

**AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
AMPLE COMMUNICATIONS, INC.**

Ample Communications, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), DOES HEREBY CERTIFY:

FIRST: The original Certificate of Incorporation of the Corporation was filed with the Secretary of State of Delaware on May 8, 2000 under the name of Ample Networks, Inc.

SECOND: The Amended and Restated Certificate of Incorporation of the Corporation in the form attached hereto as Exhibit A has been duly adopted in accordance with the provisions of sections 228, 242 and 245 of the General Corporation Law of the State of Delaware by the directors and stockholders of the Corporation.

THIRD: The Amended and Restated Certificate of Incorporation so adopted reads in full as set forth in Exhibit A attached hereto and is hereby incorporated herein by this reference.

IN WITNESS WHEREOF, the Corporation has caused this Certificate to be signed by the President and Chief Executive Officer this 16th day of January, 2004.

AMPLE COMMUNICATIONS, INC.

By /s/ Visveswar Akella
Visveswar Akella
President and Chief Executive Officer

Exhibit A

**AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
AMPLE COMMUNICATIONS, INC.**

FIRST: The name of the corporation (hereinafter called the "Corporation") is Ample Communications, Inc.

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

THIRD: The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH:

A. This Corporation is authorized to issue two classes of stock to be designated respectively Preferred Stock ("Preferred Stock") and Common Stock ("Common Stock"). The total number of shares of capital stock that the Corporation is authorized to issue is one hundred twenty-four million one hundred two thousand five hundred fifty (124,102,550). The total number of shares of Preferred Stock this Corporation shall have authority to issue is forty-four million one hundred two thousand five hundred fifty (44,102,550). The total number of shares of Common Stock this Corporation shall have authority to issue is eighty million (80,000,000). The Preferred Stock shall have a par value of \$0.0001 per share, and the Common Stock shall have a par value of \$0.0001 per share.

B. The Preferred Stock shall be divided into series. The first series shall consist of ten million four hundred seventy-eight thousand six hundred fifty-six (10,478,656) shares and is designated "Series A Preferred Stock." The second series shall consist of nineteen million three hundred thirty-eight thousand eighty (19,338,080) shares and is designated "Series B Preferred Stock." The third series shall consist of fourteen million two hundred eighty-five thousand eight hundred fourteen (14,285,814) and is designated "Series C Preferred Stock."

C. The powers, preferences, rights, restrictions, and other matters relating to the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock are as follows:

1. Dividends.

(a) The holders of the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock shall be entitled to receive dividends, out of any assets legally available

therefor, at the rate of, (i) in the case of the Series A Preferred Stock, \$0.1312 per share (as adjusted for any stock dividends, combinations or splits with respect to such shares) per annum and (ii) in the case of the Series B Preferred Stock and Series C Preferred Stock, \$0.084 per share and \$0.084 per share (as adjusted for any stock dividends, combinations or splits with respect to such shares) per annum, respectively. Such dividends shall be payable only when, as, and if declared by the Board of Directors and shall be noncumulative.

No dividends (other than those payable solely in the Common Stock of the Corporation) shall be paid on any Common Stock of the Corporation during any fiscal year of the Corporation until dividends in the total amount of, (i) in the case of the Series A Preferred Stock, \$0.1312 per share (as adjusted for any stock dividends, combinations or splits with respect to such shares) and (ii) in the case of the Series B Preferred Stock and Series C Preferred Stock, \$0.084 per share (as adjusted for any stock dividends, combinations or splits with respect to such shares) shall have been paid or declared and set apart during that fiscal year and any prior fiscal year in which dividends were declared but remain unpaid.

No dividend shall be paid on or declared and set apart for the shares of any series of Preferred Stock for any dividend period unless at the same time a like proportionate dividend for the same dividend period, ratably in proportion to the respective annual dividend rates fixed therefor, shall be paid on or declared and set apart for the shares of all other series of Preferred Stock.

No right shall accrue to holders of shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock by reason of the fact that dividends on said shares are not declared in any prior year, nor shall any unpaid dividend bear or accrue any interest.

