# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported) December 11, 2018

# **FLUIDIGM CORPORATION**

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-34180 (Commission File Number) 77-0513190 (IRS Employer Identification No.)

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

 $\begin{tabular}{ll} (650)\ 266-6000 \\ (Registrant's\ telephone\ number,\ including\ area\ code) \\ \end{tabular}$ 

(Former name or former address, if changed since last report)

	appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the provisions (see General Instruction A.2. below):		
	Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)		
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)		
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))		
	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))		
Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933(§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).			
	Emerging growth company $\Box$		
	ging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any rised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.		

#### Item 8.01 Other Events.

On December 11, 2018, Fluidigm Corporation (the "Company") entered into a purchase agreement (the "Purchase Agreement") with Piper Jaffray & Co. and UBS Securities LLC, as representatives of the several underwriters named therein (collectively, the "Underwriters"), relating to the issuance and sale of 8,150,000 shares of common stock of the Company (the "Underwritten Shares"). BTIG and Janney Montgomery Scott are acting as comanagers. The price to the public in the offering is \$6.75 per share and the Underwriters have agreed to purchase the shares of common stock from the Company pursuant to the Purchase Agreement at a price of \$6.345 per share. The net proceeds to the Company from this offering are expected to be approximately \$51.3 million (or \$59.1 million if the underwriters exercise their option to purchase additional shares of our common stock in full), after deducting underwriting discounts and commissions and estimated offering expenses. The Company intends to use the net proceeds of the offering for general corporate purposes, including working capital, capital expenditures and continued research and development with respect to products and technologies, and to fund possible investments in or acquisitions of complementary businesses, products, or technologies. The Company has granted the Underwriters a 30-day option to purchase up to an additional 1,222,500 shares of common stock (together with the Underwritten Shares, the "Shares"). The closing of the offering is expected to occur on or about December 14, 2018, subject to the satisfaction of customary closing conditions.

The offering is being made pursuant to the Company's effective registration statement on Form S-3 (Registration Statement No. 333-216542) (the "Registration Statement") previously filed with the Securities and Exchange Commission and a related prospectus included in the Registration Statement, as supplemented by a preliminary prospectus supplement dated December 11, 2018 and a final prospectus supplement dated December 11, 2018.

The Purchase Agreement contains customary representations, warranties and agreements by the Company, customary conditions to closing, indemnification obligations of the Company and the Underwriters, including for liabilities under the Securities Act of 1933, as amended, other obligations of the parties and termination provisions. The representations, warranties and covenants contained in the Purchase Agreement were made only for purposes of such agreement and as of specific dates, were solely for the benefit of the parties to such agreement, and may be subject to limitations agreed upon by the contracting parties. In addition, pursuant to the terms of the Purchase Agreement, the executive officers and directors of the Company have entered into "lock-up" agreements with the Underwriters, which generally prohibit the sale, transfer or other disposition of securities of the Company for a 75-day period, subject to certain exceptions.

The foregoing description of the Purchase Agreement is not complete and is qualified in its entirety by reference to the full text of the Purchase Agreement, a copy of which is filed herewith as Exhibit 1.1 to this Current Report on Form 8-K and is incorporated herein by reference. A copy of the opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation, relating to the legality of the issuance and sale of the Shares in the offering is filed as Exhibit 5.1 to this Current Report on Form 8-K.

#### Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit <u>No.</u>	<u>Description</u>
1.1	Purchase Agreement, dated December 11, 2018.
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation
23.1	Consent of Wilson Sonsini Goodrich & Possti, Professional Corporation (contained in Exhibit 5.1)

#### **SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: December 12, 2018

### FLUIDIGM CORPORATION

By: /s/ Nicholas Khadder

Nicholas Khadder

Senior Vice President, General Counsel, and Corporate Secretary

#### PURCHASE AGREEMENT

8,150,000 Shares
Fluidigm Corporation
Common Stock
(\$0.001 Par Value)
December 11, 2018

Piper Jaffray & Co. UBS Securities LLC

c/o U.S. Bancorp Center 800 Nicollet Mall Minneapolis, Minnesota 55402

c/o UBS Securities LLC 1285 Avenue of the Americas New York, New York 10019

As Representatives of the Several Underwriters

#### Ladies and Gentlemen:

Fluidigm Corporation, a Delaware corporation (the "Company"), proposes to sell to the several underwriters (the "Underwriters") named in Schedule I hereto for whom you are acting as representatives (the "Representatives") an aggregate of 8,150,000 shares (the "Firm Shares") of Common Stock, \$0.001 par value per share (the "Common Stock"), of the Company. The respective amounts of the Firm Shares to be so purchased by the several Underwriters are set forth opposite their names in Schedule I hereto. The Company has also granted to the Underwriters an option to purchase up to 1,222,500 additional shares of Common Stock on the terms and for the purposes set forth in Section 2 hereof (the "Option Shares"). The Firm Shares and any Option Shares purchased pursuant to this Purchase Agreement are herein collectively called the "Shares".

As the Representatives, you have advised the Company (a) that you are authorized to enter into this Agreement on behalf of the several Underwriters, and (b) that the several Underwriters are willing, acting severally and not jointly, to purchase the numbers of Firm Shares set forth opposite their respective names in <u>Schedule I</u> hereto, plus their pro rata portion of the Option Shares if you elect to exercise the option in whole or in part for the accounts of the several Underwriters.

In consideration of the mutual agreements contained herein and of the interests of the parties in the transactions contemplated hereby, the parties hereto agree as follows:

#### 1. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. The Company represents and warrants as follows:

(a) A registration statement on Form S-3 (File No. 333-216542) (including such amendments and supplements thereto as may have been filed before execution of this Agreement, the "Registration Statement") in respect of the Shares has been filed with the Securities and Exchange Commission (the "Commission") pursuant to Rule 415 under the Securities Act of 1933, as amended (the "Securities Act"). The Company meets the requirements for use of Form S-3 under the Securities Act and the rules and regulations of the Commission thereunder (the "Rules and Regulations"). The Registration Statement and any post-effective amendment thereto, excluding exhibits thereto, each in the form heretofore delivered to you as Representatives of the other Underwriters, have been declared effective by the Commission in such form and meet the requirements of the Securities Act and the Rules and Regulations. The proposed offering of the Shares may be made pursuant to General Instruction I.B.1. of Form S-3. Other than the Preliminary Prospectus (as defined below) and any Issuer Free Writing Prospectus (as defined below), no other document with respect to the offer and sale of the Shares has heretofore been filed with the Commission. No stop order suspending the effectiveness of the Registration Statement or notice that would prevent the use of the Registration Statement has been issued and no proceeding for that purpose or pursuant to Section 8A of the Securities Act has been initiated or, to the Company's knowledge, threatened by the Commission. The base prospectus included in the Registration Statement at the time of effectiveness thereof (the "Base Prospectus"), as supplemented by the preliminary prospectus supplement, dated December 11, 2018, relating to the offer and sale of the Shares in the form filed pursuant to and within the time limit described in Rule 424(b) under the Rules and Regulations, is hereinafter called the "Preliminary Prospectus." The Base Prospectus, as supplemented by the final prospectus supplement relating to the offer and sale of the Shares, in the form to be filed pursuant to and within the time limits described in Rule 424(b) under the Rules and Regulations, is hereinafter called the "Prospectus."

Any reference herein to any Registration Statement, the Base Prospectus, the Preliminary Prospectus or the Prospectus shall be deemed to refer to and include the documents incorporated by reference therein. Any reference to any amendment or supplement to the Preliminary Prospectus or the Prospectus or the Prospectus or the Prospectus or the Prospectus, respectively, under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and incorporated by reference in the Preliminary Prospectus or the Prospectus, respectively. Any reference to any amendment to the Registration Statement shall be deemed to refer to and include any annual report of the Company filed pursuant to Section 13(a) or 15(d) of the Exchange Act after the date of this Agreement that is incorporated by reference in the Registration Statement.

(b) As of the Applicable Time (as defined below) and as of the Closing Date or the Option Closing Date, as the case may be, neither (i) the General Use Free Writing Prospectus(es) (as defined below) issued at or prior to the Applicable Time and the information included on Schedule II hereto, all considered together with the Preliminary Prospectus (collectively, the "General Disclosure Package"), nor (ii) any individual Limited Use Free Writing Prospectus (as defined below), when considered together with the General Disclosure Package, included or will include any untrue statement of a material fact or omitted or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no representations or warranties as to information contained in or omitted from any Issuer Free Writing Prospectus, in reliance upon, and in conformity with, written information furnished to the Company by or on behalf of any Underwriter through the Representatives, specifically for use therein, it being

understood and agreed that the only such information is that described in <u>Section 13</u> herein. As used in this subsection and elsewhere in this Agreement:

"Applicable Time" means 7:45 p.m. (New York time) on December 11, 2018.

"Issuer Free Writing Prospectus" means any "issuer free writing prospectus," as defined in Rule 433 under the Securities Act, relating to the Shares in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g) under the Securities Act.

"General Use Free Writing Prospectus" means any Issuer Free Writing Prospectus that is identified on Schedule III hereto.

"Limited Use Free Writing Prospectus" means any Issuer Free Writing Prospectus that is not a General Use Free Writing Prospectus.

