

## EXHIBIT 4.1

### CEPHEID

#### 2000 EMPLOYEE STOCK PURCHASE PLAN

As Adopted May 10, 2000

As Amended and Restated March 18, 2003

**1. Establishment of Plan.** Cepheid (the “*Company*”) proposes to grant options for purchase of shares of the Company’s common stock, no par value per share (the “*Common Stock*”), to eligible employees of the Company and its Participating Subsidiaries (as hereinafter defined) pursuant to this Employee Stock Purchase Plan (this “*Plan*”). For purposes of this Plan, “*Parent Corporation*” and “*Subsidiary*” shall have the same meanings as “parent corporation” and “subsidiary corporation” in Sections 424(e) and 424(f), respectively, of the Internal Revenue Code of 1986, as amended (the “*Code*”). “*Participating Subsidiaries*” are Parent Corporations or Subsidiaries that the Board of Directors of the Company (the “*Board*”) designates from time to time as corporations that shall participate in this Plan. The Company intends this Plan to qualify as an “employee stock purchase plan” under Section 423 of the Code (including any amendments to or replacements of such Section), and this Plan shall be so construed. Any term not expressly defined in this Plan but defined for purposes of Section 423 of the Code shall have the same definition herein. A total of 798,183 shares of the Company’s Common Stock is reserved for issuance under this Plan as of March 18, 2003. In addition, on the first business day of each calendar year starting January 1, 2004, the aggregate number of shares of the Company’s Common Stock reserved for issuance under this Plan shall be increased by a number equal to the lesser of (i) 200,000 shares, (ii) 0.75% of the outstanding shares of capital stock on such date, or (iii) an amount determined by the Board or Committee. Such number shall be subject to adjustments effected in accordance with Section 14 of this Plan.

**2. Purpose.** The purpose of this Plan is to provide eligible employees of the Company and Participating Subsidiaries with a convenient means of acquiring an equity interest in the Company through payroll deductions, to enhance such employees’ sense of participation in the affairs of the Company and Participating Subsidiaries, and to provide an incentive for continued employment.

**3. Administration.** This Plan shall be administered by the Compensation Committee of the Board or, if no such Compensation Committee exists, by the Board (the “*Committee*”). Subject to the provisions of this Plan and the limitations of Section 423 of the Code or any successor provision in the Code, all questions of interpretation or application of this Plan shall be determined by the Committee and its decisions shall be final and binding upon all participants. Members of the Committee shall receive no compensation for their services in connection with the administration of this Plan, other than standard fees as established from time to time by the Board for services rendered by Board members serving on Board committees. All expenses incurred in connection with the administration of this Plan shall be paid by the Company.

**4. Eligibility.** Any employee of the Company or the Participating Subsidiaries is eligible to participate in an Offering Period (as hereinafter defined) under this Plan except the following:

(a) employees who are not employed by the Company or a Participating Subsidiary prior to the beginning of such Offering Period or prior to such other time period as specified by the Committee;

(b) employees who are customarily employed for twenty (20) hours or less per week;

(c) employees who are customarily employed for five (5) months or less in a calendar year;

(d) employees who, together with any other person whose stock would be attributed to such employee pursuant to Section 424(d) of the Code, own stock or hold options to purchase stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or any of its Participating Subsidiaries or who, as a result of being granted an option under this Plan with respect to such Offering Period, would own stock or hold options to purchase stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or any of its Participating Subsidiaries; and

(e) individuals who provide services to the Company or any of its Participating Subsidiaries as independent contractors who are reclassified as common law employees for any reason except for federal income and employment tax purposes.

