
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, DC 20549

FORM 8-K

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

Date of Report (Date of earliest event reported) May 29, 2018 (May 24, 2018)

QuickLogic Corporation
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

000-22671
(Commission
File Number)

77-0188504
(IRS Employer
Identification No.)

1277 Orleans Drive, Sunnyvale, CA
(Address of principal executive offices)

94089-1138
(Zip Code)

Registrant's telephone number, including area code: (408) 990-4000

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

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following 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 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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 1.01 Entry into a Material Definitive Agreement.

On May 24, 2018, QuickLogic Corporation (the “Company”) entered into an underwriting agreement (the “Underwriting Agreement”) with Craig-Hallum Capital Group LLC (the “Representative”) as representative of the several underwriters set forth on Schedule I to the Underwriting Agreement (together with the Representative, the “Underwriters”) relating to an underwritten public offering (the “Offering”) of (i) an aggregate of 13,513,510 shares (the “Shares”) of the Company’s common stock, par value \$0.001 per share (the “Common Stock”), and (ii) warrants (the “Warrants”) to purchase up to 5,405,404 shares of Common Stock. Subject to the terms and conditions contained in the Underwriting Agreement, the Underwriters have agreed to purchase and the Company has agreed to sell the Shares and Warrants, at a combined public offering price of \$1.15 per Share and corresponding Warrant, less the combined Underwriters’ discount of \$0.0805 per Share and corresponding Warrant. The Offering closed on May 29, 2018 (the “Closing”). The net proceeds to the Company from the Offering after deducting the underwriting discounts and commissions and estimated offering expenses after the Closing are expected to be approximately \$14.0 million, assuming no exercise of the Warrants.

The Warrants may be exercised at an exercise price of \$1.38 per share, subject to certain adjustments, at any time and from time to time beginning on May 29, 2018 and through, but not after, 5:30 p.m., New York City time, on May 29, 2023.

The Company has entered into a letter agreement (the “Side Letter”) with an investor in the Offering stipulating that the exercise of its Warrant may be limited in certain circumstances if, after giving effect to such exercise, the investor or any of its affiliates would beneficially own (as calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended) more than 4.99% (which threshold may be decreased or increased, but not above 9.99%, at the election of the investor upon 61 days’ prior written notice to the Company) of the outstanding Common Stock immediately after giving effect to the exercise.

The Offering was made pursuant to the Company’s effective registration statement on Form S-3, as amended (Registration Statement No. 333-215030), previously filed with and declared effective by the Securities and Exchange Commission (the “SEC”), as supplemented by a preliminary prospectus supplement, dated May 23, 2018, and a final prospectus supplement, dated May 24, 2018, filed with the SEC. The opinion of Jones Day regarding the validity of the securities sold in the Offering is filed herewith as Exhibit 5.1.

The Underwriting 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 Underwriting 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.

Copies of the Underwriting Agreement, the form of Warrant and the form of Side Letter are attached as Exhibits 1.1, 4.1 and 4.2, respectively, to this Current Report on Form 8-K and are incorporated herein by reference. The foregoing description of the terms of the Underwriting Agreement, the Warrants and the Side Letter do not purport to be complete and are qualified in their entirety by reference to such exhibits.

Item 8.01 Other Events.

On May 23, 2018, the Company issued a press release announcing the launch of the Offering, and on May 24, 2018, the Company issued a separate press release announcing the pricing of the Offering. Copies of each press release are attached as Exhibits 99.1 and 99.2, respectively, to this Current Report on Form 8-K and are incorporated by reference herein.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

| <u>Exhibit No.</u> | <u>Description</u> |
|--------------------|--|
| 1.1 | <u>Underwriting Agreement, dated May 24, 2018 between QuickLogic Corporation and Craig-Hallum Capital Group LLC, as representative of the several underwriters named therein</u> |
| 4.1 | <u>Form of Warrant</u> |
| 4.2 | <u>Form of Side Letter</u> |
| 5.1 | <u>Opinion of Jones Day</u> |
| 23.1 | <u>Consent of Jones Day (included in Exhibit 5.1)</u> |
| 99.1 | <u>Press Release of QuickLogic Corporation, dated May 23, 2018</u> |
| 99.2 | <u>Press Release of QuickLogic Corporation, dated May 24, 2018</u> |

SIGNATURES

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: May 29, 2018

QuickLogic Corporation

/s/ Suping Cheung

Suping (Sue) Cheung

Vice President, Finance and Chief Financial Officer

QUICKLOGIC CORPORATION
13,513,510 Shares of Common Stock, par value \$0.001 per share,
and
Warrants to Purchase 5,405,404 Shares of Common Stock

UNDERWRITING AGREEMENT

May 24, 2018

CRAIG-HALLUM CAPITAL GROUP LLC
As Representative of the several
Underwriters named in Schedule I hereto
c/o Craig-Hallum Capital Group LLC
222 South Ninth Street, Suite 350
Minneapolis, Minnesota 55402

Ladies and Gentlemen:

QuickLogic Corporation, a Delaware corporation (the “*Company*”), proposes, subject to the terms and conditions stated herein, to sell to the several underwriters named in Schedule I hereto (the “*Underwriters*,” or each an “*Underwriter*”) (i) an aggregate of 13,513,510 shares (the “*Shares*”) of common stock, par value \$0.001 per share (the “*Common Stock*”), of the Company, and (ii) warrants of the Company, in the form set forth in Exhibit A hereto, to purchase an aggregate of 5,405,404 shares of Common Stock (the “*Warrant Shares*”) at an exercise price of \$1.38 per share (the “*Warrants*”). Each Share is being sold together with a Warrant to purchase four-tenths of a share of Common Stock. The Shares and the Warrant Shares consist of authorized but unissued shares of Common Stock to be issued and sold by the Company. The Shares, the Warrants and the Warrant Shares purchased pursuant to this Underwriting Agreement (this “*Agreement*”) are herein collectively called the “*Securities*.”

The Company and the several Underwriters hereby confirm their agreement with respect to the sale of the Securities by the Company to the several Underwriters, for whom Craig-Hallum Capital Group LLC is acting as representative (“*you*” or the “*Representative*”).

1. **Registration Statement and Prospectus.** The Company has prepared and filed with the Securities and Exchange Commission (the “*Commission*”) a registration statement on Form S-3 (File No. 333-215030) under the Securities Act of 1933, as amended (the “*Securities Act*”), and the rules and regulations (the “*Rules and Regulations*”) of the Commission thereunder, and such amendments to such registration statement as may have been required to the date of this Agreement. Such registration statement, as amended, has been declared effective by the Commission. Each part of such registration statement, including the amendments, exhibits and any schedules thereto, the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the Securities Act and the documents and information otherwise deemed to be a part thereof or included therein by

Rule 430B under the Securities Act (the “**Rule 430B Information**”) or otherwise pursuant to the Rules and Regulations, as of the time the Registration Statement became effective, is herein called the “**Registration Statement**.” Any registration statement filed by the Company pursuant to Rule 462(b) under the Securities Act is called the “**Rule 462(b) Registration Statement**” and, from and after the date and time of filing of the Rule 462(b) Registration Statement, the term “Registration Statement” shall include the Rule 462(b) Registration Statement.

The prospectus in the form in which it has most recently been filed with the Commission on or prior to the date of this Agreement is herein called the “**Base Prospectus**.” Each preliminary prospectus supplement to the Base Prospectus (including the Base Prospectus as so supplemented), that describes the Securities and the offering thereof, that omitted the Rule 430B Information and that was used prior to the filing of the final prospectus supplement referred to in the following sentence is herein called a “**Preliminary Prospectus**.” Promptly after execution and delivery of this Agreement, the Company will prepare and file with the Commission a final prospectus supplement to the Base Prospectus relating to the Securities and the offering thereof in accordance with the provisions of Rule 430B and Rule 424(b) of the Rules and Regulations. Such final supplemental form of prospectus (including the Base Prospectus as so supplemented), in the form filed with the Commission pursuant to Rule 424(b), is herein called the “**Prospectus**.” Any reference herein to the Base Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to include the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the Securities Act as of the date of such prospectus.

For purposes of this Agreement, all references to the Registration Statement, the Rule 462(b) Registration Statement, the Base Prospectus, any Preliminary Prospectus, the Prospectus or any amendment or supplement to any of the foregoing shall be deemed to include the copy filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval System or any successor system thereto (“**EDGAR**”). All references in this Agreement to financial statements and schedules and other information which is “described,” “contained,” “included” or “stated” in the Registration Statement, the Base Prospectus, any Preliminary Prospectus or the Prospectus (or other references of like import) shall be deemed to mean and include all such financial statements and schedules and other information which is incorporated by reference in or otherwise deemed by the Rules and Regulations to be a part of or included in the Registration Statement, the Base Prospectus, any Preliminary Prospectus or the Prospectus, as the case may be; and all references in this Agreement to amendments or supplements to the Registration Statement, the Base Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to mean and include the subsequent filing of any document under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), and which is deemed to be incorporated by reference therein or otherwise deemed by the Rules and Regulations to be a part thereof.

2. Representations and Warranties of the Company.

(a) Representations and Warranties of the Company. The Company represents and warrants to, and agrees with, the several Underwriters as follows:

(i) Registration Statement and Prospectuses. No order preventing or suspending the use of any Preliminary Prospectus or the Prospectus (or any supplement thereto) has been issued by the Commission and no proceeding for that purpose has been initiated or is pending or, to the knowledge of the Company, threatened by the Commission. As of the time each part of the Registration Statement (or any post-effective amendment thereto) became or becomes effective (including each deemed effective date with respect to the Underwriters pursuant to Rule 430B or otherwise under the Securities Act), such part conformed or will conform in all material respects to the requirements of the Securities Act and the Rules and Regulations. Upon the filing or first use within the meaning of the Rules and Regulations, each Preliminary Prospectus and the Prospectus (or any supplement to either) conformed or will conform in all material respects to the requirements of the Securities Act and the Rules and Regulations. The Registration Statement and any post-effective amendment thereto has become effective under the Securities Act. The Company has complied to the Commission's satisfaction with all requests of the Commission for additional or supplemental information. No stop order suspending the effectiveness of the Registration Statement, any post-effective amendment or any part thereof is in effect and no proceedings for such purpose have been instituted or are pending or, to the knowledge of the Company, are threatened by the Commission.

(ii) Accurate Disclosure. Each Preliminary Prospectus, at the time of filing thereof or the time of first use within the meaning of the Rules and Regulations, did not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. Neither the Registration Statement nor any amendment thereto, at the effective time of each part thereof, or at the Closing Date (as defined below), contained, contains or will contain an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. As of the Time of Sale (as defined below), neither (A) the Time of Sale Disclosure Package (as defined below) nor (B) any issuer free writing prospectus (as defined below), when considered together with the Time of Sale Disclosure Package, included an untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. Neither the Prospectus nor any supplement thereto, as of its issue date, at the time of any filing with the Commission pursuant to Rule 424(b) of the Rules and Regulations, at the Closing Date, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. The representations and warranties in this Section 2(a)(ii) shall not apply to statements in or omissions from any Preliminary Prospectus, the Registration Statement (or any amendment thereto), the Time of Sale Disclosure Package or the Prospectus (or any supplement thereto) made in reliance upon, and in conformity with, written information furnished to the Company by you, or by any Underwriter through you, specifically for use in the preparation of such document, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 6(e).

As used in this Section and elsewhere in this Agreement:

(A) Each reference to an “*issuer free writing prospectus*” herein means an issuer free writing prospectus as defined in Rule 433 of the Rules and Regulations. For the avoidance of doubt, the term “issuer free writing prospectus” shall not include any free writing prospectus (as defined in Rule 405 under the Securities Act) that was prepared by any Underwriter or provided to any person by any Underwriter without the knowledge and consent of the Company.

(B) “*Time of Sale Disclosure Package*” means the Preliminary Prospectus dated May 23, 2018, any free writing prospectus set forth on Schedule II and the information on Schedule III, all considered together.

(C) “*Time of Sale*” means 6:00 a.m. (Eastern time) on the date of this Agreement.

(iii) *Issuer Free Writing Prospectuses*. (A) Each issuer free writing prospectus, if any, does not include any information that conflicts with the information contained in the Registration Statement, any Preliminary Prospectus or the Prospectus, each as amended. The foregoing sentence does not apply to statements in or omissions from any issuer free writing prospectus based upon and in conformity with written information furnished to the Company by you or by any Underwriter through you 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 6(e).

(B) (1) At the earliest time after the filing of the Registration Statement that the Company or another offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2) under the Securities Act) of the Securities and (2) at the date hereof, the Company was not and is not an “ineligible issuer,” as defined in Rule 405 under the Securities Act, including the Company or any subsidiary in the preceding three years not having been convicted of a felony or misdemeanor or having been made the subject of a judicial or administrative decree or order as described in Rule 405 of the Rules and Regulations (without taking account of any determination by the Commission pursuant to Rule 405 of the Rules and Regulations that it is not necessary that the Company be considered an ineligible issuer), nor an “excluded issuer” as defined in Rule 164 under the Securities Act.

(C) Each issuer free writing prospectus, if any, satisfied, as of its issue date and at all subsequent times to the Time of Sale, all other conditions to use thereof as set forth in Rules 164 and 433 under the Securities Act.

(iv) *No Other Offering Materials*. The Company has not distributed and will not distribute any prospectus or other offering material in connection with the offering and sale of the Securities other than any Preliminary Prospectus, the Time of Sale Disclosure Package or the Prospectus or other materials permitted by the Securities Act to be distributed by the Company; *provided, however*, that, except as set forth on Schedule II, the Company has not made and will not make any offer relating to the Securities that would constitute a free writing prospectus, except in accordance with the provisions of Section 4(a)(xv) of this Agreement.

(v) *Financial Statements*. The financial statements of the Company, together with the related notes and schedules, set forth or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus comply in all material respects with the applicable requirements of the Securities Act and the Exchange Act and fairly present in all material respects the financial condition of the Company and its consolidated subsidiaries as of the dates indicated and the results of operations and changes in cash flows for the periods therein specified in conformity with generally accepted accounting principles in the United States consistently applied throughout the periods involved; the supporting schedules included in or incorporated by reference into the Registration Statement present fairly in all material respects the information required to be stated therein; all non-GAAP financial information included in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus complies in all material respects with the requirements of Regulation G and Item 10 of Regulation S-K under the Securities Act; and, except as disclosed in the Time of Sale Disclosure Package and the Prospectus, there are no material off-balance sheet arrangements (as defined in Regulation S-K under the Securities Act, Item 303(a)(4)(ii)) or any other relationships with unconsolidated entities or other persons, that may have a material current or, to the Company's knowledge, material future effect on the Company's financial condition, results of operations, liquidity, capital expenditures, capital resources or significant components of revenue or expenses. No other financial statements or schedules are required to be included in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus. To the Company's knowledge, each of Moss Adams LLP and BDO USA, LLP, each of which has expressed its opinion with respect to the financial statements and schedules filed as a part of the Registration Statement and included in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, is (x) an independent public accounting firm within the meaning of the Securities Act and the Rules and Regulations, (y) a registered public accounting firm (as defined in Section 2(a)(12) of the Sarbanes-Oxley Act of 2002 (the "*Sarbanes-Oxley Act*")) and (z) not in violation of the auditor independence requirements of the Sarbanes-Oxley Act.

(vi) *Organization and Good Standing*. Each of the Company and its subsidiaries has been duly organized and is validly existing as a corporation in good standing under the laws of its jurisdiction of incorporation. Each of the Company and its subsidiaries has full corporate power and authority to own its properties and conduct its business as currently being carried on and as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, and is duly qualified to do business as a foreign corporation in good standing in each jurisdiction in which it owns or leases real property or in which the conduct of its business makes such qualification necessary and in which the failure to so qualify would have a material adverse effect upon the business, prospects, management, properties, operations, condition (financial or otherwise) or results of operations of the Company and its subsidiaries, taken as a whole ("*Material Adverse Effect*").

(vii) Absence of Certain Events. Except as contemplated in the Time of Sale Disclosure Package and in the Prospectus, subsequent to the respective dates as of which information is given in the Time of Sale Disclosure Package and the Prospectus, neither the Company nor any of its subsidiaries has incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions other than in the ordinary course of business, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock; and there has not been any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants or conversion of convertible securities or the issuance, repurchase or forfeiture of restricted stock awards or restricted stock units under the Company's existing stock award plans, or any new grants thereof in the ordinary course of business), or any material change in the short-term or long-term debt (other than as a result of the conversion of convertible securities) or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock of the Company or any of its subsidiaries not permitted herein, or any material adverse change in the general affairs, condition (financial or otherwise), business, prospects, management, properties, operations or results of operations of the Company and its subsidiaries, taken as a whole ("**Material Adverse Change**").

