FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

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

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* COLELLA SAMUEL D						2. Issuer Name and Ticker or Trading Symbol FLUIDIGM CORP [FLDM]								Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner					
(Last) (First) (Middle) 3000 SAND HILL ROAD, BUILDING FOUR SHITE 210							3. Date of Earliest Transaction (Month/Day/Year) 02/15/2011								Officer (give title Other (specify below)				
SUITE 210 (Street) MENLO PARK CA 94025						4. If Amendment, Date of Original Filed (Month/Day/Year) 02/17/2011								Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting					
(S	tate)	(Zip)											Pers	on					
	Та	ble I - N	lon-Dei	rivativ	/e Se	ecuri	ities A	cquire	d, D	isposed	of, or B	eneficia	Ily Owne	d					
1. Title of Security (Instr. 3) Common Stock Common Stock Common Stock Common Stock Common Stock Common Stock Common Stock					Exe r) if a	Execution Date,		3. Transaction Code (Instr. 8)			(D) (Instr. 3, 4 and		5. Amount of Securities Beneficially Owned Following Reported		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	Transactio			<u> </u>	,		
Stock			02/15	/2011	C)2/15	/2011	C ⁽¹⁾		2,065	A	(2)	2,06	5	:		ee ootnotes ⁽³⁾⁽⁴⁾		
Stock			02/15	/2011	C)2/15	/2011	C ⁽⁵⁾		7,297	A	(2)	9,36	2	:		ee ootnotes ⁽³⁾⁽⁴⁾		
Stock			02/15	/2011	0)2/15	/2011	C ⁽⁵⁾		6,401	A	(2)	15,763		I		ee ootnotes ⁽³⁾⁽⁴⁾		
Stock			02/15	/2011	C)2/15	/2011	C ⁽⁵⁾		1,769	A	(2)	17,5	32	:		ee ootnotes ⁽³⁾⁽⁴⁾		
Common Stock Common Stock				/2011	02/15/2011		C ⁽¹⁾		5,185	A	(2)	22,717		1 Fe		ee ootnotes ⁽⁴⁾⁽⁶⁾			
Stock			02/15	/2011	0)2/15	/2011	C ⁽⁵⁾		29,190	A	(2)	51,9	07		l F	ee ootnotes ⁽⁴⁾⁽⁶⁾		
Stock			02/15	/2011	0)2/15	/2011	C ⁽⁵⁾		13,442	A	(2)	65,34	49	:	l F	ee ootnotes ⁽⁴⁾⁽⁶⁾		
Common Stock			02/15/2011		02/15/2011		C ⁽⁵⁾		3,715	A	(2)	69,064		:	I See Footnotes(4				
Common Stock			02/15	/2011	0)2/15	/2011	C ⁽¹⁾		2,092	A	(2)	71,1	56	:	F	ee ootnotes ⁽⁴⁾⁽⁷⁾		
Stock			02/15	/2011	()2/15	/2011	C ⁽⁵⁾		10,425	A	(2)	81,5	31			ee ootnotes ⁽⁴⁾⁽⁷⁾		
		Table I																	
Derivative Conversion Date Executi Security or Exercise (Month/Day/Year) if any		Execution if any	n Date, Transa Code ((Instr. Derivative Securities Acquired (A) or Disposed		vative urities uired or oosed O) (Instr.	Expirati	ion Da	te	e of Securities ar) Underlying		Derivative Security (Instr. 5) Owner Follor Repo		tive Owners ties Form: cially Direct (Beneficial Ownership (Instr. 4)		
				Code	v	(A)	(D)	Date Exercis	able	Expiration Date	Title	Amount or Number of Shares							
(2)	02/15/2011	02/15/	/2011	С	С		2,065	(8)		(8)	Common Stock	2,065	\$0	1,057	7,132	I	See Footnotes ⁽³⁾⁽⁴⁾		
(2)	02/15/2011	02/15/	/2011	С	С		7,297	(9)		(9)	Common Stock	7,297	\$0	1,049),835	I	See Footnotes ⁽³⁾⁽⁴⁾		
(2)	02/15/2011	02/15/	/2011	С			6,401	(9)		(9)	Common Stock	6,401	\$0	1,043	3,434	I	See Footnotes ⁽³⁾⁽⁴⁾		
	PARK C. (S Stock Sto	PARK CA (State) Ta Security (Instr. 3) Stock St	PARK CA 94025 (State) (Zip) Table I - N Stock S	ND HILL ROAD, BUILDING FOUR 10 10 10 10 10 10 10 1	ND HILL ROAD, BUILDING FOUR 10	ND HILL ROAD, BUILDING FOUR 10	ND HILL ROAD, BUILDING FOUR 10 10 10 10 10 10 10 1	ND HILL ROAD, BUILDING FOUR O2/15/2011	ND HILL ROAD, BUILDING FOUR 10 10 11 11 11 11 11 1	Non-part Non-part	A	Date Date	Description Description	Source S	A	A	Description Communication Control Cont		

