

TWELFTH AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

AOPTIX TECHNOLOGIES, INC.

AOptix Technologies, Inc., (the "Company") a corporation organized and existing under the laws of the State of Delaware hereby certifies as follows:

A The undersigned is the duly elected and acting President and Chief Executive Officer of the Company.

B The Company was originally incorporated under the name Zyoptics, Inc. The original Certificate of Incorporation of the Company was filed with the Secretary of State of the State of Delaware on March 13, 2000. All amendments to the Certificate of Incorporation effected herein have been duly authorized and adopted by the Company's Board of Directors and stockholders in accordance with the provisions of Sections 242 and 245 of the Delaware General Corporation Law.

C The text of the Eleventh Amended and Restated Certificate of Incorporation, as amended, is hereby amended and restated in its entirety to read as follows:

I

The name of the corporation is AOptix Technologies, Inc. (the "Company").

II

The address of the registered office of the Company in the State of Delaware is 2711 Centerville Road, Suite 400, City of Wilmington 19808, Delaware, and the name of its registered agent at such address is Corporation Service Company, County of New Castle.

III

The purpose of the Company is to engage in any lawful act or activity for which a corporation may be organized under the Delaware General Corporation Law.

IV

The Company is authorized to issue two classes of stock to be designated Common Stock and Preferred Stock. The aggregate number of shares that the Company shall have authority to issue is 585,567,534 consisting of 332,549,243 shares of Common Stock, par value \$0.01 per share, and 253,018,291 shares of Preferred Stock, par value \$0.01 per share.

The shares of Preferred Stock may be issued from time to time in one or more series. The first series shall be designated "Series AA-1 Preferred Stock" and shall consist of 64,502,822 shares. The second series shall be designated "Series B-1 Preferred Stock" and shall consist of 52,628,832 shares. The third series shall be designated "Series C-1 Preferred Stock" and shall consist of 32,065,407 shares. The fourth series shall be designated "Series D-1 Preferred Stock" and shall consist of 26,271,987 shares. The fifth series shall be designated

"Series E-1 Preferred Stock" and shall consist of 74,728,678 shares. The Series AA-1 Preferred Stock, the Series B-1 Preferred Stock, the Series C-1 Preferred Stock, the Series D-1 Preferred Stock and the Series E-1 Preferred Stock are collectively referred to herein as the "Preferred Stock".

The rights, preferences, privileges and restrictions granted to and imposed upon the Preferred Stock are as follows:

1. **Definitions.** For purposes of this Article, the following definitions shall apply:

(a) "Additional Shares of Common Stock" shall mean all shares of Common Stock issued (or, pursuant to subsection 4(d)(ii), deemed to be issued) by the Company after the Series E-1 Issue Date, other than shares of Common Stock (the "Excluded Shares") issued or issuable (or, pursuant to subsection 4(d)(ii), deemed to be issued):

(i) upon the issuance and conversion of shares of Preferred Stock, including the issuance of Series E-1 Preferred Stock;

(ii) upon the issuance and exercise of the Warrants, options or any other Convertible Security existing on the Series E-1 Issue Date;

(iii) as a dividend or distribution on Preferred Stock or any event for which adjustment is made pursuant to subsection 4(d)(v), subsection 4(d)(vi) or subsection 4(d)(vii) hereof;

(iv) to banks, equipment lessors or other financial institutions pursuant to debt financing or commercial transactions approved by the Board of Directors (including at least a majority of the directors elected by holders of Preferred Stock);

(v) pursuant to an acquisition of another corporation (or other entity) or a joint venture agreement approved by the Board of Directors (including at least a majority of the directors elected by holders of Preferred Stock);

(vi) to suppliers of goods or services pursuant to transactions approved by the Board of Directors (including at least a majority of the directors elected by holders of Preferred Stock);

(vii) pursuant to the issuance of shares, or options, warrants or other rights issued, to employees, consultants or directors in accordance with plans, agreements or similar arrangements, but not to exceed 61,042,638 or such greater number as unanimously approved by the Company's Board of Directors;

(viii) in a Qualifying Public Offering or other registered public offering of the Common Stock prior to which or in connection with which all of the Preferred Stock shall have been converted to Common Stock.

(b) **"Affiliate"** shall mean, as to any person or entity, a person or entity that, directly or indirectly through one or more intermediaries, controls, is controlled by, or is under common control with, such person or entity.

(c) **"Common Stock"** shall mean the Common Stock of the Company, par value \$0.01 per share.

(d) **"Convertible Securities"** shall mean any evidences of indebtedness, shares or other securities (other than shares of Preferred Stock) convertible into or exchangeable for Common Stock, including the 1,328,197 shares of the Series D-1 Preferred Stock and shares of Common Stock issuable upon conversion thereof, which are reserved for issuance to Gold Hill Capital 2008, L.P. ("Gold Hill") pursuant to that certain Loan and Security Agreement between the Company and Gold Hill.

(e) **"Options"** shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(f) **"Preference Amount"** shall mean, with respect to the Series AA-1 Preferred Stock, the Series AA-1 Preference Amount; with respect to the Series B-1 Preferred Stock, the Series B-1 Preference Amount; with respect to the Series C-1 Preferred Stock, the Series C-1 Preference Amount; with respect to the Series D-1 Preferred Stock, the Series D-1 Preference Amount; and with respect to the Series E-1 Preferred Stock, the Series E-1 Initial Preference Amount or the Series E-1 Special Preference Amount, as applicable.

(g) **"Series AA-1 Original Issue Price"** shall mean \$0.3863 per share for the Series AA-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like).

(h) **"Series AA-1 Preference Amount"** shall mean \$0.3863 per share for the Series AA-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like).

(i) **"Series B-1 Original Issue Price"** shall mean \$0.2872 per share for the Series B-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like).

(j) **"Series B-1 Preference Amount"** shall mean \$0.2872 per share for the Series B-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like).

(k) **"Series C-1 Original Issue Price"** shall mean \$0.4025 per share for the Series C-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like).