(viii) Absence of Proceedings. Except as set forth in the Time of Sale Disclosure Package and in the Prospectus, there is not pending or, to the knowledge of the Company, threatened or contemplated, any action, suit or proceeding (a) to which the Company or any of its subsidiaries is a party or (b) to the knowledge of the Company, which has as the subject thereof any officer or director of the Company or any subsidiary or (c) which has as the subject thereof any employee benefit plan sponsored by the Company or any subsidiary or any property or assets owned or leased by the Company or any subsidiary before or by any court or Governmental Authority (as defined below), or any arbitrator, which, individually or in the aggregate, would result in any Material Adverse Change, or would materially and adversely affect the ability of the Company to perform its obligations under this Agreement or which are otherwise material in the context of the sale of the Securities. There are no current or, to the knowledge of the Company, pending, legal, governmental or regulatory actions, suits or proceedings (x) to which the Company or any of its subsidiaries is subject or (y), to the knowledge of the Company, which has as the subject thereof any officer or director of the Company or any subsidiary, any employee plan sponsored by the Company or any subsidiary or any property or assets owned or leased by the Company or any subsidiary, that are required to be described in the Registration Statement, Time of Sale Disclosure Package and Prospectus by the Securities Act or by the Rules and Regulations and that have not been so described.

(ix) Disclosure of Legal Matters. To the knowledge of the Company, there are no statutes, regulations, contracts or documents that are required to be described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus or required to be filed as exhibits to the Registration Statement by the Securities Act or by the Rules and Regulations that have not been so described or filed.

(x) *Authorization; No Conflicts; Authority.* This Agreement has been, and the Warrants on the Closing Date will be, duly authorized, executed and delivered by the Company. This Agreement constitutes, and the Warrants on the Closing Date will constitute, a valid, legal and binding obligation of the Company, enforceable in accordance with its terms, except as rights to indemnity hereunder may be limited by federal or state laws and except as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting the rights of creditors generally and subject to general principles of equity. The execution, delivery and performance of this Agreement and the Warrants and the consummation of the transactions herein and therein contemplated (including the issuance of the Warrant Shares upon exercise of the Warrants) will not (A) conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to any indenture, mortgage, deed of trust, loan agreement or other material agreement or instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or to which any of the property or assets of the Company or any of its subsidiaries is subject, (B) result in any violation of the provisions of the Company's charter or by-laws or (C) result in the violation of any law or statute or any judgment, order, rule, regulation or decree of any court or arbitrator or federal, state, local or foreign governmental agency or regulatory authority having jurisdiction over the Company or any of its subsidiaries or any of their properties or assets (each, a "**Governmental Authority**"), except in the case of clauses (A) and (C) as would not result in a Material Adverse Effect. To the knowledge of the Company, no consent, approval, authorization or order of, or registration or filing with any Governmental Authority is required for the execution, delivery and performance of this Agreement or for the consummation of the transactions contemplated hereby, including the issuance or sale of the Securities by the Company, except such as may be required under the Securities Act, the rules of the Financial Industry Regulatory Authority, Inc. ("**FINRA**"), the Nasdaq Stock Market Rules or state securities or blue sky laws and such other approvals as have been obtained; and the Company has full power and authority to enter into this Agreement and to consummate the transactions contemplated hereby, including the authorization, issuance and sale of the Securities as contemplated by this Agreement.

(xi) *Capitalization; the Securities; Registration Rights.* All of the issued and outstanding shares of capital stock of the Company, including the outstanding shares of Common Stock, are duly authorized and validly issued, fully paid and nonassessable, have been issued in compliance with all applicable federal and state and foreign securities laws, to the knowledge of the Company, were not issued in violation of or subject to any preemptive rights or other rights to subscribe for or purchase securities that have not been waived in writing (a copy of which has been delivered to counsel to the Underwriters), and the holders thereof are not subject to personal liability by reason of being such holders; the Securities which may be sold hereunder by the Company have been duly authorized and, when issued, delivered and paid for in accordance with the terms of this Agreement, will have been validly issued and will be fully paid and nonassessable, and the holders thereof will not be subject to personal liability by reason of being such holders; and the capital stock of the Company, including the Common Stock and the Securities to be purchased pursuant to this Agreement, conforms in all material respects to the description thereof in the Registration Statement (including in any agreements filed as exhibits to the Registration Statement), in the Time of Sale Disclosure Package and in the Prospectus. Except as otherwise stated in

the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, (A) there are no preemptive rights or other rights to subscribe for or to purchase, or any restriction upon the voting or transfer of, any shares of Common Stock pursuant to the Company's charter, by-laws or any agreement or other instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries is bound; (B) neither the filing of the Registration Statement nor the offering or sale of the Securities as contemplated by this Agreement gives rise to any rights for or relating to the registration of any shares of Common Stock or other securities of the Company (collectively "**Registration Rights**") and (C) any person to whom the Company has granted Registration Rights has agreed not to exercise such rights until after expiration of the Lock-Up Period (as defined below). All of the issued and outstanding shares of capital stock of each of the Company's subsidiaries have been duly and validly authorized and issued and are fully paid and nonassessable, and, except as otherwise described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, the Company owns of record and beneficially, free and clear of any security interests, claims, liens, proxies, equities or other encumbrances, all of the issued and outstanding shares of such stock. The Company has an authorized and outstanding capitalization as set forth in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus.

(xii) Stock Options. Except as described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, there are no options, warrants, agreements, contracts or other rights in existence to purchase or acquire from the Company or any subsidiary of the Company any shares of the capital stock of the Company or any subsidiary of the Company. The description of the Company's stock option, stock bonus and other stock plans or arrangements (the "**Company Stock Plans**"), and the options or other rights granted thereunder (collectively, the "**Awards**"), set forth in the Time of Sale Disclosure Package and the Prospectus accurately and fairly presents in all material respects the information required to be shown with respect to such plans, arrangements and Awards. Each grant of an Award (A) was duly authorized no later than the date on which the grant of such Award was by its terms to be effective by all necessary corporate action, including, as applicable, approval by the board of directors of the Company (or a duly constituted and authorized committee thereof) and any required stockholder approval by the necessary number of votes or written consents, and the award agreement governing such grant (if any) was duly executed and delivered by each party thereto and (B) was made in accordance with the terms of the applicable Company Stock Plan, and all applicable laws and regulatory rules or requirements, including all applicable federal securities laws.

(xiii) Compliance with Laws. The Company and each of its subsidiaries holds, and is operating in compliance in all material respects with, all franchises, grants, authorizations, licenses, permits, easements, consents, certificates and orders of any Governmental Authority or self-regulatory body required for the conduct of its business, except for such franchises, grants, authorizations, licenses, permits, easements, consents, certificates and orders as to which the failure to so own, hold, possess or comply with would not have a Material Adverse Effect and all material franchises, grants, authorizations, licenses, permits, easements, consents, certifications and orders are valid and in full force

and effect; and neither the Company nor any of its subsidiaries has received notice of any revocation or modification of any material franchise, grant, authorization, license, permit, easement, consent, certification or order or has reason to believe that any material franchise, grant, authorization, license, permit, easement, consent, certification or order will not be renewed in the ordinary course; and the Company and each of its subsidiaries is in compliance in all material respects with all applicable federal, state, local and foreign laws, regulations, orders and decrees.

(xiv) Ownership of Assets. The Company and its subsidiaries have good and marketable title to, or have valid rights to lease or otherwise use, all property (whether real or personal) described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus as being owned, leased or used by them, in each case free and clear of all liens, claims, security interests, other encumbrances or defects except such as are described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus. The property held under lease by the Company and its subsidiaries is held by them under valid, subsisting and enforceable leases with only such exceptions with respect to any particular lease as do not interfere in any material respect with the conduct of the business of the Company or its subsidiaries.

(xv) Intellectual Property.

(A) The Company and each of its subsidiaries owns or possesses the right to use pursuant to a valid and enforceable written license or other legally enforceable right (or could obtain such license or right on commercially reasonable terms for an amount that is not material to the Company and its subsidiaries taken as a whole), all Intellectual Property (as defined below) necessary for the conduct of the Company's and its subsidiaries' businesses as now conducted or as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus to be conducted (the "**Company IP**"). "**Intellectual Property**" means all patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, domain names, technology, know-how and other intellectual property.

(B) To the Company's knowledge, there is no infringement, misappropriation or violation by third parties of any Company IP. There is no pending, or to the knowledge of the Company, threatened, action, suit, proceeding or claim by others challenging the Company's or its subsidiaries' rights in or to any Company IP, and the Company is unaware of any facts which would form a reasonable basis for any such claim. The Intellectual Property owned by the Company and its subsidiaries, and to the knowledge of the Company, the Intellectual Property licensed to the Company and its subsidiaries, has not been adjudged invalid or unenforceable, in whole or in part, and there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others challenging the validity or scope of any Company IP, and the Company is unaware of any facts which would form a reasonable basis for any such claim.

Except as described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others that the Company or its subsidiaries infringe, misappropriate or otherwise violate any Intellectual Property or other proprietary rights of others, and neither the Company nor any of its subsidiaries has received any written notice of such claim and the Company is unaware of any other fact which would form a reasonable basis for any such claim.

(C) To the Company's knowledge, no employee of the Company or any of its subsidiaries is in or has ever been in material violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company or any of its subsidiaries or actions undertaken by the employee while employed with the Company or any of its subsidiaries.

(D) The Company and its subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their material Intellectual Property.

(E) All patent applications owned by the Company or its subsidiaries and filed with the U.S. Patent and Trademark Office (the "**PTO**") or any foreign or international patent authority that have resulted in patents or currently pending applications that describe inventions necessary to conduct the business of the Company or its subsidiaries as now conducted or as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus to be conducted (collectively, the "**Company Patent Applications**") have been or were duly and properly filed.

(F) The Company and its subsidiaries have complied in all material respects with their duty of candor and disclosure to the PTO for the Company Patent Applications. To the Company's knowledge, there are no facts required to be disclosed to the PTO that were not disclosed to the PTO and which would preclude the grant of a patent for the Company Patent Applications. The Company has no knowledge of any facts which would preclude it or its applicable subsidiary from having clear title to the Company Patent Applications that have been identified by the Company as being exclusively owned by the Company or one of its subsidiaries.

(xvi) No Violations or Defaults. Neither the Company nor any of its subsidiaries is in violation of its respective charter, by-laws or other organizational documents, or in breach of or otherwise in default, and no event has occurred which, with notice or lapse of time or both, would constitute such a default in the performance of any obligation, agreement or condition contained in any bond, debenture, note, indenture, loan agreement or any other contract, lease or other instrument to which it is subject or by which any of them may be bound, or to which any of the property or assets of the Company or any of its subsidiaries is subject, except as would not have a Material Adverse Effect.

(xvii) Taxes. The Company and its subsidiaries have timely filed all federal, state, local and foreign income and franchise tax returns required to be filed prior to the date hereof or has duly obtained extensions of time for the filing thereof, and are not in default in the payment of any taxes which were payable pursuant to said returns or any assessments with respect thereto, other than any which the Company or any of its subsidiaries is contesting in good faith. There is no pending dispute with any taxing authority relating to any of such returns, and the Company has no knowledge of any proposed liability for any tax to be imposed upon the properties or assets of the Company for which there is not an adequate reserve reflected in the Company's financial statements included in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus.

(xviii) Exchange Listing and Exchange Act Registration. The Common Stock is registered pursuant to Section 12(b) of the Exchange Act and is included or approved for listing on the Nasdaq Global Market and the Company has not taken any action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from the Nasdaq Global Market, and the Company has not received any notification that the Commission or the Nasdaq Global Market is contemplating terminating such registration or listing. The Company has complied in all material respects with the applicable requirements of the Nasdaq Global Market for maintenance of inclusion of the Common Stock thereon. The Company has filed an application to include the Securities (other than the Warrants) on the Nasdaq Global Market. Except as previously disclosed to counsel for the Underwriters or as set forth in the Time of Sale Disclosure Package and the Prospectus, to the knowledge of the Company, no beneficial owners of the Company's capital stock who, together with their associated persons and affiliates, hold in the aggregate 10% or more of such capital stock, have any direct or indirect association or affiliate with a FINRA member.

(xix) Ownership of Other Entities. Other than the subsidiaries of the Company listed in Exhibit 21 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017, the Company, directly or indirectly, owns no capital stock or other equity or ownership or proprietary interest in any corporation, partnership, association, trust or other entity.

(xx) Internal Controls. The Company and its 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 generally accepted accounting principles in the United States 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. Except as disclosed in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, the Company's internal control over financial reporting is effective and none of the Company, its board of directors and audit committee is aware of any "significant deficiencies" or "material weaknesses" (each as defined by the Public Company Accounting Oversight Board) in its internal control over financial reporting, or any fraud, whether or not material, that involves management or other employees of the Company and its subsidiaries who have a significant role in the Company's internal controls; and since the end of the latest audited fiscal year, there has been no change in the Company's internal control over financial reporting (whether or not remediated) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. The Company's board of directors has, subject to the exceptions, cure periods and the phase in periods specified in the applicable stock exchange rules ("**Exchange Rules**"), validly appointed an audit committee to oversee internal accounting controls whose composition satisfies the applicable requirements of the Exchange Rules and the Company's board of directors and/or the audit committee has adopted a charter that complies in all material respects with the requirements of the Exchange Rules.

(xxi) *No Brokers or Finders*. Other than as contemplated by this Agreement, the Company has not incurred any liability for any finder's or broker's fee or agent's commission in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby.

(xxii) *Insurance*. The Company and each of its subsidiaries carries, or is covered by, insurance from reputable insurers in such amounts and covering such risks as is adequate for the conduct of its business and the value of its properties and the properties of its subsidiaries and as is customary for companies engaged in similar businesses in similar industries; all policies of insurance and any fidelity or surety bonds insuring the Company or any of its subsidiaries or its business, assets, employees, officers and directors are, to the Company's knowledge, in full force and effect; the Company and its subsidiaries are in compliance with the terms of such policies and instruments in all material respects; there are no claims by the Company or any of its subsidiaries under any such policy or instrument as to which any insurance company is denying liability or defending under a reservation of rights clause that could reasonably be expected to have a Material Adverse Effect; neither the Company nor any of its subsidiaries has been refused any insurance coverage sought or applied for; and neither the Company nor any of its subsidiaries has reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires, should it elect to do so, or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect, except as disclosed in the Time of Sale Disclosure Package and the Prospectus.

(xxiii) *Investment Company Act*. The Company is not and, after giving effect to the offering and sale of the Securities, will not be an "investment company," as such term is defined in the Investment Company Act of 1940, as amended.

(xxiv) Eligibility to Use Form S-3. The conditions for use of Form S-3, in connection with the offer and sale of the Securities, as set forth in the General Instructions thereto, have been satisfied.

(xxv) Incorporated Documents. The documents incorporated by reference in the Time of Sale Disclosure Package and in the Prospectus, when they became effective or were filed with the Commission, as the case may be, conformed in all material respects to the requirements of the Securities Act or the Exchange Act, as applicable, and were filed on a timely basis with the Commission and none of such documents when they were filed (or, if amendments to such documents were filed, when such amendments were filed) contained an untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; any further documents so filed and incorporated by reference in the Time of Sale Disclosure Package or in the Prospectus, when such documents are filed with the Commission, will conform in all material respects to the requirements of the Exchange Act, and will not contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(xxvi) Sarbanes-Oxley Act. The Company is in compliance with all applicable provisions of the Sarbanes-Oxley Act and the rules and regulations of the Commission thereunder, except where the failure to be in compliance is not reasonably likely to result in a Material Adverse Effect.

(xxvii) Disclosure Controls. The Company has established and maintains disclosure controls and procedures (as defined in Rules 13a-14 and 15d-14 under the Exchange Act) and such controls and procedures are effective in ensuring that material information relating to the Company, including its subsidiaries, is made known to the principal executive officer and the principal financial officer. The Company has utilized such controls and procedures in preparing and evaluating the disclosures in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus.

(xxviii) Anti-Bribery and Anti-Money Laundering Laws. Each of the Company and its subsidiaries, and, to the Company's knowledge, its affiliates and any of their respective officers, directors, supervisors, managers, agents or employees has not violated, its participation in the offering will not 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 applicable 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, including, without limitation, Title 18 U.S. 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.

(xxix) OFAC.

