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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

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**FORM S-8**  
**REGISTRATION STATEMENT**  
*UNDER*  
*THE SECURITIES ACT OF 1933*

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**FLUIDIGM CORPORATION**

(Exact name of Registrant as specified in its charter)

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**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**77-0513190**  
(I.R.S. Employer  
Identification No.)

**7000 Shoreline Court, Suite 100**  
**South San Francisco, California 94080**  
**(650) 266-6000**  
(Address of principal executive offices, including zip code)

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**Fluidigm Corporation 2011 Equity Incentive Plan**  
**Fluidigm Corporation 2017 Inducement Award Plan**  
(Full title of the plan)

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**Stephen Christopher Linthwaite**  
**President and Chief Executive Officer**  
**7000 Shoreline Court, Suite 100**  
**South San Francisco, California 94080**  
**(650) 266-6000**  
(Name, address and telephone number, including area code, of agent for service)

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*Copies to:*

**Nicholas Khadder**  
**General Counsel**  
**7000 Shoreline Court, Suite 100**  
**South San Francisco, California 94080**  
**Telephone: (650) 266-6000**

**Robert F. Kornegay  
Wilson Sonsini Goodrich & Rosati,  
Professional Corporation  
650 Page Mill Road  
Palo Alto, California 94304  
Telephone: (650) 493-9300**

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act (Check one).

Large accelerated filer  Accelerated filer   
 Non-accelerated filer  (Do not check if a smaller reporting company) Smaller reporting company

**CALCULATION OF REGISTRATION FEE**

Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.001 par value per share (including the associated Preferred Share Purchase Rights)(2), reserved for issuance pursuant to the Fluidigm Corporation 2011 Equity Incentive Plan	1,000,000(3)	\$7.83(4)	\$7,830,000.00	\$907.50
Common Stock, \$0.001 par value per share (including the associated Preferred Share Purchase Rights)(2), reserved for issuance pursuant to the Fluidigm Corporation 2017 Inducement Award Plan	2,000,000	\$7.83 (4)	\$15,660,000.00	\$1,815.00
<b>TOTAL:</b>	3,000,000		\$23,490,000.00	\$2,722.50

- (1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended, this Registration Statement shall also cover any additional shares of the Registrant's common stock that become issuable under the Fluidigm Corporation 2011 Equity Incentive Plan (the "2011 Plan") and the Fluidigm Corporation 2017 Inducement Award Plan (the "2017 Plan") by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of the Registrant's outstanding shares of common stock.
- (2) Comprised of rights to purchase shares of the Registrant's Series A Participating Preferred Stock, par value \$0.001 per share (the "Preferred Share Purchase Rights"), that are associated with shares of the Registrant's common stock pursuant to the Tax Benefit Preservation Plan, dated as of November 21, 2016, by and between Fluidigm Corporation and Computershare Inc., as Rights Agent (the "Rights Plan"). The Preferred Share Purchase Rights are not exercisable until the occurrence of certain events specified in the Rights Plan and are transferrable solely with the associated Common Stock. The value attributed to the Preferred Share Purchase Rights, if any, is reflected in the value of the associated Common Stock.
- (3) Represents shares of the Registrant's common stock that were automatically added to the shares authorized for issuance under the 2011 Plan on January 1, 2017 pursuant to an "evergreen" provision contained in the 2011 Plan. Pursuant to such provision, on January 1st of each fiscal year beginning with the 2012 fiscal year, the number of shares available for issuance under the 2011 Plan is automatically increased in an amount equal to the least of (i) 1,000,000 shares of the Registrant's common stock, (ii) four percent (4%) of the number of shares of the Registrant's common stock outstanding on December 31st of the preceding fiscal year, or (iii) such number of shares of the Registrant's common stock determined by the Registrant's board of directors.
- (4) Estimated in accordance with Rule 457(c) and (h) solely for purposes of calculating the registration fee on the basis of \$7.83 per share, the average of the high and low sale prices of the Registrant's common stock as reported on the NASDAQ Global Select Market on January 12, 2017.

