

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

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).

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>COLELLA SAMUEL D</u>  (Last) (First) (Middle) 3000 SAND HILL ROAD, BUILDING FOUR SUITE 210  (Street) MENLO PARK CA 94025  (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)  <input checked="" type="checkbox"/> Director 10% Owner  Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) 02/15/2011	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	
		6. Individual or Joint/Group Filing (Check Applicable Line)  <input checked="" type="checkbox"/> 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 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	02/15/2011	02/15/2011	c <sup>(5)</sup>		5,760	A	(2)	87,341	I	See Footnotes <sup>(4)(7)</sup>
Common Stock	02/15/2011	02/15/2011	c <sup>(5)</sup>		1,592	A	(2)	88,933	I	See Footnotes <sup>(4)(7)</sup>
Common Stock	02/15/2011	02/15/2011	c <sup>(1)</sup>		103,546	A	(2)	192,479	I	See Footnotes <sup>(4)(8)</sup>
Common Stock	02/15/2011	02/15/2011	c <sup>(5)</sup>		474,354	A	(2)	666,833	I	See Footnotes <sup>(4)(8)</sup>
Common Stock	02/15/2011	02/15/2011	c <sup>(5)</sup>		294,457	A	(2)	961,290	I	See Footnotes <sup>(4)(8)</sup>
Common Stock	02/15/2011	02/15/2011	c <sup>(5)</sup>		81,396	A	(2)	1,042,686	I	See Footnotes <sup>(4)(8)</sup>
Common Stock	02/15/2011	02/15/2011	c <sup>(5)</sup>		164	A	\$0.02	1,042,850	I	See Footnotes <sup>(3)(4)</sup>
Common Stock	02/15/2011	02/15/2011	c <sup>(5)</sup>		346	A	\$0.02	1,043,196	I	See Footnotes <sup>(4)(6)</sup>
Common Stock	02/15/2011	02/15/2011	c <sup>(5)</sup>		148	A	\$0.02	1,043,344	I	See Footnotes <sup>(4)(7)</sup>
Common Stock	02/15/2011	02/15/2011	c <sup>(5)</sup>		7,596	A	\$0.02	1,050,940	I	See Footnotes <sup>(4)(8)</sup>
Common Stock	02/15/2011	02/15/2011	x <sup>(5)(9)</sup>		8,247	A	\$0.02	1,059,197	I	See Footnote <sup>(10)</sup>
Common Stock	02/15/2011	02/15/2011	f <sup>(5)(9)</sup>		11	D	\$13.5	1,059,186	I	See Footnote <sup>(10)</sup>

**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				
Series C Preferred Stock	(2)	02/15/2011	02/15/2011	C			5,760	(11)	(11)	Common Stock	5,760	\$0	971,856	I	See Footnotes <sup>(4)(7)</sup>
Series D Preferred Stock	(2)	02/15/2011	02/15/2011	C			1,592	(11)	(11)	Common Stock	1,592	\$0	970,264	I	See Footnotes <sup>(4)(7)</sup>
Series E Preferred Stock	(2)	02/15/2011	02/15/2011	C			103,546	(9)	(9)	Common Stock	103,546	\$0	866,718	I	See Footnotes <sup>(4)(8)</sup>

**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				
Series B Preferred Stock	(2)	02/15/2011	02/15/2011	C			474,354	(11)	(11)	Common Stock	474,354	\$0	392,364	I	See Footnotes <sup>(4)(8)</sup>
Series C Preferred Stock	(2)	02/15/2011	02/15/2011	C			294,457	(11)	(11)	Common Stock	294,457	\$0	97,907	I	See Footnotes <sup>(4)(8)</sup>
Series D Preferred Stock	(2)	02/15/2011	02/15/2011	C			81,396	(11)	(11)	Common Stock	81,396	\$0	16,511	I	See Footnotes <sup>(4)(8)</sup>
Series E-1 Preferred Stock	(2)	02/15/2011	02/15/2011	C			164	(11)	(11)	Common Stock	164	\$0	16,347	I	See Footnotes <sup>(4)(8)</sup>
Series E-1 Preferred Stock	(2)	02/15/2011	02/15/2011	C			346	(11)	(11)	Common Stock	346	\$0	16,001	I	See Footnotes <sup>(4)(8)</sup>
Series E-1 Preferred Stock	(2)	02/15/2011	02/15/2011	C			148	(11)	(11)	Common Stock	544	\$0	15,853	I	See Footnotes <sup>(4)(8)</sup>
Series E-1 Preferred Stock	(2)	02/15/2011	02/15/2011	C			7,596	(11)	(11)	Common Stock	7,596	\$0	8,257	I	See Footnotes <sup>(4)(8)</sup>
Series E-1 Preferred Warrant (Right to Buy)	\$0.02	02/15/2011	02/15/2011	X			8,257	01/06/2011	(11)(12)	Common Stock	8,257	\$0	0	I	See Footnote <sup>(10)</sup>