(A) Neither the Company nor any of its subsidiaries, nor, to the Company's knowledge, any of their directors, officers, employees, agents, affiliates or representatives, is an individual or entity that is, or is owned or controlled by an individual or entity that is:

(1) 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

(2) located, organized or resident in a country or territory that is the subject of Sanctions (including, without limitation, the Crimea Region of the Ukraine, Cuba, Iran, North Korea and Syria).

(B) Neither the Company nor any of its subsidiaries 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).

(C) For the past five years, neither the Company nor any of its subsidiaries 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.

(xxx) *Compliance with Environmental Laws.* Except as disclosed in the Time of Disclosure Package and the Prospectus, neither the Company nor any of its subsidiaries is in violation of any applicable statute, any applicable rule, regulation, decision or order of any Governmental Authority 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 contaminated with any substance that is subject to any 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. Neither the Company nor any of its subsidiaries anticipates incurring any material capital expenditures relating to compliance with Environmental Laws.

(xxxi) *Compliance with Occupational Laws.* The Company and each of its subsidiaries (A) is in compliance, in all material respects, with any and all applicable foreign, federal, state and local laws, rules, regulations, treaties, statutes and codes promulgated by any and all Governmental Authorities (including pursuant to the Occupational Health and Safety Act) relating to the protection of human health and safety in the workplace (“*Occupational Laws*”); (B) has received all material permits, licenses or other approvals required of it under applicable Occupational Laws to conduct its business as currently conducted; and (C) is in compliance, in all material respects, with all terms and conditions of any such permits, licenses or approvals. No action, proceeding, revocation proceeding, writ, injunction or claim is pending or, to the Company’s knowledge, threatened against the Company or any of its subsidiaries relating to Occupational Laws, and the Company does not have knowledge of any facts, circumstances or developments relating to its operations or cost accounting practices that could reasonably be expected to form the basis for or give rise to such actions, suits, investigations or proceedings.

(xxxii) *ERISA and Employee Benefits Matters.* (A) To the knowledge of the Company, no “prohibited transaction” (as defined in Section 406 of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder (“ERISA”), or Section 4975 of the Internal Revenue Code of 1986, as amended from time to time (the “Code”)) or “accumulated funding deficiency” (as defined in Section 302 of ERISA) or any of the events set forth in Section 4043(b) of ERISA (other than events with respect to which the thirty (30)-day notice requirement under Section 4043 of ERISA has been waived) has occurred or could reasonably be expected to occur with respect to any employee benefit plan of the Company which could, singularly or in the aggregate, have a Material Adverse Effect. Each employee benefit plan of the Company is in compliance in all material respects with applicable law, including ERISA and the Code. The Company has not incurred and could not reasonably be expected to incur liability under Title IV of ERISA with respect to the termination of, or withdrawal from, any pension plan (as defined in ERISA). Each pension plan for which the Company would have any liability that is intended to be qualified under Section 401(a) of the Code is so qualified, and nothing has occurred, whether by action or by failure to act, which could, singularly or in the aggregate, cause the loss of such qualification.

(xxxiii) Business Arrangements. Except as disclosed in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, neither the Company nor any of its subsidiaries has granted exclusive rights to develop, manufacture, produce, assemble, distribute, license, market or sell its products to any other person and is not bound by any agreement that affects the exclusive right of the Company or such subsidiary to develop, manufacture, produce, assemble, distribute, license, market or sell its products.

(xxxiv) Labor Matters. No labor problem or dispute with the employees of the Company or any of its subsidiaries exists or, to the Company's knowledge, is threatened or imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its or its subsidiaries' principal suppliers, contractors or customers, that could have a Material Adverse Effect.

(xxxv) Restrictions on Subsidiary Payments to the Company. 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, except as provided by applicable state law or described in or contemplated by the Time of Sale Disclosure Package and the Prospectus and except as would not reasonably be expected to have a Material Adverse Effect.

(xxxvi) Statistical Information. Any third-party statistical and market-related data included in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus are based on or derived from sources that the Company believes to be reliable and accurate in all material respects.

(xxxvii) Forward-looking Statements. No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) contained in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(b) Effect of Certificates. Any certificate signed by any officer of the Company and delivered to you or to counsel for the Underwriters shall be deemed a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

3. *Purchase, Sale and Delivery of Securities.*

(a) *Shares and Warrants.* On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company agrees to issue and sell the Shares and the Warrants to the several Underwriters, and each Underwriter agrees, severally and not jointly, to purchase from the Company the number of Shares and the Warrants set forth opposite the name of such Underwriter in Schedule I hereto. The aggregate purchase price for each Share and related Warrant shall be \$1.0695, which shall be allocated as \$1.06578 per Share and \$0.00372 per Warrant. In making this Agreement, each Underwriter is contracting severally and not jointly; the agreement of each Underwriter is to purchase only the respective number of Shares and the Warrants specified in Schedule I hereto.

(b) *Delivery.* The Shares and the Warrants will be delivered by the Company to you for the accounts of the several Underwriters against payment of the purchase price therefor by wire transfer of same day funds payable to the order of the Company at the offices of Craig-Hallum Capital Group LLC, 222 South Ninth Street, Suite 350, Minneapolis, Minnesota 55402, or such other location as may be mutually acceptable, at 9:00 a.m. Central time on the second (or if the Securities are priced, as contemplated by Rule 15c6-1(c) under the Exchange Act, after 4:30 p.m. Eastern time, the third) full business day following the date hereof, or at such other time and date as you and the Company determine pursuant to Rule 15c6-1(a) under the Exchange Act, such time and date of delivery being herein referred to as the “*Closing Date.*”

If the Underwriters so elect, delivery of the Shares may be made by credit through full fast transfer to the accounts at The Depository Trust Company designated by the Representative. Certificates representing the Shares and the Warrants in definitive form and in such denominations and registered in such names as you have reasonably requested, or evidence of their issuance, will be made available for checking at a reasonable time preceding the Closing Date at the office of Craig-Hallum Capital Group LLC, 222 South Ninth Street, Suite 350, Minneapolis, Minnesota 55402, or such other location as may be mutually acceptable.

(c) *Purchase by Representative on Behalf of Underwriters.* It is understood that you, individually and not as Representative of the several Underwriters, may (but shall not be obligated to) make payment to the Company on behalf of any Underwriter for the Securities to be purchased by such Underwriter. Any such payment by you shall not relieve any such Underwriter of any of its obligations hereunder. Nothing contained herein shall constitute any of the Underwriters an unincorporated association or partner with the Company.

4. *Covenants.*

(a) *Covenants of the Company.* The Company covenants and agrees with the several Underwriters as follows:

(i) *Required Filings.* During the period beginning on the date hereof and ending on the later of the Closing Date or such date, as in the opinion of counsel for the Underwriters, the Prospectus is no longer required by law to be delivered (assuming the absence of Rule 172 under the Securities Act), in connection with sales by an Underwriter

or a dealer (the “*Prospectus Delivery Period*”), prior to amending or supplementing the Registration Statement (including any Rule 462(b) Registration Statement), the Time of Sale Disclosure Package or the Prospectus, the Company shall furnish to the Underwriters for review a copy of each such proposed amendment or supplement, and the Company shall not file any such proposed amendment or supplement to which the Underwriters or counsel to the Underwriters reasonably object. Subject to this Section 4(a)(i), promptly following execution of this Agreement, the Company will prepare the Prospectus containing the Rule 430B Information and other selling terms of the Securities, the plan of distribution thereof and such other information as may be required by the Securities Act or the Rules and Regulations or as the Underwriters and the Company may deem appropriate, and if requested by the Underwriters, an issuer free writing prospectus containing the selling terms of the Securities and such other information as the Company and the Underwriters may deem appropriate, and will file or transmit for filing with the Commission, in accordance with Rule 424(b) or Rule 433, as the case may be, copies of the Prospectus and each issuer free writing prospectus.

(ii) *Notification of Certain Commission Actions.* After the date of this Agreement until the end of the Prospectus Delivery Period, the Company shall promptly advise the Underwriters in writing (A) of the receipt of any comments of, or requests for additional or supplemental information from, the Commission, (B) of the time and date of any filing of any post-effective amendment to the Registration Statement or any amendment or supplement to any Preliminary Prospectus, the Time of Sale Disclosure Package or the Prospectus, (C) of the time and date that any post-effective amendment to the Registration Statement becomes effective, (D) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto or of any order preventing or suspending its use or the use of any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus or any issuer free writing prospectus, or (E) of any proceedings to remove, suspend or terminate from listing or quotation the Common Stock from any securities exchange upon which it is listed for trading or included or designated for quotation, or of the threatening or initiation of any proceedings for any of such purposes. If the Commission shall enter any such stop order at any time during the Prospectus Delivery Period, the Company will use its reasonable best efforts to obtain the lifting of such order at the earliest possible moment. Additionally, the Company agrees during the Prospectus Delivery Period that it shall comply with the provisions of Rules 424(b) and 430B, as applicable, under the Securities Act and will use its reasonable efforts to confirm that any filings made by the Company under Rule 424(b), Rule 433 or Rule 462 were received in a timely manner by the Commission (without reliance on Rule 424(b)(8) or Rule 164(b)).

(iii) *Continued Compliance with Securities Laws.* (A) During the Prospectus Delivery Period, the Company will comply with all requirements imposed upon it by the Securities Act, as now and hereafter amended, and by the Rules and Regulations, as from time to time in force, and by the Exchange Act so far as necessary to permit the continuance of sales of or dealings in the Securities as contemplated by the provisions hereof, the Time of Sale Disclosure Package and the Prospectus. If during such period any event occurs as a result of which the Prospectus (or if the Prospectus is not yet available to

prospective purchasers, the Time of Sale Disclosure Package) would include an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances then existing, not misleading, or if during such period it is necessary or appropriate in the opinion of the Company or its counsel or the Underwriters or counsel to the Underwriters to amend the Registration Statement or supplement the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) to comply with the Securities Act or to file under the Exchange Act any document which would be deemed to be incorporated by reference in the Prospectus (or if the Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) in order to comply with the Securities Act or the Exchange Act, the Company promptly will (x) notify you of such untrue statement or omission, (y) amend the Registration Statement or supplement the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) or file such document (at the expense of the Company) so as to correct such statement or omission or effect such compliance, and (z) notify you when any amendment to the Registration Statement is filed or becomes effective or when any supplement to the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) is filed.

(B) During the Prospectus Delivery Period, if at any time following issuance of an issuer free writing prospectus there occurred or occurs an event or development as a result of which such issuer free writing prospectus conflicted or would conflict with the information contained in the Registration Statement, the Preliminary Prospectus or the Prospectus, each as amended, or included or would include, when taken together with Time of Sale Disclosure Package, an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at that subsequent time, not misleading, the Company (x) has promptly notified or promptly will notify the Underwriters of such conflict, untrue statement or omission, (y) has promptly amended or will promptly amend or supplement, at its own expense, such issuer free writing prospectus to eliminate or correct such conflict, untrue statement or omission, and (z) has notified or promptly will notify you when such amendment or supplement was or is filed with the Commission where so required to be filed.

(iv) Blue Sky Qualifications. The Company shall take or cause to be taken all necessary action required by law to qualify the Securities for sale under the securities laws of such jurisdictions as you reasonably designate and to continue such qualifications in effect so long as required for the distribution of the Securities, except that the Company shall not be required in connection therewith to (A) qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified, (B) to execute a general consent to service of process in any state, or (C) to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise subject.

(v) Provision of Documents. The Company will furnish, at its own expense, to the Underwriters and counsel for the Underwriters copies of the Registration Statement, and to the Underwriters and any dealer each Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, any issuer free writing prospectus, and all amendments and supplements to such documents, in each case as soon as available and in such quantities as you may from time to time reasonably request.

(vi) Rule 158. The Company will make generally available to its security holders as soon as practicable, but in no event later than 15 months after the end of the Company's current fiscal quarter, an earnings statement (which need not be audited) covering a 12-month period that shall satisfy the provisions of Section 11(a) of the Securities Act and Rule 158 of the Rules and Regulations.

(vii) Payment and Reimbursement of Expenses. The Company, whether or not the transactions contemplated hereunder are consummated or this Agreement is terminated, will pay or cause to be paid (A) all expenses (including transfer taxes allocated to the respective transferees) incurred in connection with the delivery to the Underwriters of the Securities, (B) all expenses and fees (including, without limitation, fees and expenses of the Company's accountants and counsel) in connection with the preparation, printing, filing, delivery, and shipping of the Registration Statement (including the financial statements therein and all amendments, schedules, and exhibits thereto), the Securities, each Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, any issuer free writing prospectus and any amendment thereof or supplement thereto, and the printing, delivery, and shipping of this Agreement and other underwriting documents, including Blue Sky Memoranda (covering the states and other applicable jurisdictions), (C) all filing fees incurred in connection with the qualification of the Securities for offering and sale by the Underwriters or by dealers under the securities or blue sky laws of the states and other jurisdictions which you shall designate, (D) the fees and expenses of the transfer agent or registrar, (E) the filing fees incident to any required review and approval by FINRA of the terms of the sale of the Securities, (F) listing fees, if any, (G) the costs and expenses of the Company relating to investor presentations or any "roadshow" undertaken in connection with marketing of the Securities, (H) all reasonable, out-of-pocket accountable expenses of the Underwriters (including, but not limited to, reasonable fees and disbursements of the Underwriters' counsel and the Underwriters' reasonable travel, database, printing, postage, facsimile and telephone expenses) incurred in connection with the Underwriters' investigation of the Company, preparing to market and marketing the Securities, sale of the Securities or in contemplation of performing its obligations hereunder, which amount will not exceed \$110,000 in the aggregate, and (I) all other costs and expenses of the Company incident to the performance of its obligations hereunder that are not otherwise specifically provided for herein.

(viii) Use of Proceeds. The Company will apply the net proceeds from the sale of the Securities to be sold by it hereunder for the purposes set forth in the Time of Sale Disclosure Package and in the Prospectus.

(ix) Company Lock Up. The Company will not, without the prior written consent of the Representative, from the date of execution of this Agreement and continuing to and including the date 90 days after the date of the Prospectus (the "**Lock-Up Period**"), (A) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or

contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or (B) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (A) or (B) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise, except, in each case, for (x) the sale of the Securities as contemplated by this Agreement, (y) issuances of shares of Common Stock upon the exercise or conversion of options, warrants or convertible securities disclosed as outstanding in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus and the vesting of restricted stock awards or units, and (z) the issuance of employee stock options not exercisable during the Lock-Up Period and the grant, redemption, forfeiture or distribution of restricted stock awards, restricted stock units or shares of Common Stock pursuant to the Company's stock option, stock bonus and other stock plans or arrangements, in the case of clauses (y) and (z) above, each as in effect on the date hereof in the ordinary course of business consistent with past practices. The Company agrees not to accelerate the vesting of any option or warrant or the lapse of any repurchase right prior to the expiration of the Lock-Up Period.

(x) Stockholder Lock-Ups. The Company has caused to be delivered to you prior to the date of this Agreement a letter, in the form of Exhibit B hereto (the "Lock-Up Agreement"), from each individual or entity listed on Schedule IV. The Company will enforce the terms of each Lock-Up Agreement and issue stop-transfer instructions to the transfer agent for the Common Stock with respect to any transaction or contemplated transaction that would constitute a breach of or default under the applicable Lock-Up Agreement.

(xi) No Market Stabilization or Manipulation. The Company has not taken and will not take, directly or indirectly, any action designed to or which might reasonably be expected to cause or result in, or which has constituted, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.

(xii) SEC Reports. During the Prospectus Delivery Period, the Company will file on a timely basis with the Commission such periodic and special reports as required by the Rules and Regulations.

(xiii) Internal Controls. During the Prospectus Delivery Period, the Company and its subsidiaries will maintain such controls and other procedures, including without limitation those required by Sections 302 and 906 of the Sarbanes-Oxley Act and the applicable regulations thereunder, that are designed to ensure that information 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 Commission's rules and forms, including without limitation, controls and procedures reasonably designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated

and communicated to the Company's management, including its principal executive officer and its principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure, to ensure that material information relating to Company, including its subsidiary, is made known to them by others within those entities.

(xiv) *Sarbanes-Oxley*. During the Prospectus Delivery Period, the Company and its subsidiaries will comply in all material respects with all applicable provisions of the Sarbanes-Oxley Act.