# FLUIDIGM CORPORATION

## EXPLANATORY NOTE

This Registration Statement is filed by Fluidigm Corporation (the “Registrant”) for the purpose of registering 1,000,000 shares of common stock of the Registrant reserved for issuance under the Fluidigm Corporation 2011 Equity Incentive Plan (the “2011 Plan”) and 2,000,000 shares of common stock of the Registrant reserved for issuance under the Fluidigm Corporation 2017 Inducement Award Plan (“2017 Plan”). The shares of the Registrant’s common stock previously reserved for issuance under the 2011 Plan were registered on the following Registration Statements on Form S-8 (File Nos. 333-172206, 333-180363, 333-187204, 333-194084, 333-202325, and 333-209904, as amended) as filed with the Securities and Exchange Commission (the “Commission”) and are incorporated by reference into this Registration Statement.

### PART I

#### INFORMATION REQUIRED IN THE PROSPECTUS

The information specified in Item 1 and Item 2 of Part I of Form S-8 is omitted from this Registration Statement on Form S-8 (the “Registration Statement”) in accordance with the provisions of Rule 428 under the Securities Act of 1933, as amended (the “Securities Act”), and the introductory note to Part I of Form S-8. The documents containing the information specified in Part I of Form S-8 has delivered or will be delivered to the participants in the equity benefit plans covered by this Registration Statement as specified by Rule 428(b)(1) under the Securities Act.

### PART II

#### INFORMATION REQUIRED IN REGISTRATION STATEMENT

##### **Item 3. Incorporation of Documents by Reference.**

The Registrant hereby incorporates by reference into this Registration Statement the following documents previously filed with the Commission:

- (1) The Registrant’s Annual Report on Form 10-K for the fiscal year ended December 31, 2015, filed with the Commission on February 29, 2016 and the Registrant’s Amendment No. 1 to the Registrant’s Form 10-K, filed with the Commission on April 27, 2016;
- (2) The Registrant’s Quarterly Reports on Form 10-Q for the three months ended March 31, 2016, June 30, 2016 and September 30, 2016, filed with the Commission on May 9, 2016, August 9, 2016, and November 9, 2016, respectively;
- (3) The Registrant’s Current Reports on Form 8-K filed with the Commission on May 23, 2016, August 4, 2016, August 4, 2016, September 13, 2016, October 24, 2016, November 22, 2016, and January 11, 2017, only to the extent that the items therein are specifically stated to be “filed” rather than “furnished” for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”);
- (4) The description of the Registrant’s common stock contained in the Company’s Registration Statements on Form 8-A (File No. 001-34180) filed with the Commission on February 7, 2011, pursuant to Section 12(b) of the Exchange Act, including any amendment or report filed for the purpose of updating such description; and
- (5) The description of the Registrant’s Preferred Share Purchase Rights contained in the Company’s Registration Statements on Form 8-A (File No. 001-34180) filed with the Commission on November 22, 2016, pursuant to Section 12(b) of the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered have been sold or that deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents; *provided, however*, that documents or information deemed to have been furnished and not filed in accordance with the rules of the Commission shall not be deemed incorporated by reference into this Registration Statement. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document which also is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Under no circumstances will any information furnished under current items 2.02 or 7.01 of Form 8-K be deemed incorporated herein by reference unless such Form 8-K expressly provides to the contrary.

**Item 4. Description of Securities.**

Not applicable.

**Item 5. Interests of Named Experts and Counsel.**

Not applicable.

**Item 6. Indemnification of Directors and Officers.**

Section 145 of the Delaware General Corporation Law authorizes a corporation's board of directors to grant, and authorizes a court to award, indemnity to officers, directors, and other corporate agents.

As permitted by Section 102(b)(7) of the Delaware General Corporation Law, the Registrant's certificate of incorporation includes provisions that eliminate the personal liability of its directors and officers for monetary damages for breach of their fiduciary duty as directors and officers.

In addition, as permitted by Section 145 of the Delaware General Corporation Law, the bylaws of the Registrant provide that:

- The Registrant shall indemnify its directors and officers for serving the Registrant in those capacities or for serving other business enterprises at the Registrant's request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful.
- The Registrant may, in its discretion, indemnify employees and agents in those circumstances where indemnification is not required by law.
- The Registrant is required to advance expenses, as incurred, to its directors and officers in connection with defending a proceeding, except that such director or officer shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification.
- The Registrant will not be obligated pursuant to the bylaws to indemnify a person with respect to proceedings initiated by that person, except with respect to proceedings authorized by the Registrant's board of directors or brought to enforce a right to indemnification.
- The rights conferred in the bylaws are not exclusive, and the Registrant is authorized to enter into indemnification agreements with its directors, officers, employees, and agents and to obtain insurance to indemnify such persons.
- The Registrant may not retroactively amend the bylaw provisions to reduce its indemnification obligations to directors, officers, employees, and agents.