(l) **"Series C-1 Preference Amount"** shall mean \$0.4025 per share for the Series C-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like).

(m) **"Series D-1 Original Issue Price"** shall mean \$0.7529 per share for the Series D-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like).

(n) **"Series D-1 Preference Amount"** shall mean \$0.7529 per share for the Series D-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like).

(o) **"Series E-1 Initial Preference Amount"** shall mean \$0.6853 per share for the Series E-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like).

(p) **"Series E-1 Issue Date"** shall mean the date on which shares of Series E-1 Preferred Stock were first issued.

(q) **"Series E-1 Original Issue Price"** shall mean \$0.6853 per share for the Series E-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like).

(r) **"Series E-1 Special Preference Amount"** shall mean \$1.02795 per share for the Series E-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like).

(s) **"Stock Option Plan"** means a stock option plan that has been approved by the Company's Board of Directors.

(t) **"Transfer"** or **"Transferred"** shall mean to sell or in any other way directly or indirectly transfer, assign, distribute, encumber or otherwise dispose of, either voluntarily or involuntarily.

(u) **"Voting Shares"** shall mean any shares of the Company's capital stock entitled to vote in any election of directors of the Company.

(v) **"Warrants"** shall mean the warrants to purchase capital stock of the Company outstanding on the Series E-1 Issue Date, as follows: that certain Preferred Stock Purchase Warrant to purchase Series AA-1 Preferred issued to Comerica Bank, as amended, those certain warrants to purchase up to 3,459,526 shares of Series D-1 Preferred Stock and those certain warrants to purchase up to 1,660,247 shares of Common Stock.

2. Dividends

(a) **Dividend Preference.** The holders of outstanding shares of Preferred Stock shall be entitled to receive noncumulative dividends out of any assets at the time legally available therefor, on a *pari passu* basis as among each series of Preferred Stock and prior and in preference to any declaration or payment of any dividend (payable other than in Common Stock or other securities or rights convertible into or entitling the holder thereof to receive, directly or indirectly, additional shares of Common Stock) on the Common Stock or any other security of the Company. Dividends on Series AA-1 Preferred Stock will accrue at the rate of 8% per annum, per share

(calculated as a percentage of the Series AA-1 Preference Amount), on each outstanding share of Series AA-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like). Dividends on Series B-1 Preferred Stock will accrue at the rate of 8% per annum, per share (calculated as a percentage of the Series B-1 Preference Amount), on each outstanding share of Series B-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like). Dividends on Series C-1 Preferred Stock will accrue at the rate of 8% per annum, per share (calculated as a percentage of the Series C-1 Preference Amount), on each outstanding share of Series C-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like). Dividends on Series D-1 Preferred Stock will accrue at the rate of 8% per annum, per share (calculated as a percentage of the Series D-1 Preference Amount), on each outstanding share of Series D-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like). Dividends on Series E-1 Preferred Stock will accrue at the rate of 8% per annum, per share (calculated as a percentage of the Series E-1 Initial Preference Amount), on each outstanding share of Series E-1 Preferred Stock (as appropriately adjusted for any subsequent stock splits, stock dividends, recapitalizations and the like). The Preferred Stock will also participate in any dividend or distribution declared or paid on the Common Stock, pro rata, on the basis of the number of shares of Common Stock (as determined on an as-converted basis for the Preferred Stock) into which it is then convertible. Dividends shall be payable when, as and if declared by the Board of Directors of the Company (the "Board of Directors"); provided, however, that, the Board of Directors is under no obligation to pay dividends to such holders, and such dividends, if any, shall be noncumulative. No rights shall accrue to the holders of the Preferred Stock if dividends are not declared in any prior fiscal year. If and to the extent that after payment of the dividends provided for in the first sentence of this paragraph, the Board of Directors shall declare and set aside for payment any other and further amount of cash or property as a distribution (other than a distribution pursuant to Section 3 hereof), such distribution shall be made with equal priority to the Common Stock and the Preferred Stock, with each share of Preferred Stock being treated for such purpose as if it had been converted into Common Stock at the then effective applicable Conversion Rate (as defined in Section 4(a)) for such share. For the purpose of the preceding sentence, all shares of Preferred Stock held by each holder of Preferred Stock shall be aggregated, and any resulting fractional share of Common Stock shall be disregarded.

(b) *Priority of Dividends.* The Company shall make no Distribution (as defined below) to the holders of shares of Common Stock in any fiscal year unless and until dividends at the rate set forth in subsection (a) above shall have been paid upon applicable shares of Preferred Stock.

(c) *Distribution.* As used in this Section 2, "Distribution" means the transfer by the Company with respect to its Common Stock or Preferred Stock of cash or property without consideration, whether by way of dividend or otherwise (except a dividend in shares of Common Stock) or the purchase by the Company of shares of Common Stock or Preferred Stock (other than purchases in connection with the repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors upon termination of their employment or services pursuant to agreements providing for the right of said repurchase) for cash or property.

3. **Liquidation Rights.** In the event of any liquidation, dissolution, or winding up of the Company (or the deemed occurrence of such event pursuant to subsection 3(e) below), either voluntary or involuntary, distributions to the stockholders of the Company shall be made in the following manner:

