

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL

OMB Number: 3235-0104

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* <u>COLELLA SAMUEL D</u>	2. Date of Event Requiring Statement (Month/Day/Year) 02/09/2011	3. Issuer Name and Ticker or Trading Symbol <u>FLUIDIGM CORP [FLDM]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year)
(Last) (First) (Middle) 3000 SAND HILL ROAD, BUILDING FOUR SUITE 210			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
(Street) MENLO CA 94025			
(City) (State) (Zip)			

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Series E1 Preferred Stock	164 ⁽¹⁾	I	See Footnotes ⁽²⁾⁽³⁾
Series E1 Preferred Stock	346 ⁽¹⁾	I	See Footnotes ⁽³⁾⁽⁴⁾
Series E1 Preferred Stock	148 ⁽¹⁾	I	See Footnotes ⁽³⁾⁽⁵⁾
Series E1 Preferred Stock	7,596 ⁽¹⁾	I	See Footnotes ⁽³⁾⁽⁶⁾

Table II - Derivative Securities Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Series E Preferred Warrant (Right to Buy)	(7)	(8)	Common Stock	479 ⁽¹⁾⁽⁷⁾	24.22	I	See footnotes ⁽²⁾⁽³⁾
Series E Preferred Stock	(7)	(10)	Common Stock	2,065 ⁽¹⁾⁽⁷⁾	0	I	See footnotes ⁽²⁾⁽³⁾
Series B Preferred Stock	(9)	(9)	Common Stock	7,297 ⁽¹⁾	0	I	See footnotes ⁽²⁾⁽³⁾
Series C Preferred Stock	(9)	(9)	Common Stock	6,401 ⁽¹⁾	0	I	See footnotes ⁽²⁾⁽³⁾
Series D Preferred Stock	(9)	(9)	Common Stock	1,769 ⁽¹⁾	0	I	See footnotes ⁽²⁾⁽³⁾
Series E Preferred Warrant (Right to Buy)	(7)	(8)	Common Stock	1,417 ⁽¹⁾⁽⁷⁾	24.22	I	See footnotes ⁽³⁾⁽⁴⁾
Series E Preferred Stock	(7)	(10)	Common Stock	5,185 ⁽¹⁾⁽⁷⁾	0	I	See footnotes ⁽³⁾⁽⁴⁾
Series B Preferred Stock	(9)	(9)	Common Stock	29,190 ⁽¹⁾	0	I	See footnotes ⁽³⁾⁽⁴⁾
Series C Preferred Stock	(9)	(9)	Common Stock	13,442 ⁽¹⁾	0	I	See footnotes ⁽³⁾⁽⁴⁾
Series D Preferred Stock	(9)	(9)	Common Stock	3,715 ⁽¹⁾	0	I	See footnotes ⁽³⁾⁽⁴⁾
Series E Preferred Warrant (Right to Buy)	(7)	(8)	Common Stock	544 ⁽¹⁾⁽⁷⁾	24.22	I	See footnotes ⁽³⁾⁽⁵⁾
Series E Preferred Stock	(7)	(10)	Common Stock	2,092 ⁽¹⁾⁽⁷⁾	0	I	See footnotes ⁽³⁾⁽⁵⁾
Series B Preferred Stock	(9)	(9)	Common Stock	10,425 ⁽¹⁾	0	I	See footnotes ⁽³⁾⁽⁵⁾
Series C Preferred Stock	(9)	(9)	Common Stock	5,760 ⁽¹⁾	0	I	See footnotes ⁽³⁾⁽⁵⁾
Series D Preferred Stock	(9)	(9)	Common Stock	1,592 ⁽¹⁾	0	I	See footnotes ⁽³⁾⁽⁵⁾
Series E Preferred Warrant (Right to Buy)	(7)	(8)	Common Stock	26,181 ⁽¹⁾⁽⁷⁾	24.22	I	See footnotes ⁽³⁾⁽⁶⁾
Series E Preferred Stock	(7)	(10)	Common Stock	103,546 ⁽¹⁾⁽⁷⁾	0	I	See footnotes ⁽³⁾⁽⁶⁾
Series B Preferred Stock	(9)	(9)	Common Stock	474,354 ⁽⁷⁾	0	I	See footnotes ⁽³⁾⁽⁶⁾
Series C Preferred Stock	(9)	(9)	Common Stock	294,457 ⁽⁷⁾	0	I	See footnotes ⁽³⁾⁽⁶⁾

**Table II - Derivative Securities Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Series D Preferred Stock	(9)	(9)	Common Stock	81,396 ⁽⁷⁾	0	I	See footnotes ⁽³⁾⁽⁶⁾
Stock Option (Right to Buy)	(11)	(11)	Common Stock	8,670 ⁽⁷⁾	8.38	D	
Stock Option (Right to Buy)	(12)	(12)	Common Stock	8,670 ⁽⁷⁾	4.45	D	
Series E1 Preferred Warrant (Right to Buy)	(9)	(8)	Common Stock	8,257 ⁽¹⁾	0.02	I	See footnote ⁽¹³⁾

Explanation of Responses:

- Reflects a 1-for-1.73 reverse stock split of the Issuer's outstanding shares effected February 3, 2011.
- Versant Affiliates Fund 1-A, L.P., is the record holder of the securities reported on Lines 1, 2, 3, 4, 5 and 6 of Table 2.
- 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.
- Versant Affiliates Fund 1-B, L.P., is the record holder of the securities.
- Versant Side Fund 1, L.P., is the record holder of the securities.
- Versant Venture Capital I, L.P., is the record holder of the securities.
- Reflects the automatic conversion of each share of Series E Preferred Stock into 1.3 shares of Common Stock to occur upon the closing of the Issuer's initial public offering.
- Expires immediately prior to the closing of the Issuer's initial public offering.
- Reflects the automatic conversion of each share of Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series E1 Preferred Stock into one share of Common Stock to occur upon the closing of the Issuer's initial public offering. Each share has no expiration date.
- Each share has no expiration date.
- 1/12th of the shares subject to such Option shall vest on each monthly anniversary of January 28, 2011 (the "Vesting Commencement Date"), such that the Option will be fully vested on the first annual anniversary of the Vesting Commencement Date. The Option shall expire on January 6, 2021.
- The Option fully vested on January 28, 2011. The Option shall expire on January 28, 2020.
- The Colella Family Trust U/D/T dated September 21, 1992 is the record holder of the securities reported on line 27 of Table 2. Samuel D. Colella and Nancy R. Colella are trustees of the Colella Family Trust U/D/T dated September 21, 1992.

Remarks:

Exhibit List ----- Exhibit 24 - Power of Attorney

/s/ Gajus V. Worthington,
attorney-in-fact

02/09/2011

** 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 5 (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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