(b) In the event the Corporation shall declare a distribution on Common Stock (other than any distribution described in Section C.2 hereof) payable in securities of other persons, evidences of indebtedness issued by the Corporation or other persons, assets (excluding cash dividends) or options or rights to purchase any such securities or evidences of indebtedness, then, in each such case, the holders of the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock shall be entitled to a proportionate share of any such distribution as though the holders of the Series A Preferred Stock, the Series B Preferred Stock and Series C Preferred Stock were the holders of the number of shares of Common Stock of the Corporation into which their respective shares of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock are convertible as of the record date fixed for the determination of the holders of Common Stock of the Corporation entitled to receive such distribution.

2. Liquidation Preference.

(a) In the event of any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, the holders of the Series A Preferred Stock, the Series B Preferred Stock and Series C Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets or surplus funds of the Corporation to the holders of the Common Stock by reason of their ownership thereof, (i) in the case of the Series A Preferred Stock, the amount of \$1.64 per share (as adjusted for any stock dividends, combinations or splits with respect to such shares, the "Original Series A Issue Price"), plus all declared but unpaid

dividends on such shares for each share of Series A Preferred Stock then held by them and (ii) in the case of the Series B Preferred Stock and Series C Preferred Stock, the amount of \$1.05 per share and \$1.05 per share (as adjusted for any stock dividends, combinations or splits with respect to such shares, the "Original Series B Issue Price" and the "Original Series C Issue Price," respectively), plus all declared but unpaid dividends on such shares for each share of Series B Preferred Stock and Series C Preferred Stock then held by them. The Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock shall rank on parity as to the receipt of the respective preferential amounts for each such series upon the occurrence of such event. If, upon the occurrence of such event, the assets and funds thus distributed among the holders of the Series A Preferred Stock, the Series B Preferred Stock and Series C Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amount, then the entire assets and funds of the Corporation legally available for distribution shall be distributed ratably among the holders of the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock, *pari passu*, in proportion to the preferential amount each such holder is otherwise entitled to receive. The Original Series A Issue Price, Original Series B Issue Price and the Original Series C Issue Price are collectively referred to herein as the "Original Issue Price."

(b) After the distribution described in Section 2(a) hereof has been paid, the remaining assets of the Corporation available for distribution to stockholders shall be distributed among the holders of the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Common Stock pro rata based on the number of shares of Common Stock held by each such holder (assuming conversion of all such Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock into Common Stock).

(c) For purposes of this Section C.2, (i) any acquisition of the Corporation by means of merger or other form of corporate reorganization in which outstanding shares of the Corporation are exchanged for securities or other consideration issued, or caused to be issued, by the acquiring corporation or its subsidiary (other than a mere reincorporation transaction), (ii) any transaction in which the stockholders of the Corporation as constituted immediately prior to such transaction do not own at least a majority of the voting securities of the surviving entity or (iii) a sale or an exclusive, perpetual license of all or substantially all of the assets of the Corporation, shall be treated as a liquidation, dissolution or winding up of the Corporation and shall entitle the holders of Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Common Stock to receive at the closing in cash, securities or other property (valued as provided in Section C.2(d) hereof) amounts as specified in Sections C.2(a) and C.2(b) hereof.

(d) Whenever the distribution provided for in this Section C.2 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 Board of Directors.

3. Voting Rights; Directors.

(a) Each holder of shares of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock shall be entitled to the number of votes equal to the number of shares of Common Stock into which such shares of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock could be converted and shall have voting rights and powers equal to the

voting rights and powers of the Common Stock (except as otherwise expressly provided herein or as required by law, voting together with the Common Stock as a single class) and shall be entitled to notice of any stockholders' meeting in accordance with the Bylaws of the Corporation. In all cases, any fractional share, determined on an aggregate conversion basis for each holder, shall be rounded to the nearest whole share (with one-half being rounded upward). Each holder of Common Stock shall be entitled to one (1) vote for each share of Common Stock held.

