

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL

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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>VERSANT VENTURE CAPITAL LP</u> (Last) (First) (Middle) 3000 SAND HILL ROAD, BUILDING FOUR SUITE 210 (Street) MENLO CA 94025 (City) (State) (Zip)	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) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person
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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	164 ⁽¹⁾	I	See Footnotes ⁽²⁾⁽³⁾
Series E1 Preferred	346 ⁽¹⁾	I	See Footnotes ⁽³⁾⁽⁴⁾
Series E1 Preferred	148 ⁽¹⁾	I	See Footnotes ⁽³⁾⁽⁵⁾
Series E1 Preferred	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 ⁽¹⁾	0	I	See footnotes ⁽³⁾⁽⁶⁾
Series C Preferred Stock	(9)	(9)	Common Stock	294,457 ⁽¹⁾	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 ⁽¹⁾	0	I	See footnotes ⁽³⁾⁽⁶⁾

1. Name and Address of Reporting Person*

[VERSANT VENTURE CAPITAL I LP](#)

(Last) (First) (Middle)

3000 SAND HILL ROAD, BUILDING FOUR
SUITE 210

(Street)

MENLO PARK CA 94025

(City) (State) (Zip)

1. Name and Address of Reporting Person*

[VERSANT AFFILIATES FUND I-A LP](#)

(Last) (First) (Middle)

3000 SAND HILL ROAD, BUILDING FOUR,
SUITE 210

(Street)

MENLO PARK CA 94025

(City) (State) (Zip)

1. Name and Address of Reporting Person*

[VERSANT AFFILIATES FUND I-B LP](#)

(Last) (First) (Middle)

3000 SAND HILL ROAD, BUILDING FOUR,
SUITE 210

(Street)

MENLO PARK CA 94025

(City) (State) (Zip)

1. Name and Address of Reporting Person*

[VERSANT SIDE FUND I LP](#)

(Last) (First) (Middle)

3000 SAND HILL ROAD, BUILDING FOUR,
SUITE 210

(Street)

MENLO PARK CA 94025

(City) (State) (Zip)

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.
- 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.

Remarks:

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

[/s/ Gajus V. Worthington,](#) [02/09/2011](#)
[attorney-in-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 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.

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: _____
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