- (c) The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the State of Delaware, with corporate power and authority to own or lease its properties and conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus. The Company has no subsidiaries other than the subsidiaries listed in Exhibit 21.1 to Item 15 of the Annual Report on Form 10-K filed with the Commission on March 6, 2018 and the subsidiaries listed in Schedule IV hereto (collectively, the "Subsidiaries"). Each of the Subsidiaries has been duly organized and is validly existing as a corporation, limited liability company or similar entity in good standing (to the extent that the concept of "good standing" exists in a specified jurisdiction) under the laws of its jurisdiction of organization, with requisite power and authority to own or lease its properties and conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus. The Company and each of the Subsidiaries are duly qualified to transact business in all jurisdictions in which the conduct of their business requires such qualification, except where the failure to be so qualified would not either (i) have, individually or in the aggregate, a material adverse effect on the earnings, business, management, properties, assets, rights, operations, condition (financial or otherwise), or prospects of the Company and the Subsidiaries, taken as a whole, or (ii) prevent the consummation of the transactions contemplated hereby (the occurrence of any such effect or any such prevention described in the foregoing clauses (i) and (ii) being referred to as a "Material Adverse Effect"). The outstanding shares of capital stock of each of the Subsidiaries have been duly authorized and validly issued, are fully paid and non-assessable and are owned by the Company or another Subsidiary free and clear of all liens, encumbrances and equities and claims; and no options, warrants or other rights to purchase, agreements or other obligations to issue or other rights to convert any obligations into shares of capital stock or ownership interests in the Subsidiaries are outstanding.
- (d) The outstanding shares of Common Stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable; the Shares to be issued and sold by the Company have been duly authorized and when issued and paid for as contemplated herein will be validly issued, fully paid and non-assessable, will be issued in compliance with all United States federal and state securities laws; and except as waived or terminated prior to the date hereof, no preemptive rights, rights of first refusal or similar rights exist with respect to any of the Shares or the issue and sale thereof. Neither the filing of the Registration Statement nor the offering or sale of the Shares as contemplated by this Agreement gives rise to any rights, other than those which have been waived or satisfied, for or relating to the registration of any shares of Common Stock.

- (e) The information set forth under the caption "Description of Our Capital Stock" in the Preliminary Prospectus and the Prospectus (and any similar section or information contained in the General Disclosure Package) is true and correct in all material respects. All of the Shares conform in all material respects to the description thereof contained in the Registration Statement, the General Disclosure Package and the Prospectus. The form of certificates for the Common Stock conforms to the corporate law of the jurisdiction of the Company's incorporation and to any requirements of the Company's organizational documents. Subsequent to the respective dates as of which information is given in the Registration Statement, the General Disclosure Package and the Prospectus, except as otherwise specifically stated therein or in this Agreement, the Company has not: (i) issued any securities (other than pursuant to the equity incentive plan of the Company or pursuant to the conversion of outstanding convertible notes); (ii) incurred any material liability or obligation, direct or contingent, for borrowed money; or (iii) declared or paid any dividend or made any other distribution on or in respect to its capital stock.
- (f) The Commission has not issued an order preventing or suspending the use of the Preliminary Prospectus, any Issuer Free Writing Prospectus or the Prospectus relating to the proposed offering of the Shares, and no proceeding for that purpose or pursuant to Section 8A of the Securities Act has been instituted or, to the Company's knowledge, threatened by the Commission. The Registration Statement and the General Disclosure Package contains, and the Prospectus and any amendments or supplements thereto will contain, all statements which are required to be stated therein by, and will conform to, the requirements of the Securities Act and the Rules and Regulations. The Registration Statement and any amendments thereto do not contain, and will not contain, any untrue statement of a material fact and do not omit, and will not omit, to state a material fact required to be stated therein or necessary to make the statements therein not misleading. The documents incorporated or deemed incorporated by reference in the Registration Statement, the Preliminary Prospectus and the Prospectus, when they became effective or at the time they were or hereafter are filed with the Commission, complied and will comply in all material respects with the requirements of the Exchange Act. The Prospectus and any amendments and supplements thereto do not contain, and will not contain, any untrue statement of a material fact; and do not omit, and will not omit, to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no representations or warranties as to information contained in or omitted from the Registration Statement or the Prospectus, or any such amendment or supplement, in reliance upon, and in conformity with, written information furnished to the Company by or on behalf of any Underwriter through the Representatives, specifically for use therein, it being understood and agreed that the only such
- (g) Each Issuer Free Writing Prospectus, when taken together with the Preliminary Prospectus accompanying or delivered prior to delivery of such Issuer Free Writing Prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Shares or until any earlier date that the Company notified or notifies the Representatives, did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement or the Prospectus, including any document incorporated by reference therein that has not been superseded or modified.
- (h) The Company has not, directly or indirectly, distributed and will not distribute any offering material in connection with the offering and sale of the Shares other than the Preliminary Prospectus, the Prospectus and other materials, if any, permitted under the Securities Act and consistent with Section 4(b) below. The Company will file with the Commission all Issuer Free Writing Prospectuses in the time required under Rule 433(d) under the Securities Act.

- (i) (i) At the time of filing the Registration Statement and (ii) as of the date hereof (with such date being used as the determination date for purposes of this clause (ii)), the Company was not and is not an "ineligible issuer" (as defined in Rule 405 under the Securities Act, without taking into account any determination by the Commission pursuant to Rule 405 under the Securities Act that it is not necessary that the Company be considered an ineligible issuer), including, without limitation, for purposes of Rules 164 and 433 under the Securities Act with respect to the offering of the Shares as contemplated by the Registration Statement.
- (j) The consolidated financial statements of the Company and the Subsidiaries, together with related notes and schedules as set forth or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus, present fairly in all material respects the financial position and the results of operations and cash flows of the Company and the consolidated Subsidiaries, at the indicated dates and for the indicated periods. Such financial statements and related schedules have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP"), consistently applied throughout the periods involved, except as disclosed therein, and all adjustments necessary for a fair presentation of results for such periods have been made. The summary and selected consolidated financial and statistical data included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus present fairly the information shown therein and such data has been compiled on a basis consistent with the financial statements presented therein and the books and records of the Company. The Company and the Subsidiaries do not have any material liabilities or obligations, direct or contingent (including any off-balance sheet obligations or any "variable interest entities" within the meaning of Financial Accounting Standards Board Interpretation No. 46), not disclosed in the Registration Statement, the General Disclosure Package and the Prospectus. There are no financial statements (historical or pro forma) that are required to be included in the Registration Statement, the General Disclosure Package or the Prospectus that are not included as required.
- (k) PricewaterhouseCoopers LLP, who have certified certain of the financial statements filed with the Commission as part of, or incorporated by reference in, the Registration Statement, the General Disclosure Package and the Prospectus, is an independent registered public accounting firm with respect to the Company and the Subsidiaries within the meaning of the Securities Act and the applicable Rules and Regulations and the Public Company Accounting Oversight Board (United States) (the "PCAOB").
- (l) Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, neither the Company nor any of the Subsidiaries is aware of any (i) material weakness in its internal control over financial reporting or (ii) change in internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.
- (m) The Company is in compliance in all material respects with all applicable provisions of the Sarbanes-Oxley Act of 2002, as amended, and all rules and regulations promulgated thereunder or supplementing the provisions thereof (the "<u>Sarbanes-Oxley Act</u>") that are in effect.
- (n) There is no action, suit, claim or proceeding pending or, to the knowledge of the Company, threatened against the Company or any of the Subsidiaries before any court or administrative agency or otherwise which if determined adversely to the Company or any of the Subsidiaries would have a Material Adverse Effect, except as set forth in the Registration Statement, the General Disclosure Package and the Prospectus.

- (o) Neither the Company nor any of the Subsidiaries own any real property. The Company and the Subsidiaries have good title to all of the material properties and assets reflected in the consolidated financial statements hereinabove described or described in the Registration Statement, the General Disclosure Package and the Prospectus, subject to no lien, mortgage, pledge, charge or encumbrance of any kind except those reflected in such financial statements or described in the Registration Statement, the General Disclosure Package and the Prospectus or which are not material in amount. The Company and the Subsidiaries occupy their leased properties under valid and binding leases conforming in all material respects to the description thereof set forth in the Registration Statement, the General Disclosure Package and the Prospectus.
- (p) The Company and the Subsidiaries have filed all federal, state, local and foreign tax returns (or timely filed applicable extensions therefor) which have been required to be filed and have paid all taxes indicated by such returns and all assessments received by them to the extent that such taxes have become due, except for such taxes as are being contested in good faith and for which an adequate reserve or accrual has been established in accordance with GAAP or which would not, singularly or in the aggregate, have a Material Adverse Effect. The accruals and reserves on the books and records of the Company and the Subsidiaries in respect of tax liabilities for any taxable period are adequate to meet any assessments and related liabilities for any such period, and neither the Company has no knowledge of any actual or proposed additional material tax assessments for any such period. Since September 30, 2018 the Company and the Subsidiaries have not incurred any liability for taxes other than in the ordinary course of business.
- (q) Since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package and the Prospectus, as each may be amended or supplemented, there has not been any material adverse change or any development involving a prospective material adverse change in or affecting the earnings, business, management, properties, assets, rights, operations, condition (financial or otherwise), or prospects of the Company and the Subsidiaries taken as a whole, whether or not occurring in the ordinary course of business, and there has not been any material transaction entered into or any material transaction that is probable of being entered into by the Company or the Subsidiaries, other than transactions in the ordinary course of business and changes and transactions described in the Registration Statement, the General Disclosure Package and the Prospectus, as each may be amended or supplemented. The Company and the Subsidiaries have no material contingent obligations which are not disclosed in the Company's financial statements which are included in the Registration Statement, the General Disclosure Package and the Prospectus.
- (r) Neither the Company nor any of the Subsidiaries is or, with the giving of notice or lapse of time or both, would currently be (i) in violation of its certificate or articles of incorporation, by-laws, certificate of formation, limited liability agreement, partnership agreement or other organizational documents, as applicable, or (ii) in violation of or in default under any agreement, lease, contract, indenture or other instrument or obligation to which it is a party or by which it, or any of its properties, is bound other than as disclosed in the Registration Statement and the Prospectus, including documents incorporated by reference therein, and, solely with respect to this clause (ii), which violation or default would have a Material Adverse Effect. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby and the fulfillment of the terms hereof do not and will not conflict with or result in a breach of any of the terms or provisions of, or constitute a default under, any indenture, mortgage, deed of trust or other agreement or instrument to which the Company or any Subsidiary is a party or by which the Company or any Subsidiary or any of their respective properties is bound except as would not, individually or in the aggregate, have a Material Adverse

Effect, or of the certificate or articles of incorporation or by-laws of the Company or any law, order, rule or regulation judgment, order, writ or decree applicable to the Company or any Subsidiary of any court or of any government, regulatory body or administrative agency or other governmental body having jurisdiction.