**5. Offering Dates.** The offering periods of this Plan that commenced prior to the date of the adoption of the amendment and restatement of this Plan on March 18, 2003 (a “**Commenced Offering Period**”) shall be of twenty-four (24) months duration commencing on July 1, or the soonest business day thereafter. Any such Commenced Offering Period shall be subject to the terms of the Commenced Offering Period and the terms of the Plan as in effect immediately prior to the time of the adoption of the amendment and restatement of the Plan. Following the adoption of the amendment and restatement of the Plan on March 18, 2003, the offering periods (each, an “**Offering Period**”) shall be of twenty-four (24) months duration commencing on February 1 and August 1 of each year and ending on January 31 and July 31 of each year; provided that the first Offering Period after amendment and restatement of this Plan shall commence on the first day of the month following such amendment and restatement and shall be of less than twenty-four (24) months duration. Each Offering Period shall consist of four (4) six month purchase periods (individually, a “**Purchase Period**”) during which payroll deductions of the participants are accumulated under this Plan; provided that the first Purchase Period of the first Offering Period after amendment and restatement of this Plan shall commence on the first day of the month following such amendment and restatement and shall be of less than six (6) months duration. The first business day of each Offering Period is referred to as the “**Offering Date**”. The last business day of each Purchase Period is referred to as the “**Purchase Date**”. The Committee shall have the power to change the Offering Dates, the Purchase Dates and the duration of the Offering Periods or Purchase Periods without stockholder approval if such change is announced prior to the relevant Offering Period or prior to such other time period as specified by the Committee.

**6. Participation in this Plan.** Eligible employees may become participants in an Offering Period under this Plan on the Offering Date after satisfying the eligibility requirements by delivering a subscription agreement to the Company prior to such Offering Date, or such other time period as specified by the Committee; provided, however, that all employees enrolled in the Commenced Offering Period may not enroll in an Offering Period until the termination of such Commenced Offering Period or their withdrawal from such Commenced Offering Period pursuant to Section 11 below. Notwithstanding the foregoing, the Committee may set a later time for filing the subscription agreement authorizing payroll deductions for all eligible employees with respect to a given Offering Period. An eligible employee who does not deliver a subscription agreement to the Company after becoming eligible to participate in an Offering Period shall not participate in that Offering Period or any subsequent Offering Period unless such employee enrolls in this Plan by filing a subscription agreement with the Company prior to such Offering Period, or such other time period as specified by the Committee. Once an employee becomes a participant in an Offering Period by filing a subscription agreement, or if an employee is participating in the Commenced Offering Period, such employee will automatically participate in the Offering Period commencing immediately following the last day of either the prior Offering Period or the Commenced Offering Period, as applicable, unless the employee withdraws or is deemed to withdraw from this Plan or terminates further participation in the Offering Period as set forth in Section 11 below. Such participant is not required to file any additional subscription agreement in order to continue participation in this Plan.

**7. Grant of Option on Enrollment.** Enrollment by an eligible employee in this Plan with respect to an Offering Period will constitute the grant (as of the Offering Date) by the Company to such employee of an option to purchase on the Purchase Date up to that number of shares of Common Stock of the Company determined by a fraction, the numerator of which is the amount accumulated in such employee’s payroll deduction account during

such Purchase Period and the denominator of which is the lower of (i) eighty-five percent (85%) of the fair market value of a share of the Company's Common Stock on the Offering Date, or (ii) eighty-five percent (85%) of the fair market value of a share of the Company's Common Stock on the Purchase Date, provided, however, that the number of shares of the Company's Common Stock subject to any option granted pursuant to this Plan shall not exceed the lesser of (x) the maximum number of shares set by the Committee pursuant to Section 10(c) below with respect to the applicable Purchase Date, or (y) the maximum number of shares which may be purchased pursuant to Section 10(b) below with respect to the applicable Purchase Date. The fair market value of a share of the Company's Common Stock shall be determined as provided in Section 8 below.

**8. Purchase Price.** The purchase price per share at which a share of Common Stock will be sold in any Offering Period shall be eighty-five percent (85%) of the lesser of:

- (a) The fair market value on the Offering Date; or
- (b) The fair market value on the Purchase Date.

The term "***fair market value***" means, as of any date, the value of a share of the Company's Common Stock determined as follows:

- (a) if such Common Stock is then quoted on the Nasdaq National Market, its closing price on the Nasdaq National Market on the date of determination as reported in The Wall Street Journal;
- (b) if such Common Stock is publicly traded and is then listed on a national securities exchange, its closing price on the date of determination on the principal national securities exchange on which the Common Stock is listed or admitted to trading as reported in The Wall Street Journal; or
- (c) if such Common Stock is publicly traded but is not quoted on the Nasdaq National Market nor listed or admitted to trading on a national securities exchange, the average of the closing bid and asked prices on the date of determination as reported in The Wall Street Journal.