(xv) *Free Writing Prospectuses*. The Company represents and agrees that, unless it obtains the prior written consent of the Representative, it has not made and will not make any offer relating to the Securities that would constitute an issuer free writing prospectus or that would otherwise constitute a free writing prospectus required to be filed with the Commission; provided that the prior written consent of the Representative shall be deemed to have been given in respect of the free writing prospectuses included in Schedule II. Any such free writing prospectus consented to by the Representative is hereinafter referred to as a "**Permitted Free Writing Prospectus**." The Company represents that it has treated or agrees that it will treat each Permitted Free Writing Prospectus as an issuer free writing prospectus and has complied and will comply with the requirements of Rule 164 and Rule 433 applicable to any Permitted Free Writing Prospectus.

5. Conditions of Underwriters' Obligations. The obligations of the several Underwriters hereunder are subject to the accuracy, as of the date hereof and at the Closing Date (as if made at the Closing Date), of and compliance with all representations, warranties and agreements of the Company contained herein, to the performance by the Company of its obligations hereunder and to the following additional conditions:

(a) *Required Filings; Absence of Certain Commission Actions*. If filing of the Prospectus, or any amendment or supplement thereto, or any issuer free writing prospectus, is required under the Securities Act or the Rules and Regulations, the Company shall have filed the Prospectus (or such amendment or supplement) or such issuer free writing prospectus with the Commission in the manner and within the time period so required (without reliance on Rule 424(b)(8) or Rule 164(b)); the Registration Statement shall remain effective; no stop order suspending the effectiveness of the Registration Statement or any part thereof, any Rule 462(b) Registration Statement, or any amendment thereof, nor suspending or preventing the use of the Time of Sale Disclosure Package, the Prospectus or any issuer free writing prospectus shall have been issued; no proceedings for the issuance of such an order shall have been initiated or threatened; any request of the Commission for additional information (to be included in the Registration Statement, the Time of Sale Disclosure Package, the Prospectus, any issuer free writing prospectus or otherwise) shall have been complied with to your satisfaction.

(b) *Continued Compliance with Securities Laws.* No Underwriter shall have reasonably determined and advised the Company that (i) the Registration Statement or any amendment thereof or supplement thereto contains an untrue statement of a material fact which, in your opinion, is material or omits to state a material fact which, in your opinion, is required to be stated therein or necessary to make the statements therein not misleading, or (ii) the Time of Sale Disclosure Package or the Prospectus, or any amendment thereof or supplement thereto, or any issuer free writing prospectus contains an untrue statement of fact which, in your opinion, is material, or omits to state a fact which, in your opinion, is material and is required to be stated therein, or necessary to make the statements therein, in light of the circumstances under which they are made, not misleading.

(c) *Absence of Certain Events.* Except as contemplated in the Time of Sale Disclosure Package and in the Prospectus, subsequent to the respective dates as of which information is given in the Time of Sale Disclosure Package, neither the Company nor any of its subsidiaries shall have incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions other than in the ordinary course of business, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock; and there shall not have been any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants or conversion of convertible securities or the issuance, repurchase or forfeiture of restricted stock awards or restricted stock units under the Company's existing stock award plans, or any new grants thereof in the ordinary course of business), or any material change in the short-term or long-term debt of the Company (other than as a result of the conversion of convertible securities), or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock of the Company or any of its subsidiaries not permitted herein, or any Material Adverse Change (whether or not arising in the ordinary course of business), or any loss by strike, fire, flood, earthquake, accident or other calamity, whether or not covered by insurance, incurred by the Company or any subsidiary, the effect of which, in any such case described above, in your reasonable judgment, makes it impractical or inadvisable to offer or deliver the Securities on the terms and in the manner contemplated in the Time of Sale Disclosure Package and in the Prospectus.

(d) *Opinion of Company Counsel.* On the Closing Date, there shall have been furnished to you, as Representative of the several Underwriters, the opinion and negative assurance statement of Jones Day, counsel for the Company, dated the Closing Date and addressed to you in form and substance reasonably satisfactory to you.

(e) *Opinion of Company Intellectual Property Counsel.* On the Closing Date, there shall have been furnished to you, as Representative of the several Underwriters, the opinion of Silicon Valley Patent Group LLP, intellectual property counsel for the Company, dated the Closing Date and addressed to you in form and substance reasonably satisfactory to you.

(f) *Opinion of Underwriters' Counsel.* On the Closing Date, there shall have been furnished to you, as Representative of the several Underwriters, such opinion or opinions and negative assurance statement from Faegre Baker Daniels LLP, counsel for the several Underwriters, dated the Closing Date and addressed to you, with respect to such matters as you reasonably may request, and such counsel shall have received such papers and information as they request to enable them to pass upon such matters.

(g) Comfort Letter of Moss Adams LLP. On the date hereof, on the effective date of any post-effective amendment to the Registration Statement filed after the date hereof and on the Closing Date you, as Representative of the several Underwriters, shall have received an accountant's "comfort" letter of Moss Adams LLP, dated such date and addressed to you in form and substance reasonably satisfactory to you.

(h) Comfort Letter of BDO USA, LLP. On the date hereof, on the effective date of any post-effective amendment to the Registration Statement filed after the date hereof and on the Closing Date you, as Representative of the several Underwriters, shall have received an accountant's "comfort" letter of BDO USA, LLP, dated such date and addressed to you in form and substance reasonably satisfactory to you.

(i) Officers' Certificate. On the Closing Date, there shall have been furnished to you, as Representative of the several Underwriters, a certificate, dated the Closing Date and addressed to you, signed by the chief executive officer and by the chief financial officer of the Company, to the effect that:

(i) The representations and warranties of the Company in this Agreement are true and correct as if made at and as of the Closing Date, and the Company has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to the Closing Date;

(ii) No stop order or other order suspending the effectiveness of the Registration Statement or any part thereof or any amendment thereof or the qualification of the Securities for offering or sale nor suspending or preventing the use of the Time of Sale Disclosure Package, the Prospectus or any issuer free writing prospectus, has been issued, and no proceeding for that purpose has been instituted or, to their knowledge, is contemplated by the Commission or any state or regulatory body; and

(iii) Affirms the accuracy of the matters set forth in subsection (c) of this Section 5.

(j) Lock-Up Agreement. The Representative shall have received all of the Lock-Up Agreements referenced in Section 4 and the Lock-Up Agreements shall remain in full force and effect.

(k) FINRA No Objections. FINRA shall have raised no objection to the fairness and reasonableness of the underwriting terms and arrangements.

(l) Other Documents. The Company shall have furnished to you, as Representative of the several Underwriters, and counsel for the Underwriters such additional documents, certificates and evidence as you or they may have reasonably requested.

(m) Exchange Listing. The Securities (other than the Warrants) to be delivered on the Closing Date have been approved for listing on the Nasdaq Global Market, subject to official notice of issuance.

All such opinions, certificates, letters and other documents will be in compliance with the provisions hereof only if they are satisfactory in form and substance to you and counsel for the Underwriters. The Company will furnish you with such conformed copies of such opinions, certificates, letters and other documents as you shall reasonably request.

6. Indemnification and Contribution.

(a) *Indemnification by the Company.* The Company agrees to indemnify and hold harmless each Underwriter, its affiliates, directors and officers and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities, joint or several, to which such Underwriter may become subject, under the Securities Act or otherwise (including in settlement of any litigation if such settlement is effected with the written consent of the Company), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including the 430B Information and any other information deemed to be a part of the Registration Statement at the time of effectiveness and at any subsequent time pursuant to the Rules and Regulations, if applicable, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any amendment or supplement thereto, any issuer free writing prospectus, or any issuer information that the Company has filed or is required to file pursuant to Rule 433(d) of the Rules and Regulations, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and will reimburse each Underwriter for any legal or other expenses reasonably incurred by it in connection with investigating or defending against such loss, claim, damage, liability or action as such expenses are incurred; *provided, however*, that the Company will not be liable in any such case to the extent that any such loss, claim, damage, liability or action (or any legal or other expense incurred in connection with the investigation or defense thereof) arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in reliance upon and in conformity with written information furnished to the Company by you, or by any Underwriter through you, specifically for use in the preparation thereof; it being understood and agreed that the only information furnished by an Underwriter consists of the information described as such in Section 6(e).

(b) *Indemnification by the Underwriters.* Each Underwriter will, severally and not jointly, indemnify and hold harmless the Company, its affiliates, directors, officers and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities, joint or several, to which the Company may become subject, under the Securities Act or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of such Underwriter), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including the 430B Information and any other information deemed to be a part of the Registration Statement at the time of effectiveness and at any subsequent time pursuant to the Rules and Regulations, if applicable, any Preliminary Prospectus,

the Time of Sale Disclosure Package, the Prospectus, or any amendment or supplement thereto, or any issuer free writing prospectus, or any issuer information that the Company has filed or is required to file pursuant to Rule 433(d) of the Rules and Regulations, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in reliance upon and in conformity with written information furnished to the Company by you, or by such Underwriter through you, specifically for use in the preparation thereof (it being understood and agreed that the only information furnished by an Underwriter consists of the information described as such in Section 6(e)), and will reimburse the Company for any legal or other expenses reasonably incurred by the Company in connection with investigating or defending against any such loss, claim, damage, liability or action as such expenses are incurred.

(c) *Notice and Procedures.* Promptly after receipt by an indemnified party under subsection (a) or (b) above of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify the indemnifying party in writing of the commencement thereof; but the omission so to notify the indemnifying party shall not relieve the indemnifying party from any liability that it may have to any indemnified party except to the extent such indemnifying party has been materially prejudiced by such failure (through the forfeiture of substantive rights or defenses). In case any such action 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 in, and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of the indemnifying party's election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof other than reasonable costs of investigation; *provided, however,* that if (i) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party; (ii) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party will not have the right to direct the defense of such action on behalf of the indemnified party), or (iii) the indemnifying party has not in fact employed counsel reasonably satisfactory to the indemnified party to assume the defense of such action within a reasonable time after receiving notice of the commencement of the action, the indemnified party or parties shall have the right to employ a single counsel to represent it in any claim in respect of which indemnity may be sought under subsection (a) or (b) of this Section 6, in which event the reasonable fees and expenses of such separate counsel shall be borne by the indemnifying party and reimbursed to the indemnified party or parties as incurred; it being understood, however, that the indemnifying party shall not be liable for the expenses of more than one separate counsel (plus local counsel). An indemnifying party shall not be obligated under any settlement agreement, consent to judgment or other compromise relating to any action under this Section 6 to which it has not agreed in writing. In addition, no indemnifying party shall, without the prior written consent of the indemnified party (which consent shall not be unreasonably withheld or

delayed), effect any settlement of any pending or threatened proceeding unless such settlement includes an unconditional release of such indemnified party for all liability on claims that are the subject matter of such proceeding and does not include a statement as to, or an admission of, fault, culpability or a failure to act by or on behalf of an indemnified party.

(d) *Contribution; Limitations on Liability; Non-Exclusive Remedy.* If the indemnification provided for in this Section 6 is unavailable or insufficient to hold harmless an indemnified party under subsection (a) or (b) above, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of the losses, claims, damages or liabilities referred to in subsection (a) or (b) above, (i) 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 and sale of the Securities or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above 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 that resulted in such losses, claims, damages or liabilities, 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 or the Underwriters and the parties' relevant intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this subsection (d) were to be determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in the first sentence of this subsection (d). The amount paid by an indemnified party as a result of the losses, claims, damages or liabilities referred to in the first sentence of this subsection (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending against any action or claim which is the subject of this subsection (d). Notwithstanding the provisions of this subsection (d), no Underwriter shall be required to contribute any amount in excess of the amount of the total underwriting discounts and commissions received by such Underwriter with respect to the Securities purchased by it hereunder. 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 subsection (d) to contribute are several in proportion to their respective underwriting obligations and not joint. The remedies provided for in this Section 6 are not exclusive and shall not limit any rights or remedies that might otherwise be available to any indemnified party at law or in equity.

(e) *Information Provided by the Underwriters.* The Underwriters severally confirm and the Company acknowledges that the statements with respect to the public offering of the Securities by the Underwriters set forth in (1) the first table under the caption "Underwriting", and (2) the second paragraph under the caption "Underwriting", in the Time of Sale Disclosure Package and in the Prospectus are correct and, together with the marketing and legal names of each

Underwriter, constitute the only information concerning such Underwriter furnished in writing to the Company by or on behalf of the Underwriters specifically for inclusion in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus or any issuer free writing prospectus.

7. Representations and Agreements to Survive Delivery. All representations, warranties, and agreements of the Company and the several Underwriters herein or in certificates delivered pursuant hereto, including but not limited to the agreement of the Company and the several Underwriters contained in Section 6 hereof, shall remain operative and in full force and effect regardless of any investigation made by or on behalf of any Underwriter or any controlling person thereof, or the Company or any of its officers, directors, or controlling persons, and shall survive delivery of, and payment for, the Securities to and by the Underwriters hereunder and any termination of this Agreement.

8. Termination of this Agreement.

(a) *Right to Terminate.* You, as Representative of the several Underwriters, shall have the right to terminate this Agreement by giving notice to the Company as hereinafter specified at any time at or prior to the Closing Date if (i) the Company shall have failed, refused or been unable, at or prior to the Closing Date, to perform any material agreement on its part to be performed hereunder, (ii) any condition of the Underwriters' obligations set forth in Section 5 hereof is not fulfilled at its respective required time, (iii) trading in the Company's Common Stock shall have been suspended by the Commission or the Nasdaq Global Market or trading in securities generally on the NYSE American, Nasdaq Stock Market or New York Stock Exchange shall have been suspended, (iv) minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities shall have been required, on the NYSE American, Nasdaq Stock Market or New York Stock Exchange, by such Exchange or by order of the Commission or any other Governmental Authority having jurisdiction, (v) a banking moratorium shall have been declared by federal or New York state authorities or a material disruption in commercial banking or securities settlement or clearance services in the United States, or (vi) there shall have occurred any attack on, outbreak or escalation of hostilities or widespread act of terrorism involving the United States, any declaration by the United States of a national emergency or war, any material adverse change in financial markets, any substantial change or development involving a prospective substantial change in United States or international political, financial or economic conditions, or any other calamity or crisis that, in your reasonable judgment, is material and adverse and makes it impractical or inadvisable to proceed with the completion of the sale of and payment for the Securities.

(b) *Notice of Termination.* If you elect to terminate this Agreement as provided in this Section, the Company shall be notified promptly by you by telephone, confirmed promptly thereafter by letter.

(c) *Effect of Termination.* No party shall be relieved of any liability under this Agreement arising from any breach of its obligations hereunder occurring prior to termination of this Agreement as a result of the termination of this Agreement.

9. **Notices.** Except as otherwise provided herein, all communications hereunder shall be in writing and, if to the Underwriters, shall be mailed via overnight delivery service or hand delivered via courier to the Representative, c/o Craig-Hallum Capital Group LLC, 222 South Ninth Street, Suite 350, Minneapolis, Minnesota 55402, Attention: General Counsel, with a copy (which shall not constitute notice) to Faegre Baker Daniels LLP, 2200 Wells Fargo Center, 90 South Seventh Street, Minneapolis, Minnesota 55402, Attention: Jonathan R. Zimmerman; if to the Company, shall be mailed via overnight delivery service or hand delivered to it at 1277 Orleans Drive, Sunnyvale, California 94089, Attention: Sue Cheung, with a copy (which shall not constitute notice) to Jones Day, 1755 Embarcadero Road, Palo Alto, California 94303, Attention: Alan Seem; or in each case to such other address as the person to be notified may have requested in writing. Any party to this Agreement may change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose.

10. **Persons Entitled to Benefit of Agreement.** This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns and, with respect to Section 6, the controlling persons, officers and directors referred to in Section 6. Nothing in this Agreement is intended or shall be construed to give to any other person, firm or corporation any legal or equitable remedy or claim under or in respect of this Agreement or any provision herein contained. The term "successors and assigns" as herein used shall not include any purchaser, as such purchaser, of any of the Securities from any of the several Underwriters.

11. **Absence of Fiduciary Relationship.** The Company acknowledges and agrees that: (a) the Underwriters have been retained solely to act as underwriters in connection with the sale of the Securities and that no fiduciary, advisory or agency relationship between the Company and the Underwriters has been created in respect of any of the transactions contemplated by this Agreement, irrespective of whether the Underwriters have advised or are advising the Company on other matters; (b) the price and other terms of the Securities set forth in this Agreement were established by the Company following discussions and arms-length negotiations with the Underwriters 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 Underwriters 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 Underwriters have no obligation to disclose such interest and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; and (d) it has been advised that the Underwriters are acting, in respect of the transactions contemplated by this Agreement, solely for the benefit of the Underwriters, and not on behalf of the Company.

