

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| OMB APPROVAL | |
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|---|--|--|---|--|--|--|--|--|
| 1. Name and Address of Reporting Person * JONES ROBERT C <hr/> (Last) (First) (Middle) FLUIDIGM CORPORATION 7000 SHORELINE COURT, SUITE 100 <hr/> (Street) SOUTH SAN FRANCISCO CA 94080 <hr/> (City) (State) (Zip) | | | 2. Issuer Name and Ticker or Trading Symbol FLUIDIGM CORP [FLDM] | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) EVP, RESEARCH & DEVELOPMENT | | |
| | | | 3. Date of Earliest Transaction (Month/Day/Year) 03/12/2015 | | | | | |
| | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | |
| | | | 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 | | | | | |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 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 | | | |

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) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 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 |
| Restricted Stock Units | (1) | 03/12/2015 | | A | | 4,800 | | (2) | (2) | Common Stock | 4,800 | \$0 | 4,800 | D | |
| Employee Stock Option (Right to Buy) | \$41.14 | 03/12/2015 | | A | | 12,000 | | (3) | 03/12/2025 | Common Stock | 12,000 | \$0 | 12,000 | D | |

Explanation of Responses:

- Each Restricted Stock Unit represents the contingent right to receive one share of FLDM common stock upon vesting of the unit.
- 4/48th of the total number of shares underlying the Restricted Stock Units granted will vest on May 20, 2015, and 3/48th of the total number of shares underlying the Restricted Stock Units granted will vest every three months thereafter until fully vested, subject to recipient's continued employment through the applicable vest date.
- 2/48th of the shares subject to the Option vested on March 12, 2015 and 1/48th of the shares subject to the Option vest on April 1, 2015 and each month thereafter, such that the Option will be fully vested on January 1, 2019.

Remarks:

/s/ Valerie Barnett, attorney-in-fact 03/16/2015

** 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.