The Registrant's policy is to enter into separate indemnification agreements with each of its directors and officers that provide the maximum indemnity allowed to directors and executive officers by Section 145 of the Delaware General Corporation Law and also provides for certain additional procedural protections. The Registrant also maintains directors and officers insurance to insure such persons against certain liabilities.

These indemnification provisions and the indemnification agreements entered into between the Registrant and its officers and directors may be sufficiently broad to permit indemnification of the Registrant's officers and directors for liabilities (including reimbursement of expenses incurred) arising under the Securities Act.

See also Registrant's undertakings in Section 9 of this Registration Statement.

**Item 7. Exemption from Registration Claimed.**

Not applicable.

**Item 8. Exhibits.**

<u>Exhibit Number</u>	<u>Description</u>	<u>Incorporated by Reference From Form</u>	<u>Incorporated by Reference From Exhibit Number</u>	<u>Date Filed</u>
4.1	Specimen Common Stock Certificate of the Registrant.	Filed herewith.		
4.2+	2017 Inducement Award Plan and related form agreements.	8-K	10.1	1/11/2017
4.3+	2011 Equity Incentive Plan of Fluidigm Corporation.	S-1/A	10.4	1/28/2011
4.4+	Forms of agreements under the 2011 Equity Incentive Plan.	S-1/A	10.4A	1/28/2011
4.5	Tax Benefit Preservation Plan, dated as of November 21, 2016, by and between Fluidigm Corporation and Computershare Inc., as Rights Agent.	8-K	4.1	11/22/2016
4.6	Indenture, dated February 4, 2014, by and between Fluidigm Corporation and U.S. Bank National Association.	8-K	4.1	2/4/2014
4.7	First Supplement Indenture, dated February 4, 2014, by and between Fluidigm Corporation and U.S. Bank National Association.	8-K	4.2	2/4/2014
4.8	Form of Global Note (included in Exhibit 4.6).	8-K	4.3	2/4/2014
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation.	Filed herewith.		
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.	Filed herewith.		
23.2	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.	Filed herewith.		
23.3	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (contained in Exhibit 5.1 hereto).			
24.1	Power of Attorney (contained on signature page hereto).			

+ Indicates management contract or compensatory plan, contract or arrangement.

**Item 9. Undertakings.**

A. The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement.

*Provided, however,* that: (1) Paragraphs (A)(1)(i) and (A)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

B. The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

C. Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California, on January 13, 2017.

### Fluidigm Corporation

By: /s/ Stephen Christopher Linthwaite  
Stephen Christopher Linthwaite  
*President and Chief Executive Officer*

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Stephen Christopher Linthwaite and Vikram Jog, and each of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign the Registration Statement on Form S-8 of Fluidigm Corporation, and any or all amendments thereto (including post-effective amendments), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he might or could do in person, hereby and about the premises hereby ratifying and confirming all that said attorneys-in-fact and agent, proxy and agent, or his, her or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement on Form S-8 has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Stephen Christopher Linthwaite</u> Stephen Christopher Linthwaite	President, Chief Executive Officer, and Director (Principal Executive Officer)	January 13, 2017
<u>/s/ Vikram Jog</u> Vikram Jog	Chief Financial Officer (Principal Financial Officer)	January 13, 2017
<u>/s/ Jennifer Lee</u> Jennifer Lee	Vice President, Controller (Principal Accounting Officer)	January 13, 2017
<u>/s/ Samuel D. Colella</u> Samuel D. Colella	Chairman of the Board of Directors	January 13, 2017
<u>/s/ Gerhard F. Burbach</u> Gerhard F. Burbach	Director	January 13, 2017
<u>/s/ Evan Jones</u> Evan Jones	Director	January 13, 2017
<u>/s/ Patrick S. Jones</u> Patrick S. Jones	Director	January 13, 2017
<u>/s/ John A. Young</u> John A. Young	Director	January 13, 2017

**EXHIBIT INDEX**

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23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.	Filed herewith.		
23.2	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.	Filed herewith.		
23.3	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (contained in Exhibit 5.1 hereto).			
24.1	Power of Attorney (contained on signature page hereto).			

