested on April 1, 2010 and 1/48th of the remaining unvested shares subject to the Option shall vest each month thereafter. However, such Form 3 should have reported that 61% of the shares subject to the Option vested on December 31, 2009, 25% of the remaining 39% of the shares subject to the Option vested on April 1, 2010 and 1/48th of the remaining 39% of the shares subject to the Option shall vest each month thereafter such that all shares subject to the Option shall be fully vested on April 1, 2013.
- Reflects a 1-for-1.73 reverse stock split of the Issuer's outstanding shares effected February 3, 2011.

/s/ William M. Smith

03/14/2012

** 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.

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