(a) **Series E-1 Initial Liquidation Preference.** In connection with any liquidation, dissolution or winding up of the Company (or the deemed occurrence of such event pursuant to subsection 3(e) below) that either (i) is consummated on or after January 27, 2019, or (ii) pursuant to which the aggregate Proceeds (as defined below) equal \$300,000,000 or more, then the holders of the Series E-1 Preferred Stock, the Series D-1 Preferred Stock, the Series C-1 Preferred Stock, the Series B-1 Preferred Stock and the Series AA-1 Preferred Stock shall be entitled to receive *pari passu* as among each such series of Preferred Stock and prior and in preference to any distribution of any of the assets or surplus funds of the Company to the holders of Common Stock as set forth in subsection 3(c) below by reason of their ownership of such stock, all declared but unpaid dividends, if any, thereon plus the following amounts: (i) for the Series E-1 Preferred Stock, the Series E-1 Initial Preference Amount per share on each outstanding share of such Series E-1 Preferred Stock; (ii) for the Series D-1 Preferred Stock, the Series D-1 Preference Amount per share on each outstanding share of such Series D-1 Preferred Stock; (iii) for the Series C-1 Preferred Stock, the Series C-1 Preference Amount per share on each outstanding share of such Series C-1 Preferred Stock; (iv) for the Series B-1 Preferred Stock, the Series B-1 Preference Amount per share on each outstanding share of such Series B-1 Preferred Stock, and (v) for the Series AA-1 Preferred Stock, the Series AA-1 Preference Amount per share on each outstanding share of such Series AA-1 Preferred Stock. If the assets and funds thus available for distribution among the holders of such series of Preferred Stock shall be insufficient to permit the payment to such holders of their full aforesaid preferential amount, then the entire amount of the assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of such series of Preferred Stock in proportion to the aggregate preferential amount each holder is otherwise entitled to receive. For the purposes of this Section 3, "Proceeds" shall mean (i) all amounts of cash, stock, or other consideration payable to the equityholders of the Company in connection with a liquidation, dissolution, or winding up of the Company (or the deemed occurrence of such event pursuant to subsection 3(e) below), as applicable, including any amounts which become payable upon the release of escrow or the satisfaction of other contingencies related to such transaction.

(b) **Series E-1 Special Liquidation Preference.** In connection with any liquidation, dissolution or winding up of the Company (or the deemed occurrence of such event pursuant to subsection 3(e) below) that is consummated prior to January 27, 2019 and pursuant to which the aggregate Proceeds equal less than \$300,000,000, then:

(i) The holders of the Series E-1 Preferred Stock shall be entitled to receive *pari passu* as among such series of Preferred Stock and prior and in preference to any distribution of any of the assets or surplus funds of the Company to the holders of Common Stock and the holders of the other series of Preferred Stock as set forth in subsections 3(b)(ii) and 3(c) below by reason of their ownership of such stock, all declared but unpaid dividends, if any, thereon plus the following amounts: (i) for the Series E-1 Preferred Stock, the Series E-1 Special Preference Amount per share on each outstanding share of such Series E-1 Preferred Stock. If the assets and funds thus available for distribution among the holders of Series E-1 Preferred Stock

shall be insufficient to permit the payment to such holders of their full aforesaid preferential amount, then the entire amount of the assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of Series E-1 Preferred Stock in proportion to the aggregate preferential amount each holder is otherwise entitled to receive

(ii) After payment of the full preferential amount set forth in subsection 3(b)(i) above to the holders of the Series E-1 Preferred Stock, the holders of the Series D-1 Preferred Stock, the Series C-1 Preferred Stock, the Series B-1 Preferred Stock and the Series AA-1 Preferred Stock shall be entitled to receive *pari passu* as among each such series of Preferred Stock and prior and in preference to any distribution of any of the assets or surplus funds of the Company to the holders of Common Stock as set forth in subsection 3(c) below by reason of their ownership of such stock, all declared but unpaid dividends, if any, thereon plus the following amounts: (i) for the Series D-1 Preferred Stock, the Series D-1 Preference Amount per share on each outstanding share of such Series D-1 Preferred Stock; (ii) for the Series C-1 Preferred Stock, the Series C-1 Preference Amount per share on each outstanding share of such Series C-1 Preferred Stock; (iii) for the Series B-1 Preferred Stock, the Series B-1 Preference Amount per share on each outstanding share of such Series B-1 Preferred Stock, and (iv) for the Series AA-1 Preferred Stock, the Series AA-1 Preference Amount per share on each outstanding share of such Series AA-1 Preferred Stock. If the assets and funds thus available for distribution among the holders of such series of Preferred Stock shall be insufficient to permit the payment to such holders of their full aforesaid preferential amount, then the entire amount of the assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of such series of Preferred Stock in proportion to the aggregate preferential amount each holder is otherwise entitled to receive.

(c) *Distribution after Payment of Liquidation Preference.* After payment has been made to the holders of the Preferred Stock of the full preferential amounts set forth in Section 3(a) or 3(b) above, as applicable, the entire remaining assets, and funds of the Company legally available for distribution, if any, shall be distributed ratably among the holders of Common Stock

(d) *Shares not Treated as Both Preferred Stock and Common Stock in any Distribution.* Shares of Preferred Stock shall not be entitled to be converted into shares of Common Stock in order to participate in any distribution, or series of distributions, as shares of Common Stock, without first foregoing participation in the distribution, or series of distributions, as shares of Preferred Stock pursuant to Section 3(a) and 3(b) above. The foregoing sentence notwithstanding, in the event of any event deemed a liquidation pursuant to subsection 3(e) below, each holder of Preferred Stock shall be entitled to receive, for each share of Preferred Stock then held, out of the proceeds of such deemed liquidation, the greater of the amount of cash, securities or other property to which such holder would be entitled to receive in a liquidation pursuant to (i) Section 3(a) or 3(b) above, as applicable, or (ii) the amount of cash, securities or other property to which such holder would be entitled to receive in a liquidation with respect to such shares if such shares had been converted to Common Stock immediately prior to such liquidation.

(e) *Deemed Liquidation.* For purposes of this Section 3 only, a merger or consolidation of the Company with or into any other corporation or corporations, unless the stockholders of the Company immediately prior to any such transaction are holders of at least a

majority of the voting power of the surviving corporation, the acquiring corporation or the entity controlling the surviving corporation immediately thereafter, a sale or other transfer of more than fifty percent (50%) of the assets of the Company (or any series of related transactions resulting in the sale or other transfer of more than fifty percent (50%) of the assets of the Company) or the exclusive licensing by the Company of all or substantially all of its intellectual property, shall be treated as a liquidation, dissolution or winding up. A deemed liquidation, dissolution or winding up may be waived upon the election the holders of a majority of the outstanding shares of Preferred Stock, voting on an as-converted to Common Stock basis.