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)	Execution Date,		4. Transaction Code (Instr. 8)		umber ivative urities uired or oosed O) (Instr. 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 D Preferred Stock	(2)	02/15/2011	02/15/2011	С			1,769	(9)	(9)	Common Stock	1,769	\$0	1,041,665	I	See Footnotes ⁽³⁾⁽⁴⁾
Series E Preferred Stock	(2)	02/15/2011	02/15/2011	С			5,185	(8)	(8)	Common Stock	5,185	\$0	1,036,480	I	See Footnotes ⁽⁴⁾⁽⁶⁾
Series B Preferred Stock	(2)	02/15/2011	02/15/2011	С			29,190	(9)	(9)	Common Stock	29,190	\$0	1,007,290	I	See Footnotes ⁽⁴⁾⁽⁶⁾
Series C Preferred Stock	(2)	02/15/2011	02/15/2011	С			13,442	(9)	(9)	Common Stock	13,442	\$0	993,848	I	See Footnotes ⁽⁴⁾⁽⁶⁾
Series D Preferred Stock	(2)	02/15/2011	02/15/2011	С			3,715	(9)	(9)	Common Stock	3,715	\$0	990,133	I	See Footnotes ⁽⁴⁾⁽⁶⁾
Series E Preferred Stock	(2)	02/15/2011	02/15/2011	С			2,092	(8)	(8)	Common Stock	2,092	\$0	988,041	I	See Footnotes ⁽⁴⁾⁽⁷⁾
Series B Preferred Stock	(2)	02/15/2011	02/15/2011	С			10,425	(9)	(9)	Common Stock	10,425	\$0	977,616	I	See Footnotes ⁽⁴⁾⁽⁷⁾

Explanation of Responses:

- 1. Represents shares of Common Stock issued upon conversion of shares of Series E Preferred Stock on a 1-for 1.300053676865 basis.
- 2. Not applicable.
- 3. Versant Affiliates Fund I-A, L.P., is the record holder of the securities reported.
- 4. 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
- 5. 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.
- 6. Versant Affiliates Fund I-B, L.P. is the record holder of the securities reported.
- 7. Versant Side Fund I, L.P., is the record holder of the securities reported.
- 8. 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.
- 9. Each share of Series B Preferred Stock, Series C Preferred Stock and Series D Preferred Stock automatically converted into one share of Common Stock on the Closing Date and has no expiration date.

Remarks:

Exhibit List Exhibit 24 - Power of Attorney Form 1 of 2

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

fact

** 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
- 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

lama. Dahim I. Duranan Ohiof Financial Officer

Name: Robin L. Praeger, Chief Financial Officer

Signature: /s/ Brian G. Atwood

Name: Brian G. Atwood, an individual

Signature: /s/ Samuel D. Colella

Name: Samuel D. Colella, an individual

Signature: /s/ Ross A. Jaffe

Name: Ross A. Jaffe, an individual

Signature: /s/ William J. Link

Name: William J. Link, an individual

Signature: /s/ Barbara N. Lubash

Name: Barbara N. Lubash, an individual

Signature: /s/ Donald B. Milder

Name: Donald B. Milder, an individual

Signature: /s/ Rebecca B. Robertson

Name: Rebecca B. Robertson, an individual