- (s) The execution and delivery of, and the performance by the Company of its obligations under, this Agreement has been duly and validly authorized by all necessary corporate action on the part of the Company, and this Agreement has been duly executed and delivered by the Company.
- (t) Each approval, consent, order, authorization, designation, declaration or filing by or with any regulatory, administrative or other governmental body necessary in connection with the execution and delivery by the Company of this Agreement and the consummation of the transactions contemplated hereby (except such additional steps as may be required by the Commission or Financial Industry Regulatory Authority, Inc. ("FINRA") or such additional steps as may be necessary to qualify the Shares for public offering by the Underwriters under state securities or Blue Sky laws) has been obtained or made and is in full force and effect.
- (u) The Company and each of the Subsidiaries hold all licenses, certificates and permits (collectively, "Governmental Licenses") from governmental authorities which are necessary to the conduct of their respective businesses, except where the failure to hold such licenses, certificates and permits would not have a Material Adverse Effect. The Company and the Subsidiaries are in compliance with the terms and conditions of all Governmental Licenses, and all of the Governmental Licenses are valid and in full force and effect, except where the failure to be in such compliance would not have a Material Adverse Effect. Neither the Company nor any of the Subsidiaries has received any written notice of proceedings relating to the revocation or modification of any Governmental License.
- (v) Except as described in the Registration Statement, the General Disclosure Package, and the Prospectus, the Company and the Subsidiaries each own, possess, have rights to, or can acquire on reasonable terms all material patents, patent rights, trademarks, trade names, service marks, service names, copyrights, license rights, know-how (including trade secrets and other unpatented and unpatentable proprietary or confidential information, systems or procedures) and other intellectual property rights ("Intellectual Property") necessary to carry on their respective business, except where the failure to own or possess or inability to acquire on reasonable terms any such Intellectual Property would not have a Material Adverse Effect. There are no outstanding options, licenses or agreements of any kind relating to the Intellectual Property of the Company that are required to be described in the Registration Statement, the General Disclosure Package and the Prospectus and that are not described in all material respects. None of the technology employed by the Company or any of the Subsidiaries has been obtained or is being used by the Company in violation of any contractual obligation binding on the Company, any of the Subsidiaries or, to the knowledge of the Company, any of the officers, directors or employees of the Company or any of the Subsidiaries, other than such violations as would not individually or in the aggregate if the subject of an unfavorable decision, ruling or finding, have a Material Adverse Effect. To the Company's knowledge, neither the Company nor the Subsidiaries has infringed or violated the valid and enforceable Intellectual Property of any other person that would, individually or in the aggregate, have a Material Adverse Effect. Except as described in the Registration Statement, the General Disclosure Package, and the Prospectus, neither the Company nor any of the Subsidiaries has received any written or oral notice or communications alleging that the Company or any of the Subsidiaries has violated, infringed or conflicted with, or by conducting its business as set forth in the Registration Statement, the

General Disclosure Package and the Prospectus, would violate, infringe or conflict with, any of the Intellectual Property of any other person or entity, other than such violations, infringements or conflicts which, individually or in the aggregate if the subject of an unfavorable decision, ruling or finding, would not have a Material Adverse Effect. The Company knows of no infringement by others of Intellectual Property owned by or licensed to the Company or any of the Subsidiaries, which would have a Material Adverse Effect.

- (w) Neither the Company, nor to the Company's knowledge, any of its affiliates, has taken or may take, directly or indirectly, any action designed to cause or result in, or which has constituted or which might reasonably be expected to constitute, the stabilization or manipulation of the price of the shares of Common Stock to facilitate the sale or resale of the Shares. The Company acknowledges that the Underwriters may engage in passive market making transactions in the Common Stock on the NASDAQ Global Select Market in accordance with Regulation M under the Exchange Act.
- (x) Neither the Company nor any Subsidiary is or, after giving effect to the offering and sale of the Shares contemplated hereunder and the application of the net proceeds from such sale as described in the Registration Statement, General Disclosure Package and the Prospectus, will be required to register as an "investment company" within the meaning of such term under the Investment Company Act of 1940, as amended (the "1940 Act"), and the rules and regulations of the Commission thereunder.
- (y) The Company and the Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurances that: (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.
- (z) The Company has established and maintains "disclosure controls and procedures" (as defined in Rules 13a-14(c) and 15d-14(c) under the Exchange Act); the Company's "disclosure controls and procedures" are reasonably designed to ensure that all information (both financial and non-financial) required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and regulations of the Exchange Act, and that all such information is accumulated and communicated to the Company's management as appropriate to allow timely decisions regarding required disclosure and to make the certifications of the Chief Executive Officer and Chief Financial Officer of the Company required under the Exchange Act with respect to such reports.
- (aa) The statistical, industry-related and market-related data included in the Registration Statement, the General Disclosure Package and the Prospectus are based on or derived from sources which the Company reasonably and in good faith believes are reliable and accurate, and such data agree with the sources from which they are derived.
- (bb) None of the Company, the Subsidiaries, or to the Company's knowledge its affiliates and any of their respective officers, directors, supervisors, managers, agents, or employees, has violated, nor will its participation in the offering violate, and the Company and each of its subsidiaries has instituted and maintains policies and procedures designed to ensure

continued compliance with, each of the following laws: anti-bribery laws, including but not limited to, any applicable law, rule, or regulation of any locality, including but not limited to any law, rule, or regulation promulgated to implement the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, signed December 17, 1997, including the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.K. Bribery Act 2010, or any other law, rule or regulation of similar purposes and scope, or anti-money laundering laws, including but not limited to, applicable federal, state, international, foreign or other laws, regulations or government guidance regarding anti-money laundering, without limitation, Title 18 US. Code section 1956 and 1957, the Patriot Act, the Bank Secrecy Act, and international anti-money laundering principles or procedures by an intergovernmental group or organization, such as the Financial Action Task Force on Money Laundering, of which the United States is a member and with which designation the United States representative to the group or organization continues to concur, all as amended, and any Executive order, directive, or regulation pursuant to the authority of any of the foregoing, or any orders or licenses issued thereunder.

- (cc) Neither the Company nor any Subsidiaries, nor any or their directors, officers or employees, nor, to the Company's knowledge, any agent, affiliate or representative of the Company or any Subsidiary, is an individual or entity that is, or is owned or controlled by an individual or entity that is:
  - (i) the subject of any sanctions administered or enforced by the U.S. Department of Treasury's Office of Foreign Assets Control, the United Nations Security Council, the European Union, Her Majesty's Treasury, or other relevant sanctions authority (collectively, "Sanctions"), nor
  - (ii) located, organized or resident in a country or territory that is the subject of Sanctions (including, without limitation, Burma/Myanmar, Cuba, Iran, Libya, North Korea, Sudan and Syria).
  - (iii) Neither the Company nor any Subsidiary will, directly or indirectly, use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other individual or entity:
    - (1) to fund or facilitate any activities or business of or with any individual or entity or in any country or territory that, at the time of such funding or facilitation, is the subject of Sanctions; or
    - (2) in any other manner that will result in a violation of Sanctions by any individual or entity (including any individual or entity participating in the offering, whether as underwriter, advisor, investor or otherwise).
  - (iv) For the past five years, neither the Company nor any Subsidiary has knowingly engaged in, and is not now knowingly engaged in, any dealings or transactions with any individual or entity, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions.
- (dd) The Company and each of the Subsidiaries carry, or are covered by, insurance in such amounts and covering such risks as is in the Company's reasonable judgement adequate for the conduct of their respective businesses and the value of their respective properties and as is customary for companies engaged in similar businesses.

- (ee) The Company and each Subsidiary is in compliance in all material respects with all presently applicable provisions of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder ("ERISA"); no "reportable event" (as defined in ERISA) has occurred with respect to any "pension plan" (as defined in ERISA) for which the Company and each Subsidiary would have any material liability; the Company and each Subsidiary has not incurred and does not expect to incur liability under (i) Title IV of ERISA with respect to termination of, or withdrawal from, any "pension plan" or (ii) Sections 412 or 4971 of the Internal Revenue Code of 1986, as amended, including the regulations and published interpretations thereunder (the "Code"); and each "pension plan" for which the Company or any Subsidiary would have any liability that is intended to be qualified under Section 401(a) of the Code is so qualified in all material respects and nothing has occurred, whether by action or by failure to act, which would cause the loss of such qualification.
- (ff) To the Company's knowledge, there are no affiliations or associations between any member of FINRA and any of the Company's officers, directors or 5% or greater securityholders, except as set forth in the Registration Statement.
- (gg) To enable the Underwriters to rely on Rule 5110(b)(7)(C)(i) of FINRA, the Company represents that the Company, as of the date of this Agreement, (i) has a non-affiliate, public common equity float of at least \$150 million and (ii) has been subject to the Exchange Act reporting requirements for a period of at least 36 months.
- (hh) Neither the Company nor any of the Subsidiaries is in violation of any statute, rule, regulation, decision or order of any governmental agency or body or any court, domestic or foreign, relating to the use, disposal or release of hazardous or toxic substances or relating to the protection or restoration of the environment or human exposure to hazardous or toxic substances (collectively, "environmental laws"), owns or operates any real property that is, to the knowledge of the Company, contaminated with any substance that is subject to environmental laws, is liable for any off-site disposal or contamination pursuant to any environmental laws, or is subject to any claim relating to any environmental laws, which violation, contamination, liability or claim would, individually or in the aggregate, have a Material Adverse Effect; and the Company is not aware of any pending investigation which might lead to such a claim.
  - (ii) The Shares have been approved for listing subject to notice of issuance on the NASDAQ Global Select Market.
- (jj) There are no relationships or related-party transactions involving the Company or any of the Subsidiaries or any other person required to be described in the Prospectus which have not been described as required.
- (kk) Neither the Company nor any of the Subsidiaries has made any contribution or other payment to any official of, or candidate for, any federal, state or foreign office in violation of any law which violation is required to be disclosed in the Prospectus.
- (ll) As of the date of the initial filing of the registration statement referred to in Section 1(a)(i), there were no outstanding personal loans made, directly or indirectly, by the Company to any director or executive officer of the Company.