(f) *Non-Cash Distribution.* Whenever the distribution provided for in this Section 3 shall be payable in securities or property other than cash, the value of such distribution shall be the fair market value of such securities or other property as determined in good faith by the unanimous vote of the Board of Directors. Any securities shall be valued as follows:

(i) Securities not subject to investment letter or other similar restrictions on free marketability (which cases are covered by (ii) below):

(A) If traded on a securities exchange or through the Nasdaq Global Market, the value shall be deemed to be the average of the closing prices of the securities on such quotation system over the 30-day period ending three days prior to the closing;

(B) If actively traded over-the-counter, the value shall be deemed to be the average of the closing bid or sale prices (whichever is applicable) over the 30-day period ending three days prior to the closing; and

(C) If there is no active public market, the value shall be the fair market value thereof, as determined by the affirmative vote of sixty-six and two-thirds percent (66 2/3%) of the Board of Directors in good faith.

(ii) The method of valuation of securities subject to investment letter or other restrictions on free marketability (other than restrictions arising solely by virtue of a stockholder's status as an affiliate or former affiliate) shall be to make an appropriate discount from the market value determined as above in (i)(A), (B) or (C) to reflect the approximate fair market value thereof, as determined by the unanimous vote of the Board of Directors in good faith.

(g) The Company shall give each holder of record of Preferred Stock written notice of an impending transaction contemplated by Section 3(e) in the manner set forth in Section 4(g) and Section 6 below.

(h) In the event that requirements of Sections 3(e), (f) and (g) are not complied with, the Company shall forthwith either:

(i) cause such closing to be postponed until such time as the requirements of Sections 3(e), (f) and (g) have been complied with; or

(ii) cancel such transaction, in which event the rights, preferences and privileges of the holders of the Preferred Stock shall revert to and be the same as such rights,

preferences and privileges existing immediately prior to the date of the first notice referred to in Section 3(g) hereof.

(i) The provisions of this Section 3 are in addition to the protective provisions of Section 5(d) hereof.

4. **Conversion.** The holders of the Preferred Stock shall have conversion rights as follows (the "Conversion Rights"):

(a) **Right to Convert.** Subject to Section 4(c), each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the issuance of such share at the office of the Company or any transfer agent for the Preferred Stock, into that number of fully paid and nonassessable shares of Common Stock as it is then convertible in accordance with the terms hereof. The number of shares of Common Stock into which each share of Series AA-1 Preferred Stock may be converted shall be determined by dividing the Series AA-1 Original Issue Price by the appropriate conversion price for the Series AA-1 Preferred Stock then in effect at the time of conversion (such conversion price referred to herein as the "Series AA-1 Conversion Price"). The initial Series AA-1 Conversion Price shall be \$0.3863 per share and shall be subject to adjustment as provided herein. The number of shares of Common Stock into which each share of Series B-1 Preferred Stock may be converted shall be determined by dividing the Series B-1 Original Issue Price by the appropriate conversion price for the Series B-1 Preferred Stock then in effect at the time of conversion (such conversion price referred to herein as the "Series B-1 Conversion Price"). The initial Series B-1 Conversion Price shall be \$0.2872 per share and shall be subject to adjustment as provided herein. The number of shares of Common Stock into which each share of Series C-1 Preferred Stock may be converted shall be determined by dividing the Series C-1 Original Issue Price by the appropriate conversion price for the Series C-1 Preferred Stock then in effect at the time of conversion (such conversion price referred to herein as the "Series C-1 Conversion Price"). The initial Series C-1 Conversion Price shall be \$0.4025 per share and shall be subject to adjustment as provided herein. The number of shares of Common Stock into which each share of Series D-1 Preferred Stock may be converted shall be determined by dividing the Series D-1 Original Issue Price by the appropriate conversion price for the Series D-1 Preferred Stock then in effect at the time of conversion (such conversion price referred to herein as the "Series D-1 Conversion Price"). The initial Series D-1 Conversion Price shall be \$0.7529 per share and shall be subject to adjustment as provided herein. The number of shares of Common Stock into which each share of Series E-1 Preferred Stock may be converted shall be determined by dividing the Series E-1 Original Issue Price by the appropriate conversion price for the Series E-1 Preferred Stock then in effect at the time of conversion (such conversion price referred to herein as the "Series E-1 Conversion Price"). The initial Series E-1 Conversion Price shall be \$0.6853 per share and shall be subject to adjustment as provided herein. The number of shares of Common Stock into which each share of Series AA-1 Preferred Stock may be converted is referred to as the "Series AA-1 Conversion Rate," the number of shares of Common Stock into which the Series B-1 Preferred Stock may be converted is referred to as the "Series B-1 Conversion Rate", the number of shares of Common Stock into which the Series C-1 Preferred Stock may be converted is referred to as the "Series C-1 Conversion Rate", the number of shares of Common Stock into which the Series D-1 Preferred Stock may be converted is referred to as the "Series D-1 Conversion Rate" and the number of shares of Common Stock into which the Series E-1 Preferred Stock may be converted is referred to as the "Series E-1 Conversion Rate".

The Series AA-1 Conversion Price, the Series B-1 Conversion Price, the Series C-1 Conversion Price, the Series D-1 Conversion Price and the Series E-1 Conversion Price are collectively referred to herein as the "Conversion Price." The Series AA-1 Conversion Rate, the Series B-1 Conversion Rate, the Series C-1 Conversion Rate, the Series D-1 Conversion Rate and the Series E-1 Conversion Rate are collectively referred to herein as the "Conversion Rate." Each Conversion Rate shall be subject to adjustment as described in this Section 4.