(b) The holders of Series A Preferred Stock, voting as a separate class, shall be entitled to elect two (2) members (the "Series A Directors") of the Board of Directors; provided, that at least one million five hundred thousand (1,500,000) shares of Series A Preferred Stock remain outstanding (as adjusted for stock dividends, stock splits, stock combinations and the like). The holders of Series B Preferred Stock, voting as a separate class, shall be entitled to elect one (1) member (the "Series B Director") of the Board of Directors; provided, that at least two million eight hundred ninety-five thousand (2,895,000) shares of Series B Preferred Stock remain outstanding (as adjusted for stock dividends, stock splits, stock combinations and the like). The holders of Series C Preferred Stock, voting as a separate class, shall be entitled to elect one (1) member (the "Series C Director" and together with the Series A Directors and the Series B Director, the "Preferred Directors") of the Board of Directors; provided, that at least one million four hundred twenty-eight thousand (1,428,000) shares of Series C Preferred Stock remain outstanding (as adjusted for stock dividends, stock splits, stock combinations and the like). The holders of Common Stock, voting as a separate class, shall be entitled to elect two (2) members of the Board of Directors (the "Common Directors"). All remaining directors shall be elected by the holders of (i) at least a majority of the Common Stock, (ii) at least a majority of the Series A Preferred Stock, (iii) at least a majority of the Series B Preferred Stock, and (iv) at least a majority of the Series C Preferred Stock, each voting as a separate class (the "Mutual Directors").

(c) In the case of any vacancy in the office of a director occurring among the directors elected by the holders of the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock or Common Stock pursuant to Section C.3(b) hereof, the remaining director or directors so elected by the holders of the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock or Common Stock, as the case may be, may, by affirmative vote of a majority thereof (or the remaining director so elected if there is one, or if there is no such director remaining, by the affirmative vote of the holders of a majority of the shares of that class or classes or series) elect a successor or successors to hold the office for the unexpired term of the director or directors whose place or places shall be vacant. Any director who shall have been elected by the holders of the Series A Preferred Stock, the Series B Preferred Stock, Series C Preferred Stock or Common Stock or any director so elected as provided in the preceding sentence hereof, may be removed during the aforesaid term of office, whether with or without cause, only by the affirmative vote of the holders of a majority of the Series A Preferred Stock, the Series B Preferred Stock, Series C Preferred Stock or Common Stock, as the case may be.

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

(a) Right To Convert. Subject to subsection (d), each share of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock shall be convertible, at the option

of the holder thereof, at any time after the date of issuance of such share, at the office of the Corporation or any transfer agent for the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Original Issue Price for the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock as the case may be, by the Conversion Price (defined below) for the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, in effect on the date the certificate is surrendered for conversion. After giving effect to the initial issuance of the Series C Preferred Stock on the Series C Issue Date (as defined in Section C.4(d)(i)(B) below), the "Conversion Price" per share for the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock shall be \$1.05, \$1.05 and \$1.05, respectively; provided, however, that the Conversion Price for the Series A Preferred Stock, the Series B Preferred Stock and Series C Preferred Stock shall be subject to adjustment as set forth in subsection (d).

(b) Automatic Conversion. Each share of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock shall automatically be converted into fully paid and nonassessable shares of Common Stock at its Conversion Price then in effect at such time immediately upon the earlier of (i) as to each series of Preferred Stock, the date specified by vote or written consent or agreement of holders of at least two-thirds (2/3) of the shares of such series of Preferred Stock then outstanding or (ii) immediately upon the closing of the sale of the Corporation's Common Stock in a firm commitment, underwritten public offering registered under the Securities Act of 1933, as amended (the "Securities Act"), other than a registration relating solely to a transaction under Rule 145 under such Securities Act (or any successor thereto) or to an employee benefit plan of the Corporation, at a public offering price (before underwriters' discounts and expenses) of at least \$6.50 per share (as adjusted for any stock splits, stock dividends or other recapitalizations) and with gross proceeds to the Corporation of at least \$30,000,000.

(c) Mechanics of Conversion.

(i) Before any holder of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock shall be entitled voluntarily to convert the same into shares of Common Stock, he shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or of any transfer agent for such stock, and shall give written notice to the Corporation at such office that he elects to convert the same (except that no such written notice of election to convert shall be necessary in the event of an automatic conversion pursuant to Section C.4(b) hereof) and shall state therein the number of shares to be converted and the name or names in which he wishes the certificate or certificates for shares of Common Stock to be issued. The Corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, a certificate or certificates for the number of shares of Common Stock to which he shall be entitled. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of surrender of the shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, 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.