**Explanation of Responses:**

- Represents shares of Common Stock issued upon conversion of shares of Series E Preferred Stock on a 1-for 1.300053676865 basis.
- Not applicable.
- Versant Affiliates Fund I-A, L.P., is the record holder of the securities reported.
- Voting and investment power over the shares directly held by Versant Venture Capital I, L.P., Versant Affiliates Fund I-A, L.P., Versant Affiliates Fund I-B, L.P., and Versant Side Fund I, L.P., is held by Versant Ventures I, LLC, their sole General Partner, Samuel D. Colella, the reporting person is a Managing Member of Versant Ventures I, LLC but he disclaims beneficial ownership of these shares, except to the extent of his pecuniary interest therein. The individual Managing Members of Versant Ventures I, LLC are Brian G. Atwood, Samuel D. Colella, Ross A. Jaffe, William J. Link, Barbara N. Lubash, Donald B. Milder, and Rebecca B. Robertson, all of whom share voting and dispositive control. Each respective individual General Partner disclaims beneficial ownership of these shares, except to the extent of their pecuniary interest therein.
- Represents shares of Common Stock issued upon the conversion of shares of Series B Preferred Stock, Series C Preferred Stock or Series D Preferred Stock on a 1-for-1 basis.
- Versant Affiliates Fund I-B, L.P. is the record holder of the securities reported.
- Versant Side Fund I, L.P., is the record holder of the securities reported.
- Versant Venture Capital I, L.P., is the record holder of the securities reported.
- Each share of Series E Preferred Stock automatically converted into 1.300053676865 share of Common Stock on February 15, 2011, the closing date of the Issuer's initial public offering (the "Closing") and has no expiration date.
- The Colella Family Trust U/D/T dated September 21, 1992 is the record holder of the securities reported. Samuel D. Colella and Nancy R. Colella are trustees of the Colella Family Trust U/D/T dated September 21, 1992.
- Each share of Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock or Series E-1 Preferred Stock automatically converted into one share of Common Stock on February 15, 2011 and has no expiration date.
- The warrant was automatically net exercised immediately prior to the Closing.

**Remarks:**

Exhibit List Exhibit 24 - Power of Attorney Form 2 of 2

/s/ William Smith, attorney-in-  
fact 02/16/2011

\*\* 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.

**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.**

POWER OF ATTORNEY

Each of the undersigned, as a Section 16 reporting person of Fluidigm Corporation (the "Company"), hereby constitutes and appoints each of the officers of the Company and the responsible attorneys and paralegals of Wilson Sonsini Goodrich & Rosati, P.C. such undersigned's true and lawful attorney-in-fact to:

1. complete and execute Forms ID, 3,4 and 5 and other forms and all amendments thereto as such attorney-in-fact shall in his or her discretion determine to be required or advisable pursuant to Section 16 of the Securities Exchange Act of 1934 (as amended) and the rules and regulations promulgated thereunder, or any successor laws and regulations, as a consequence of such undersigned's ownership, acquisition or disposition of securities of the Company; and
2. do all acts necessary in order to file such forms with the Securities and Exchange Commission, any securities exchange or national association, the Company and such other person or agency as the attorney-in-fact shall deem appropriate.

Each of the undersigned hereby ratifies and confirms all that said attorney-in-fact and agents shall do or cause to be done by virtue hereof. Each of the undersigned acknowledges that the foregoing attorney-in-fact, in serving in such capacity at the request of such undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934 (as amended).

This Power of Attorney shall remain in full force and effect until such time as none of the undersigned are required to file Forms ID, 3, 4 and 5 with respect to such undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by any of the undersigned in a signed writing delivered to the Company and the foregoing attorney-in-fact (each such revocation to apply only to the Power of Attorney with respect to such revoking individual).

This Power of Attorney may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the undersigned have caused this Power of Attorney to be executed as of this 4th day of February, 2011.

IN WITNESS WHEREOF, this Power of Attorney has been signed as of February , 2011.

Versant Venture Capital I, L.P.  
Versant Affiliates Fund I-A, L.P.  
Versant Affiliates Fund I-B, L.P.  
Versant Side Fund I, L.P.

By: Versant Ventures I, LLC  
Its: General Partner

By: /s/ Robin L. Praeger

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Name: Robin L. Praeger, Chief Financial Officer

Signature: /s/ Brian G. Atwood

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Name: Brian G. Atwood, an individual

Signature: /s/ Samuel D. Colella

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Name: Samuel D. Colella, an individual

Signature: /s/ Ross A. Jaffe

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Name: Ross A. Jaffe, an individual

Signature: /s/ William J. Link

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Name: William J. Link, an individual

Signature: /s/ Barbara N. Lubash

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Name: Barbara N. Lubash, an individual

Signature: /s/ Donald B. Milder

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Name: Donald B. Milder, an individual

Signature: /s/ Rebecca B. Robertson

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Name: Rebecca B. Robertson, an individual