12. **Governing Law; Waiver of Jury Trial.** This Agreement shall be governed by and construed in accordance with the laws of the State of New York. The Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates) and each of the Underwriters hereby irrevocably waive, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

13. **Counterparts.** This Agreement may be executed and delivered (including by facsimile transmission and electronic mail attaching a portable document file (.pdf)) in one or more counterparts and, if executed in more than one counterpart, the executed counterparts shall each be deemed to be an original and all such counterparts shall together constitute one and the same instrument.

14. **General Provisions.** 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, including that certain engagement letter (other than Sections 5, 9, 10, 15 and 16 thereof to the extent that they do not conflict with the provisions of this Agreement), dated May 2, 2018, by and between the Company and the Representative. 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. The invalidity or unenforceability of any Section, paragraph or provision of this Agreement shall not affect the validity or enforceability of any other Section, paragraph or provision hereof. If any Section, paragraph or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

[Signature Page Follows]

Please sign and return to the Company the enclosed duplicates of this letter whereupon this letter will become a binding agreement between the Company and the several Underwriters in accordance with its terms.

Very truly yours,

QUICKLOGIC CORPORATION

By /s/ Suping Cheung
Name Suping Cheung
Its Vice President, Finance and Chief Financial Officer

Confirmed as of the date first
above mentioned, on behalf of
itself and the several Underwriters
named in Schedule I hereto.

CRAIG-HALLUM CAPITAL GROUP LLC

By /s/ Rick Hartfiel
Name Rick Hartfiel
Its Managing Partner

[Signature Page to Underwriting Agreement]

SCHEDULE I

Underwriters

| <u>Underwriter</u> | <u>Number of Shares</u> | <u>Number of Warrants</u> |
|--------------------------------|--------------------------------|----------------------------------|
| Craig-Hallum Capital Group LLC | 9,459,456 | 3,783,781 |
| Roth Capital Partners, LLC | 3,378,378 | 1,351,352 |
| The Benchmark Company, LLC | 675,676 | 270,271 |
| Total | 13,513,510 | 5,405,404 |

SCHEDULE II

Certain Permitted Free Writing Prospectuses

None.

SCHEDULE III

Pricing Information

Shares: 13,513,510 shares

Warrant Shares: 5,405,404 shares

Warrants: (1) exercise price of \$1.38 per share, (2) will be exercisable upon issuance, and (3) will expire five years from the date of issuance.

Combined Price to Public per Share and related Warrant: \$1.15

Price to Public per Share: \$1.146

Price to Public per Warrant: \$0.004

Combined Underwriting Discount per Share and related Warrant: \$0.0805

Underwriting Discount per Share: \$0.08022

Underwriting Discount per Warrant: \$0.00028

SCHEDULE IV

List of Individuals Executing Lock-Up Agreements

Thomas Hart
Michael Farese
Arturo Krueger
Andrew Pease
Daniel Rabinovitsj
Christine Russell
Gary Tauss
Suping (Sue) Cheung
Brian Faith
Timothy Saxe
Rajiv Jain

EXHIBIT A

Form of Warrant

See attached.

QUICKLOGIC CORPORATION

WARRANT TO PURCHASE COMMON STOCK

Warrant No.: _____
Original Issue Date: May 29, 2018

QuickLogic Corporation, a Delaware corporation (the “*Company*”), hereby certifies that, for good and valuable consideration received, or its permitted registered assigns (the “*Holder*”), is entitled, subject to the terms set forth below, to purchase from the Company up to a total of shares of common stock, \$0.001 par value per share (the “*Common Stock*”), of the Company (each such share, a “*Warrant Share*” and all such shares, the “*Warrant Shares*”) at an exercise price per share equal to \$1.38 per share (as adjusted from time to time as provided in Section 8 herein, the “*Exercise Price*”), at any time and from time to time beginning on the date hereof (the “*Original Exercise Date*”) and through, but not after, 5:30 p.m., New York City time, on May 29, 2023 (the “*Expiration Date*”), and subject to the following terms and conditions:

This Warrant (this “*Warrant*”) is one of the warrants to purchase Common Stock (the “*Warrants*”) issued pursuant to (i) an underwriting agreement, dated May 24, 2018, among the Company and the underwriters named therein, (ii) the Company’s Registration Statement on Form S-3 (File No. 333-215030) and (iii) the Company’s prospectus supplement dated as of May 24, 2018.

1. Registration of Warrants. The Company shall register this Warrant, upon records to be maintained by or on behalf of the Company for that purpose, which may be by a third-party transfer agent (the “*Warrant Register*”), in the name of the record Holder (which shall include the initial Holder or, as the case may be, any registered assignee to which this Warrant is permissibly assigned hereunder) from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

2. Registration of Transfers. The Company shall register the transfer of all or any portion of this Warrant in the Warrant Register, upon surrender of this Warrant, with an assignment, in the form attached as Schedule 2 hereto, duly completed and signed, to the Company at 1277 Orleans Drive, Sunnyvale, California 94089-1138, Attention: Chief Financial Officer, unless notified (in accordance with Section 11 hereto) otherwise. Upon any such registration or transfer, a new warrant to purchase Common Stock in substantially the form of this Warrant (any such new warrant, a “*New Warrant*”) evidencing the portion of this Warrant so transferred shall be issued to the transferee, and, subject to delivery by the transferring Holder of its Warrant, a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations in respect of the New Warrant that the Holder has in respect of this Warrant. The Company shall prepare, issue and deliver at its own expense any New Warrant under this Section 2.

3. Exercise and Duration of Warrant.

(a) All or any part of this Warrant shall be exercisable by the registered Holder in any manner permitted by Section 9 of this Warrant at any time and from time to time on or after the Original Issue Date and through, but not after, 5:30 p.m., New York City time, on the Expiration Date. After 5:30 p.m., New York City time, on the Expiration Date, the portion (or all) of this Warrant not exercised prior thereto shall be and become void and of no value and this Warrant shall be automatically terminated and no longer outstanding.

(b) The Holder may exercise this Warrant by delivering to the Company (i) an exercise notice, in the form attached as Schedule 1 hereto (the “*Exercise Notice*”), completed and duly signed, and (ii) payment of the Exercise Price for the number of Warrant Shares as to which this Warrant is being exercised (which, if permitted pursuant to Section 9 hereto, may take the form of a “cashless exercise” if so indicated in the Exercise Notice) within one (1) Business Day (as defined below) following the Exercise Date (as defined herein). The date on which the Exercise Notice is delivered to the Company (as determined in accordance with the notice provisions hereof) is an “*Exercise Date*.” “*Business Day*” as used herein means any day, other than a Saturday or Sunday and other than a day that banks in the New York, New York are generally authorized or required by applicable law to be closed.

No ink-original Exercise Notice shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Exercise Notice form be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date the final Exercise Notice is delivered to the Company. The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder, but if it is not so delivered then such exercise shall constitute an agreement by the Holder to deliver the original Warrant to the Company as soon as practicable thereafter, subject to the other provisions hereof. Execution and delivery of the Exercise Notice shall have the same effect as cancellation of the original Warrant and issuance of a New Warrant evidencing the right to purchase the remaining number of Warrant Shares, if any.

4. Delivery of Warrant Shares.

(a) Upon exercise of this Warrant, the Company shall promptly (but in no event later than three Trading Days after the Exercise Date) issue or cause to be issued and cause to be delivered to or upon the written order of the Holder and in such name or names as the Holder may designate (i) a certificate for the Warrant Shares issuable upon such exercise, free of restrictive legends, or (ii) an electronic delivery of the Warrant Shares to the Holder's account at the Depository Trust Company ("**DTC**") or a similar organization. The Holder, or any person permissibly so designated by the Holder to receive Warrant Shares, shall be deemed to have become the holder of record of such Warrant Shares as of the Exercise Date. The Company shall, upon the written request of the Holder, use its reasonable best efforts to deliver, or cause to be delivered, the Warrant Shares hereunder electronically through DTC or another established clearing corporation performing similar functions; *provided*, that the Company may, but will not be required to, change its transfer agent if its current transfer agent cannot deliver the Warrant Shares electronically through such a clearing corporation. "**Trading Day**" means (a) a day on which the Common Stock is listed or quoted and traded on its Principal Trading Market (other than the OTC Markets), or (b) if the Common Stock is not listed on a Trading Market (other than the OTC Markets), a day on which the Common Stock is traded in the over-the-counter market, as reported by the OTC Markets (or any similar organization or agency succeeding to its functions of reporting prices); *provided*, that in the event that the Common Stock is not listed or quoted as set forth in (a) or (b) hereof, then Trading Day shall mean a Business Day; *provided further*, that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00 p.m., New York time). "**Principal Trading Market**" means whichever of the New York Stock Exchange, the NYSE American LLC, the NASDAQ Global Select Market, the NASDAQ Global Market, the NASDAQ Capital Market or the OTC Markets on which the Common Stock is primarily listed and quoted for trading on the date in question. "**Trading Market**" means whichever of the New York Stock Exchange, the NYSE American LLC, the NASDAQ Global Select Market, the NASDAQ Global Market, the NASDAQ Capital Market or the OTC Markets on which the Common Stock is listed or quoted for trading on the date in question.

(b) If by the close of the third Trading Day after delivery of a properly completed Exercise Notice and the payment of the aggregate Exercise Price in any manner permitted by Section 9 of this Warrant, the Company fails to deliver to the Holder the required number of Warrant Shares in the manner required pursuant to this Section 4, and if after such third Trading Day and prior to the receipt of such Warrant Shares, the Holder is required to purchase (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "**Buy-In**"), then the Company shall, in its sole discretion, within three Trading Days after the Holder's request for payment, either (i) pay in cash to the Holder an amount equal to the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased, at which point the number of Warrant Shares underlying this Warrant equal to the number of shares of Common Stock so purchased shall be forfeited and the Company's obligation to deliver such certificate (and to issue such Warrant Shares) shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such Warrant Shares and pay cash to the Holder in an amount equal to the excess (if any) of the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased in the Buy-In over the product of (A) the number of shares of Common Stock purchased in the Buy-In, multiplied by (B) the closing bid price of a share of Common Stock on the Exercise Date. The Holder shall provide the Company with written notice indicating the amounts payable to the Holder in respect of the Buy-In, together with applicable confirmations and other evidence reasonably requested by the Company.

(c) To the extent permitted by law, the Company's obligations to issue and deliver Warrant Shares in accordance with and subject to the terms hereof are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other person of any obligation to the Company (other than breaches related to this Warrant) or any violation or alleged violation of law by the Holder or any other person, and irrespective of any other circumstance that might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Shares. Nothing herein shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

5. Charges, Taxes and Expenses. Issuance and delivery of certificates for shares of Common Stock upon exercise of this Warrant shall be made without charge to the Holder for any issue or transfer tax, transfer agent fee or other incidental tax or expense in respect of the issuance of such certificates, all of which taxes and expenses shall be paid by the Company. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Shares upon exercise hereof.

6. Replacement of Warrant. If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction (in such case) and, in each case, a customary and reasonable indemnity and surety bond, if requested by the Company. Applicants for a New Warrant under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Company may prescribe. If a New Warrant is requested as a result of a mutilation of this Warrant, then the Holder shall deliver such mutilated Warrant to the Company as a condition precedent to the Company's obligation to issue the New Warrant.

7. Reservation of Warrant Shares. The Company represents and warrants that on the date hereof, it has duly authorized and reserved, and covenants that it will at all times during the period this Warrant is outstanding reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of this Warrant as herein provided, the number of Warrant Shares that are initially issuable and deliverable upon the exercise of this entire Warrant, free from preemptive rights or any other contingent purchase rights of persons other than the Holder (taking into account the adjustments and restrictions of Section 8). The Company covenants that all Warrant Shares so issuable and deliverable shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized, issued and fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the original issuance thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue). The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for the Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company represents and warrants that the Warrant Shares, when issued and paid for in accordance with the terms of the Warrants and the underwriting agreement pursuant to which the Warrants originally were issued, will be issued free and clear of all security interests, claims, liens and other encumbrances. The Company will take all such action as may be reasonably necessary to assure that such shares of Common Stock may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any securities exchange or automated quotation system upon which the Common Stock may be listed.

8. Certain Adjustments. The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 8.

(a) **Stock Dividends and Splits.** If the Company, at any time while this Warrant is outstanding, (i) pays a stock dividend on its Common Stock or otherwise makes a distribution on any class of capital stock that is payable in shares of Common Stock, (ii) subdivides its outstanding shares of Common Stock into a larger number of shares, (iii) combines (by combination, reverse stock split or otherwise) its outstanding shares of Common Stock into a smaller number of shares (a “**Stock Combination Event**”), or (iv) issues by reclassification of shares of Common Stock any shares of capital stock of the Company, then in each such case the Exercise Price shall be adjusted to a price determined by multiplying the Exercise Price in effect immediately prior to the effective date of such event by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding on such effective date immediately before giving effect to such event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after giving effect to such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, and any adjustment pursuant to clause (ii), (iii) or (iv) of this paragraph shall become effective immediately after the effective date of such subdivision, combination or reclassification.

(b) **Pro Rata Distributions.** If the Company, at any time while this Warrant is outstanding, distributes to all holders of Common Stock for no consideration (i) evidences of its indebtedness, (ii) any security (other than a distribution of Common Stock covered by the preceding paragraph), (iii) rights or warrants to subscribe for or purchase any security, or (iv) any other asset, including cash (in each case, “**Distributed Property**”), except for any distributions pursuant to a shareholders’ rights plan or similar takeover defense agreement or plan adopted by the Company, then, upon any exercise of this Warrant that occurs after the record date fixed for determination of stockholders entitled to receive such distribution, the Holder shall be entitled to receive, in addition to the Warrant Shares otherwise issuable upon such exercise (if applicable), the Distributed Property that such Holder would have been entitled to receive in respect of such number of Warrant Shares had the Holder been the record holder of such Warrant Shares immediately prior to such record date.

(c) **Fundamental Transactions.** If, at any time while this Warrant is outstanding (i) the Company effects (A) any merger of the Company with (but not into) another person, in which stockholders of the Company immediately prior to such transaction own less than a majority of the outstanding stock of the surviving entity, or (B) any merger or consolidation of the Company into another person, (ii) the Company effects any sale of all or substantially all of its assets in one or a series of related transactions, (iii) any tender offer or exchange offer approved or authorized by the Company’s Board of Directors is completed pursuant to which holders of at least a majority of the outstanding Common Stock tender or exchange their shares for other securities, cash or property, or (iv) the Company effects any reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 8(a) above) (in any such case, a “**Fundamental Transaction**”), then the Holder shall have the right thereafter to receive, upon any exercise of this Warrant that occurs after the date of the Fundamental Transaction, the same amount and kind of securities, cash or property as holders of Common Stock received and as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant without regard to any limitations on exercise contained herein (the “**Alternate Consideration**”), and the Holder shall no longer have the right to receive Warrant Shares upon exercise of this Warrant. If holders of Common Stock are given any choice as to securities, cash or property to be received in a Fundamental Transaction, then the Holder shall have the same rights as the holders of Common Stock as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. The Company shall not effect any such Fundamental Transaction unless prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or the corporation purchasing or otherwise acquiring such assets or other appropriate corporation or person shall assume the obligation to deliver to the Holder, such Alternate Consideration as, in accordance with the foregoing provisions, the Holder may be entitled to receive, and the other obligations under this Warrant. The provisions of this paragraph (c) shall similarly apply to subsequent transactions of an analogous type to any Fundamental Transaction.

(d) **Number of Warrant Shares.** Simultaneously with any adjustment to the Exercise Price pursuant to paragraph (a) of this Section 8, the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the increased or decreased number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment.

(e) Calculations. All calculations under this Section 8 shall be made to the nearest cent or the nearest share, as applicable. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Company.

(f) Notice of Adjustments. Upon the occurrence of each adjustment pursuant to this Section 8, the Company at its expense will, at the written request of the Holder, promptly compute such adjustment, in good faith, in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in reasonable detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder and, if it is maintaining the Warrant Register, to the Company's transfer agent.

(g) Notice of Corporate Events. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including, without limitation, any granting of rights or warrants to subscribe for or purchase any capital stock of the Company, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction, or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then, except if such notice and the contents thereof shall be deemed to constitute material non-public information, the Company shall deliver to the Holder a notice of such transaction at least ten (10) Business Days prior to the applicable record or effective date on which a person would need to hold Common Stock in order to participate in or vote with respect to such transaction; *provided, however*, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice.