**9. Payment Of Purchase Price; Changes In Payroll Deductions; Issuance Of Shares.**

(a) The purchase price of the shares will be accumulated by regular payroll deductions made during each Offering Period. The deductions are made as a percentage of the participant's compensation in one percent (1%) increments not less than one percent (1%), nor greater than fifteen percent (15%) or such lower limit set by the Committee. Compensation shall mean all W-2 cash compensation, including, but not limited to, base salary, wages, commissions, overtime, shift premiums, plus draws against commissions, provided, however, that for purposes of determining a participant's compensation, any election by such participant to reduce his or her regular cash remuneration under Sections 125 or 401(k) of the Code shall be treated as if the participant did not make such election. Payroll deductions shall commence on the first payday of the Offering Period and shall continue to the end of the Offering Period unless sooner altered or terminated as provided in this Plan.

(b) A participant may increase or decrease the rate of payroll deductions during an Offering Period by filing with the Company a new authorization for payroll deductions, in which case the new rate shall become effective for the next payroll period commencing after the Company's receipt of the authorization and shall continue for the remainder of the Offering Period, unless changed as described below. Such change in the rate of payroll deductions may be made at any time during an Offering Period. A participant may increase or decrease the rate of payroll deductions for any subsequent Offering Period by filing with the Company a new authorization for payroll deductions prior to the beginning of such Offering Period, or such other time period as specified by the Committee.

(c) A participant may reduce his or her payroll deduction percentage to zero during an Offering Period by filing with the Company a request for cessation of payroll deductions. Such reduction shall be effective

beginning with the next payroll period after the Company's receipt of the request and no further payroll deductions will be made for the duration of the Offering Period. Payroll deductions credited to the participant's account prior to the effective date of the request shall be used to purchase shares of Common Stock of the Company in accordance with Section (e) below. A participant may not resume making payroll deductions during the Offering Period in which he or she reduced his or her payroll deductions to zero.

(d) All payroll deductions made for a participant are credited to his or her account under this Plan and are deposited with the general funds of the Company. No interest accrues on the payroll deductions. All payroll deductions received or held by the Company may be used by the Company for any corporate purpose, and the Company shall not be obligated to segregate such payroll deductions.

(e) On each Purchase Date, so long as this Plan remains in effect and provided that the participant has not submitted a signed and completed withdrawal form before that date which notifies the Company that the participant wishes to withdraw from that Offering Period under this Plan and have all payroll deductions accumulated in the account maintained on behalf of the participant as of that date returned to the participant, the Company shall apply the funds then in the participant's account to the purchase of whole shares of Common Stock reserved under the option granted to such participant with respect to the Offering Period to the extent that such option is exercisable on the Purchase Date. The purchase price per share shall be as specified in Section 8 of this Plan. Any cash remaining in a participant's account after such purchase of shares shall be refunded to such participant in cash, without interest; provided, however, that any amount remaining in such participant's account on a Purchase Date which is less than the amount necessary to purchase a full share of Common Stock of the Company shall be carried forward, without interest, into the next Purchase Period or Offering Period, as the case may be. In the event that this Plan has been oversubscribed, all funds not used to purchase shares on the Purchase Date shall be returned to the participant, without interest. No Common Stock shall be purchased on a Purchase Date on behalf of any employee whose participation in this Plan has terminated prior to such Purchase Date.

(f) As promptly as practicable after the Purchase Date, the Company shall issue shares for the participant's benefit representing the shares purchased upon exercise of his or her option.

(g) During a participant's lifetime, his or her option to purchase shares hereunder is exercisable only by him or her. The participant will have no interest or voting right in shares covered by his or her option until such option has been exercised.