+ Indicates management contract or compensatory plan, contract or arrangement.

ZQ|CERT#|COY|CLS|RGSTRY|ACCT#|TRANSTYPE|RUN#|TRANS#

**COMMON STOCK**  
PAR VALUE \$0.001

**Fluidigm** 

**FLUIDIGM CORPORATION**  
INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE

THIS CERTIFIES THAT

is the owner of

**\*\*\*ZERO HUNDRED THOUSAND  
ZERO HUNDRED AND ZERO\*\*\***

FULLY-PAID AND NON-ASSESSABLE SHARES OF THE COMMON STOCK OF

**Fluidigm Corporation** (hereinafter called the "Company"), transferable on the books of the Company in person or by duly authorized attorney, upon surrender of this Certificate properly endorsed. This Certificate and the shares represented hereby, are issued and shall be held subject to all of the provisions of the Certificate of Incorporation, as amended, and the By-Laws, as amended, of the Company (copies of which are on file with the Company and with the Transfer Agent), to all of which each holder, by acceptance hereof, assents. This Certificate is not valid unless countersigned and registered by the Transfer Agent and Registrar.

Witness the facsimile seal of the Company and the facsimile signatures of its duly authorized officers.

*S. Christopher Johnson*  
President and Chief Executive Officer

*NSM*  
Secretary

DATED **DD-MMM-YYYY**  
COUNTERSIGNED AND REGISTERED:  
**COMPUTERSHARE TRUST COMPANY, N.A.**  
TRANSFER AGENT AND REGISTRAR.

By \_\_\_\_\_  
AUTHORIZED SIGNATURE

**SEAL**  
FLUIDIGM CORPORATION  
2017  
DELAWARE

Shares  
\*\*\*\*\*000000\*\*\*\*\*  
\*\*\*\*\*000000\*\*\*\*\*  
\*\*\*\*\*000000\*\*\*\*\*  
\*\*\*\*\*000000\*\*\*\*\*

CUSIP 34385P 10 8  
SEE REVERSE FOR CERTAIN DEFINITIONS

Certificate Number  
**ZQ00000000**

COMMON STOCK  
THIS CERTIFICATE IS TRANSFERABLE IN  
CANTON, MA AND NEW YORK, NY

PO BOX 43004, Providence, RI 02940-3004

UNR A SAMPLE  
REGISTRATION (P ANY)  
A001  
A002  
A003  
A004




CUSIP	Holder ID	Insurance Value	Number of Shares	DTC	Certificate Numbers	NumNo.	Denom.	Total
1234567890	XXXXXXXXXX	1,000,000.00	123456	12345678	1234567890	1	1	1
1234567890	XXXXXXXXXX	1,000,000.00	123456	12345678	1234567890	2	2	2
1234567890	XXXXXXXXXX	1,000,000.00	123456	12345678	1234567890	3	3	3
1234567890	XXXXXXXXXX	1,000,000.00	123456	12345678	1234567890	4	4	4
1234567890	XXXXXXXXXX	1,000,000.00	123456	12345678	1234567890	5	5	5
1234567890	XXXXXXXXXX	1,000,000.00	123456	12345678	1234567890	6	6	6
1234567890	XXXXXXXXXX	1,000,000.00	123456	12345678	1234567890	7	7	7
				<b>Total Transaction</b>				