9. Payment of Exercise Price. The Holder shall pay the Exercise Price in immediately available funds; *provided, however*, that if an effective registration statement covering the issuance or resale of the Warrant Shares is not available for such purpose, the Holder, then, at the Holder's option, may exercise this Warrant in whole or in part, at such time by means of a "cashless exercise," in which event the Company shall issue to the Holder the number of Warrant Shares determined as follows:

$$X = Y[(A-B)/A]$$

where:

X = the number of Warrant Shares to be issued to the Holder.

Y = the total number of Warrant Shares with respect to which this Warrant is being exercised.

A = the average of the Closing Bid Price of the shares of Common Stock (as reported by Bloomberg Financial Markets) for the five consecutive Trading Days ending on the date immediately preceding the Exercise Date.

B = the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

For purposes of this Warrant, "**Closing Bid Price**" means, for any security as of any date, the last reported closing bid price for such security on the Principal Trading Market for such security, as reported by Bloomberg Financial Markets, or, if such Principal Trading Market begins to operate on an extended hours basis and does not designate the closing bid price, then the last bid price of such security prior to 4:00 p.m., New York City time, as reported by Bloomberg Financial Markets, or if the foregoing do not apply, the last closing price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg Financial Markets, or, if no closing bid price is reported for such security by Bloomberg Financial Markets, the average of the bid prices of any market makers for such security as reported on OTC Pink (also known as the "pink sheets") by the OTC Markets. If the Closing Bid Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then the Board of Directors of the Company shall use its good faith judgment to determine the fair market value. The Board of Directors' determination shall be binding upon all parties absent demonstrable error. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

For purposes of Rule 144, it is intended, understood and acknowledged that the provisions above permitting “cashless exercise” under certain circumstances are intended, in part, to ensure that a full or partial exchange of this Warrant pursuant to such provisions will qualify as a conversion, within the meaning of paragraph (d)(3)(ii) of Rule 144, and the holding period for the Warrant Shares shall be deemed to have commenced as to such original Holder, on the Original Issue Date.

10. No Fractional Shares. No fractional Warrant Shares will be issued in connection with any exercise of this Warrant. In lieu of any fractional shares that would otherwise be issuable, the number of Warrant Shares to be issued shall be rounded down to the next whole number.

11. Notices. Any notice or other document required or permitted to be given or delivered to the Holder shall be in writing and sent (a) by email or fax if the sender on the same day sends a confirming copy of such notice by an internationally recognized overnight delivery service (charges prepaid) or (b) by an internationally recognized overnight delivery service (with charges prepaid). The address and facsimile number of a person for such notices or communications shall be as set forth in the Warrant Register unless changed by such person by two Trading Days’ prior notice to the other person(s) in accordance with this Section 11.

12. Warrant Agent. The Company shall initially serve as warrant agent under this Warrant. Upon 15 days’ notice to the Holder, the Company may appoint a new warrant agent. Any corporation into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new warrant agent shall be a party or any corporation to which the Company or any new warrant agent transfers substantially all of its corporate trust or shareholders services business shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder’s last address as shown on the Warrant Register.

13. Miscellaneous.

(a) No Rights as a Stockholder. The Holder, solely in such person’s capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such person’s capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, amalgamation, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities, whether such liabilities are asserted by the Company or by creditors of the Company.

(b) Authorized Shares.

(i) The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation or of any requirements of the Principal Trading Market upon which the Common Stock may be listed.

(ii) Except and to the extent waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issuance or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of the Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (1) not increase the par value of any Warrant Shares above the

amount payable therefor upon such exercise immediately prior to such increase in par value, (2) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant, and (3) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof as may be necessary to enable the Company to perform its obligations under this Warrant.

(iii) Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

(c) Successors and Assigns. This Warrant may be assigned by the Holder. This Warrant may not be assigned by the Company without the written consent of the Holder except to a successor in the event of a Fundamental Transaction. This Warrant shall be binding upon and inure to the benefit of the Company and the Holder and their respective heirs, estate, legal representatives, successors and assigns. Subject to the preceding sentence, nothing in this Warrant shall be construed to give to any person other than the Company and the Holder any legal or equitable right, remedy or cause of action under this Warrant.

(d) Amendment and Waiver. Except as otherwise provided herein, the provisions of this Warrant may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder.

(e) Acceptance. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

(f) Governing Law. This Warrant shall be enforced, governed and construed in all respects in accordance with the laws of the State of New York, as such laws are applied by the New York courts to agreements entered into and to be performed in New York by and between residents of New York.

(g) Headings. The headings herein are for convenience only, do not constitute a part of this Warrant and shall not be deemed to limit or affect any of the provisions hereof.

(h) Severability. If any provision of this Warrant is held to be invalid or unenforceable under any applicable statute or rule of law, then such provision shall be deemed modified to conform with such statute or rule of law. Any provision hereof that may prove invalid or unenforceable under any law shall not affect the validity or enforceability of any other provisions hereof.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed by its authorized officer as of the date first indicated above.

QUICKLOGIC CORPORATION

By: _____
Name:
Title:

[Signature Page to Warrant]

SCHEDULE 1

QUICKLOGIC CORPORATION.

FORM OF EXERCISE NOTICE

[To be executed by the Holder to purchase shares of Common Stock under the Warrant]

Ladies and Gentlemen:

(1) The undersigned is the Holder of Warrant No. _____ (the "**Warrant**") issued by QuickLogic Corporation, a Delaware corporation (the "**Company**"). Capitalized terms used herein and not otherwise defined herein have the respective meanings set forth in the Warrant.

(2) The undersigned hereby exercises its right to purchase _____ Warrant Shares pursuant to the Warrant.

(3) The Holder intends that payment of the Exercise Price shall be made as (check one):

- Cash Exercise
- "*Cashless Exercise*" if permitted under Section 9 of the Warrant

(4) If the Holder has elected a Cash Exercise, the Holder shall pay the sum of \$ _____ in immediately available funds to the Company in accordance with the terms of the Warrant.

(5) Pursuant to this Exercise Notice, the Company shall deliver to the Holder Warrant Shares determined in accordance with the terms of the Warrant. Please issue (check applicable box):

- A certificate of certificates representing the Holder's Warrant Shares in the name of the undersigned or in such other name as is specified below:
- The Holder's Warrant Shares in electronic form to the following account:

Name and Contact for Broker:
Broker no:
Account no:
Account holder:

Dated: _____, _____

Name of Holder: _____
By: _____
Name:
Title:

(Signature must conform in all respects to name of the Holder as specified on the face of the Warrant)

SCHEDULE 2

QUICKLOGIC CORPORATION

FORM OF ASSIGNMENT

[To be completed and executed by the Holder only upon transfer of the Warrant]

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto _____ (the "*Transferee*") the right represented by the within Warrant to purchase _____ shares of Common Stock of QuickLogic Corporation, a Delaware corporation (the "*Company*"), to which the within Warrant relates and appoints _____ attorney to transfer said right on the books of the Company with full power of substitution in the premises.

Dated: _____, _____

(Signature must conform in all respects to name of the Holder as specified on the face of the Warrant)

In the presence of: Address of Transferee:

EXHIBIT B

Form of Common Stock Lock-Up Agreement

See attached.

Common Stock Lock-Up Agreement

Date: _____

Craig-Hallum Capital Group LLC
As Representative of the several
Underwriters named in Schedule I to the Underwriting Agreement

c/o Craig-Hallum Capital Group LLC
222 South Ninth Street, Suite 350
Minneapolis, Minnesota 55402

Ladies and Gentlemen:

As an inducement to Craig-Hallum Capital Group LLC (the "**Underwriter**") to execute an underwriting agreement (the "**Underwriting Agreement**") in its capacity as representative for the several underwriters named in Schedule I thereto (the "**Representative**") providing for a public offering (the "**Offering**") of common stock, par value \$0.001 per share (the "**Common Stock**"), or other securities, of QuickLogic Corporation, a Delaware corporation, and any successor (by merger or otherwise) thereto (the "**Company**"), the undersigned hereby agrees that without, in each case, the prior written consent of the Representative during the Lock-Up Period (as defined below), the undersigned will not: (1) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, make any short sale or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into, exercisable or exchangeable for or that represent the right to receive Common Stock (including without limitation, Common Stock which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the U.S. Securities and Exchange Commission (the "**SEC**") and securities which may be issued upon exercise of a stock option or warrant) whether now owned or hereafter acquired (the "**Undersigned's Securities**"); (2) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Undersigned's Securities, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise; (3) make any demand for or exercise any right with respect to, the registration of any Common Stock or any security convertible into or exercisable or exchangeable for Common Stock; or (4) publicly disclose the intention to do any of the foregoing.

The undersigned agrees that the foregoing restrictions preclude the undersigned from engaging in any hedging or other transaction which is designed to or which reasonably could be expected to lead to or result in a sale or disposition of the Undersigned's Securities even if such securities would be disposed of by someone other than the undersigned. Such prohibited hedging or other transactions would include without limitation any short sale or any purchase, sale or grant of any right (including without limitation any put or call option) with respect to any of the Undersigned's Securities or with respect to any security that includes, relates to or derives any significant part of its value from such securities.

The **Lock-Up Period** shall mean the period commencing on the date of this Lock-Up Agreement and continue and include the date ninety (90) days after the date of the final prospectus supplement used to sell the Common Stock (or other securities) in the Offering pursuant to the Underwriting Agreement.

Notwithstanding the foregoing, the undersigned may transfer the Undersigned's Securities (i) as a *bona fide* gift or gifts, (ii) to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned, (iii) if the undersigned is a corporation, partnership, limited liability company, trust or other business entity (1) transfers to another corporation, partnership, limited liability company, trust or other business entity that is a direct or indirect affiliate (as defined in Rule 405 promulgated under

the Securities Act of 1933, as amended) of the undersigned or (2) distributions of shares of Common Stock or any security convertible into or exercisable for Common Stock to limited partners, limited liability company members or stockholders of the undersigned, (iv) if the undersigned is a trust, transfers to the beneficiary of such trust, (v) transfers by testate succession or intestate succession; (vi) to the Company to satisfy tax obligations resulting from the exercise of any stock options that otherwise would expire during the Lock-Up Period or to satisfy tax obligations resulting from the vesting of restricted stock grants during the Lock-Up Period; provided that any filing made under Section 16(a) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), shall indicate in a footnote that such surrender was made to satisfy a tax obligation and that the restrictions of this Agreement shall apply to any of the Undersigned's Securities issued upon such exercise or vesting, (vii) pursuant to the Underwriting Agreement, (viii) in connection with transactions relating to the Undersigned's Securities acquired in open market transactions after the completion of the Offering; provided that no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made in connection with subsequent sales of Undersigned's Securities acquired in such open market transactions, (ix) pursuant to a tender or exchange offer for shares of Common Stock initiated by an unaffiliated third party of the Company that is subject to the provisions of the Exchange Act, or (x) pursuant to the consummation of a business combination or similar transaction with an unaffiliated third party of the Company; provided, in the case of clauses (i) through (v), that (x) such transfer shall not involve a disposition for value, (y) the transferee agrees in writing with the Representative to be bound by the terms of this Lock-Up Agreement and (z) no filing by any party under Section 16(a) of the Exchange Act shall be required or shall be made voluntarily in connection with such transfer. For purposes of this Lock-Up Agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, nor more remote than first cousin.

In addition, the foregoing restrictions shall not apply to (i) the exercise of stock options granted pursuant to the Company's equity incentive plans; *provided* that such restrictions shall apply to any of the Undersigned's Securities issued upon such exercise, or (ii) the establishment of any contract, instruction or plan (a "**Plan**") that satisfies all of the requirements of Rule 10b5-1(c)(1)(i)(B) under the Exchange Act; *provided* that no sales of the Undersigned's Securities shall be made pursuant to such a Plan prior to the expiration of the Lock-Up Period, and such a Plan may only be established if no public announcement of the establishment or existence thereof and no filing with the SEC or other regulatory authority in respect thereof or transactions thereunder or contemplated thereby, by the undersigned, the Company or any other person, shall be required, and no such announcement or filing is made voluntarily, by the undersigned, the Company or any other person, prior to the expiration of the Lock-Up Period.

In furtherance of the foregoing, the Company and its transfer agent and registrar are hereby authorized to decline to make any transfer of shares of Common Stock if such transfer would constitute a violation or breach of this Lock-Up Agreement.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Lock-Up Agreement and that upon request, the undersigned will execute any additional documents necessary to ensure the validity or enforcement of this Lock-Up Agreement. All authority herein conferred or agreed to be conferred and any obligations of the undersigned shall be binding upon the successors, assigns, heirs or personal representatives of the undersigned.

The undersigned understands that the undersigned shall be released from all obligations under this Lock-Up Agreement if (i) the Company notifies the Representative that it does not intend to proceed with the Offering, (ii) the Underwriting Agreement does not become effective, or if the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Common Stock (or other securities) to be sold thereunder or (iii) the Offering is not completed by July 31, 2018.

The undersigned understands that the Representative is entering into the Underwriting Agreement and proceeding with the Offering in reliance upon this Lock-Up Agreement.

This Lock-Up Agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

[The remainder of this page has intentionally been left blank.]

Very truly yours,

Printed Name of Holder

Signature

Printed Name and Title of Person Signing
(if signing as custodian, trustee or on behalf of an entity)

QUICKLOGIC CORPORATION
WARRANT TO PURCHASE COMMON STOCK

Warrant No.: _____
Original Issue Date: May 29, 2018

QuickLogic Corporation, a Delaware corporation (the “*Company*”), hereby certifies that, for good and valuable consideration received, _____ or its permitted registered assigns (the “*Holder*”), is entitled, subject to the terms set forth below, to purchase from the Company up to a total of _____ shares of common stock, \$0.001 par value per share (the “*Common Stock*”), of the Company (each such share, a “*Warrant Share*” and all such shares, the “*Warrant Shares*”) at an exercise price per share equal to \$1.38 per share (as adjusted from time to time as provided in Section 8 herein, the “*Exercise Price*”), at any time and from time to time beginning on the date hereof (the “*Original Exercise Date*”) and through, but not after, 5:30 p.m., New York City time, on May 29, 2023 (the “*Expiration Date*”), and subject to the following terms and conditions:

This Warrant (this “*Warrant*”) is one of the warrants to purchase Common Stock (the “*Warrants*”) issued pursuant to (i) an underwriting agreement, dated May 24, 2018, among the Company and the underwriters named therein, (ii) the Company’s Registration Statement on Form S-3 (File No. 333-215030) and (iii) the Company’s prospectus supplement dated as of May 24, 2018.

1. Registration of Warrants. The Company shall register this Warrant, upon records to be maintained by or on behalf of the Company for that purpose, which may be by a third-party transfer agent (the “*Warrant Register*”), in the name of the record Holder (which shall include the initial Holder or, as the case may be, any registered assignee to which this Warrant is permissibly assigned hereunder) from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

2. Registration of Transfers. The Company shall register the transfer of all or any portion of this Warrant in the Warrant Register, upon surrender of this Warrant, with an assignment, in the form attached as Schedule 2 hereto, duly completed and signed, to the Company at 1277 Orleans Drive, Sunnyvale, California 94089-1138, Attention: Chief Financial Officer, unless notified (in accordance with Section 11 hereto) otherwise. Upon any such registration or transfer, a new warrant to purchase Common Stock in substantially the form of this Warrant (any such new warrant, a “*New Warrant*”) evidencing the portion of this Warrant so transferred shall be issued to the transferee, and, subject to delivery by the transferring Holder of its Warrant, a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations in respect of the New Warrant that the Holder has in respect of this Warrant. The Company shall prepare, issue and deliver at its own expense any New Warrant under this Section 2.

3. Exercise and Duration of Warrant.

(a) All or any part of this Warrant shall be exercisable by the registered Holder in any manner permitted by Section 9 of this Warrant at any time and from time to time on or after the Original Issue Date and through, but not after, 5:30 p.m., New York City time, on the Expiration Date. After 5:30 p.m., New York City time, on the Expiration Date, the portion (or all) of this Warrant not exercised prior thereto shall be and become void and of no value and this Warrant shall be automatically terminated and no longer outstanding.

