



PTC INC.

AMENDED AND RESTATED BY - LAWS

ARTICLE 1 - Stockholders

1.1 Place of Meetings; Participation by Remote Communications. Meetings of stockholders shall be held at the principal office of the corporation or such different place as is fixed by the Board of Directors or the Chief Executive Officer and stated in the notice of the meeting. The corporation may permit stockholders and proxyholders not physically present at a meeting of stockholders to participate in and be deemed present in person and vote at the meeting by means of remote communications, provided that (a) the corporation shall have implemented reasonable measures (i) to provide such stockholders and proxyholders a reasonable opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings and (ii) to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxyholder and (b) the corporation shall maintain a record of each vote cast or other action taken at the meeting by means of remote communication.

1.2 Annual Meeting. The annual meeting of stockholders shall be held on the date (which shall not be a legal holiday in the place where the meeting is to be held) and at the time fixed by the Board of Directors or the Chief Executive Officer and stated in the notice of the meeting. The annual meeting shall be held for the purpose of electing directors and such other purposes as are specified in the notice of meeting. To the extent a stockholder is entitled as a matter of law independent of these By-Laws to propose nominations or other business to be considered at an annual meeting, such stockholder may do so only in compliance with these By-Laws and any other applicable requirements. If no annual meeting is held in accordance with the foregoing provisions, a special meeting may be held in lieu of the annual meeting, and any action taken at that special meeting shall have the same effect as if it had been taken at the annual meeting, and in such case all references in these By-Laws to the annual meeting of stockholders shall be deemed to refer to such special meeting.

1.3 Special Meetings. Special meetings of stockholders may be called by the Chief Executive Officer or by the Board of Directors. Upon written application, in accordance with these By-Laws and any other applicable requirements, of one or more stockholders who are entitled to vote and who hold at least 10% (or 40% in the event the corporation has a class of voting stock registered under the Securities Exchange Act of 1934, as amended) of the capital stock entitled to vote at the meeting, special meetings shall be called by the Secretary, or in the case of the death, absence, incapacity or refusal of the Secretary, by any other officer.

1.4 Notice of Meetings; Waiver. A written notice of each meeting of stockholders, stating the place, date and hour thereof, and the purposes for which the meeting is to be held, shall be given by the Secretary, Assistant Secretary or other person calling the meeting at least seven, and no more than sixty, days before the meeting to each stockholder entitled to vote at the meeting and to each stockholder who by law, by the Articles of Organization or by these By-Laws is entitled to such notice, by leaving such notice with him or at his residence or usual place of business, by mailing it postage prepaid and addressed to him at his address as it appears in the records of the corporation, or by electronic transmission. Whenever any notice is required to be given to a stockholder by law, by the Articles of Organization or by these By-Laws, no such notice need be given if a written (including electronically transmitted) waiver of notice,

executed before or after the meeting by the stockholder or his authorized attorney, is filed with the records of the meeting. A stockholder's attendance at a meeting (i) waives objection to lack of notice or defective notice of the meeting, unless the stockholder at the beginning of the meeting objects to holding the meeting or transacting business at the meeting and (ii) waives objection to consideration of a particular matter at the meeting that is not within the purpose or purposes described in the meeting notice, unless the stockholder objects to considering the matter when it is presented.

1.5 Quorum. Unless the Articles of Organization otherwise provide, the holders of a majority of the shares of stock issued, outstanding and entitled to vote on any matter shall constitute a quorum with respect to that matter, except that if two or more voting groups are entitled to vote separately then, in the case of each such voting group, a quorum shall consist of the holders of a majority of the votes entitled to be cast on the matter by the voting group. Shares owned directly or indirectly by the corporation shall not be counted in determining the total number of shares outstanding for this purpose. Shares once represented for any purpose at a meeting are deemed present for quorum purposes for the remainder of the meeting and for any adjournment of that meeting unless (i) the stockholder attends solely to object to lack of notice, defective notice or the conduct of the meeting on other grounds and does not vote the shares or otherwise consent that such shares are to be deemed present, or (ii) in the case of an adjournment, a new record date is or shall be set for that adjourned meeting.

1.6 Postponements; Adjournments. Any meeting of stockholders may, before it is called to order, be postponed for any reason by the Board of Directors or Chief Executive Officer to any other date, time and place at which a meeting of stockholders may be held under these By-Laws. Any meeting of stockholders may be adjourned to any other date, time and place at which a meeting of stockholders may be held under these By-Laws by the stockholders present or represented at the meeting, although less than a quorum, or by any officer entitled to preside or to act as clerk of such meeting, if no stockholder is present. It shall not be necessary to notify any stockholder of any adjournment. Any business that could have been transacted at any meeting of the stockholders as originally called may be transacted at any postponement or adjournment of the meeting.