(ii) If the conversion is in connection with an underwritten offering of securities pursuant to the Securities Act, the conversion may, at the option of any holder tendering shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock for conversion, be conditioned upon the closing with the underwriters of the sale of securities pursuant to such offering, in which event the person(s) entitled to receive the Common Stock upon conversion of the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, shall not be deemed to have converted such Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock until immediately prior to the closing of such sale of securities. If the conversion occurs in accordance with Section C.4(b) hereof, such conversion shall be deemed to have been made at the close of business on the day written notice of such election has been received by the Corporation, and the person or persons entitled to receive 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. Until certificates for such shares of the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock which has been converted have been delivered to the Corporation for exchange for certificates representing such Common Stock, such certificates shall be deemed to represent the shares of Common Stock into which such Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, has been converted.

(d) Adjustments to Conversion Price for Certain Diluting Issues.

(i) Special Definitions. For purposes of this Section C.4(d), the following definitions apply:

(A) "Options" shall mean rights, options, or warrants to subscribe for, purchase or otherwise acquire either Common Stock or Convertible Securities (as hereinafter defined).

(B) "Series C Issue Date" shall mean the date on which a share of Series C Preferred Stock was first issued.

(C) "Convertible Securities" shall mean any evidences of indebtedness, shares (other than Common Stock) or other securities convertible into or exchangeable for Common Stock.

(D) "Additional Shares of Common Stock" shall mean all shares of Common Stock issued (or, pursuant to Section C.4(d)(iii) hereof, deemed to be issued) by the Corporation after the Series C Issue Date, other than shares of Common Stock issued or issuable:

(1) upon conversion of shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock;

(2) to employees, directors, consultants or advisors under stock option, stock bonus or stock purchase plans or agreements or similar plans or agreements approved by the Board of Directors or an authorized committee thereof, or pursuant to warrants approved by the Board of Directors or an authorized committee thereof which approval, until the closing of the sale of equity securities in an offering of such securities having an aggregate purchase price of at least \$15,000,000 and a per share purchase price of at least \$3.28 (as adjusted for any stock splits, dividends, combinations, recapitalizations and the like) ("Qualified Equity Financing"), shall include at least one Series A Director, the Series B Director and the Series C Director;

(3) to lenders, lessors or recruiters in transactions which are not primarily for the purpose of equity financing and which are approved by the Board of Directors which approval, until the Qualified Equity Financing, shall include at least one Series A Director, the Series B Director and the Series C Director, if any;

(4) pursuant to licensing agreements or arrangements or strategic partnership agreements approved by the Board of Directors or an authorized committee thereof which approval, until the Qualified Equity Financing, shall include at least one Series A Director, the Series B Director and the Series C Director;

(5) as a dividend or distribution on Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock;

(6) for which adjustment of the Series A Conversion Price, Series B Conversion Price or Series C Conversion Price is made pursuant to Section C.4(c) hereof.

(7) which are approved by at least a majority of the outstanding shares of the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock pursuant to a consent or vote expressly stating that such consent or vote is being solicited in order that the proposed issuance of Common Stock (or deemed issuance pursuant to Section C.4(d)(iii) hereof) will not be considered an issuance of Additional Shares of Common Stock, and the Board of Directors or an authorized committee thereof; or

(8) pursuant to the acquisition of another business entity or business segment of any such entity by the Corporation by merger, purchase of substantially all of the assets or other reorganization (other than a mere reincorporation transaction) whereby the Corporation will own more than fifty percent (50%) of the voting power of such business entity or business segment of any such entity; provided, that such transaction is approved by the Board of Directors or an authorized

committee thereof which approval, until the Qualified Equity Financing, shall include at least one Series A Director, the Series B Director and the Series C Director.

(ii) No Adjustment of Conversion Price. Any provision herein to the contrary notwithstanding, no adjustment of the Conversion Price for a series of Preferred Stock shall be made in respect of the issuance of Additional Shares of Common Stock unless the consideration per share (determined pursuant to Section C.4(d)(v) hereof) for an Additional Share of Common Stock issued or deemed to be issued by the Corporation is less than the Conversion Price for such series of Preferred Stock in effect on the date of, and immediately prior to, such issue.