(b) The Holder may exercise this Warrant by delivering to the Company (i) an exercise notice, in the form attached as Schedule 1 hereto (the “*Exercise Notice*”), completed and duly signed, and (ii) payment of the Exercise Price for the number of Warrant Shares as to which this Warrant is being exercised (which, if permitted pursuant to Section 9 hereto, may take the form of a “cashless exercise” if so indicated in the Exercise Notice) within one (1) Business Day (as defined below) following the Exercise Date (as defined herein). The date on which the Exercise Notice is delivered to the Company (as determined in accordance with the notice provisions hereof) is an “*Exercise Date*.” “*Business Day*” as used herein means any day, other than a Saturday or Sunday and other than

a day that banks in the New York, New York are generally authorized or required by applicable law to be closed. No ink-original Exercise Notice shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Exercise Notice form be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date the final Exercise Notice is delivered to the Company. The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder, but if it is not so delivered then such exercise shall constitute an agreement by the Holder to deliver the original Warrant to the Company as soon as practicable thereafter, subject to the other provisions hereof. Execution and delivery of the Exercise Notice shall have the same effect as cancellation of the original Warrant and issuance of a New Warrant evidencing the right to purchase the remaining number of Warrant Shares, if any.

4. Delivery of Warrant Shares.

(a) Upon exercise of this Warrant, the Company shall promptly (but in no event later than three Trading Days after the Exercise Date) issue or cause to be issued and cause to be delivered to or upon the written order of the Holder and in such name or names as the Holder may designate (i) a certificate for the Warrant Shares issuable upon such exercise, free of restrictive legends, or (ii) an electronic delivery of the Warrant Shares to the Holder's account at the Depository Trust Company ("**DTC**") or a similar organization. The Holder, or any person permissibly so designated by the Holder to receive Warrant Shares, shall be deemed to have become the holder of record of such Warrant Shares as of the Exercise Date. The Company shall, upon the written request of the Holder, use its reasonable best efforts to deliver, or cause to be delivered, the Warrant Shares hereunder electronically through DTC or another established clearing corporation performing similar functions; *provided*, that the Company may, but will not be required to, change its transfer agent if its current transfer agent cannot deliver the Warrant Shares electronically through such a clearing corporation. "**Trading Day**" means (a) a day on which the Common Stock is listed or quoted and traded on its Principal Trading Market (other than the OTC Markets), or (b) if the Common Stock is not listed on a Trading Market (other than the OTC Markets), a day on which the Common Stock is traded in the over-the-counter market, as reported by the OTC Markets (or any similar organization or agency succeeding to its functions of reporting prices); *provided*, that in the event that the Common Stock is not listed or quoted as set forth in (a) or (b) hereof, then Trading Day shall mean a Business Day; *provided further*, that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00 p.m., New York time). "**Principal Trading Market**" means whichever of the New York Stock Exchange, the NYSE American LLC, the NASDAQ Global Select Market, the NASDAQ Global Market, the NASDAQ Capital Market or the OTC Markets on which the Common Stock is primarily listed and quoted for trading on the date in question. "**Trading Market**" means whichever of the New York Stock Exchange, the NYSE American LLC, the NASDAQ Global Select Market, the NASDAQ Global Market, the NASDAQ Capital Market or the OTC Markets on which the Common Stock is listed or quoted for trading on the date in question.

(b) If by the close of the third Trading Day after delivery of a properly completed Exercise Notice and the payment of the aggregate Exercise Price in any manner permitted by Section 9 of this Warrant, the Company fails to deliver to the Holder the required number of Warrant Shares in the manner required pursuant to this Section 4, and if after such third Trading Day and prior to the receipt of such Warrant Shares, the Holder is required to purchase (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "**Buy-In**"), then the Company shall, in its sole discretion, within three Trading Days after the Holder's request for payment, either (i) pay in cash to the Holder an amount equal to the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased, at which point the number of Warrant Shares underlying this Warrant equal to the number of shares of Common Stock so purchased shall be forfeited and the Company's obligation to deliver such certificate (and to issue such Warrant Shares) shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such Warrant Shares and pay cash to the Holder in an amount equal to the excess (if any) of the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased in the Buy-In over the product of (A) the

number of shares of Common Stock purchased in the Buy-In, multiplied by (B) the closing bid price of a share of Common Stock on the Exercise Date. The Holder shall provide the Company with written notice indicating the amounts payable to the Holder in respect of the Buy-In, together with applicable confirmations and other evidence reasonably requested by the Company.

(c) To the extent permitted by law, the Company's obligations to issue and deliver Warrant Shares in accordance with and subject to the terms hereof are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other person of any obligation to the Company (other than breaches related to this Warrant) or any violation or alleged violation of law by the Holder or any other person, and irrespective of any other circumstance that might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Shares. Nothing herein shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

5. Charges, Taxes and Expenses. Issuance and delivery of certificates for shares of Common Stock upon exercise of this Warrant shall be made without charge to the Holder for any issue or transfer tax, transfer agent fee or other incidental tax or expense in respect of the issuance of such certificates, all of which taxes and expenses shall be paid by the Company. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Shares upon exercise hereof.

6. Replacement of Warrant. If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction (in such case) and, in each case, a customary and reasonable indemnity and surety bond, if requested by the Company. Applicants for a New Warrant under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Company may prescribe. If a New Warrant is requested as a result of a mutilation of this Warrant, then the Holder shall deliver such mutilated Warrant to the Company as a condition precedent to the Company's obligation to issue the New Warrant.

7. Reservation of Warrant Shares. The Company represents and warrants that on the date hereof, it has duly authorized and reserved, and covenants that it will at all times during the period this Warrant is outstanding reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of this Warrant as herein provided, the number of Warrant Shares that are initially issuable and deliverable upon the exercise of this entire Warrant, free from preemptive rights or any other contingent purchase rights of persons other than the Holder (taking into account the adjustments and restrictions of Section 8). The Company covenants that all Warrant Shares so issuable and deliverable shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized, issued and fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the original issuance thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue). The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for the Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company represents and warrants that the Warrant Shares, when issued and paid for in accordance with the terms of the Warrants and the underwriting agreement pursuant to which the Warrants originally were issued, will be issued free and clear of all security interests, claims, liens and other encumbrances. The Company will take all such action as may be reasonably necessary to assure that such shares of Common Stock may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any securities exchange or automated quotation system upon which the Common Stock may be listed.

8. Certain Adjustments. The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 8.

(a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding, (i) pays a stock dividend on its Common Stock or otherwise makes a distribution on any class of capital stock that is payable in shares of Common Stock, (ii) subdivides its outstanding shares of Common Stock into a larger number of shares, (iii) combines (by combination, reverse stock split or otherwise) its outstanding shares of Common Stock into a smaller number of shares (a "**Stock Combination Event**"), or (iv) issues by reclassification of shares of Common Stock any shares of capital stock of the Company, then in each such case the Exercise Price shall be adjusted to a price determined by multiplying the Exercise Price in effect immediately prior to the effective date of such event by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding on such effective date immediately before giving effect to such event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after giving effect to such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, and any adjustment pursuant to clause (ii), (iii) or (iv) of this paragraph shall become effective immediately after the effective date of such subdivision, combination or reclassification.

(b) Pro Rata Distributions. If the Company, at any time while this Warrant is outstanding, distributes to all holders of Common Stock for no consideration (i) evidences of its indebtedness, (ii) any security (other than a distribution of Common Stock covered by the preceding paragraph), (iii) rights or warrants to subscribe for or purchase any security, or (iv) any other asset, including cash (in each case, "**Distributed Property**"), except for any distributions pursuant to a shareholders' rights plan or similar takeover defense agreement or plan adopted by the Company, then, upon any exercise of this Warrant that occurs after the record date fixed for determination of stockholders entitled to receive such distribution, the Holder shall be entitled to receive, in addition to the Warrant Shares otherwise issuable upon such exercise (if applicable), the Distributed Property that such Holder would have been entitled to receive in respect of such number of Warrant Shares had the Holder been the record holder of such Warrant Shares immediately prior to such record date.

(c) Fundamental Transactions. If, at any time while this Warrant is outstanding (i) the Company effects (A) any merger of the Company with (but not into) another person, in which stockholders of the Company immediately prior to such transaction own less than a majority of the outstanding stock of the surviving entity, or (B) any merger or consolidation of the Company into another person, (ii) the Company effects any sale of all or substantially all of its assets in one or a series of related transactions, (iii) any tender offer or exchange offer approved or authorized by the Company's Board of Directors is completed pursuant to which holders of at least a majority of the outstanding Common Stock tender or exchange their shares for other securities, cash or property, or (iv) the Company effects any reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 8(a) above) (in any such case, a "**Fundamental Transaction**"), then the Holder shall have the right thereafter to receive, upon any exercise of this Warrant that occurs after the date of the Fundamental Transaction, the same amount and kind of securities, cash or property as holders of Common Stock received and as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant without regard to any limitations on exercise contained herein (the "**Alternate Consideration**"), and the Holder shall no longer have the right to receive Warrant Shares upon exercise of this Warrant. If holders of Common Stock are given any choice as to securities, cash or property to be received in a Fundamental Transaction, then the Holder shall have the same rights as the holders of Common Stock as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. The Company shall not effect any such Fundamental Transaction unless prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or the corporation purchasing or otherwise acquiring such assets or other appropriate corporation or person shall assume the obligation to deliver to the Holder, such Alternate Consideration as, in accordance with the foregoing provisions, the Holder may be entitled to receive, and the other obligations under this Warrant. The provisions of this paragraph (c) shall similarly apply to subsequent transactions of an analogous type to any Fundamental Transaction.

(d) Number of Warrant Shares. Simultaneously with any adjustment to the Exercise Price pursuant to paragraph (a) of this Section 8, the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the increased or decreased number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment.

(e) Calculations. All calculations under this Section 8 shall be made to the nearest cent or the nearest share, as applicable. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Company.

(f) Notice of Adjustments. Upon the occurrence of each adjustment pursuant to this Section 8, the Company at its expense will, at the written request of the Holder, promptly compute such adjustment, in good faith, in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in reasonable detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder and, if it is maintaining the Warrant Register, to the Company's transfer agent.

(g) Notice of Corporate Events. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including, without limitation, any granting of rights or warrants to subscribe for or purchase any capital stock of the Company, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction, or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then, except if such notice and the contents thereof shall be deemed to constitute material non-public information, the Company shall deliver to the Holder a notice of such transaction at least ten (10) Business Days prior to the applicable record or effective date on which a person would need to hold Common Stock in order to participate in or vote with respect to such transaction; *provided, however*, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice.

9. Payment of Exercise Price. The Holder shall pay the Exercise Price in immediately available funds; *provided, however*, that if an effective registration statement covering the issuance or resale of the Warrant Shares is not available for such purpose, the Holder, then, at the Holder's option, may exercise this Warrant in whole or in part, at such time by means of a "cashless exercise," in which event the Company shall issue to the Holder the number of Warrant Shares determined as follows:

$$X = Y[(A-B)/A]$$

where:

X = the number of Warrant Shares to be issued to the Holder.

Y = the total number of Warrant Shares with respect to which this Warrant is being exercised.

A = the average of the Closing Bid Price of the shares of Common Stock (as reported by Bloomberg Financial Markets) for the five consecutive Trading Days ending on the date immediately preceding the Exercise Date.

B = the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

For purposes of this Warrant, "**Closing Bid Price**" means, for any security as of any date, the last reported closing bid price for such security on the Principal Trading Market for such security, as reported by Bloomberg Financial Markets, or, if such Principal Trading Market begins to operate on an extended hours basis and does not designate the closing bid price, then the last bid price of such security prior to 4:00 p.m., New York City time, as reported by Bloomberg Financial Markets, or if the foregoing do not apply, the last closing price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg Financial Markets, or, if no closing bid price is reported for such security by Bloomberg Financial Markets, the average of the bid prices of any market makers for such security as reported on OTC Pink (also known as the "pink sheets") by the OTC Markets. If the Closing Bid Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then the Board of Directors of the Company shall use its good faith judgment to determine the fair market value. The Board of Directors' determination shall be binding upon all parties absent demonstrable error. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

For purposes of Rule 144, it is intended, understood and acknowledged that the provisions above permitting “cashless exercise” under certain circumstances are intended, in part, to ensure that a full or partial exchange of this Warrant pursuant to such provisions will qualify as a conversion, within the meaning of paragraph (d)(3)(ii) of Rule 144, and the holding period for the Warrant Shares shall be deemed to have commenced as to such original Holder, on the Original Issue Date.

10. No Fractional Shares. No fractional Warrant Shares will be issued in connection with any exercise of this Warrant. In lieu of any fractional shares that would otherwise be issuable, the number of Warrant Shares to be issued shall be rounded down to the next whole number.

11. Notices. Any notice or other document required or permitted to be given or delivered to the Holder shall be in writing and sent (a) by email or fax if the sender on the same day sends a confirming copy of such notice by an internationally recognized overnight delivery service (charges prepaid) or (b) by an internationally recognized overnight delivery service (with charges prepaid). The address and facsimile number of a person for such notices or communications shall be as set forth in the Warrant Register unless changed by such person by two Trading Days’ prior notice to the other person(s) in accordance with this Section 11.

12. Warrant Agent. The Company shall initially serve as warrant agent under this Warrant. Upon 15 days’ notice to the Holder, the Company may appoint a new warrant agent. Any corporation into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new warrant agent shall be a party or any corporation to which the Company or any new warrant agent transfers substantially all of its corporate trust or shareholders services business shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder’s last address as shown on the Warrant Register.

13. Miscellaneous.

(a) No Rights as a Stockholder. The Holder, solely in such person’s capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such person’s capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, amalgamation, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities, whether such liabilities are asserted by the Company or by creditors of the Company.

(b) Authorized Shares.

(i) The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation or of any requirements of the Principal Trading Market upon which the Common Stock may be listed.

(ii) Except and to the extent waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issuance or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of the Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (1) not increase the par value of any Warrant Shares above the

amount payable therefor upon such exercise immediately prior to such increase in par value, (2) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant, and (3) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof as may be necessary to enable the Company to perform its obligations under this Warrant.

(iii) Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

(c) Successors and Assigns. This Warrant may be assigned by the Holder. This Warrant may not be assigned by the Company without the written consent of the Holder except to a successor in the event of a Fundamental Transaction. This Warrant shall be binding upon and inure to the benefit of the Company and the Holder and their respective heirs, estate, legal representatives, successors and assigns. Subject to the preceding sentence, nothing in this Warrant shall be construed to give to any person other than the Company and the Holder any legal or equitable right, remedy or cause of action under this Warrant.

(d) Amendment and Waiver. Except as otherwise provided herein, the provisions of this Warrant may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder.

(e) Acceptance. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

(f) Governing Law. This Warrant shall be enforced, governed and construed in all respects in accordance with the laws of the State of New York, as such laws are applied by the New York courts to agreements entered into and to be performed in New York by and between residents of New York.

(g) Headings. The headings herein are for convenience only, do not constitute a part of this Warrant and shall not be deemed to limit or affect any of the provisions hereof.

(h) Severability. If any provision of this Warrant is held to be invalid or unenforceable under any applicable statute or rule of law, then such provision shall be deemed modified to conform with such statute or rule of law. Any provision hereof that may prove invalid or unenforceable under any law shall not affect the validity or enforceability of any other provisions hereof.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed by its authorized officer as of the date first indicated above.

QUICKLOGIC CORPORATION

By: _____
Name:
Title:

[Signature Page to Warrant]

SCHEDULE 1

QUICKLOGIC CORPORATION.

FORM OF EXERCISE NOTICE

[To be executed by the Holder to purchase shares of Common Stock under the Warrant]

Ladies and Gentlemen:

(1) The undersigned is the Holder of Warrant No. _____ (the "**Warrant**") issued by QuickLogic Corporation, a Delaware corporation (the "**Company**"). Capitalized terms used herein and not otherwise defined herein have the respective meanings set forth in the Warrant.

(2) The undersigned hereby exercises its right to purchase _____ Warrant Shares pursuant to the Warrant.

(3) The Holder intends that payment of the Exercise Price shall be made as (check one):

- Cash Exercise
- "*Cashless Exercise*" if permitted under Section 9 of the Warrant

(4) If the Holder has elected a Cash Exercise, the Holder shall pay the sum of \$ _____ in immediately available funds to the Company in accordance with the terms of the Warrant.

(5) Pursuant to this Exercise Notice, the Company shall deliver to the Holder Warrant Shares determined in accordance with the terms of the Warrant. Please issue (check applicable box):

- A certificate of certificates representing the Holder's Warrant Shares in the name of the undersigned or in such other name as is specified below:
- The Holder's Warrant Shares in electronic form to the following account:

Name and Contact for Broker:
Broker no:
Account no:
Account holder:

Dated: _____, _____

Name of Holder: _____
By: _____
Name: _____
Title: _____

(Signature must conform in all respects to name of the Holder as specified on the face of the Warrant)

SCHEDULE 2

QUICKLOGIC CORPORATION

FORM OF ASSIGNMENT

[To be completed and executed by the Holder only upon transfer of the Warrant]

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto _____ (the "*Transferee*") the right represented by the within Warrant to purchase _____ shares of Common Stock of QuickLogic Corporation, a Delaware corporation (the "*Company*"), to which the within Warrant relates and appoints _____ attorney to transfer said right on the books of the Company with full power of substitution in the premises.