1.7 Voting and Proxies. Each stockholder shall have one vote for each share of stock entitled to vote held of record by such stockholder and a proportionate vote for each fractional share so held, unless otherwise provided by the Articles of Organization. Stockholders may vote either in person or by written proxy dated not more than eleven months before the meeting named in the proxy. Proxies shall be filed with the clerk of the meeting, or of any adjourned meeting, before being voted. Except as otherwise limited by their terms, a proxy shall entitle the persons named in the proxy to vote at any adjournment of such meeting. A stockholder may give a proxy by electronic transmission under procedures approved by the Board of Directors or the Chief Executive Officer designed to permit determination that such transmission was authorized by the stockholder. A proxy with respect to stock held in the name of two or more persons shall be valid if executed by any one of them, unless at or prior to exercise of the proxy the corporation receives a specific written notice to the contrary from any one of them. A proxy purported to be executed by or on behalf of a stockholder shall be deemed valid unless challenged at or prior to its exercise.

1.8 Action at Meeting. When a quorum is present at any meeting, the holders of a majority of the stock present or represented and voting on a matter (or if there are two or more voting groups entitled to vote separately, then, in the case of each such voting group, the holders of a majority of the votes present or represented and voting on a matter), shall decide any matter to be voted on by the stockholders, except when a larger vote is required by law,

the Articles of Organization or these By-Laws. Any election by stockholders shall be determined by a plurality of the votes cast by the stockholders entitled to vote at the election. No ballot shall be necessary for such election unless requested by a stockholder present or represented at the meeting and entitled to vote in the election or required by the chairman of the meeting. The corporation shall not directly or indirectly vote any share of its own stock.

1.9 Action without Meeting. Any action required or permitted to be taken at any meeting of the stockholders may be taken without a meeting if all stockholders entitled to vote on the matter consent to the action in writing and the written consents are filed with the records of the meetings of stockholders. Each such consent shall be treated for all purposes as a vote at a meeting.

1.10 Advance Notice of Business at Meetings of Stockholders.

(a) To the extent a stockholder is entitled as a matter of law or another provision of these By-Laws to propose a matter to be considered at any meeting of the stockholders (other than the nomination of directors, which is addressed in Section 2.3), such matter may be proposed only by a person who is a stockholder of record of the corporation at the time of giving the notice provided for in this Section 1.10, who is entitled to vote at the applicable meeting, and who (in addition to complying with any other applicable requirements) has given timely written notice thereof in accordance with this Section 1.10 to the Secretary at the principal executive offices of the corporation.

(b) To be timely with respect to an annual meeting, a stockholder's notice must be received by the Secretary not less than ninety (90) days nor more than one hundred twenty (120) days before the anniversary of the date on which the corporation first transmitted to stockholders its proxy materials for the immediately preceding annual meeting of stockholders; provided that, if the annual meeting is not held within thirty (30) days before or after the anniversary of such preceding annual meeting, such stockholder's notice to be timely must be so received not later than the close of business on the later of (i) the one hundred twentieth (120th) day before the date of such annual meeting or (ii) the tenth (10th) day after the day on which notice of the date of the annual meeting was transmitted to stockholders or other public disclosure of the date of the annual meeting was made, whichever occurs first. Notwithstanding the foregoing, the postponement or adjournment of any annual meeting for which notice has been provided to stockholders shall not commence a new time period for giving the stockholder's notice.

(c) To be timely with respect to a special meeting, a stockholder's notice must be received by the Secretary not less than ninety (90) days nor more than one hundred twenty (120) days before the date of the special meeting; provided that, if the first day on which notice of the special meeting is transmitted to stockholders or on which public disclosure of the date of the special meeting is made is less than one hundred (100) days before the date of the special meeting, such stockholder's notice to be timely must be so received not later than the close of business on the tenth (10th) day after the day on which notice of the date of the special meeting was transmitted to stockholders or other public disclosure of the date of the special meeting was made, whichever occurs first. Notwithstanding the foregoing, the postponement or adjournment of any special meeting for which notice has been transmitted to stockholders shall not commence a new time period for giving the stockholder's notice.

(d) A stockholder's notice shall set forth as to each matter the stockholder proposes to bring before the meeting (i) a brief description of the business desired to be brought before the meeting and the reasons for conducting such business at the meeting, (ii) the name

