

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

OMB APPROVAL	
OMB Number:	3235-0287
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1. Name and Address of Reporting Person * <u>Yow Mai Chan</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 <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>VP, WW Mfg & MD-Singapore</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>09/19/2011</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	09/19/2011		M		5,093	A	\$4.08	5,093	D	
Common Stock	09/19/2011		S ⁽¹⁾		5,093 ⁽²⁾	D	\$14.4204 ⁽²⁾	0.00	D	
Common Stock	09/19/2011		M		3,468	A	\$4.08	3,468	D	
Common Stock	09/19/2011		S ⁽¹⁾		3,468 ⁽²⁾	D	\$14.4204 ⁽²⁾	0.00	D	
Common Stock	09/19/2011		M		4,772	A	\$3.39	4,772	D	
Common Stock	09/19/2011		S ⁽¹⁾		4,772 ⁽²⁾	D	\$14.4204 ⁽²⁾	0.00	D	
Common Stock	09/19/2011		M		6,667	A	\$4.45	6,667	D	
Common Stock	09/19/2011		S ⁽¹⁾		6,667 ⁽²⁾	D	\$14.4204 ⁽²⁾	0.00	D	
Common Stock	09/20/2011		M		20,000	A	\$3.39	20,000	D	
Common Stock	09/20/2011		S ⁽¹⁾		20,000 ⁽⁷⁾	D	\$14.6172	0.00	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
Employee Stock Option (Right to Buy)	\$4.08	09/19/2011		M			5,093	(3)	11/17/2019	Common Stock	5,093	\$0	687	D	
Employee Stock Option (Right to Buy)	\$4.08	09/19/2011		M			3,468	(4)	11/17/2019	Common Stock	3,468	\$0	2,312	D	
Employee Stock Option (Right to Buy)	\$3.39	09/19/2011		M			4,772	(5)	08/02/2015	Common Stock	4,772	\$0	20,000	D	
Employee Stock Option (Right to Buy)	\$4.45	09/19/2011		M			6,667	(6)	09/26/2016	Common Stock	6,667	\$0	1,590	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)	\$3.39	09/20/2011		M			20,000	(5)	08/02/2015	Common Stock	20,000	\$0	0	D	

Explanation of Responses:

- The sales reported by Ms. Yow were effected pursuant to a Rule 10b5-1 trading plan adopted on September 13, 2011.
- The "Amount" and "Price" reported in this Column 4 reflect the aggregate number and weighted-average price, respectively, of shares acquired. These shares were purchased in multiple transactions at prices ranging from \$14.12 to \$14.59, 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 purchased at each separate price within the ranges set forth herein.
- 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.
- 60% of the shares subject to the Option vested on December 31, 2009 and the remaining shares shall vest on December 31, 2012.
- 100% of the shares subject to the Option vested on June 8, 2009.
- 100% of the shares subject to the Option vested on December 27, 2010.
- The "Amount" and "Price" reported in this Column 4 reflect the aggregate number and weighted-average price, respectively, of shares acquired. These shares were purchased in multiple transactions at prices ranging from \$14.27 to \$14.99, 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 purchased at each separate price within the ranges set forth herein.

/s/ William M. Smith, attorney-in-fact 09/21/2011

** 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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