- (mm) None of the information on (or hyperlinked from) the Company's websites at www.fluidigm.com or www.fluidigm.co.jp includes or constitutes a "free writing prospectus" as defined in Rule 405 under the Securities Act and the Company does not maintain or support any websites other than www.fluidigm.com, www.fluidigm.co.jp and www.fluidigm-china.com.
- (nn) Except as described in the Registration Statement, the General Disclosure Package, and the Prospectus or as described in the Company's Loan and Security Agreement with Silicon Valley Bank effective August 2, 2018, which loan and security agreement has been filed as an exhibit to the Company's Quarterly Report on Form 10-Q filed with the Commission on November 6, 2018, which is incorporated by reference in the Registration Statement, the General Disclosure Package, and the Prospectus, no Subsidiary of the Company is currently prohibited, directly or indirectly, from paying any dividends to the Company, from making any other distribution on such Subsidiary's capital stock, from repaying to the Company any loans or advances to such Subsidiary from the Company or from transferring any of such Subsidiary's property or assets to the Company or any other Subsidiary of the Company.
- (oo) Neither the Company nor any of the Subsidiaries nor any director or officer of the Company nor, to the knowledge of the Company, any agent, employee or controlled affiliate of the Company or any of the Subsidiaries, in each case, acting on behalf of the Company, is aware of or has taken any action, directly or indirectly, that would result in a violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the "FCPA"), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any "foreign official" (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA and the Company, the Subsidiaries and their controlled affiliates have conducted their businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.
- (pp) Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, and except as would not, singly or in the aggregate, have a Material Adverse Effect: (i) neither the Company nor any of the Subsidiaries has received any unresolved FDA Form 483, notice of adverse filing, warning letter, untitled letter or other correspondence or notice from the U.S. Food and Drug Administration ("FDA"), or any other court or arbitrator or federal, state, local or foreign governmental or regulatory authority, alleging or asserting noncompliance with the Federal Food, Drug and Cosmetic Act (21 U.S.C. § 301 et seq.) (the "FFDCA"); (ii) the Company and each of the Subsidiaries is and has been in compliance with applicable health care laws, including without limitation, the FFDCA, the federal Anti-Kickback Statute (42 U.S.C. § 1320a-7b(b)), the civil False Claims Act (31 U.S.C. §§ 3729 et seq.), the administrative False Claims Law (42 U.S.C. § 1320a-7b(a)), the Stark law (42 U.S.C. Section 1395nn), the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. Section 1320d et seq.) as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq.), the exclusion laws (42 U.S.C. Section 1320a-7), the Anti-Inducement Law (42 U.S.C. § 1320a-7a(a)(5)), the exclusion laws, Social Security Act § 1128 (42 U.S.C. § 1320a-7), Medicare (Title XVIII of the Social Security Act), Medicaid (Title XIX of the Social Security Act), and the Patient Protection and Affordable Care Act of 2010 (Public Law 111-148), as amended by the Health Care and Education Affordability Reconciliation Act of 2010 (Public Law 111-152), and the regulations promulgated pursuant to such laws, and comparable state laws, and all other local, state, federal, national, supranational

and foreign laws, manual provisions, policies and administrative guidance relating to the regulation of the Company (collectively, "Health Care Laws"); (iii) the Company and each of the Subsidiaries possesses all licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Health Care Laws and/or to carry on its businesses as now or proposed to be conducted ("Authorizations") and such Authorizations are valid and in full force and effect and the Company is not in violation of any term of any such Authorizations; (iv) neither the Company nor any of the Subsidiaries has received notice of any ongoing claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any U.S. or non-U.S. federal, state, local or other governmental or regulatory authority, governmental or regulatory agency or body, court, arbitrator or self-regulatory organization (each, a "Governmental Authority") or third party alleging that any product operation or activity is in violation of any Health Care Laws or Authorizations or has any knowledge that any such Governmental Authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (v) neither the Company nor any of the Subsidiaries has received notice that any Governmental Authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations or has any knowledge that any such Governmental Authority is considering such action; (vi) the Company and each of the Subsidiaries has filed, obtained, maintained or submitted all reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Health Care Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete, correct and not misleading on the date filed (or were corrected or supplemented by a subsequent submission); and (vii) neither the Company nor any of the Subsidiaries has, either voluntarily or involuntarily, initiated, conducted, or issued or caused to be initiated, conducted or issued, any recall, market withdrawal or replacement, safety alert, post sale warning, "dear doctor" letter, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to the Company's knowledge, no third party has initiated or conducted any such notice or

- (qq) To the knowledge of the Company, the research, studies and tests conducted by or on behalf of the Company and the Subsidiaries have been and, if still pending, are being conducted with reasonable care and in accordance with experimental protocols, procedures and controls pursuant to all Health Care Laws and Authorizations; the descriptions of the results of such research, studies and tests contained in the Registration Statement, the General Disclosure Package and the Prospectus are accurate and complete and fairly present the data derived from such research, studies and tests; except to the extent disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company is not aware of any research, studies or tests, the results of which the Company believes reasonably call into question the research, study or test results described or referred to in the Registration Statement, the General Disclosure Package and the Prospectus when viewed in the context in which such results are described; and neither the Company nor any of the Subsidiaries has received any notices or correspondence from any Governmental Authority requiring the termination, suspension or material modification of any research, study or test conducted by or on behalf of the Company or the Subsidiaries, as applicable. To the knowledge of the Company or the Subsidiaries.
- (rr) No material labor dispute with the employees of the Company or any of the Subsidiaries exists, except as described in the Registration Statement, the General Disclosure Package and the Prospectus, or, to the knowledge of the Company, is imminent; and the Company is not aware of any existing, threatened or imminent labor disturbance by the employees of any of its principal suppliers, manufacturers or contractors that would be reasonably likely to have a Material Adverse Effect.

- (ss) Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company (i) does not have any material lending or other relationship with any bank or lending affiliate of any Underwriter and (ii) does not intend to use any of the proceeds from the sale of the Shares to repay any outstanding debt owed to any affiliate of any Underwriter.
- (tt) Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company has not sold, issued or distributed shares of Common Stock during the six-month period preceding the date hereof, including any sales pursuant to Rule 144A, Regulation D or Regulation S under the Securities Act, other than shares of Common Stock issued pursuant to employee benefit plans, qualified stock option plans or other employee compensation plans or pursuant to outstanding options, rights or warrants.
- (uu) Except as would not, individually or in the aggregate, have a Material Adverse Effect, the Company and each Subsidiary's information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases (collectively, "IT Systems") are adequate for, and operate and perform in all material respects as required in connection with the operation of the business of the Company and its Subsidiaries as currently conducted, free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants. The Company and all Subsidiaries have implemented and maintained commercially reasonable controls, policies, procedures, and safeguards to maintain and protect their material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and data (including all personal, personally identifiable, sensitive, confidential or regulated data ("Personal Data")) used in connection with their businesses, and there have been no breaches, violations, outages or unauthorized uses of or accesses to same, except for those that have been remedied without material cost or liability or the duty to notify any other person, nor any incidents under internal review or investigations relating to the same. The Company and its Subsidiaries are presently in compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Personal Data and to the protection of such IT Systems and Personal Data from unauthorized use, access, misappropriation or modification, except, in each case, as would not, individually or in the aggregate, have a Material Adverse Effect.
- (vv) No person has the right to require the Company or any of the Subsidiaries to register any securities for sale under the Securities Act by reason of the filing of the Registration Statement with the Commission or the issuance and sale of the Shares by the Company.
- (ww) Neither the Company nor any of the Subsidiaries is a party to any contract, agreement or understanding with any person (other than this Agreement) that would give rise to a valid claim against any of them or any Underwriter for a brokerage commission, finder's fee or like payment in connection with the offering and sale of the Shares.
- (xx) No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) included or incorporated by reference in any of the Registration Statement, the General Disclosure Package or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

#### 2. PURCHASE, SALE AND DELIVERY OF THE SECURITIES.

- (a) On the basis of the representations, warranties and covenants herein contained, and subject to the conditions herein set forth, the Company agrees to sell to the Underwriters and each Underwriter agrees, severally and not jointly, to purchase, at a price of \$6.345 per share, the number of Firm Shares set forth opposite the name of each Underwriter in <u>Schedule I</u> hereof, subject to adjustments in accordance with <u>Section 9</u> hereof.
- (b) Payment for the Firm Shares to be sold hereunder is to be made in Federal (same day) funds to an account designated by the Company against delivery of certificates or book-entry securities entitlements therefor to the Representatives for the several accounts of the Underwriters. Such payment and delivery are to be made through the facilities of The Depository Trust Company ("DTC"), New York, New York at 10:00 a.m., New York time, on the second business day after the date of this Agreement or at such other time and date not later than five business days thereafter as you and the Company shall agree upon, such time and date being herein referred to as the "Closing Date." As used herein, "business day" means a day on which the NASDAQ Global Select Market is open for trading and on which banks in New York are open for business and not permitted by law or executive order to be closed.
- (c) In addition, on the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company grants an option to the several Underwriters to purchase the Option Shares at the price per Option Share as set forth in the first paragraph of this Section 2. The maximum number of Option Shares to be sold by the Company is 1,222,500. The option granted hereby may be exercised in whole or in part by giving written notice (i) at any time before the Closing Date and (ii) at any time, from time to time thereafter within 30 days after the date of this Agreement, by you, as Representatives of the several Underwriters, to the Company setting forth the number of Option Shares as to which the several Underwriters are exercising the option and the time and date at which such certificates are to be delivered. The time and date at which certificates for Option Shares are to be delivered shall be determined by the Representatives but shall not be earlier than two nor later than 10 full business days after the exercise of such option, nor in any event prior to the Closing Date (such time and date being herein referred to as the "Option Closing Date"). If the date of exercise of the option is three or more days before the Closing Date, the notice of exercise shall set the Closing Date as the Option Closing Date. The number of Option Shares to be purchased by each Underwriter shall be in the same proportion to the total number of Option Shares being purchased as the number of Firm Shares being purchased by such Underwriters bears to the total number of Firm Shares, adjusted by you in such manner as to avoid fractional shares. You, as Representatives of the several Underwriters, may cancel such option at any time prior to its expiration by giving written notice of such cancellation to the Company. To the extent, if any, that the option is exercised, payment and delivery for the Option Shares shall be made on the Option Closing Date through the facilities of the DTC, New Yor
- (d) In the event that the Firm Shares (and Option Shares, if elected by the Representatives) are not delivered to the Representatives by 2:30 p.m., New York time, on the Closing Date (and the Option Closing Date, if elected by the Representatives), the Company will return (or will instruct its Custodian to return) payment of the full purchase price to the Representatives's agent, Pershing LLC, via same day funds by 4:30 p.m., New York City time. The Company shall remain liable to Pershing LLC for the full amount of the purchase price and any costs associated with recovering the purchase price until the full amount has been received by Pershing LLC.