#### **10. Limitations on Shares to be Purchased.**

(a) No participant shall be entitled to purchase stock under this Plan at a rate which, when aggregated with his or her rights to purchase stock under all other employee stock purchase plans of the Company or any Subsidiary, exceeds \$25,000 in fair market value, determined as of the Offering Date (or such other limit as may be imposed by the Code) for each calendar year in which the employee participates in this Plan. The Company shall automatically suspend the payroll deductions of any participant as necessary to enforce such limit provided that when the Company automatically resumes such payroll deductions, the Company must apply the rate in effect immediately prior to such suspension.

(b) No more than two hundred percent (200%) of the number of shares determined by using eighty-five percent (85%) of the fair market value of a share of the Company's Common Stock on the Offering Date as the denominator may be purchased by a participant on any single Purchase Date.

(c) No participant shall be entitled to purchase more than the Maximum Share Amount (as defined below) on any single Purchase Date. Prior to the commencement of any Offering Period or prior to such time period as specified by the Committee, the Committee may, in its sole discretion, set a maximum number of shares which may be purchased by any employee at any single Purchase Date (hereinafter the "**Maximum Share Amount**"). Until otherwise determined by the Committee, there shall be no Maximum Share Amount. In no event shall the Maximum Share Amount exceed the amounts permitted under Sections 10(a) and 10(b) above. If a new

Maximum Share Amount is set, then all participants must be notified of such Maximum Share Amount prior to the commencement of the next Offering Period. The Maximum Share Amount shall continue to apply with respect to all succeeding Purchase Dates and Offering Periods unless revised by the Committee as set forth above.

(d) If the number of shares to be purchased on a Purchase Date by all employees participating in this Plan exceeds the number of shares then available for issuance under this Plan, then the Company will make a pro rata allocation of the remaining shares in as uniform a manner as shall be reasonably practicable and as the Committee shall determine to be equitable. In such event, the Company shall give written notice of such reduction of the number of shares to be purchased under a participant's option to each participant affected.

(e) Any payroll deductions accumulated in a participant's account which are not used to purchase stock due to the limitations in this Section 10 shall be returned to the participant as soon as practicable after the end of the applicable Purchase Period, without interest.

#### **11. Withdrawal.**

(a) Each participant may withdraw from the Commenced Offering Period or an Offering Period under this Plan by signing and delivering to the Company a written notice to that effect on a form provided for such purpose. Such withdrawal may be elected at any time prior to the end of the Commenced Offering Period or an Offering Period, as applicable, or such other time period as specified by the Committee.

(b) Upon withdrawal from this Plan, the accumulated payroll deductions shall be returned to the withdrawn participant, without interest, and his or her interest in this Plan shall terminate. In the event a participant voluntarily elects to withdraw from this Plan, he or she may not resume his or her participation in this Plan during the same Offering Period, but he or she may participate in any Offering Period under this Plan which commences on a date subsequent to such withdrawal by filing a new authorization for payroll deductions in the same manner as set forth in Section 6 above for initial participation in this Plan.

(c) If the Fair Market Value on the first day of the current Offering Period or the Commenced Offering Period in which a participant is enrolled is higher than the Fair Market Value on the first day of any subsequent Offering Period, the Company will automatically enroll such participant in the subsequent Offering Period. Any funds accumulated in a participant's account prior to the first day of such subsequent Offering Period will be applied to the purchase of shares on the Purchase Date immediately prior to the first day of such subsequent Offering Period, if any.

**12. Termination of Employment.** Termination of a participant's employment for any reason, including retirement, death or the failure of a participant to remain an eligible employee of the Company or of a Participating Subsidiary, immediately terminates his or her participation in this Plan. In such event, the payroll deductions credited to the participant's account will be returned to him or her or, in the case of his or her death, to his or her legal representative, without interest. For purposes of this Section 12, an employee will not be deemed to have terminated employment or failed to remain in the continuous employ of the Company or of a Participating Subsidiary in the case of sick leave, military leave, or any other leave of absence approved by the Board; provided that such leave is for a period of not more than ninety (90) days or reemployment upon the expiration of such leave is guaranteed by contract or statute.