**FLUIDIGM CORPORATION**

THE COMPANY WILL FURNISH WITHOUT CHARGE TO EACH STOCKHOLDER WHO SO REQUESTS, A SUMMARY OF THE POWERS, DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL OR OTHER SPECIAL RIGHTS OF EACH CLASS OF STOCK OF THE COMPANY AND THE QUALIFICATIONS, LIMITATIONS OR RESTRICTIONS OF SUCH PREFERENCES AND RIGHTS, AND THE VARIATIONS IN RIGHTS, PREFERENCES AND LIMITATIONS DETERMINED FOR EACH SERIES, WHICH ARE FIXED BY THE CERTIFICATE OF INCORPORATION OF THE COMPANY, AS AMENDED, AND THE RESOLUTIONS OF THE BOARD OF DIRECTORS OF THE COMPANY, AND THE AUTHORITY OF THE BOARD OF DIRECTORS TO DETERMINE VARIATIONS FOR FUTURE SERIES. SUCH REQUEST MAY BE MADE TO THE OFFICE OF THE SECRETARY OF THE COMPANY OR TO THE TRANSFER AGENT. THE BOARD OF DIRECTORS MAY REQUIRE THE OWNER OF A LOST OR DESTROYED STOCK CERTIFICATE, OR HIS LEGAL REPRESENTATIVES, TO GIVE THE COMPANY A BOND TO INDEMNIFY IT AND ITS TRANSFER AGENTS AND REGISTRARS AGAINST ANY CLAIM THAT MAY BE MADE AGAINST THEM ON ACCOUNT OF THE ALLEGED LOSS OR DESTRUCTION OF ANY SUCH CERTIFICATE.

THIS CERTIFICATE ALSO EVIDENCES AND ENTITLES THE HOLDER HEREOF TO CERTAIN RIGHTS AS SET FORTH IN A TAX BENEFIT PRESERVATION PLAN, DATED AS OF NOVEMBER 21, 2016, BETWEEN FLUIDIGM CORPORATION (THE "COMPANY") AND COMPUTERSHARE INC., AS RIGHTS AGENT (OR ANY SUCCESSOR RIGHTS AGENT THEREUNDER), AS THE SAME MAY BE AMENDED OR SUPPLEMENTED FROM TIME TO TIME (THE "PLAN"), THE TERMS OF WHICH ARE HEREBY INCORPORATED HEREIN BY REFERENCE AND A COPY OF WHICH IS ON FILE AT THE PRINCIPAL EXECUTIVE OFFICES OF THE COMPANY. UNDER CERTAIN CIRCUMSTANCES, AS SET FORTH IN THE PLAN, SUCH RIGHTS (AS DEFINED IN THE PLAN) MAY BE REDEEMED, MAY BECOME EXERCISABLE FOR SECURITIES OR ASSETS OF THE COMPANY OR SECURITIES OF ANOTHER ENTITY, MAY BE EXCHANGED FOR SHARES OF COMMON STOCK OR OTHER SECURITIES OR ASSETS OF THE COMPANY, MAY EXPIRE OR MAY BE EVIDENCED BY SEPARATE CERTIFICATES AND MAY NO LONGER BE EVIDENCED BY THIS CERTIFICATE. THE COMPANY WILL MAIL TO THE HOLDER OF THIS CERTIFICATE A COPY OF THE PLAN AS IN EFFECT ON THE DATE OF MAILING WITHOUT CHARGE AFTER RECEIPT OF A WRITTEN REQUEST THEREFOR. **UNDER CERTAIN CIRCUMSTANCES AS SET FORTH IN THE PLAN, RIGHTS THAT ARE BENEFICIALLY OWNED BY, TRANSFERRED TO OR HAVE BEEN OWNED BY AN ACQUIRING PERSON (AS DEFINED IN THE PLAN) OR ANY OF ITS AFFILIATES (AS DEFINED IN THE PLAN) OR ASSOCIATES (AS DEFINED IN THE PLAN) WILL BE NULL AND VOID AND WILL NO LONGER BE TRANSFERABLE.**

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM - as tenants in common	UNIF GIFT MIN ACT- .....Custodian ..... (Cust) (Minor) under Uniform Gifts to Minors Act ..... (State)
TEN ENT - as tenants by the entireties	UNIF TRF MIN ACT .....Custodian (until age... ) ..... (Cust) (Minor) under Uniform Transfers to Minors Act ..... (State)
JT TEN - as joint tenants with right of survivorship and not as tenants in common	

Additional abbreviations may also be used though not in the above list.

For value received, \_\_\_\_\_ hereby sell, assign and transfer unto PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE

\_\_\_\_\_  
(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING POSTAL ZIP CODE, OF ASSIGNEE)  
 \_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_ Shares  
 of the common stock represented by the within Certificate, and do hereby irrevocably constitute and appoint \_\_\_\_\_ Attorney  
 to transfer the said stock on the books of the within-named Corporation with full power of substitution in the premises.