#### 3. OFFERING BY THE UNDERWRITERS.

It is understood that the several Underwriters are to make a public offering of the Firm Shares as soon as the Representatives deems it advisable to do so. The Firm Shares are to be initially offered to the public at the initial public offering price set forth in the Prospectus. The Representatives may from time to time thereafter change the public offering price and other selling terms.

It is further understood that you will act as the Representatives for the Underwriters in the offering and sale of the Shares in accordance with a Master Agreement Among Underwriters entered into among you and the several other Underwriters.

#### 4. COVENANTS OF THE COMPANY. The Company covenants and agrees with the several Underwriters that:

- (a) The Company will (A) prepare and timely file with the Commission under Rule 424(b) under the Securities Act a Prospectus relating to the Shares in a form approved by the Representatives containing information previously omitted at the time of effectiveness of the Registration Statement in reliance on Rules 430A, 430B or 430C under the Securities Act, (B) during such period after the date hereof and prior to the date all Shares have been sold by the Underwriters, not file any amendment to the Registration Statement or distribute an amendment or supplement to the General Disclosure Package or the Prospectus or document incorporated by reference therein of which the Representatives shall not previously have been advised and furnished with a copy or to which the Representatives shall have reasonably objected in writing or which is not in compliance with the Rules and Regulations, and (C) during such period after the date hereof and prior to the date all Shares have been sold by the Underwriters, file on a timely basis all reports and any definitive proxy or information statements required to be filed by the Company with the Commission subsequent to the date of the Prospectus and prior to the termination of the offering of the Shares by the Underwriters.
- (b) During such period after the date hereof and prior to the date all Shares have been sold by the Underwriters, the Company will (i) not make any offer relating to the Shares that would constitute an Issuer Free Writing Prospectus or that would otherwise constitute a "free writing prospectus" (as defined in Rule 405 under the Securities Act) required to be filed by the Company with the Commission under Rule 433 under the Securities Act unless the Representatives approve its use in writing prior to first use (each, a "Permitted Free Writing Prospectus"); provided that the prior written consent of the Representatives shall be deemed to have been given in respect of the Issuer Free Writing Prospectus(es) included in Schedule III hereto, (ii) treat each Permitted Free Writing Prospectus as an Issuer Free Writing Prospectus, (iii) comply with the requirements of Rules 164 and 433 under the Securities Act applicable to any Issuer Free Writing Prospectus, including the requirements relating to timely filing with the Commission, legending and record keeping and (iv) not take any action that would result in an Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of such Underwriter that such Underwriter otherwise would not have been required to file thereunder. During such period after the date hereof and prior to the date all Shares have been sold by the Underwriters, the Company will satisfy the conditions in Rule 433 under the Securities Act to avoid a requirement to file with the Commission any electronic road show.
- (c) During such period after the date hereof and prior to the date all Shares have been sold by the Underwriters, the Company will advise the Representatives promptly (A) when the Registration Statement or any post-effective amendment thereto shall have become effective, (B) of receipt of any comments from the Commission, (C) of any request of the Commission for

amendment of the Registration Statement or for supplement to the General Disclosure Package or the Prospectus or for any additional information, and (D) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement, any notice that would prevent the use of the Registration Statement or any order preventing or suspending the use of the Preliminary Prospectus, Issuer Free Writing Prospectus or the Prospectus, or of the institution of any proceedings for that purpose or pursuant to Section 8A of the Securities Act. The Company will use its best efforts to prevent the issuance of any such order and to obtain as soon as possible the lifting thereof, if issued.

- (d) The Company will cooperate with the Representatives in endeavoring to qualify the Shares for sale under the securities laws of such jurisdictions as the Representatives may reasonably have designated in writing and will make such applications, file such documents, and furnish such information as may be reasonably required for that purpose, *provided* the Company shall not be required to qualify as a foreign corporation or to file a general consent to service of process in any jurisdiction where it is not now so qualified or required to file such a consent. The Company will, from time to time, prepare and file such statements, reports, and other documents, as are or may be required to continue such qualifications in effect for so long a period as the Representatives may reasonably request for distribution of the Shares.
- (e) The Company will deliver to, or upon the order of, the Representatives, from time to time, as many copies of the Preliminary Prospectus as the Representatives may reasonably request. The Company will deliver to, or upon the order of, the Representatives, from time to time, as many copies of any Issuer Free Writing Prospectus as the Representatives may reasonably request. The Company will deliver to, or upon the order of, the Representatives during the period when delivery of a Prospectus (or, in lieu thereof, the notice referred to under Rule 173(a) under the Securities Act) is required under the Securities Act, as many copies of the Prospectus in final form, or as thereafter amended or supplemented, as the Representatives may reasonably request. The Company will deliver to the Representatives such number of copies of the Registration Statement (including such number of copies of the exhibits filed therewith that may reasonably be requested), including documents incorporated by reference therein, and of all amendments thereto, as the Representatives may reasonably request.
- (f) The Company will comply with the Securities Act and the Rules and Regulations, and the Exchange Act, and the rules and regulations of the Commission thereunder, so as to permit the completion of the distribution of the Shares as contemplated in this Agreement and the Prospectus. If during the period in which a prospectus (or, in lieu thereof, the notice referred to under Rule 173(a) under the Securities Act) is required by law to be delivered by an Underwriter or dealer, any event shall occur as a result of which, in the judgment of the Company or in the reasonable opinion of the Underwriters, it becomes necessary to amend or supplement the Prospectus in order to make the statements therein, in the light of the circumstances existing at the time the Prospectus is delivered to a purchaser, not misleading, or, if it is necessary at any time to amend or supplement the Prospectus to comply with any law, the Company promptly will prepare and file with the Commission an appropriate amendment to the Registration Statement or supplement to the Prospectus so that the Prospectus as so amended or supplemented will not, in the light of the circumstances when it is so delivered, be misleading, or so that the Prospectus will comply with the applicable law.
- (g) If the General Disclosure Package is being used to solicit offers to buy the Shares at a time when the Prospectus is not yet available to prospective purchasers and any event shall occur as a result of which, in the judgment of the Company or in the reasonable opinion of the Underwriters, it becomes necessary to amend or supplement the General Disclosure Package in

order to make the statements therein, in the light of the circumstances, not misleading, or to make the statements therein not conflict with the information contained in the Registration Statement then on file, or if it is necessary at any time to amend or supplement the General Disclosure Package to comply with any law, the Company promptly will prepare, file with the Commission (if required) and furnish to the Underwriters and any dealers an appropriate amendment or supplement to the General Disclosure Package so that the General Disclosure Package as so amended or supplemented will not, in the light of the circumstances, be misleading or conflict with the Registration Statement then on file, or so that the General Disclosure Package will comply with applicable law.

- (h) The Company will make generally available to its security holders, as soon as it is practicable to do so, but in any event not later than 15 months after the effective date of the Registration Statement, an earnings statement (which need not be audited) in reasonable detail, covering a period of at least 12 consecutive months beginning after the effective date of the Registration Statement, which earnings statement shall satisfy the requirements of Section 11(a) of the Securities Act and Rule 158 under the Securities Act and will advise you in writing when such statement has been so made available.
- (i) If, prior to the Closing Date, any unaudited interim financial statements of the Company for any period subsequent to the period covered by the most recent financial statements appearing in the Registration Statement, the General Disclosure Package and the Prospectus are prepared by or available to the Company, the Company will furnish a copy of such unaudited interim financial statements of the Company to the Underwriters as soon as they have been so prepared or made available.
- (j) No offering, sale, short sale or other disposition of any shares of Common Stock of the Company or securities convertible into or exchangeable or exercisable for shares of Common Stock or derivative of Common Stock (or agreement for such) will be made for a period of 75 days after the date of the Prospectus, directly or indirectly, by the Company otherwise than hereunder, with the prior written consent of Piper Jaffray & Co.

The restrictions contained in the preceding paragraph shall not apply to (a) the sale and issuance of the Shares to be sold hereunder; (b) the issuance of shares of Common Stock upon exchange, vesting, exercise or conversion of the Shares or outstanding warrants, notes, or other derivative securities disclosed in the Prospectus; (c) the issuance, exercise, or vesting of shares of, or options to purchase shares of, or other equity incentive awards pursuant to employee benefit plans disclosed in the Prospectus; (d) the filing of a registration statement on Form S-8 for the registration of shares of Common Stock issued pursuant to employee benefit plans disclosed in the Prospectus; or (e) the issuance by the Company of shares of Common Stock or securities convertible into, exchangeable for or that represent the right to receive Common Stock in connection with (1) the acquisition by the Company or any of its subsidiaries of the securities, business, technology, property or other assets of another person or entity or pursuant to an employee benefit plan assumed by the Company in connection with such acquisition, (2) the Company's joint ventures, equipment leasing arrangements, licensing transactions, collaborations, debt financings and other strategic transactions; provided that the aggregate number of shares of Common Stock that the Company may sell or issue or agree to sell or issue pursuant to clause (e) shall not exceed 5% of the total number of shares of Common Stock outstanding immediately following the completion of the transactions contemplated by this Agreement (including the Option Shares, if and to the extent any Option Shares are issued) and the Company shall cause each recipient of such securities to execute and deliver to Piper Jaffray & Co., on behalf of the Underwriters, on or prior to the issuance of such securities, a lock-up agreement on substantially the same terms as the Lock-Up Agreement (as defined below) attached hereto as Exhibit A to the extent and for the duration that such terms remain in

- (k) The Company will use its best efforts to list the Shares for quotation on the NASDAQ Global Select Market.
- (l) The Company has caused each officer and director of the Company to execute and deliver to you, on or prior to the date of this agreement, a letter or letters, substantially in the form attached hereto as <u>Exhibit A</u> (the "<u>Lock-Up Agreement</u>").
- (m) The Company shall apply the net proceeds of its sale of the Shares as set forth in the Registration Statement, the General Disclosure Package and the Prospectus and shall file such reports with the Commission with respect to the sale of the Shares and the application of the proceeds therefrom as may be required in accordance with Rule 463 under the Securities Act.
- (n) The Company shall not invest, or otherwise use the proceeds received by the Company from its sale of the Shares in such a manner as would require the Company or any of the Subsidiaries to register as an investment company under the 1940 Act.
- (o) The Company will maintain a transfer agent and, if necessary under the jurisdiction of incorporation of the Company, a registrar for the Common Stock.
- (p) The Company will not take, directly or indirectly, any action designed to cause or result in, or that has constituted or might reasonably be expected to constitute, the stabilization or manipulation of the price of any securities of the Company.
- (q) If immediately prior to the third anniversary of the initial effective date of the Registration Statement, any of the Shares remain unsold by the Underwriters, the Company will prior to that third anniversary file, if it has not already done so, a new shelf registration statement relating to the Shares, in a form satisfactory to the Representatives, will use its best efforts to cause such registration statement to be declared effective within 180 days after that third anniversary, and will take all other action necessary or appropriate to permit the public offering and sale of the Shares to continue as contemplated in the expired registration statement relating to the Shares. References herein to the Registration Statement shall include such new shelf registration statement.

