

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

SCHEDULE 13G

(Amendment No. 1)*

Under the Securities Exchange Act of 1934

Fluidigm Corporation

(Name of Issuer)

Common Stock

(Title of Class of Securities)

34385P108

(CUSIP Number)

December 31, 2015

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 (the "Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Mubadala Development Company PJSC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION The Emirate of Abu Dhabi, United Arab Emirates	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER Not applicable
	6	SHARED VOTING POWER 1,599,069
	7	SOLE DISPOSITIVE POWER Not applicable
	8	SHARED DISPOSITIVE POWER 1,599,069
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,599,069	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="radio"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 5.55%	
12	TYPE OF REPORTING PERSON (See Instructions) CO	

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	MDC Capital LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION The Emirate of Abu Dhabi, United Arab Emirates	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER Not applicable
	6	SHARED VOTING POWER 1,599,069
	7	SOLE DISPOSITIVE POWER Not applicable
	8	SHARED DISPOSITIVE POWER 1,599,069
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,599,069	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="radio"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 5.55%	
12	TYPE OF REPORTING PERSON (See Instructions) OO	

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	MDC Capital (Cayman) Limited, as trustee for Fifty First Investment Company LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Cayman Islands	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER Not applicable
	6	SHARED VOTING POWER 1,599,069
	7	SOLE DISPOSITIVE POWER Not applicable
	8	SHARED DISPOSITIVE POWER 1,599,069
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,599,069	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="radio"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 5.55%	
12	TYPE OF REPORTING PERSON (See Instructions) CO	

This Amendment No. 1 amends and restates in its entirety the statement on Schedule 13G filed by the Reporting Persons listed in Item 2 with the Securities and Exchange Commission (the "Commission") on September 11, 2015, which relates to the Common Stock, par value \$0.001 per share, of Fluidigm Corporation (the "Issuer"). The information set forth herein regarding percentages of beneficial ownership is based upon information obtained from the Issuer regarding the number of shares of Common Stock, par value \$0.001 per share, disclosed as outstanding as of October 30, 2015 by the Issuer in its quarterly report on Form 10-Q for the quarterly period ended September 30, 2015, and filed with the Commission on November 9, 2015.

Item 1.

(a) Name of Issuer:

Fluidigm Corporation

(b) Address of Issuer's Principal Executive Offices:

7000 Shoreline Court, Suite 100

South San Francisco, CA 94080

Item 2.

(a) Name of Person Filing:

(i) Mubadala Development Company PJSC

(ii) MDC Capital LLC

(iii) MDC Capital (Cayman) Limited, as trustee for Fifty First Investment Company LLC

(b) Address of Principal Business Office or, if none, Residence:

(i) P.O. Box 45005, Abu Dhabi, United Arab Emirates

(ii) P.O. Box 45005, Abu Dhabi, United Arab Emirates

(iii) Intertrust Corporate Services (Cayman) Limited, 190 Elgin Avenue, George Town, Grand Cayman KY1-9005, Cayman Islands

(c) Citizenship:

(i) The Emirate of Abu Dhabi, United Arab Emirates

(ii) The Emirate of Abu Dhabi, United Arab Emirates

(iii) Cayman Islands

(d) Title of Class of Securities:

Common Stock, par value \$0.001 per share

(e) CUSIP Number:

34385P108

Item 3.

Not applicable.

Item 4. Ownership.**(a) Amount Beneficially Owned:**

1,599,069 shares are held of record by MDC Capital (Cayman) Limited (“MDC Capital (Cayman)”), as trustee for Fifty First Investment Company LLC. MDC Capital (Cayman) is a direct wholly-owned subsidiary of MDC Capital LLC. MDC Capital LLC, MDC Capital (Cayman) and Fifty First Investment Company LLC are controlled subsidiaries of Mubadala Development Company PJSC.

(b) Percent of Class:

The responses of the Reporting Persons to Row (11) of the cover pages of this Statement are incorporated herein by reference.

(c) Number of shares as to which the person has:

The responses of the Reporting Persons to Rows (5) through (8) of the cover pages of this Statement are incorporated herein by reference.

Item 5. Ownership of Five Percent or Less of a Class.

Not applicable.

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company.

Not applicable.

Item 8. Identification and Classification of Member of the Group.

Not applicable.

Item 9. Notice of Dissolution of Group.

Not applicable.

Item 10. Certification.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

MUBADALA DEVELOPMENT COMPANY PJSC

February 11, 2016

Date

/s/ Samer Halawa

Signature

Samer Halawa / Attorney in Fact

Name/Title

MDC CAPITAL LLC

February 11, 2016

Date

/s/ Rodney Cannon

/s/ Hani Barhoush

Signature

Rodney Cannon / Director

Hani Barhoush / Director

Name/Title

MDC CAPITAL (CAYMAN) LIMITED, AS TRUSTEE FOR
FIFTY FIRST INVESTMENT COMPANY LLC

February 11, 2016

Date

/s/ Rodney Cannon

/s/ Hani Barhoush

Signature

Rodney Cannon / Director

Hani Barhoush / Director

Name/Title



AGREEMENT OF JOINT FILING

Pursuant to Rule 13d-1(k)(1) of the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended, each of the undersigned agrees that the statement on Schedule 13G filed herewith shall be filed on behalf of each of the undersigned.

MUBADALA DEVELOPMENT COMPANY PJSC

February 11, 2016

Date

/s/ Samer Halawa

Signature

Samer Halawa / Attorney in Fact

Name/Title

MDC CAPITAL LLC

February 11, 2016

Date

/s/ Rodney Cannon /s/ Hani Barhoush

Signature

Rodney Cannon / Director Hani Barhoush / Director

Name/TitleMDC CAPITAL (CAYMAN) LIMITED, AS TRUSTEE FOR
FIFTY FIRST INVESTMENT COMPANY LLC

February 11, 2016

Date

/s/ Rodney Cannon /s/ Hani Barhoush

Signature

Rodney Cannon / Director Hani Barhoush / Director

Name/Title