Dated: _____, _____

(Signature must conform in all respects to name of the Holder as specified on the face of the Warrant)

In the presence of: Address of Transferee:

[QUICKLOGIC CORPORATION LETTERHEAD]

, 2018

[Investor]

[Investor Address]

Re: QuickLogic Corporation (the “Company”)

To Whom It May Concern:

This letter agreement (the “Letter Agreement”) is being entered into in connection with the purchase by (the “Investor”), of an aggregate of shares of common stock, par value \$0.001 per share (the “Common Stock”), of the Company, and a warrant (Warrant No.:) of the Company (the “Warrant”), to purchase an aggregate of shares of Common Stock (the “Warrant Shares”). The shares of Common Stock and the Warrant were purchased as part of a registered public offering pursuant to and in accordance with an underwriting agreement, dated May 24, 2018, between the Company and Craig-Hallum Capital Group LLC, as Representative of the several Underwriters named in Schedule I thereto (the “Underwriting Agreement”). Capitalized terms used and not defined herein shall have the meanings set forth in the Underwriting Agreement.

For other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Company does hereby agree with the Investor as follows:

1. The Investor shall not have the right to exercise all or any portion of its Warrant, and any such exercise shall be null and void and treated as if never made, to the extent that after giving effect to such exercise, such Investor (together with such Investor’s affiliates) would beneficially own in excess of 4.99% (the “Maximum Percentage”) of the number of shares of Common Stock outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Investor and its affiliates shall include the number of shares of Common Stock held by the Investor and its affiliates plus the number of shares of Common Stock which would be issuable upon exercise of its Warrant with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (i) exercise of the remaining, unexercised portion of its Warrant beneficially owned by the Investor and its affiliates and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company beneficially owned by such Investor and its affiliates (including, without limitation, any convertible notes or convertible preferred stock or warrants) subject to a limitation on conversion or exercise analogous to the limitation contained herein. Except as set forth in the preceding sentence, for purposes of this paragraph, beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended. For purposes of the Investor’s Warrant, in determining the number of outstanding shares of Common Stock, the Investor may rely on the number of outstanding shares of Common Stock as reflected in (1) the Company’s most recent Form 10-K, Form 10-Q, Current Report on Form 8-K or other public filing with the Securities and Exchange Commission, as the case may be, (2) a more recent public announcement by the Company or (3) any other notice by the Company or the Company’s transfer agent setting forth the number of shares of Common Stock outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including the Investor’s Warrant, by the Investor and its affiliates since the date as of which such number of outstanding shares of

Common Stock was reported. By written notice to the Company, the Investor may from time to time increase or decrease the Maximum Percentage to any other percentage not in excess of 9.99% specified in such notice; provided that (i) any such increase will not be effective until the sixty-first (61st) day after such notice is delivered to the Company, and (ii) any such increase or decrease will apply only to the Investor.

2. This Letter Agreement shall be enforced, governed and construed in all respects in accordance with the laws of the State of New York, without regard to principles of conflicts of laws thereof.
3. This Letter Agreement shall terminate and be of no further force or effect upon the earlier of (a) the date on which the Investor's Warrant has been fully exercised and all the Warrant Shares available under the Warrant have been delivered to the Investor and (b) 5:30 p.m., New York City time, on May 29, 2023, the expiration date of the Warrant.
4. This Letter Agreement is solely for the benefit of the parties hereto, and will not be assignable by any party. This Letter Agreement may be executed in one or more counterparts and all such counterparts so executed shall constitute an original agreement binding on all parties but together shall constitute but one instrument.

[The remainder of this page has intentionally been left blank]

If you agree with the foregoing, please so indicate by signing and returning a copy of this Letter Agreement to the undersigned Company.

Very truly yours,

QuickLogic Corporation

By: _____
Name: _____
Title: _____

Accepted and acknowledged as of the date first above written:

[Investor]

By: _____
Name: _____
Title: _____

[Signature page to Letter Agreement]

JONES DAY

SILICON VALLEY OFFICE • 1755 EMBARCADERO ROAD • PALO ALTO, CALIFORNIA 94303

TELEPHONE: +1.650.739.3939 • FACSIMILE: +1.650.739.3900

May 29, 2018

QuickLogic Corporation
1277 Orleans Drive
Sunnyvale, California 94089

Re: 13,513,510 Shares of Common Stock of QuickLogic Corporation and
Warrants to Purchase up to an additional 5,405,404 shares of Common Stock

Ladies and Gentlemen:

We are acting as counsel to QuickLogic Corporation, a Delaware corporation (the “*Company*”), in connection with the issuance and sale by the Company of 13,513,510 shares (the “*Shares*”) of the Company’s common stock, par value \$0.001 per share (the “*Common Stock*”) and warrants (the “*Warrants*”) to purchase up to an additional 5,405,404 shares of Common Stock (the “*Warrant Shares*,” and together with the Shares and the Warrants, the “*Securities*”), pursuant to an Underwriting Agreement, dated as of May 24, 2018 (the “*Underwriting Agreement*”), by and between the Company and Craig-Hallum Capital Group LLC, as representative of the several underwriters named in Schedule I thereto.

In connection with the opinions expressed herein, we have examined such documents, records and matters of law as we have deemed relevant or necessary for purposes of such opinions. Based on the foregoing, and subject to the further limitations, qualifications and assumptions set forth herein, we are of the opinion that:

1. The Shares, when issued and delivered pursuant to the terms of the Underwriting Agreement against payment of the consideration therefor as provided in the Underwriting Agreement, will be validly issued, fully paid and nonassessable.
2. The Warrants, when issued and delivered pursuant to the terms of the Underwriting Agreement against payment of the consideration therefor as provided in the Underwriting Agreement, will constitute valid and binding obligations of the Company.
3. The Warrant Shares, when issued upon exercise of the Warrants pursuant to the terms of the Warrants, will be validly issued, fully paid and nonassessable.

In rendering the foregoing opinions, we have assumed that the resolutions authorizing the Company to issue, offer and sell the Securities will be in full force and effect at all times at which any Securities are offered or sold by the Company.

ALKHOBAR • AMSTERDAM • ATLANTA • BEIJING • BOSTON • BRISBANE • BRUSSELS • CHICAGO • CLEVELAND • COLUMBUS • DALLAS DETROIT • DUBAI • DÜSSELDORF • FRANKFURT • HONG KONG • HOUSTON • IRVINE • LONDON • LOS ANGELES • MADRID • MELBOURNE MEXICO CITY • MIAMI • MILAN • MINNEAPOLIS • MOSCOW • MUNICH • NEW YORK • PARIS • PERTH • PITTSBURGH • RIYADH SAN DIEGO • SAN FRANCISCO • SÃO PAULO • SHANGHAI • SILICON VALLEY • SINGAPORE • SYDNEY • TAIPEI • TOKYO • WASHINGTON

The opinion in paragraph 2 is limited by bankruptcy, insolvency, reorganization, fraudulent transfer and fraudulent conveyance, voidable preference, moratorium or other similar laws and related regulations and judicial doctrines from time to time in effect relating to or affecting creditors' rights generally, and by general equitable principles and public policy considerations, whether such principles and considerations are considered in a proceeding at law or at equity.

As to facts material to the opinions and assumptions expressed herein, we have relied upon oral or written statements and representations of officers and other representatives of the Company and others. The opinions expressed herein are limited to the laws of the State of New York and the General Corporation Law of the State of Delaware, in each case as currently in effect, and we express no opinion as to the effect of the laws of any other jurisdiction.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Current Report on Form 8-K dated the date hereof filed by the Company relating to the Company's Registration Statement on Form S-3, as amended (File No. 333-215030), and to the reference to Jones Day under the caption "Legal Matters" in the prospectus supplement constituting a part of such Registration Statement. In giving such consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations of the Securities and Exchange Commission promulgated thereunder.

Very truly yours,

/s/ Jones Day



QuickLogic Corporation Announces Proposed Public Offering of Common Stock and Warrants

SUNNYVALE, Calif., May 23, 2018 /PR Newswire/— QuickLogic Corporation (NASDAQ: QUIK) (“QuickLogic” or the “Company”), a developer of ultra-low power multi-core voice enabled SoCs, embedded FPGA IP, display bridge and programmable logic solutions, today announced that it intends to offer and sell, subject to market and other conditions, shares of its common stock and corresponding warrants to purchase shares of its common stock in an underwritten registered public offering. The Company anticipates that the shares of common stock and corresponding warrants will be sold in combination. The securities to be sold in the proposed offering will be sold by the Company. The proposed offering is subject to market conditions, and there can be no assurance as to whether or when the offering may be completed, or as to the final size or terms of the offering.

The Company intends to use the net proceeds from the proposed offering for working capital, the development of next generation new products and general corporate purposes. The Company may also use a portion of the net proceeds to acquire and/or license technologies and acquire and/or invest in businesses when the opportunity arises; however, the Company currently has no commitments or agreements and is not involved in any negotiations with respect to any such transactions.

There is no established public trading market for the warrants and the Company does not expect a market to develop. Additionally, the Company does not intend to apply for the listing of the warrants on any national securities exchange or other nationally recognized trading system.

Craig-Hallum Capital Group is acting as the sole book-running manager for the proposed offering. Roth Capital Partners is acting as co-manager for the proposed offering.

The proposed offering is being made pursuant to a shelf registration statement on Form S-3 that was declared effective by the Securities and Exchange Commission (the “SEC”) on March 16, 2017. A preliminary prospectus supplement and accompanying prospectus related to the proposed offering have been filed with the SEC and may be obtained by visiting EDGAR on the SEC’s website at www.sec.gov, or by contacting Craig-Hallum Capital Group LLC, 222 South Ninth Street, Suite 350, Minneapolis, MN 55402, by telephone at 612-334-6300, or by email at prospectus@chlm.com. The final terms of the proposed offering will be disclosed in a final prospectus supplement to be filed with the SEC.

This press release does not constitute an offer to sell or the solicitation of an offer to buy any securities in this offering. There shall not be any sale of these securities in any state or jurisdiction in which such offering, sale or solicitation would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

About QuickLogic

QuickLogic Corporation (NASDAQ: QUIK) enables OEMs to maximize battery life for highly differentiated, immersive user experiences with Smartphone, Wearable and IoT devices. QuickLogic delivers these benefits through industry leading ultra-low power customer programmable SoC semiconductor solutions, embedded software, and algorithm solutions for always-on voice and sensor processing. The Company’s embedded FPGA initiative also enables SoC designers to easily implement post production changes, and increase revenue by providing hardware programmability to their end customers. For more information about QuickLogic, visit www.quicklogic.com.

Safe Harbor Statement Under the Private Securities Litigation Reform Act of 1995

This press release contains statements that are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These include statements regarding, but not limited to, the intention to offer the securities and the expected uses of the proceeds from the proposed offering. Forward-looking statements can be identified by the use of words such as “may,” “will,” “plan,” “should,” “expect,” “anticipate,” “estimate,” “continue” or comparable terminology. Such forward-looking statements are inherently subject to certain risks, trends and uncertainties, including market conditions and future decisions regarding the Company’s use of cash resources, many of which the Company cannot predict with accuracy and some of which the Company might not even anticipate, and involve factors that may cause actual results to differ materially from those projected or suggested. Readers are cautioned not to place undue reliance on these forward-looking statements and are advised to consider the factors listed above together with the additional factors under the heading “Forward-Looking Statements” and “Risk Factors” in the Company’s Annual Reports on Form 10-K, as may be supplemented or amended by the Company’s Quarterly Reports on Form 10-Q. The Company assumes no obligation to update or supplement forward-looking statements that become untrue because of subsequent events, new information or otherwise.

Investor Relations Contact:
Moriah Shilton/Kirsten Chapman
(415) 433-3777
ir@quicklogic.com

Company Contact:
Sue Cheung
Chief Financial Officer
(408) 990-4000
scheung@quicklogic.com



**QuickLogic Corporation Announces Pricing of \$15.5 Million
Public Offering of Common Stock and Warrants**

SUNNYVALE, Calif., May 24, 2018 /PR Newswire/—QuickLogic Corporation (NASDAQ:QUIK) (“QuickLogic” or the “Company”), a developer of ultra-low power multi-core voice enabled SoCs, embedded FPGA IP, display bridge and programmable logic solutions, today announced the pricing of its previously announced underwritten public offering of 13,513,510 shares of its common stock and corresponding warrants to purchase up to 5,405,404 shares of its common stock. The shares of common stock and corresponding warrants are being sold in combination, with one warrant to purchase 0.4 of a share of common stock for each share of common stock sold. The warrants will have an exercise price of \$1.38 per share of common stock and a term of five years, exercisable upon the date of issuance. The aggregate public offering price for each share of common stock and corresponding warrant is \$1.15. All securities to be sold in the offering were offered by the Company.

The Company expects to close the offering on or about May 29, 2018, subject to the satisfaction of customary closing conditions. The gross proceeds from this offering are expected to be approximately \$15.5 million, assuming none of the corresponding warrants issued in this offering are exercised. The Company intends to use the net proceeds from the offering for working capital, the development of next generation new products and general corporate purposes. The Company may also use a portion of the net proceeds to acquire and/or license technologies and acquire and/or invest in businesses when the opportunity arises; however, the Company currently has no commitments or agreements and is not involved in any negotiations with respect to any such transactions.

There is no established public trading market for the warrants and the Company does not expect a market to develop. Additionally, the Company does not intend to apply for the listing of the warrants on any national securities exchange or other nationally recognized trading system.

Craig-Hallum Capital Group is acting as the sole book-running manager for the proposed offering. Roth Capital Partners and The Benchmark Company are acting as co-managers for the proposed offering.

A shelf registration statement on Form S-3 (File No. 333-215030) relating to the securities being offered has been declared effective by the Securities and Exchange Commission (“SEC”). This offering may only be made by means of a prospectus supplement and the accompanying prospectus. The preliminary prospectus supplement related to the offering was filed with the SEC on May 23, 2018. The final prospectus supplement and accompanying prospectus will be filed with the SEC and, when available, may be obtained by visiting EDGAR on the SEC’s website at www.sec.gov; or from Craig-Hallum Capital Group LLC, 222 South Ninth Street, Suite 350, Minneapolis, MN 55402, by telephone at 612-334-6300, or by email at prospectus@chlm.com.

This press release does not constitute an offer to sell or the solicitation of an offer to buy any securities in this offering. There shall not be any sale of these securities in any state or jurisdiction in which such offering, sale or solicitation would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

About QuickLogic

QuickLogic Corporation (NASDAQ: QUIK) enables OEMs to maximize battery life for highly differentiated, immersive user experiences with Smartphone, Wearable and IoT devices. QuickLogic delivers these benefits through industry leading ultra-low power customer programmable SoC semiconductor solutions, embedded software, and algorithm solutions for always-on voice and sensor processing. The Company’s embedded FPGA initiative also enables SoC designers to easily implement post production changes, and increase revenue by providing hardware programmability to their end customers. For more information about QuickLogic, visit www.quicklogic.com.

Safe Harbor Statement Under the Private Securities Litigation Reform Act of 1995

This press release contains statements that are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These include statements regarding, but not limited to, the anticipated closing of the offering and the expected uses of the proceeds from the offering. Forward-looking statements can be identified by the use of words such as “may,” “will,” “plan,” “should,” “expect,” “anticipate,” “estimate,” “continue” or comparable terminology. Such forward-looking statements are inherently subject to certain risks, trends and uncertainties, including market conditions and future decisions regarding the Company’s use of cash resources, many of which the Company cannot predict with accuracy and some of which the Company might not even anticipate, and involve factors that may cause actual results to differ materially from those projected or suggested. Readers are cautioned not to place undue reliance on these forward-looking statements and are advised to consider the factors listed above together with the additional factors under the heading “Forward-Looking Statements” and “Risk Factors” in the Company’s Annual Reports on Form 10-K, as may be supplemented or amended by the Company’s Quarterly Reports on Form 10-Q. The Company assumes no obligation to update or supplement forward-looking statements that become untrue because of subsequent events, new information or otherwise.

IR Contact:

Moriah Shilton/Kirsten Chapman
(415) 433-3777
ir@quicklogic.com

Company Contact:

Sue Cheung
Chief Financial Officer
(408) 990-4000
scheung@quicklogic.com