#### 5. COSTS AND EXPENSES.

The Company will pay all costs, expenses and fees incident to the performance of the obligations of the Company under this Agreement, including, without limiting the generality of the foregoing, the following: accounting fees of the Company; the fees and disbursements of counsel for the Company; any roadshow expenses (other than the cost of any aircraft chartered for flights within the United States in connection with the roadshow, which cost shall be borne fifty percent (50%) by the Company, on the one hand, and fifty percent (50%) by the Underwriters, on the other hand); the cost of printing and delivering to, or as requested by, the Underwriters copies of the Registration Statement, the Issuer Free Writing Prospectuses, the Prospectus, this Agreement, any the Blue Sky survey and any supplements or amendments thereto; the filing fees of the Commission; the Listing Fee of the NASDAQ Global Select Market; any FINRA related filing fees; the costs and expenses (including without limitation any damages or other amounts payable in connection with legal or contractual liability) associated with the reforming of any contracts for sale of the Shares made by the Underwriters caused by a breach of the representation in Section 1(b) hereof; and the expenses, including the reasonable fees and disbursements of counsel for the Underwriters, incurred in connection with the qualification of the Shares under State securities or Blue

Sky laws. The Company shall not, however, be required to pay for any of the Underwriter's expenses (other than those related to State securities or Blue Sky laws which shall be paid by the Company), except that if this Agreement shall not be consummated because the conditions in Section 6 hereof are not satisfied, or because this Agreement is terminated by the Representatives pursuant to Section 11(i), (vi) or (vii) hereof, or by reason of any failure, refusal or inability on the part of the Company to perform any undertaking or satisfy any condition of this Agreement or to comply with any of the terms hereof on their part to be performed, unless such failure, refusal or inability is due primarily to the default or omission of any Underwriter, the Company shall reimburse the several Underwriters for reasonable out-of-pocket expenses, including fees and disbursements of counsel, reasonably incurred in connection with investigating, marketing and proposing to market the Shares or performing their obligations hereunder; but the Company shall not in any event be liable to the several Underwriters for damages on account of loss of anticipated profits from the sale by them of the Shares.

#### 6. CONDITIONS OF OBLIGATIONS OF THE UNDERWRITERS.

The several obligations of the Underwriters to purchase the Firm Shares on the Closing Date and the Option Shares, if any, on the Option Closing Date are subject to the accuracy, as of the Applicable Time, the Closing Date or the Option Closing Date, as the case may be, of the representations and warranties of the Company, and to the performance by the Company of its covenants and obligations hereunder and to the following additional conditions:

- (a) The Registration Statement and all post-effective amendments thereto shall have become effective and the Prospectus and each Issuer Free Writing Prospectus required shall have been filed as required by Rules 424, 430A, 430B, 430C or 433 under the Securities Act, as applicable, within the time period prescribed by, and in compliance with, the Rules and Regulations, and any request of the Commission for additional information (to be included in the Registration Statement or otherwise) shall have been disclosed to the Representatives and complied with to their reasonable satisfaction. No stop order suspending the effectiveness of the Registration Statement, as amended from time to time, shall have been issued, no notice that would prevent the use of the Registration Statement and no proceedings for that purpose or pursuant to Section 8A under the Securities Act shall have been taken or, to the knowledge of the Company, shall be contemplated or threatened by the Commission and no injunction, restraining order or order of any nature by a Federal or state court of competent jurisdiction shall have been issued as of the Closing Date which would prevent the issuance of the Shares.
- (b) The Representatives shall have received on the Closing Date or the Option Closing Date, as the case may be, the opinion of Wilson Sonsini Goodrich & Rosati, P.C., counsel for the Company, dated the Closing Date or the Option Closing Date, as the case may be, in a form satisfactory to the Representatives.
- (c) The Representatives shall have received on the Closing Date or the Option Closing Date, as the case may be, the negative assurance letter of Wilson Sonsini Goodrich & Rosati, P.C., counsel for the Company, dated the Closing Date or the Option Closing Date, as the case may be, in a form satisfactory to the Representatives.
- (d) The Representatives shall have received on the Closing Date or the Option Closing Date, as the case may be, the opinion of Kilpatrick Townsend & Stockton LLP, outside intellectual property counsel for the Company, dated the Closing Date or the Option Closing Date, as the case may be, in a form satisfactory to the Representatives.

- (e) The Representatives shall have received from Gibson, Dunn & Crutcher LLP, counsel for the Underwriters, an opinion and negative assurance letter, each dated the Closing Date or the Option Closing Date, as the case may be, in a form satisfactory to the Representatives.
- (f) The Representatives shall have received, on each of the date hereof, the Closing Date and, if applicable, the Option Closing Date, a letter dated the date hereof, the Closing Date or the Option Closing Date, as the case may be, in form and substance satisfactory to you, of PricewaterhouseCoopers LLP confirming that they are an independent registered public accounting firm with respect to the Company and the Subsidiaries within the meaning of the Securities Act and the applicable Rules and Regulations and the PCAOB and stating that in their opinion the financial statements and schedules examined by them and included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus comply in form in all material respects with the applicable accounting requirements of the Securities Act and the related Rules and Regulations; and containing such other statements and information as is ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial and statistical information contained in the Registration Statement, the General Disclosure Package and the Prospectus.
- (g) The Representatives shall have received on the Closing Date and, if applicable the Option Closing Date, as the case may be, a certificate of the Chief Financial Officer of the Company providing "management comfort" on certain specified financial and statistical information contained in the Registration Statement, the General Disclosure Package and the Prospectus.
- (h) The Representatives shall have received on the Closing Date and, if applicable, the Option Closing Date, as the case may be, a certificate or certificates of the Chief Executive Officer and the Chief Financial Officer of the Company to the effect that, as of the Closing Date or the Option Closing Date, as the case may be, each of them severally represents as follows:
  - (i) The Registration Statement has become effective under the Securities Act; no stop order suspending the effectiveness of the Registration Statement; no order preventing or suspending the use of any Issuer Free Writing Prospectus or the Prospectus has been issued, and no proceedings for such purpose or pursuant to Section 8A of the Securities Act have been taken or are, to his or her knowledge, contemplated or threatened by the Commission;
  - (ii) The representations and warranties of the Company contained in <u>Section 1</u> hereof are true and correct as of the Closing Date or the Option Closing Date, as the case may be;
  - (iii) All filings required to have been made pursuant to Rules 424, 430A, 430B or 430C under the Securities Act have been made as and when required by such rules;
  - (iv) He or she has carefully examined the General Disclosure Package and any individual Limited Use Free Writing Prospectus and, in his or her opinion, as of the Applicable Time, the statements contained in the General Disclosure Package and any individual Limited Use Free Writing Prospectus did not contain any untrue statement of a material fact, and such General Disclosure Package and any individual Limited Use Free Writing Prospectus, when considered together with the General Disclosure Package, did not omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;

- (v) He or she has carefully examined the Registration Statement and, in his or her opinion, as of the effective date of the Registration Statement, the Registration Statement and any amendments thereto did not contain any untrue statement of a material fact and did not omit to state a material fact necessary in order to make the statements therein not misleading, and since the effective date of the Registration Statement, no event has occurred which should have been set forth in a supplement to or an amendment of the Prospectus which has not been so set forth in such supplement or amendment;
- (vi) He or she has carefully examined the Prospectus and, in his or her opinion, as of its date and the Closing Date or the Option Closing Date, as the case may be, the Prospectus and any amendments and supplements thereto did not contain any untrue statement of a material fact and did not omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; and
- (vii) Since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package and Prospectus, there has not been any material adverse change or any development involving a prospective material adverse change in or affecting the business, management, properties, assets, rights, operations, condition (financial or otherwise), or prospects of the Company and the Subsidiaries taken as a whole, whether or not arising in the ordinary course of business.
- (i) The Company shall have furnished to the Representatives such further certificates and documents confirming the representations and warranties, covenants and conditions contained herein and related matters as the Representatives may reasonably have requested.
- (j) The Firm Shares and Option Shares, if any, have been approved for quotation upon notice of issuance on the NASDAQ Global Select Market, subject only to official notice of issuance.
  - (k) The Lock-up Agreements described in Section 4(j) are in full force and effect.

The opinions and certificates mentioned in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in all material respects reasonably satisfactory to the Representatives and to Gibson, Dunn & Crutcher LLP, counsel for the Underwriters.

If any of the conditions hereinabove provided for in this <u>Section 6</u> shall not have been fulfilled when and as required by this Agreement to be fulfilled, the obligations of the Underwriters hereunder may be terminated by the Representatives by notifying the Company of such termination in writing or by telegram at or prior to the Closing Date or the Option Closing Date, as the case may be.

In such event the Company and the Underwriters shall not be under any obligation to each other (except to the extent provided in <u>Sections 5</u> and <u>8</u> hereof).

#### 7. CONDITIONS OF THE OBLIGATIONS OF THE COMPANY.

The obligation of the Company to sell and deliver the portion of the Shares required to be delivered as and when specified in this Agreement are subject to the conditions that at the Closing Date or the Option Closing Date, as the case may be, no stop order or notice suspending the effectiveness, or preventing the use, of the Registration Statement shall have been issued and in effect, or proceedings therefor initiated or threatened.