(b) *Automatic Conversion.* Each share of Preferred Stock shall automatically be converted into shares of Common Stock at the then effective applicable Conversion Rate for such share immediately upon the earlier of (i) the consummation of the Company's first firmly underwritten public offering of the Company's Common Stock registered under the Securities Act of 1933, as amended (the "Securities Act"), provided that aggregate gross proceeds to the Company exceed \$40,000,000 (before deducting underwriting discounts or commissions) (a "Qualifying Public Offering") or (ii) the date specified by written consent or agreement of the holders of at least a majority of the then outstanding shares of Preferred Stock, voting together as a single class, on an as-converted to Common Stock basis; provided, however, that the Series D-1 Preferred Stock shall not be automatically converted into Common Stock pursuant to this clause (ii) without the consent of the holders of seventy-five percent (75%) of the Series D-1 Preferred Stock and the Series E-1 Preferred Stock shall not be automatically converted into Common Stock pursuant to this clause (ii) without the consent of the holders of seventy-five percent (75%) of the Series E-1 Preferred Stock.

(c) *Mechanics of Conversion.* No fractional shares of Common Stock shall be issued upon conversion of Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Company shall pay cash equal to such fraction multiplied by the then fair market value of such fractional shares as determined by the Board of Directors. Before any holder of Preferred Stock shall be entitled to convert the same into full shares of Common Stock, and to receive certificates therefor, he shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Company or of any transfer agent for the Preferred Stock, and shall give written notice to the Company at such office that he elects to convert the same; provided, however, that in the event of an automatic conversion pursuant to Section 4(b), the outstanding shares of Preferred Stock shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Company or its transfer agent; provided, further, that the Company shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such automatic conversion unless either the certificates evidencing such shares of Preferred Stock are delivered to the Company or its transfer agent as provided above, or the holder notifies the Company or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement and provides, if requested by the Company, a bond satisfactory to the Company to indemnify the Company from any loss incurred by it in connection with such certificates.

The Company shall, as soon as practicable after such delivery, or after such agreement and indemnification, issue and deliver at such office to such holder of Preferred Stock, a certificate or certificates for the number of shares of Common Stock to which such holder shall be entitled as aforesaid and promptly pay (i) in cash (by check or wire) or, to the extent that sufficient funds are not then legally available therefor, in Common Stock (at the then-fair market

value, as determined above), any declared and unpaid dividends on shares of Preferred Stock being converted and (ii) in cash (by check or wire) the value of any fractional shares otherwise issuable upon such conversion. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date; provided, however, that if the conversion is in connection with the consummation of the first firmly underwritten public offering of the Company's Common Stock registered under the Securities Act (an "IPO") or any liquidation, dissolution or winding up of the Company (or deemed occurrence of such event pursuant to subsection 3(e) above) (a "Liquidation Event"), the conversion may, at the option of any holder tendering Preferred Stock for conversion, be conditioned upon the closing of the sale of securities pursuant to such IPO or Liquidation Event, in which event the person(s) entitled to receive the Common Stock issuable upon such conversion of the Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing or consummation of the IPO or Liquidation Event, subject to each Conversion Price adjustment, if any, pursuant to Section 4(d)(iii) below.

(d) *Adjustments to Conversion Price for Diluting Issues.* Each Conversion Price shall be subject to adjustment from time to time as follows:

(i) *No Adjustment of Conversion Price.* No adjustment in any Conversion Price of a particular series of Preferred Stock shall be made in respect of the issuance of Additional Shares of Common Stock, unless the consideration per share for the Additional Shares of Common Stock issued or deemed to be issued by the Company is less than the Conversion Price for such series of Preferred Stock in effect on the date of, and immediately prior to, the issue of such Additional Shares of Common Stock.

(ii) *Deemed Issuances of Additional Shares of Common Stock.*

(A) *Options and Convertible Securities.* In the event the Company at any time or from time to time after the Series E-1 Issue Date shall issue any Options or Convertible Securities or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained therein for a subsequent adjustment of such number) of Common Stock issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in the case such a record date shall have been fixed, as of the close of business on such record date, provided that Additional Shares of Common Stock shall not be deemed to have been issued with respect to an adjustment of any Conversion Price unless the consideration per share (determined pursuant to Section 4(d)(iv) hereof) of such Additional Shares of Common Stock would be less than such Conversion Price in effect on the date of and immediately prior to such issue, or such record date, as the case may be, and provided further that in any such case in which Additional Shares of Common Stock are deemed to be issued:

(1) no further adjustment in any Conversion Price shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock upon the exercise of such Options or conversion or exchange of such Convertible Securities;

(2) if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any increase or decrease in the consideration payable to the Company, or decrease or increase in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, each Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such increase or decrease becoming effective, be recomputed to take into effect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities;

(3) upon the expiration of any such Options or any rights of conversion or exchange under such Convertible Securities which shall not have been exercised, each Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto) and any subsequent adjustments based thereon shall, upon such expiration, be recomputed as if:

a. in the case of Convertible Securities or Options for Common Stock, the only Additional Shares of Common Stock issued were the shares of Common Stock, if any, actually issued upon the exercise of such Options or the conversion or exchange of such Convertible Securities and the consideration received therefor was the consideration actually received by the Company for the issue of such Options, whether or not exercised, plus the consideration actually received by the Company upon such exercise or for the issue of all such Convertible Securities which were actually converted or exchanged, plus the additional consideration, if any, actually received by the Company upon such conversion or exchange, and

b. in the case of Options for Convertible Securities only the Convertible Securities, if any, actually issued upon the exercise thereof were issued at the time of issue of such Options, and the consideration received by the Company for the Additional Shares of Common Stock deemed to have been then issued was the consideration actually received by the Company for the issue of such Options, whether or not exercised, plus the consideration deemed to have been received by the Company (determined pursuant to Section 4(d)(iv)) upon the issue of the Convertible Securities with respect to which such Options were actually exercised;

(4) no readjustment pursuant to clause (2) or (3) above shall have the effect of increasing any Conversion Price to an amount which exceeds the lower of (i) such Conversion Price on the original adjustment date, or (ii) such Conversion Price that would have resulted from any issuance of Additional Shares of Common Stock between the original adjustment date and such readjustment date;

(5) in the case of any Options which expire by their terms not more than 30 days after the date of issue thereof, no adjustment of any Conversion