(iii) Deemed Issue of Additional Shares of Common Stock. In the event the Corporation at any time or from time to time after the Series C 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 then 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 designed to protect against dilution) 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 case such a record date shall have been fixed, as of the close of business on such record date; provided, that in any such case in which Additional Shares of Common Stock are deemed to be issued:

(A) no further adjustments in the Conversion Price for a series of Preferred Stock 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;

(B) 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 Corporation, or decrease or increase in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Conversion Price for any series of Preferred Stock 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 reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities (provided, however, that no such adjustment of the Conversion Price for any series of Preferred Stock shall affect Common Stock previously issued upon conversion of the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as applicable);

(C) upon the expiration of any such Options or any rights of conversion or exchange under such Convertible Securities which shall not have been exercised, the Conversion Price for any series of Preferred Stock 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:

(1) 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 Corporation for the issue of all such Options, whether or not exercised, plus the consideration actually received by the Corporation 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 Corporation upon such conversion or exchange, and

(2) 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 Corporation for the Additional Shares of Common Stock deemed to have been then issued was the consideration actually received by the Corporation for the issue of all such Options, whether or not exercised, plus the consideration deemed to have been received by the Corporation (determined pursuant to Section C.4(d) hereof) upon the issue of the Convertible Securities with respect to which such Options were actually exercised;

(D) no readjustment pursuant to clause (B) or (C) above shall have the effect of increasing the Conversion Price for a series of Preferred Stock to an amount which exceeds the lower of (1) the Conversion Price for such series of Preferred Stock on the original adjustment date, or (2) the Conversion Price that would have resulted from any issuance of Additional Shares of Common Stock between the original adjustment date and such readjustment date.

(E) in the case of any Options which expire by their terms not more than thirty (30) days after the date of issue thereof, no adjustment of the Conversion Price for a series of Preferred Stock shall be made until the expiration or exercise of all such Options, whereupon such adjustment shall be made in the same manner provided in clause (C) above.

(iv) Adjustment of Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event this Corporation, from the period beginning on the Series C Issue Date and through and including the date of the closing of the Qualified Equity Financing, shall issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Section C.4(d)(iii) hereof) without consideration or for a consideration per share less than the Conversion Price for any series of Preferred Stock in effect on the date of and immediately prior to such issue, then

and in such event, the Conversion Price for such series of Preferred Stock shall be reduced, concurrently with such issue, to a price equal to the lowest consideration per share at which such Additional Shares of Common Stock are issued (or deemed issued pursuant to Section C.4(iii) hereof).

Following the date of the closing of the Qualified Equity Financing, in the event this Corporation, at any time after such date, shall issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Section C.4(d)(iii) hereof) without consideration or for a consideration per share less than the Conversion Price for any series of Preferred Stock in effect on the date of and immediately prior to such issue, then and in such event, the Conversion Price for such series of Preferred Stock shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying the Conversion Price for such series of Preferred Stock by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common Stock so issued would purchase at the Conversion Price for such series of Preferred Stock in effect immediately prior to such issuance, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common Stock so issued. For the purpose of the above calculation, the number of shares of Common Stock outstanding immediately prior to such issue shall be calculated on a fully diluted basis, as if all outstanding shares of Preferred Stock and all Convertible Securities had been fully converted into shares of Common Stock immediately prior to such issuance and any outstanding warrants, options or other rights for the purchase of shares of stock or convertible securities had been fully exercised immediately prior to such issuance (and the resulting securities fully converted into shares of Common Stock, if so convertible as of such date), but not including in such calculation any additional shares of Common Stock issuable with respect to shares of Preferred Stock, Convertible Securities, or outstanding options, warrants or other rights for the purchase of shares of stock or convertible securities, solely as a result of the adjustment of the Conversion Price of any series of Preferred Stock (or other conversion ratios) resulting from the issuance of Additional Shares of Common Stock causing such adjustment.

(v) Determination of Consideration. For purposes of this Section C.4(d), the consideration received by the Corporation 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 Corporation 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 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 Corporation 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 Board of Directors.

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

(1) the total amount, if any, received or receivable by the Corporation 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 designed to protect against dilution) payable to the Corporation 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 designed to protect against the dilution) issuable upon the exercise of such Options or conversion or exchange of such Convertible Securities.