**13. Return of Payroll Deductions.** In the event a participant's interest in this Plan is terminated by withdrawal, termination of employment or otherwise, or in the event this Plan is terminated by the Board, the Company shall deliver to the participant all payroll deductions credited to such participant's account. No interest shall accrue on the payroll deductions of a participant in this Plan.

**14. Capital Changes.** Subject to any required action by the stockholders of the Company, the number of shares of Common Stock covered by each option under this Plan which has not yet been exercised and the number of shares of Common Stock which have been authorized for issuance under this Plan but have not yet been placed under option (collectively, the "**Reserves**"), as well as the price per share of Common Stock covered by

each option under this Plan which has not yet been exercised, shall be proportionately adjusted for any increase or decrease in the number of issued and outstanding shares of Common Stock of the Company resulting from a stock split or the payment of a stock dividend (but only on the Common Stock) or any other increase or decrease in the number of issued and outstanding shares of Common Stock effected without receipt of any consideration by the Company; provided, however, that conversion of any convertible securities of the Company shall not be deemed to have been “effected without receipt of consideration”. Such adjustment shall be made by the Committee, whose determination shall be final, binding and conclusive. Except as expressly provided herein, no issue by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock subject to an option.

In the event of the proposed dissolution or liquidation of the Company, the Commenced Offering Period and any other Offering Period will terminate immediately prior to the consummation of such proposed action, unless otherwise provided by the Committee. The Committee may, in the exercise of its sole discretion in such instances, declare that this Plan shall terminate as of a date fixed by the Committee and give each participant the right to purchase shares under this Plan prior to such termination. In the event of (i) a merger or consolidation in which the Company is not the surviving corporation (other than a merger or consolidation with a wholly-owned subsidiary, a reincorporation of the Company in a different jurisdiction, or other transaction in which there is no substantial change in the stockholders of the Company or their relative stock holdings and the options under this Plan are assumed, converted or replaced by the successor corporation, which assumption will be binding on all participants), (ii) a merger in which the Company is the surviving corporation but after which the stockholders of the Company immediately prior to such merger (other than any stockholder that merges, or which owns or controls another corporation that merges, with the Company in such merger) cease to own their shares or other equity interest in the Company, (iii) the sale of all or substantially all of the assets of the Company or (iv) the acquisition, sale, or transfer of more than 50% of the outstanding shares of the Company by tender offer or similar transaction, the Plan will continue with regard to the Commenced Offering Period or Offering Periods that commenced prior to the closing of the proposed transaction and shares will be purchased based on the Fair Market Value of the surviving corporation’s stock on each Purchase Date, unless otherwise provided by the Committee.

The Committee may, if it so determines in the exercise of its sole discretion, also make provision for adjusting the Reserves, as well as the price per share of Common Stock covered by each outstanding option, in the event that the Company effects one or more reorganizations, recapitalizations, rights offerings or other increases or reductions of shares of its outstanding Common Stock, or in the event of the Company being consolidated with or merged into any other corporation.

**15. Nonassignability.** Neither payroll deductions credited to a participant’s account nor any rights with regard to the exercise of an option or to receive shares under this Plan may be assigned, transferred, pledged or otherwise disposed of in any way (other than by will, the laws of descent and distribution or as provided in Section 22 below) by the participant. Any such attempt at assignment, transfer, pledge or other disposition shall be void and without effect.

**16. Reports.** Individual accounts will be maintained for each participant in this Plan. Each participant shall receive promptly after the end of each Purchase Period a report of his or her account setting forth the total payroll deductions accumulated, the number of shares purchased, the per share price thereof and the remaining cash balance, if any, carried forward to the next Purchase Period or Offering Period, as the case may be.

**17. Notice of Disposition.** Each participant shall notify the Company in writing if the participant disposes of any of the shares purchased in the Commenced Offering Period or any Offering Period pursuant to this Plan if such disposition occurs within two (2) years from the Offering Date or within one (1) year from the Purchase Date on which such shares were purchased (the “*Notice Period*”). The Company may, at any time during the Notice Period, place a legend or legends on any certificate representing shares acquired pursuant to this Plan requesting the Company’s transfer agent to notify the Company of any transfer of the shares. The obligation of the

participant to provide such notice shall continue notwithstanding the placement of any such legend on the certificates.