Price shall be made until the expiration or exercise of all such Options issued on the same date, whereupon such adjustment shall be made in the same manner provided in clause (3) above; and

(6) if such record date shall have been fixed and such Options or Convertible Securities are not issued on the date fixed therefor, the adjustment previously made in any Conversion Price which became effective on such record date shall be canceled as of the close of business on such record date, and thereafter such Conversion Price shall be adjusted pursuant to this Section 4(d)(ii) as of the actual date of their issuance

(B) *Stock Dividends, Stock Distributions and Subdivisions.* In the event the Company at any time or from time to time after the Series E-1 Issue Date shall declare or pay any dividend or make any other distribution on the Common Stock payable in Common Stock or effect a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in Common Stock), then and in any such event, Additional Shares of Common Stock shall be deemed to have been issued:

(1) in the case of any such dividend or distribution, immediately after the close of business on the record date for the determination of holders of any class of securities entitled to receive such dividend or distribution, or

(2) in the case of any such subdivision, at the close of business on the date immediately prior to the date upon which such corporate action becomes effective

If such record date shall have been fixed and such dividend shall not have been paid on the payment date fixed therefor, the adjustment previously made in any Conversion Price which became effective on such record date shall be canceled as of the close of business on such record date, and thereafter such Conversion Price shall be adjusted pursuant to this Section 4(d)(ii) as of the time of actual payment of such dividend, if any.

(iii) *Adjustment of Conversion Price.*

(A) In the event the Company shall issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Section 4(d)(ii), but excluding Additional Shares of Common Stock issued pursuant to Section 4(d)(ii)(B), which event is dealt with in Section 4(d)(v) hereof), without consideration or for a consideration per share less than the applicable Conversion Price in effect on the date of and immediately prior to such issue, then and in such event, the Conversion Price of the affected Series of Preferred shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction (x) the numerator of which shall be (1) the number of shares of Common Stock outstanding immediately prior to such issue, plus (2) the number of shares of Common Stock which the aggregate consideration received by the Company for the total number of Additional Shares of Common Stock so issued would purchase at such Conversion Price, and (y) the denominator of which shall be (1) the number of shares of Common Stock outstanding immediately prior to such issue plus (2) the number of such Additional Shares of Common Stock so issued, provided that for the purposes of this Section 4(d)(iii), all shares of Common Stock issuable upon exercise, conversion or

exchange of outstanding Options, Convertible Securities and shares of Preferred Stock, as the case maybe, shall be deemed to be outstanding, and immediately after any Additional Shares of Common Stock are deemed issued pursuant to Section 4(d)(ii) above, such Additional Shares of Common Stock shall be deemed to be outstanding, and provided further that such Conversion Price shall not be so reduced at such time if the amount of such reduction would be an amount less than \$0.001, but any such amount shall be carried forward and reduction with respect thereto made at the time of and together with any subsequent reduction which, together with such amount and any other amount or amounts so carried forward, shall aggregate \$0.001 or more.

(iv) *Determination of Consideration.* For purposes of this Section 4(d), the consideration received by the Company for the issue of any Additional Shares of Common Stock shall be computed as follows:

(A) *Cash and Property.* Such consideration shall:

(1) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Company excluding amounts paid or payable for accrued interest or accrued dividends;

(2) insofar as it consists of property other than cash, be computed at the fair value thereof at the time of such issue, as determined in good faith by the affirmative vote of sixty-six and two-thirds percent (66 2/3%) of the Board of Directors; and

(3) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Company for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (1) and (2) above, as determined in good faith by the affirmative vote of sixty-six and two-thirds percent (66 2/3%) of the Board of Directors.

(B) *Options and Convertible Securities.* The consideration per share received by the Company for Additional Shares of Common Stock deemed to have been issued pursuant to Section 4(d)(ii)(A), relating to Options and Convertible Securities, shall be determined by dividing:

(1) the total amount, if any, received or receivable by the Company as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Company upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(2) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities.

(v) *Adjustments for Subdivisions, Combinations or Consolidation of Common Stock.* In the event the outstanding shares of Common Stock shall be subdivided (by stock split, or otherwise), into a greater number of shares of Common Stock, each Conversion Price then in effect shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, each Conversion Price then in effect shall, concurrently with the effectiveness of such combination or consolidation, be proportionately increased.

(vi) *Adjustments for Other Distributions.* In the event the Company at any time or from time to time makes, or fixes a record date for the determination of holders of Common Stock entitled to receive any distribution payable in securities of the Company other than shares of Common Stock and other than as otherwise adjusted in this Section 4(d), then and in each such event provision shall be made so that the holders of Preferred Stock shall receive upon conversion thereof, in addition to the number of shares of Common Stock receivable thereupon, the amount of securities of the Company which they would have received had their Preferred Stock been converted into Common Stock on the date of such event and had they thereafter, during the period from the date of such event to and including the date of conversion, retained such securities receivable by them as aforesaid during such period, subject to all other adjustments called for during such period under this Section 4(d) with respect to the rights of the holders of the Preferred Stock.

(vii) *Adjustments for Reclassification, Exchange and Substitution.* If the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for above), each Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted such that the Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Preferred Stock immediately before that change.

(viii) *Reorganization, Mergers, Consolidations, or Sales of Assets.* To the extent that Section 3 hereof does not apply or the holders of Preferred Stock waive their rights under Section 3, if at any time or from time to time, there shall be a capital reorganization of the Common Stock (other than a subdivision, combination, reclassification, or exchange of shares provided for elsewhere in this Section 4) or a merger or consolidation of the Company with or into another corporation, or the sale of all or substantially all of the Company's properties and assets to any other person, then, as a part of such reorganization, merger, consolidation, or sale, provision shall be made so that the holders of the Preferred Stock shall thereafter be entitled to receive upon conversion of the Preferred Stock held by them, the number of shares of stock or other securities or property of the Company, or of the successor Company resulting from such merger or consolidation or sale, to which a holder of Common Stock deliverable upon conversion would have been entitled upon such capital reorganization, merger, consolidation or sale. In any such case, appropriate adjustment shall be made in the application

of the provisions of this Section 4 with respect to the rights of the holders of the Preferred Stock after the reorganization, merger, consolidation, or sale to the end that the provisions of this Section 4 (including adjustment of each Conversion Price then in effect and the number of shares purchasable upon conversion of the Preferred Stock) shall be applicable after that event as nearly equivalent as may be practicable.