(e) Adjustments to Conversion Prices for Stock Dividends and for Combinations or Subdivisions of Common Stock. In the event that this Corporation at any time or from time to time after the Series C Issue Date shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock or in any right to acquire Common Stock for no consideration, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or 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, then the Conversion Price for any series of Preferred Stock in effect immediately prior to such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate. In the event that this Corporation shall declare or pay, without consideration, any dividend on the Common Stock payable in any right to acquire Common Stock for no consideration, then the Corporation shall be deemed to have made a dividend payable in

Common Stock in an amount of shares equal to the maximum number of shares issuable upon exercise of such rights to acquire Common Stock.

(f) Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the Series A Preferred Stock, Series B Preferred Stock and Series C 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 in Section C.4(c) hereof or a merger or other reorganization referred to in Section C.2(c) hereof), the Conversion Price for the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series A Preferred Stock, Series B Preferred Stock and Series C 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 Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock immediately before that change.

(g) No Impairment. The Corporation will not, by amendment of its Certificate of Incorporation or through any reorganization, transfer of assets, consolidation, merger, 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 Corporation, but will at all times in good faith assist in the carrying out of all the provisions of this Section C.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 Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock against impairment.

(h) Certificates as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price of any series of Preferred Stock pursuant to this Section C.4, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock a certificate executed by the Corporation's President or Chief Financial Officer setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Price for such series of Preferred Stock 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 the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock.

(i) Notices of Record Date. In the event that the Corporation 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 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 or consolidate with or into any other corporation, or sell, lease or convey all or substantially all of its assets, or to liquidate, dissolve or wind up; then, in connection with each such event, the Corporation shall send to the holders of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock:

(i) at least twenty (20) 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, if any, in respect of the matters referred to in (iii) and (iv) above; and

(ii) in the case of the matters referred to in (iii) and (iv) above, at least twenty (20) days' prior written notice of the date when the same shall take place (and specifying the date on which the holders of Common Stock shall be entitled to exchange their Common Stock for securities or other property deliverable upon the occurrence of such event).

(j) Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock pursuant hereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder in connection with any such conversion.

(k) Reservation of Stock Issuable Upon Conversion. The Corporation 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 Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Series A Preferred Stock, Series B Preferred Stock and Series C 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 Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock, the Corporation 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, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Certificate.

(l) Fractional Shares. No fractional share shall be issued upon the conversion of any share or shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fraction of a share of Common Stock, the Corporation shall, in lieu of issuing any fractional share, pay the holder otherwise entitled to such fraction a sum in cash equal to the fair market value of such fraction on the date of conversion (as determined in good faith by the Board of Directors).

(m) Notices. Any notice required by the provisions of this Section C.4 to be given to the holders of shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

5. Restrictions and Limitations.

(a) Preferred Stock. So long as four million eight hundred thirty-five thousand seven hundred forty-four (4,835,744) shares (subject to stock splits, stock dividends and the like) of Preferred Stock remain outstanding, the Corporation shall not, without the vote or written consent by the holders of at least a majority of the then outstanding shares of the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock, voting together as a single class:

(i) Redeem, purchase or otherwise acquire for value (or pay into or set aside for a sinking fund for such purpose) any share or shares of Preferred Stock otherwise than by conversion in accordance with Section C.4 hereof; provided, however, that this restriction shall not apply to the repurchase of shares of Preferred Stock pursuant to agreements under which the Corporation has the option to repurchase such shares pursuant to redemption provisions;

(ii) Redeem, purchase or otherwise acquire (or pay into or set aside for a sinking fund for such purpose) any of the Common Stock; provided, however, that this restriction shall not apply to the repurchase of shares of Common Stock from employees, officers, directors, consultants or other persons performing services for the Corporation or any subsidiary pursuant to agreements under which the Corporation has the option to repurchase such shares at the lesser of fair market value and cost;

(iii) Authorize or issue, or obligate itself to issue, any other equity security (including any security convertible into or exercisable for any equity security) senior to the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock as to dividend rights, redemption rights, liquidation preferences or conversion provisions; provided, however, that this shall not limit the Corporation's rights hereunder to issue a security on parity with the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock;

(iv) Adversely affect the rights, preferences or privileges of the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock;

(v) Increase or decrease the authorized number of shares of Preferred Stock; provided, however, that this restriction shall not apply to redemption or conversion;