Dated: \_\_\_\_\_ 20\_\_\_\_  
 Signature: \_\_\_\_\_  
 Signature: \_\_\_\_\_

**Signature(s) Guaranteed: Medallion Guarantee Stamp**  
 THE SIGNATURE(S) SHOULD BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (Banks, Stockbrokers, Savings and Loan Associations and Credit Unions) WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM, PURSUANT TO S.E.C. RULE 17A-15.

Notice: The signature to this assignment must correspond with the name as written upon the face of the certificate, in every particular, without alteration or enlargement, or any change whatever.

**SECURITY INSTRUCTIONS**  
 THIS IS WATERMARKED PAPER. DO NOT ACCEPT WITHOUT NOTING WATERMARK. HOLD TO LIGHT TO VERIFY WATERMARK.



The IRS requires that the named transfer agent ("we") report the cost basis of certain shares or units acquired after January 1, 2011. If your shares or units are covered by the legislation, and you requested to sell or transfer the shares or units using a specific cost basis calculation method, then we have processed as you requested. If you did not specify a cost basis calculation method, then we have defaulted to the first in, first out (FIFO) method. Please consult your tax advisor if you need additional information about cost basis.  
 If you do not keep in contact with the issuer or do not have any activity in your account for the time period specified by state law, your property may become subject to state unclaimed property laws and transferred to the appropriate state.

1534291

OPINION OF WILSON SONSINI GOODRICH & ROSATI  
PROFESSIONAL CORPORATION

January 13, 2017

Fluidigm Corporation  
7000 Shoreline Court, Suite 100  
South San Francisco, CA 94080**Re: Registration Statement on Form S-8**

Ladies and Gentlemen:

We have examined the Registration Statement on Form S-8 (the "**Registration Statement**") to be filed by Fluidigm Corporation, a Delaware corporation (the "**Company**"), with the Securities and Exchange Commission on or about the date hereof, in connection with the registration under the Securities Act of 1933, as amended, of an aggregate of 3,000,000 shares of the Company's common stock, par value \$0.001 per share, consisting of: (i) 1,000,000 additional shares of common stock reserved for future issuance pursuant to the Fluidigm Corporation 2011 Equity Incentive Plan; and (ii) 2,000,000 shares of common stock reserved for future issuance pursuant to the Fluidigm Corporation 2017 Inducement Award Plan (which plans are referred to herein as the "**Plans**" and which shares of Common Stock are referred to herein as the "**Shares**") and preferred share purchase rights (the "**Rights**") associated with the shares of common stock issuable upon exercise of the Shares to be issued pursuant to that certain Tax Benefit Preservation Plan, dated as of November 21, 2016, by and between the Company and Computershare Inc., as Rights Agent. As your legal counsel, we have examined the proceedings taken and are familiar with the actions proposed to be taken by you in connection with the issuance and sale of the Shares under the Plans and pursuant to the agreements related thereto. In such examination, we have assumed the following: (a) the authenticity of original documents and the genuineness of all signatures; (b) the conformity to the originals of all documents submitted to us as copies; and (c) the truth, accuracy and completeness of the information, representations and warranties contained in the records, documents, instruments and certificates we have reviewed.

It is our opinion that the Shares, when issued and sold in the manner referred to in the Plans and pursuant to the agreements that accompany the Plans, will be legally and validly issued, fully paid and nonassessable.

We consent to the use of this opinion as an exhibit to the Registration Statement, and further consent to the use of our name wherever appearing in the Registration Statement and any amendments thereto.

Very truly yours,

WILSON SONSINI GOODRICH & ROSATI  
Professional Corporation

/s/ Wilson Sonsini Goodrich &amp; Rosati

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated February 29, 2016, relating to the financial statements, financial statement schedule, and the effectiveness of internal control over financial reporting, which appears in Fluidigm Corporation's Annual Report on Form 10-K for the year ended December 31, 2015.

/s/ PricewaterhouseCoopers LLP  
San Jose, California  
January 13, 2017

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statement (Form S-8) for the registration of 1,000,000 shares of common stock pertaining to the Fluidigm Corporation 2011 Equity Incentive Plan and 2,000,000 shares of common stock pertaining to the Fluidigm Corporation 2017 Inducement Award Plan of our report dated February 29, 2016, with respect to the consolidated financial statements and schedule of Fluidigm Corporation included in its Annual Report (Form 10-K) for the year ended December 31, 2015, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP  
January 13, 2017  
Redwood City, California