#### 8. INDEMNIFICATION.

#### (a) The Company agrees:

- (i) to indemnify and hold harmless each Underwriter, the directors and officers of each Underwriter and each person, if any, who controls any Underwriter within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act, against any losses, claims, damages or liabilities to which such Underwriter or any such controlling person may become subject under the Securities Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions or proceedings in respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement, the General Disclosure Package, any Issuer Free Writing Prospectus, the Prospectus or any amendment or supplement thereto, any other information deemed to be part of the Registration Statement at the time of effectiveness and at any subsequent time pursuant to the Rules and Regulations, or any roadshow materials; (ii) the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading; or (iii) any investigation or proceeding by any governmental authority relating to or arising out of either clause (i) or (ii) above (whether commenced or threatened and whether or not any Underwriter is a target of or a party to such investigation or proceeding); provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement, or omission or alleged omission made in the Registration Statement, the Preliminary Prospectus, any Issuer Free Writing Prospectus, the Prospectus, or such amendment or supplement, in reliance upon and in conformity with written information furnished to the Company by or through the Representatives specifically for use therein, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 13 herein; and
- (ii) to reimburse each Underwriter, each Underwriters' directors and officers, and each such controlling person upon demand for any legal or other out-of-pocket expenses reasonably incurred by such Underwriter or such controlling person in connection with investigating or defending any such loss, claim, damage or liability, action or proceeding or in responding to a subpoena or governmental inquiry related to the offering of the Shares, whether or not such Underwriter or controlling person is a party to any action or proceeding. In the event that it is finally judicially determined that the Underwriters were not entitled to receive payments for legal and other expenses pursuant to this subparagraph, the Underwriters will promptly return all sums that had been advanced pursuant hereto.
- (b) Each Underwriter severally and not jointly will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, and each person, if any, who controls the Company within the meaning of the Securities Act, against any losses, claims, damages or liabilities to which the Company or any such director, officer, or controlling person may become subject under the Securities Act or otherwise, insofar

as such losses, claims, damages or liabilities (or actions or proceedings in respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement, the Preliminary Prospectus, any Issuer Free Writing Prospectus, the Prospectus or any amendment or supplement thereto, (ii) with respect to the Registration Statement or any amendment or supplement thereto, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading or (iii) with respect to the Preliminary Prospectus, Issuer Free Writing Prospectus, the Prospectus or any amendment or supplement thereto, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances under which they were made; and will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, or controlling person in connection with investigating or defending any such loss, claim, damage, liability, action or proceeding; *provided*, *however*, that each Underwriter will be liable in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission has been made in the Registration Statement, the Preliminary Prospectus, any Issuer Free Writing Prospectus, the Prospectus or such amendment or supplement, in reliance upon and in conformity with written information furnished to the Company by or through the Representatives specifically for use therein, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 13 herein. This indemnity agreement will be in addition to any liability which such Underwriter may otherwise have.

(c) In case any proceeding (including any governmental investigation) shall be instituted involving any person in respect of which indemnity may be sought pursuant to this Section 8, such person (the "indemnified party") shall promptly notify the person against whom such indemnity may be sought (the "indemnifying party") in writing. No indemnification provided for in Section 8(a) or (b) hereof shall be available to any party who shall fail to give notice as provided in this Section 8(c) if the party to whom notice was not given was unaware of the proceeding to which such notice would have related and was materially prejudiced by the failure to give such notice, but the failure to give such notice shall not relieve the indemnifying party or parties from any liability which it or they may have to the indemnified party for contribution or otherwise than on account of the provisions of Section 8(a) or (b) hereof. In case any such proceeding shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel satisfactory to such indemnified party and shall pay as incurred the fees and disbursements of such counsel related to such proceeding. In any such proceeding, any indemnified party shall have the right to retain its own counsel at its own expense. Notwithstanding the foregoing, the indemnifying party shall pay as incurred (or within 30 days of presentation) the fees and expenses of the counsel retained by the indemnified party in the event (i) the indemnifying party and the indemnified party shall have mutually agreed to the retention of such counsel, (ii) the named parties to any such proceeding (including any impleaded parties) include both the indemnifying party and the indemnified party and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them or (iii) the indemnifying party shall have failed to assume the defense and employ counsel acceptable to the indemnified party within a reasonable period of time after notice of commencement of the action. It is understood that the indemnifying party shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable fees and expenses of more than one separate firm (in addition to local counsel) for all such indemnified parties. Such firm shall be designated in writing by the Representatives in the case of parties indemnified pursuant to Section 8(a) hereof and by

Company in the case of parties indemnified pursuant to <u>Section 8(b)</u> hereof. The indemnifying party shall not be liable for any settlement of any proceeding effected without its written consent but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party from and against any loss or liability by reason of such settlement or judgment. In addition, the indemnifying party will not, without the prior written consent of the indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding of which indemnification may be sought hereunder (whether or not any indemnified party is an actual or potential party to such claim, action or proceeding) unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising out of such claim, action or proceeding.

(d) To the extent the indemnification provided for in this Section 8 is unavailable to or insufficient to hold harmless an indemnified party under Section 8(a) or (b) above in respect of any losses, claims, damages or liabilities (or actions or proceedings in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions or proceedings in respect thereof) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other from the offering of the Shares. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law then each indemnifying party shall contribute to such amount paid or payable by such indemnified party in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and the Underwriters on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities (or actions or proceedings in respect thereof), as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company bear to the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company on the one hand or the Underwriters on the other and the parties' relative intent, knowledge, access to informatio

The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this Section 8(d) were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section 8(d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions or proceedings in respect thereof) referred to above in this Section 8(d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 8(d), (i) no Underwriter shall be required to contribute any amount in excess of the underwriting discounts and commissions applicable to the Shares purchased by such Underwriter and (ii) no person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations in this Section 8(d) to contribute are several in proportion to their respective underwriting obligations and not joint.

- (e) In any proceeding relating to the Registration Statement, the Preliminary Prospectus, any Issuer Free Writing Prospectus, the Prospectus or any supplement or amendment thereto, each party against whom contribution may be sought under this Section 8 hereby consents to the jurisdiction of any court having jurisdiction over any other contributing party, agrees that process issuing from such court may be served upon it by any other contributing party and consents to the service of such process and agrees that any other contributing party may join it as an additional defendant in any such proceeding in which such other contributing party is a party.
- (f) Any losses, claims, damages, liabilities or expenses for which an indemnified party is entitled to indemnification or contribution under this Section 8 shall be paid by the indemnifying party to the indemnified party as such losses, claims, damages, liabilities or expenses are incurred. The indemnity and contribution agreements contained in this Section 8 and the representations and warranties of the Company set forth in this Agreement shall remain operative and in full force and effect, regardless of (i) any investigation made by or on behalf of any Underwriter, its directors or officers or any person controlling any Underwriter, the Company, its directors or officers or any person controlling the Company, (ii) acceptance of any Shares and payment therefor hereunder, and (iii) any termination of this Agreement. A successor to any Underwriter, its directors or officers or any person controlling any Underwriter, or to the Company, its directors or officers, or any person controlling the Company, shall be entitled to the benefits of the indemnity, contribution and reimbursement agreements contained in this Section 8.

#### 9. DEFAULT BY UNDERWRITERS.

If on the Closing Date or the Option Closing Date, as the case may be, any Underwriter shall fail to purchase and pay for the portion of the Shares which such Underwriter has agreed to purchase and pay for on such date (otherwise than by reason of any default on the part of the Company), you, as Representatives of the Underwriters, shall use your reasonable efforts to procure within 36 hours thereafter one or more of the other Underwriters, or any others, to purchase from the Company such amounts as may be agreed upon and upon the terms set forth herein, the Shares which the defaulting Underwriter or Underwriters failed to purchase. If during such 36 hours you, as such Representatives, shall not have procured such other Underwriters, or any others, to purchase the Shares agreed to be purchased by the defaulting Underwriter or Underwriters, then (a) if the aggregate number of shares with respect to which such default shall occur does not exceed 10% of the aggregate number of Shares to be purchased on the Closing Date or the Option Closing Date, as the case may be, the other Underwriters shall be obligated, severally, in proportion to the respective numbers of Shares which they are obligated to purchase hereunder, to purchase the Shares which such defaulting Underwriter or Underwriters failed to purchase, or (b) if the aggregate number of Shares with respect to which such default shall occur exceeds 10% of the aggregate number of Shares to be purchased on the Closing Date or the Option Closing Date, as the case may be, the Company and or you as the Representatives of the Underwriters will have the right, by written notice given within the next 36-hour period to the parties to this Agreement, to terminate this Agreement without liability on the part of the non-defaulting Underwriters or of the Company except to the extent provided in <u>Sections 5</u> and <u>8</u> hereof. In the event of a default by any Underwriter or Underwriters, as set forth in this Section 9, the Closing Date or Option Closing Date, as the case may be, may be postponed for such period, not exceeding seven days, as you, as Representatives, may determine in order that the required changes in the Registration Statement, the General Disclosure Package or in the Prospectus or in any other documents or arrangements may be effected. The term "Underwriter" includes any person substituted for a defaulting Underwriter. Any action taken under this Section 9 shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

#### 10. NOTICES.

All communications hereunder shall be in writing and, except as otherwise provided herein, will be mailed, delivered, telecopied or telegraphed and confirmed as follows: if to the Underwriters, to Piper Jaffray & Co., 800 Nicollet Mall, Minneapolis, Minnesota 55402, Attention: General Counsel, Fax: 612-303-1068, with a copy to Gibson, Dunn & Crutcher LLP, 200 Park Avenue, New York, New York 10166, Attention: Glenn R. Pollner; if to the Company, to Fluidigm Corporation, 7000 Shoreline Court, Suite 100, South San Francisco, California 94080, Attention: Chief Executive Officer, with a copy to Wilson, Sonsini, Goodrich & Rosati, P.C., 950 Page Mill Road, Palo Alto, California 94304, Attention: Robert F. Kornegay and Michael Nordtvedt.