(vi) Declare or pay any dividend on the Common Stock or Preferred Stock;

(vii) Authorize or approve the liquidation, dissolution or winding up of the Corporation, or merger, consolidation, sale of all or substantially all of its assets, as defined in Section C.2(c) herein;

- (viii) Increase or decrease the size of the Board of Directors; or
- (ix) Permit any subsidiary to issue or sell, or obligate itself to issue or sell, except to the Corporation or any wholly owned subsidiary, any stock of such subsidiary.
- (b) Series A Preferred Stock. So long as one million five hundred thousand (1,500,000) shares (subject to stock splits, stock dividends and the like) of Series A Preferred Stock remain outstanding, the Corporation shall not, without the vote or written consent by the holders of at least a majority of the then outstanding shares of the Series A Preferred Stock:
 - (i) Authorize or issue, or obligate itself to issue, any other equity security (including any security convertible into or exercisable for any equity security) senior to or on parity with the Series A Preferred Stock as to dividend rights, redemption rights, liquidation preferences, conversion provisions or voting rights; or
 - (ii) Adversely affect the rights, preferences or privileges of the Series A Preferred Stock.
- (c) Series B Preferred Stock. So long as two million eight hundred ninety-five thousand (2,895,000) shares (subject to stock splits, stock dividends and the like) of Series B Preferred Stock remain outstanding, the Corporation shall not, without the vote or written consent by the holders of at least a majority of the then outstanding shares of the Series B Preferred Stock:
 - (i) Authorize or issue, or obligate itself to issue, any other equity security (including any security convertible into or exercisable for any equity security) senior to or on parity with the Series B Preferred Stock as to dividend rights, redemption rights, liquidation preferences, conversion provisions or voting rights; or
 - (ii) Adversely affect the rights, preferences or privileges of the Series B Preferred Stock.
- (d) Series C Preferred Stock. So long as one million four hundred twenty-eight thousand (1,428,000) shares (subject to stock splits, stock dividends and the like) of Series C Preferred Stock remain outstanding, the Corporation shall not, without the vote or written consent by the holders of at least two-thirds (2/3) of the then outstanding shares of the Series C Preferred Stock:
 - (i) Authorize or issue, or obligate itself to issue, any other equity security (including any security convertible into or exercisable for any equity security) senior to or on parity with the Series C Preferred Stock as to dividend rights, redemption rights, liquidation preferences, conversion provisions or voting rights; or
 - (ii) Adversely affect the rights, preferences or privileges of the Series C Preferred Stock.

The provisions of this Section C.5 shall not limit or restrict any rights that any holder of Preferred Stock may have under the Delaware General Corporation Law.

6. No Reissuance of Preferred Stock. No share or shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock acquired by the Corporation by reason of redemption, purchase, conversion or otherwise shall be reissued, and all such shares shall be canceled, retired and eliminated from the shares which the Corporation shall be authorized to issue.

FIFTH: The Board of Directors is authorized to adopt, amend or repeal the Bylaws of the Corporation. Election of directors need not be by ballot.

SIXTH: The Corporation reserves the right to adopt, repeal, rescind or amend in any respect any provisions contained in this Amended and Restated Certificate of Incorporation in the manner now or hereafter prescribed by applicable law, and all rights conferred on stockholders herein are granted subject to this reservation.

SEVENTH: To the fullest extent permitted by the Delaware General Corporation Law, as the same exists or as may hereafter be amended, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of his fiduciary duty as a director.

(a) Right to Indemnification. Each person who was or is made a party or is threatened to be made a party to or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (hereinafter a "proceeding"), by reason of the fact that he or she is or was a director, officer of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan (hereinafter an "indemnitee"), whether the basis of such proceeding is alleged action in an official capacity as a director, officer, employee or agent or in any other capacity while serving as a director, officer, employee or agent, shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the Delaware General Corporation Law, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than permitted prior thereto), against all liability and loss (including judgments, fines, ERISA excise taxes or penalties and amounts paid in settlement) suffered and expenses and other amounts (including attorneys' fees) reasonably incurred by such indemnitee in connection therewith and such indemnification shall continue as to an indemnitee who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the indemnitee's heirs, executors and administrators; provided, however, that, except as provided in paragraph (c) hereof with respect to proceedings to enforce rights to indemnification, the Corporation shall indemnify any such indemnitee in connection with a proceeding (or part thereof) initiated by such indemnitee only if such proceeding (or part thereof) was authorized by the board of directors of the Corporation.