(e) *No Impairment.* The Company will not, by amendment of its Certificate of Incorporation or through any reorganization, recapitalization, transfer of assets, merger, consolidation, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Company but will at all times in good faith assist in the carrying out of all the provisions of this Section 4 and in the taking of all such action as may be necessary or appropriate in order to protect the conversion rights of the holders of the Preferred Stock against impairment

(f) *Certificate as to Adjustments.* Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Section 4, the Company at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the applicable Conversion Price at the time in effect, and (iii) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of Preferred Stock.

(g) *Notices of Record Date.* In the event that the Company shall propose at any time:

(i) to declare any dividend or distribution upon its Common Stock, whether in cash, property, stock or other securities, whether or not a regular cash dividend and whether or not out of earnings or earned surplus;

(ii) to offer for subscription pro rata to the holders of any class or series of its stock any additional shares of stock of any class or series or any other securities or property, or to receive any other rights;

(iii) to effect any reclassification or recapitalization of its Common Stock outstanding involving a change in the Common Stock; or

(iv) to merge with or into any other corporation, or sell, lease or convey all or substantially all its property or business, or to liquidate, dissolve or wind up, including without limitation, any deemed liquidation events as defined in Section 3(e) above;

then, in connection with each such event, this Company shall send to the holders of the Preferred Stock at least 30 days' prior written notice of the date on which a record shall be taken for such dividend, distribution or subscription rights (and specifying the date on which the holders of Common Stock shall be entitled thereto) or for determining rights to vote in respect of the matters referred to in (iii) and (iv) above. With regard to the matters referenced in (iii) and (iv)

above, such written notice shall describe the material terms and conditions of the proposed transaction and the Company shall thereafter give such holders prompt notice of any material changes. The transaction shall in no event take place sooner than 30 days after the Company has given the first notice provided for herein or sooner than 10 days after the Company has given notice of any material changes provided for herein; provided, however, that such periods may be shortened upon the written consent of the holders of the Preferred Stock that are entitled to such notice rights or similar notice rights and that represent at least a majority of the voting power of all then outstanding shares of the Preferred Stock, voting together as single class, on an as-converted to Common Stock basis.

Each such written notice shall be given as provided in Section 6 below.

(h) *Reservation of Stock Issuable Upon Conversion.* The Company shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Company will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose, including without limitation using its best efforts to obtain the requisite stockholder approval for any necessary amendment to this certificate.

5. *Voting.* The holders of Preferred Stock and the holders of Common Stock shall vote as a single class for all matters of which holders of Common Stock have the right to vote except as otherwise provided herein in this Section 5.

(a) *Preferred Stock.* Each holder of shares of Preferred Stock shall be entitled to the number of votes equal to the number of shares of Common Stock into which such shares of Preferred Stock held by such holder of Preferred Stock could then be converted. The holders of shares of the Preferred Stock shall be entitled to vote on all matters on which the Common Stock shall be entitled to vote. The holders of the Preferred Stock shall be entitled to notice of any stockholders' meeting in accordance with the Bylaws of the Company (the "Bylaws"). Fractional votes shall not, however, be permitted and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted), shall be rounded to the nearest whole number (with one-half being rounded upward).

(b) *Common Stock.* Except as otherwise required by law, each holder of shares of Common Stock shall be entitled to one vote for each share thereof held.

(c) *Election of Directors.* So long as at least 5,000,000 shares of Series E-1 Preferred Stock (subject to appropriate adjustment for any subsequent stock splits, stock dividends, recapitalizations and the like) remain outstanding, the holders of the Series E-1 Preferred Stock, voting together as a separate class and on an as-converted basis, shall be entitled to elect one director. So long as at least 8,500,000 shares of Series AA-1 Preferred Stock (subject

to appropriate adjustment for any subsequent stock splits, stock dividends, recapitalizations and the like) remain outstanding, the holders of the Series AA-1 Preferred Stock, voting together as a separate class, shall be entitled to elect four directors. So long as at least 6,034,389 shares of Series B-1 Preferred Stock (subject to appropriate adjustment for any subsequent stock splits, stock dividends, recapitalizations and the like) remain outstanding, the holders of the Series B-1 Preferred Stock, voting together as a separate class, shall be entitled to elect one director. The holders of Common Stock shall be entitled to elect one director. The holders of Preferred Stock and Common Stock, voting together as a single class and on an as-converted basis, shall be entitled to elect any remaining directors of the Company. Any vacancies on the Board of Directors shall be filled by vote of the holders of that class or series of stock originally entitled to elect the director whose absence or resignation created such vacancy

(d) *Amendments and Changes.*

(i) *No Series Voting.* Other than as provided herein or by law, there shall be no voting by any series of Preferred Stock as a separate class.