#### 11. TERMINATION.

This Agreement may be terminated by you by notice to the Company at any time prior to the Closing Date or any Option Closing Date (if different from the Closing Date and then only as to Option Shares) if any of the following has occurred: (i) since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package and the Prospectus, any material adverse change or any development involving a prospective material adverse change in or affecting the earnings, business, management, properties, assets, rights, operations, condition (financial or otherwise) or prospects of the Company and the Subsidiaries taken as a whole, whether or not arising in the ordinary course of business, (ii) any outbreak or escalation of hostilities or declaration of war or national emergency or other national or international calamity or crisis (including, without limitation, an act of terrorism) or change in economic or political conditions if the effect of such outbreak, escalation, declaration, emergency, calamity, crisis or change on the financial markets of the United States would, in your judgment, materially impair the investment quality of the Shares, (iii) suspension of trading in securities generally on the New York Stock Exchange, the American Stock Exchange or the NASDAQ Global Select Market or limitation on prices (other than limitations on hours or numbers of days of trading) for securities on any such exchange, (iv) the enactment, publication, decree or other promulgation of any statute, regulation, rule or order of any court or other governmental authority which in your opinion materially and adversely affects or may materially and adversely affect the business or operations of the Company, (v) the declaration of a banking moratorium by United States or New York State authorities, (vi) any downgrading, or placement on any watch list for possible downgrading, in the rating of any of the Company's debt securities by any "nationally recognized statistical rating organization" (as defined for purposes of Rule 436(g) under the Securities Act), (vii) the suspension of trading of the Company's Common Stock by the NASDAQ Global Select Market, the Commission, or any other governmental authority, or (viii) the taking of any action by any governmental body or agency in respect of its monetary or fiscal affairs which in your opinion has a material adverse effect on the securities markets in the United States; or as provided in Sections 6 and 9 of this Agreement.

#### 12. SUCCESSORS.

This Agreement has been and is made solely for the benefit of the Underwriters and the Company and its successors, executors, administrators, heirs and assigns, and the officers, directors and controlling persons referred to herein, and no other person will have any right or obligation hereunder. No purchaser of any of the Shares from any Underwriter shall be deemed a successor or assign merely because of such purchase.

#### 13. INFORMATION PROVIDED BY UNDERWRITERS.

The Company and the Underwriters acknowledge and agree that the only information furnished or to be furnished by any Underwriter to the Company for inclusion in the Registration Statement, the Preliminary Prospectus, any Issuer Free Writing Prospectus or the Prospectus consists of the information set forth in "Price Stabilization, Short Positions, Penalty Bids and Passive Market Making" under the caption "Underwriting" in the Prospectus.

#### 14. MISCELLANEOUS.

The reimbursement, indemnification and contribution agreements contained in this Agreement and the representations, warranties and covenants in this Agreement shall remain in full force and effect regardless of (a) any termination of this Agreement, (b) any investigation made by or on behalf of any Underwriter or controlling person thereof, or by or on behalf of the Company or its directors or officers, and (c) delivery of and payment for the Shares under this Agreement.

The Company acknowledges and agrees that: (a) the Representatives have been retained solely to act as underwriters in connection with the sale of the Shares and that no fiduciary, advisory or agency relationship between the Company and the Representatives has been created in respect of any of the transactions contemplated by this Agreement, irrespective of whether the Representatives have advised or are advising the Company on other matters; (b) the price and other terms of the Shares set forth in this Agreement were established by the Company following discussions and arms-length negotiations with the Representatives and the Company is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated by this Agreement; (c) it has been advised that the Representatives and their affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and that the Representatives have no obligation to disclose such interests and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; (d) it has been advised that the Representatives are acting, in respect of the transactions contemplated by this Agreement, solely for the benefit of the Representatives and the other Underwriters, and not on behalf of the Company; (e) it waives to the fullest extent permitted by law, any claims it may have against the Representatives for breach of fiduciary duty or alleged breach of fiduciary duty in respect of any of the transactions contemplated by this Agreement and agrees that the Representatives shall have no liability (whether direct or indirect) to the Company in respect of such a fiduciary duty claim on behalf of or in right of the Company, including stockholders, employees or creditors of the Company.

This Agreement 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.

This Agreement shall be governed by, and construed in accordance with, the law of the State of New York, including, without limitation, Section 5-1401 of the New York General Obligations Law.

The Underwriters, on the one hand, and the Company (on its own behalf and, to the extent permitted by law, on behalf of its stockholders), on the other hand, waive any right to trial by jury in any action, claim, suit or proceeding with respect to your engagement as underwriter or your role in connection herewith.

This Agreement constitutes the entire agreement of the parties to this Agreement and supersedes all prior written or oral and all contemporaneous oral agreements, understandings and negotiations with respect to the subject matter hereof. This Agreement may not be amended or modified unless in writing by all of the parties hereto, and no condition herein (express or implied) may be waived unless waived in writing by each party whom the condition is meant to benefit. The Section headings herein are for the convenience of the parties only and shall not affect the construction or interpretation of this Agreement.

If the foregoing letter is in accordance with your understanding of our agreement, please sign and return to us the enclosed duplicates hereof, whereupon it will become a binding agreement among the Company and the several Underwriters in accordance with its terms.

Very truly yours,

# FLUIDIGM CORPORATION

By: /s/ Vikram Jog

Title: Chief Financial Officer

The foregoing Purchase Agreement is hereby confirmed and accepted as of the date first above written.

## PIPER JAFFRAY & CO.

As Representative of the several Underwriters listed on Schedule I

By /s/ Neil Riley

Authorized Officer Neil Riley, Managing Director

# UBS SECURITIES LLC By /s/ Jordan Termine Authorized Officer By /s/ Kapil Gupta

Authorized Officer

## SCHEDULE I

# SCHEDULE OF UNDERWRITERS

	Number of
	Firm Shares
	to be
<u>Underwriter</u>	Purchased
Piper Jaffray & Co.	4,075,000
UBS Securities LLC.	2,771,000
BTIG, LLC	652,000
Janney Montgomery Scott LLC	652,000
Total	8,150,000

#### SCHEDULE II

# PRICE AND OTHER TERMS OF THE OFFERING CONVEYED ORALLY

Number of Shares being offered by the Company: 8,150,000

Number of Option Shares: 1,222,500

Price per Share to the public: \$6.75

Underwriting discounts and commissions: \$0.405

# SCHEDULE III GENERAL USE FREE WRITING PROSPECTUS

None

# SCHEDULE IV SUBSIDIARIES

FLUIDIGM CANADA INC.

FLUIDIGM (SHANGHAI) INSTRUMENT TECHNOLOGY CO., LTD.

FLUIDIGM FRANCE SARL

FLUIDIGM FRANCE SARL (ITALIAN BRANCH)

FLUIDIGM GMBH

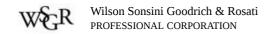
FLUIDIGM K.K.

FLUIDIGM EUROPE B.V.

FLUIDIGM SINGAPORE PTE. LTD.

FLUIDIGM UK LIMITED

FLUIDIGM SCIENCES INC.



650 Page Mill Road Palo Alto, CA 94304-1050

> PHONE 650.493.9300 FAX 650.493.6811

> > www.wsgr.com

December 11, 2018

Fluidigm Corporation 7000 Shoreline Court, Suite 100 South San Francisco, California 94080

Re: Registration Statement on Form S-3

#### Ladies and Gentlemen:

This opinion is furnished to you in connection with the offering by Fluidigm Corporation, a Delaware corporation (the "Company"), of 9,372,500 shares of the Company's common stock, par value \$0.001 per share (the "Shares"), including up to 1,222,500 shares that may be sold pursuant to the exercise of an option to purchase additional shares of common stock of the Company, pursuant to a Registration Statement on Form S-3 (Registration No. 333-216542) (the "Registration Statement"), filed by the Company on March 8, 2017, as amended on April 28, 2017, with the Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended (the "Securities Act"), the prospectus included in the Registration Statement (the "Base Prospectus"), and the prospectus supplement related to the Shares to be filed by the Company with the SEC pursuant to Rule 424(b) promulgated under the Securities Act (together with the Base Prospectus").

We understand that the Shares are to be sold to the underwriters for resale to the public as described in the Prospectus and pursuant to a purchase agreement to be entered into by and between the Company, Piper Jaffray & Co. and UBS Securities LLC as representatives of the several underwriters, substantially in the form attached as an exhibit to a Current Report on Form 8-K to be filed on or about December 12, 2018 by the Company with the SEC for incorporation by reference into the Registration Statement (the "Purchase Agreement").

We are acting as counsel for the Company in connection with the sale of the Shares by the Company. In such capacity, we have examined the Registration Statement (including exhibits

AUSTIN BEIJING BOSTON BRUSSELS HONG KONG LONDON LOS ANGELES NEW YORK PALO ALTO SAN DIEGO SAN FRANCISCO SEATTLE SHANGHAI WASHINGTON, DC WILMINGTON, DE

Fluidigm Corporation December 11, 2018 Page 2

thereto), the Prospectus and the Purchase Agreement. We have also examined originals or copies, certified or otherwise identified to our satisfaction, of such documents, corporate records, certificates of public officials and other instruments as we have deemed necessary for the purposes of rendering this opinion. In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity with the originals of all documents submitted to us as copies, the authenticity of the originals of such documents and the legal competence of all signatories to such documents.

We express no opinion herein as to the laws of any state or jurisdiction other than the General Corporation Law of the State of Delaware (including the statutory provisions and all applicable judicial decisions interpreting those laws) and the federal laws of the United States of America.

On the basis of the foregoing, we are of the opinion that the Shares to be issued and sold by the Company have been duly authorized and, when such Shares are issued and paid for in accordance with the terms of the Purchase Agreement, such Shares will be validly issued, fully paid and nonassessable.

\* \* \*

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Fluidigm Corporation December 11, 2018 Page 3

We consent to the use of this opinion as an exhibit to the Company's Current Report on Form 8-K, to be filed on or about December 12, 2018, and we consent to the reference of our name under the caption "Legal Matters" in the Prospectus forming part of the Registration Statement.

Very truly yours,

/s/ Wilson Sonsini Goodrich & Rosati, Professional Corporation

WILSON SONSINI GOODRICH & ROSATI Professional Corporation

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