(b) Right to Advancement of Expenses. The right to indemnification conferred in paragraph (a) of this Section shall include the right to be paid by the Corporation the expenses incurred in defending any proceeding for which such right to indemnification is applicable in advance of its final disposition (hereinafter an "advancement of expenses"); provided, however, that, if the Delaware General Corporation Law requires, an advancement of expenses incurred by

an indemnitee in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such indemnitee, including, without limitation, service to an employee benefit plan) shall be made only upon delivery to the Corporation of an undertaking (hereinafter an "undertaking"), by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal (hereinafter a "final adjudication") that such indemnitee is not entitled to be indemnified for such expenses under this Section or otherwise.

(c) Right of Indemnitee to Bring Suit. The rights to indemnification and to the advancement of expenses conferred in paragraphs (a) and (b) of this Section shall be contract rights. If a claim under paragraph (a) or (b) of this Section is not paid in full by the Corporation within sixty (60) days after a written claim has been received by the Corporation, except in the case of a claim for an advancement of expenses, in which case the applicable period shall be twenty (20) days, the indemnitee may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim. If successful in whole or in part in any such suit, or in a suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the indemnitee shall be entitled to be paid also the expense of prosecuting or defending such suit. In (i) any suit brought by the indemnitee to enforce a right to indemnification hereunder (but not in a suit brought by the indemnitee to enforce a right to an advancement of expenses) it shall be a defense that, and (ii) in any suit by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking the Corporation shall be entitled to recover such expenses upon a final adjudication that, the indemnitee has not met any applicable standard for indemnification set forth in the Delaware General Corporation Law. Neither the failure of the Corporation (including its board of directors, independent legal counsel, or its stockholders) to have made a determination prior to the commencement of such suit that indemnification of the indemnitee is proper in the circumstances because the indemnitee has met the applicable standard of conduct set forth in the Delaware General Corporation Law, nor an actual determination by the Corporation (including its board of directors, independent legal counsel, or its stockholders) that the indemnitee has not met such applicable standard of conduct, shall create a presumption that the indemnitee has not met the applicable standard of conduct or, in the case of such a suit brought by the indemnitee, be a defense to such suit. In any suit brought by the indemnitee to enforce a right to indemnification or to an advancement of expenses hereunder, or by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the burden of proving that the indemnitee is not entitled to be indemnified, or to such advancement of expenses, under this Section or otherwise shall be on the Corporation.

(d) Non-Exclusivity of Rights. The rights to indemnification and to the advancement of expenses conferred in this Section shall not be exclusive of any other right which any person may have or hereafter acquire under any statute, the Corporation's certificate of incorporation, bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in an official capacity and as to action in another capacity while holding such office.

(e) Insurance. The Corporation may purchase and maintain insurance, at its expense, to protect itself and any present or former director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense,

liability or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the Delaware General Corporation Law.

(f) Indemnification of Employees and Agents of the Corporation. The Corporation may, to the extent authorized from time to time by the board of directors, grant rights to indemnification, and to the advancement of expenses to any employee or agent of the Corporation to the fullest extent of the provisions of this Section with respect to the indemnification and advancement of expenses of directors and officers of the Corporation.

(g) Amendment. Neither any amendment nor repeal of this Article SEVENTH, nor the adoption of any provision of the Corporation's Certificate of Incorporation inconsistent with this Article SEVENTH, shall eliminate or reduce the effect of this Article SEVENTH in respect of any matter occurring, or action or proceeding accruing or arising or that, but for this Article SEVENTH, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

If the Delaware General Corporation Law hereafter is amended to further eliminate or limit the liability of directors, then the liability of a director of the Corporation, in addition to the limitation on personal liability provided herein, shall be limited to the fullest extent permitted by the amended Delaware General Corporation Law. Any repeal or modification of this paragraph by the stockholders of the Corporation shall be prospective only, and shall not adversely affect any limitation on the personal liability of a director of the Corporation existing at the time of such repeal or modification.