**18. No Rights to Continued Employment.** Neither this Plan nor the grant of any option hereunder shall confer any right on any employee to remain in the employ of the Company or any Participating Subsidiary, or restrict the right of the Company or any Participating Subsidiary to terminate such employee's employment.

**19. Equal Rights And Privileges.** All eligible employees shall have equal rights and privileges with respect to this Plan so that this Plan qualifies as an "employee stock purchase plan" within the meaning of Section 423 or any successor provision of the Code and the related regulations. Any provision of this Plan which is inconsistent with Section 423 or any successor provision of the Code shall, without further act or amendment by the Company, the Committee or the Board, be reformed to comply with the requirements of Section 423. This Section 19 shall take precedence over all other provisions in this Plan.

**20. Notices.** All notices or other communications by a participant to the Company under or in connection with this Plan shall be deemed to have been duly given when received in the form specified by the Company at the location, or by the person, designated by the Company for the receipt thereof.

**21. Term; Stockholder Approval.** The Plan was originally adopted by the Board on April 3, 2000 and approved by the Company's shareholders on May 10, 2000. The amendment and restatement of the Plan was adopted by the Board on March 18, 2003, and became effective on that date. This Plan shall continue until the earlier to occur of (a) termination of this Plan by the Board (which termination may be effected by the Board at any time), (b) issuance of all of the shares of Common Stock reserved for issuance under this Plan, or (c) ten (10) years from the adoption of this amended and restated Plan by the Board.

**22. Designation of Beneficiary.**

(a) A participant may file a written designation of a beneficiary who is to receive any shares and cash, if any, from the participant's account under this Plan in the event of such participant's death subsequent to the end of an Purchase Period but prior to delivery to him of such shares and cash. In addition, a participant may file a written designation of a beneficiary who is to receive any cash from the participant's account under this Plan in the event of such participant's death prior to a Purchase Date.

(b) Such designation of beneficiary may be changed by the participant at any time by written notice. In the event of the death of a participant and in the absence of a beneficiary validly designated under this Plan who is living at the time of such participant's death, the Company shall deliver such shares or cash to the executor or administrator of the estate of the participant, or if no such executor or administrator has been appointed (to the knowledge of the Company), the Company, in its discretion, may deliver such shares or cash to the spouse or to any one or more dependents or relatives of the participant, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

**23. Conditions Upon Issuance of Shares; Limitation on Sale of Shares.** Shares shall not be issued with respect to an option unless the exercise of such option and the issuance and delivery of such shares pursuant thereto shall comply with all applicable provisions of law, domestic or foreign, including, without limitation, the Securities Act of 1933, the Securities Exchange Act of 1934, as amended, the rules and regulations promulgated thereunder, and the requirements of any stock exchange or automated quotation system upon which the shares may then be listed, and shall be further subject to the approval of counsel for the Company with respect to such compliance.

**24. Applicable Law.** The Plan shall be governed by the substantive laws (excluding the conflict of laws rules) of the State of California.

**25. Amendment or Termination of this Plan.** The Board may at any time amend, terminate or extend the term of this Plan, except that any such termination cannot affect options previously granted under this Plan, nor may any amendment make any change in an option previously granted which would adversely affect the right of any participant, nor may any amendment be made without approval of the stockholders of the Company obtained in accordance with Section 21 above within twelve (12) months of the adoption of such amendment (or earlier if required by Section 21) if such amendment would:

- (a) increase the number of shares that may be issued under this Plan; or
- (b) change the designation of the employees (or class of employees) eligible for participation in this Plan.

Notwithstanding the foregoing, the Board may make such amendments to the Plan as the Board determines to be advisable, if the continuation of the Plan, the Commenced Offering Period or any Offering Period would result in financial accounting treatment for the Plan that is different from the financial accounting treatment in effect on the date this Plan is adopted by the Board.