(ii) *Separate Vote of Preferred Stock.* So long as at least 30,000,000 shares of Preferred Stock (subject to appropriate adjustment for any subsequent stock splits, stock dividends, recapitalizations and the like) remain outstanding, the Company shall not, by merger, reclassification or otherwise, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least a majority of the then outstanding shares of Preferred Stock, voting together as a single class, on an as-converted to Common Stock basis:

(A) alter any provision of the Certificate of Incorporation or the Bylaws (including pursuant to any merger) if it would alter the rights, preferences, privileges or powers of or restrictions on the Preferred Stock or any series of Preferred Stock;

(B) authorize or create (by reclassification, merger or otherwise) any new class or series of shares having rights, preferences or privileges with respect to dividends or liquidation senior to or on a parity with the Preferred or having voting rights other than those granted to the Preferred Stock generally;

(C) approve any transaction or series of transactions deemed to be a liquidation of the Company;

(D) approve the purchase, redemption or other acquisition of any equity security, other than repurchases pursuant to stock restriction and other agreements approved by the Board of Directors upon termination of a consultant, director or employee;

(E) declare or pay any dividend or distribution with respect to the Common Stock;

(F) encumber or grant a security interest in all or substantially all of the assets of the Company in connection with an indebtedness of the Company;

(G) acquire a material amount of assets through a merger or purchase of all or substantially all of the assets or capital stock of another entity;

(H) increase the number of shares authorized for issuance under any existing equity incentive plan or creates any new equity incentive plan;

(I) the transfer of material assets of the Company to any person other than a wholly-owned subsidiary of the Company;

(J) increase or decrease (other than by redemption or conversion) the total number of authorized shares of Common Stock or Preferred Stock or any series of Preferred Stock;

(K) incur any indebtedness which has equity participation rights or is issued in conjunction with any equity securities, including any security exercised for, or convertible into, any equity security; or

(L) amend this Section 5(d)(ii).

(iii) *Separate Vote of Series E-1 Preferred Stock.* So long as at least 20,000,000 shares of Series E-1 Preferred Stock (subject to appropriate adjustment for any subsequent stock splits, stock dividends, recapitalizations and the like) remain outstanding, the Company shall not, by merger, reclassification or otherwise, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least a majority of the then-outstanding shares of Series E-1 Preferred Stock, voting together as a single class:

(A) alter any provision of the Amended and Restated Certificate of Incorporation or the Bylaws (including pursuant to a merger) if it would alter or adversely affect the rights, preferences, privileges or powers of or restrictions on the Series E-1 Preferred Stock in a manner differently and adversely compared to the other authorized and outstanding shares of Preferred Stock; or

(B) increase or decrease the authorized number of shares of the Series E-1 Preferred Stock.

(iv) *Separate Vote of Series D-1 Preferred Stock.* So long as at least 9,000,000 shares of Series D-1 Preferred Stock (subject to appropriate adjustment for any subsequent stock splits, stock dividends, recapitalizations and the like) remain outstanding, the Company shall not, by merger, reclassification or otherwise, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least a majority of the then-outstanding shares of Series D-1 Preferred Stock, voting together as a single class:

(A) alter any provision of the Amended and Restated Certificate of Incorporation or the Bylaws (including pursuant to a merger) if it would alter or adversely affect the rights, preferences, privileges or powers of or restrictions on the Series D-1 Preferred Stock in a manner differently and adversely compared to the other authorized and outstanding shares of Preferred Stock; or

(B) increase or decrease the authorized number of shares of the Series D-1 Preferred Stock.

6. **Notices.** Any notice, demand, offer, request or other communication required or permitted to be given by the Company to the holders of Preferred Stock pursuant to this Article IV shall be in writing and shall be deemed effectively given the earlier of (i) when received, (ii) when delivered personally, (iii) upon confirmed transmission of delivery by facsimile, (iv) one business day after being deposited with an overnight courier (with receipt of appropriate delivery) service or (v) four days after being deposited in the U.S. Mail, First Class with postage prepaid, and addressed to each holder of record at such holder's address appearing on the books of the Company.

7. **Status of Converted Stock.** In case any shares of Preferred Stock shall be converted pursuant to Section 4 hereof, the shares so converted or redeemed shall be cancelled and may not be reissued.

8. **Common Stock.** In addition to any other vote required by law, the affirmative vote of at least a majority of the then outstanding shares of Common Stock, voting together as a class, shall be required to:

(i) consummate the liquidation, dissolution or winding up of the Company; or

(ii) amend this Article IV; provided, however, that the number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms hereof) the affirmative vote of the holders of shares of stock of the Corporation representing a majority of the votes represented by all outstanding shares of stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law of Delaware.

V

Perpetual Existence. The Company is to have perpetual existence.

VI

Amendment, Repeal of Bylaws. In furtherance and not in limitation of the powers conferred by the laws of the State of Delaware, the Board of Directors is expressly authorized to adopt, amend or repeal the Bylaws of the Company.

VII

1. **Limitation of Directors' and Officers' Liability.** To the fullest extent permitted by the Delaware General Corporation Law as the same exists or may hereafter be amended, a director of the Company shall not be personally liable to the Company or its stockholders for monetary damages for breach of fiduciary duty as a director, except to the extent such exception from liability or limitation thereof is not permitted under the Delaware General Corporation Law as the same exists or may hereafter be amended. Neither any amendment nor repeal of this Article, nor the adoption of any provisions of this Twelfth Amended and Restated Certificate of Incorporation inconsistent with this Article, shall eliminate or reduce the effect of this Article in

respect of any matter occurring, or any cause of action, suit or claim that, but for this Article, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

To the fullest extent permitted by applicable law, this Company is authorized to provide indemnification of (and advancement of expenses to) directors, officers, employees and other agents of this Company (and any other persons to which Delaware law permits this Company to provide indemnification), through bylaw provisions, agreements with any such director, officer, employee or other agent or other person, vote of stockholders or disinterested directors, or otherwise, in excess of the indemnification and advancement otherwise permitted by the Delaware General Corporation Law, subject only to limits created by applicable Delaware law (statutory or nonstatutory), with respect to actions for breach of duty to a corporation, its stockholders and others.

2. ***Repeal or Modification.*** Neither any amendment, repeal or modification of the foregoing provisions of this Article VII by the stockholders of this Company, nor the adoption of any provision of this Company's Twelfth Amended and Restated Certificate of Incorporation inconsistent with this Article VII, shall adversely affect any right or protection of an agent of the Company existing at the time of such amendment, repeal or modification.

IN WITNESS WHEREOF, AOptix Technologies, Inc. has caused this Twelfth Amended and Restated Certificate of Incorporation to be signed by its President and Chief Executive Officer on this 10th day of July, 2013.

AOPTIX TECHNOLOGIES, INC.

By: /s/ DEAN SENNER
Dean Senner, President