and record address of the stockholder proposing such business and the name and address of the beneficial owner, if any, on whose behalf the proposal is made, (iii) details of all the following that are held and/or beneficially owned, directly or indirectly, including through any entity, by such stockholder and by such beneficial owner, if any: (A) the class and number of shares of the corporation, (B) any option, warrant, convertible security, stock appreciation right, or similar right with an exercise or conversion privilege or a settlement payment or mechanism at a price related to any class or series of shares of the corporation or with a value derived in whole or in part from the value of any class or series of shares of the corporation, whether or not such instrument or right shall be subject to settlement in the underlying class or series of capital stock of the corporation or otherwise (a "Derivative Instrument") and any other direct or indirect opportunity of any such person to profit or share in any profit derived from any increase or decrease in the value of shares of the corporation, (C) any proxy, contract, arrangement, understanding, or relationship pursuant to which such stockholder or such other beneficial owner, if any, has a right to vote any shares of any security of the corporation, (D) any short interest in any security of the corporation (for purposes of this By-Law a person shall be deemed to have a short interest in a security if such person directly or indirectly, through any contract, arrangement, understanding relationship or otherwise, has the opportunity to profit or share in any profit derived from any decrease in the value of the subject security), (E) any rights to dividends on the shares of the corporation that are separated or separable from the underlying shares of the corporation, and (F) any performance-related fees (other than an asset-based fee) that such stockholder or such beneficial owner, if any, is entitled to based on any increase or decrease in the value of shares of the corporation or Derivative Instruments, if any, as of the date of such notice, including without limitation any such interest held by members of such stockholder's immediate family sharing the same household (which information shall be supplemented by such stockholder and beneficial owner, if any, not later than ten (10) days after the record date for the meeting to disclose such ownership as of the record date), (iv) a description of any material interest of the stockholder and of such beneficial owner, if any, in such business, (v) a description of any agreement, arrangement or understanding such stockholder or such beneficial owner, if any, has with any other person(s) relating to the subject matter of such business, and (vi) the basis upon which the stockholder is entitled to make the proposal.

(e) Notwithstanding anything in these By-Laws to the contrary, no business proposed by a stockholder shall be conducted at any meeting of stockholders except in accordance with the procedures set forth in this Section, whether or not the stockholder (if otherwise permitted by applicable law) seeks inclusion of such proposal in the corporation's proxy statement for the meeting; provided that any stockholder proposal that complies with Rule 14a-8 (or any successor provision) of the proxy rules promulgated under the Securities Exchange Act of 1934, as amended, and is included in the corporation's proxy statement for the applicable stockholders meeting shall be deemed to comply with the requirements for the timing and content of notices hereunder.

(f) The chairman of the respective stockholders meeting shall, if the facts warrant, determine and declare to the meeting that business was not properly brought before the meeting in accordance with the provisions of this Section 1.10, and, if he should so determine, he shall so declare to the meeting and any such business not properly brought before the meeting shall not be transacted.

ARTICLE 2 - Directors

2.1 Powers. The business of the corporation shall be managed by a Board of Directors, who may exercise all the powers of the corporation except as otherwise provided by law, by the Articles of Organization or by these By-Laws. In the event of a vacancy in the Board of Directors, the remaining Directors, except as otherwise provided by law, may exercise the powers of the full Board until the vacancy is filled.

2.2 Number, Election and Qualification. The number of Directors which shall constitute the whole Board of Directors shall be determined by vote of the stockholders or the Board of Directors, but shall consist of not less than three Directors (except that whenever there shall be only two stockholders the number of Directors shall be not less than two and whenever there shall be only one stockholder, there shall be at least one Director). The number of Directors may be decreased at any time and from time to time either by the stockholders or by a majority of the Directors then in office, but only to eliminate vacancies existing by reason of the death, resignation, removal or expiration of the term of one or more Directors. Directors need not be stockholders of the corporation. Notwithstanding the foregoing provisions, if the corporation is a "public corporation" within the meaning of Section 8.06 of the Massachusetts Business Corporation Act and has not elected, pursuant to paragraph (c) of such Section 8.06, to be exempt from the provisions of paragraph (b) of such Section 8.06, then:

(i) In accordance with paragraph (e), clause (4) of such Section 8.06, the number of directors shall be fixed only by vote of the Board of Directors.

(ii) In accordance with paragraph (b) of such Section 8.06, the Directors of the corporation shall be classified with respect to the time for which they severally hold office, into three classes, as nearly equal in number as possible; the term of office of those of the first class ("Class I Directors") to continue until the first annual meeting following the date the corporation becomes subject to such paragraph (a) and until their successors are duly elected and qualified; the term of office of those of the second class ("Class II Directors") to continue until the second annual meeting following the date the corporation becomes subject to such paragraph (a) and until their successors are duly elected and qualified; and the term of office of those of the third class ("Class III Directors") to continue until the third annual meeting following the date the corporation becomes subject to such paragraph (a) and until their successors are duly elected and qualified. At each annual meeting of the corporation, the successors to the class of directors whose term expires at that meeting shall be elected to hold office for a term continuing until the annual meeting held in the third year following the year of their election and until their successors are duly elected and qualified.

2.3 Nomination of Directors.

(a) Only persons who are nominated in accordance with this Section 2.3 shall be eligible for election as directors at any annual or special meeting of stockholders. Nominations of persons for election as directors may be made only (i) by or at the direction of the Board of Directors or (ii) by any person who is a stockholder of record of the corporation at the time of giving the notice provided for in this Section 2.3, who is entitled to vote for the election of directors at the applicable meeting, and who (in addition to any other applicable requirements) has given timely written notice thereof in accordance with this Section 2.3 to the Secretary at the principal executive offices of the corporation.

(b) To be timely with respect to an annual meeting, a stockholder's notice must be received by the Secretary not less than ninety (90) days nor more than one hundred twenty (120) days before the anniversary of the date on which the corporation first transmitted

to stockholders its proxy materials for the immediately preceding annual meeting of stockholders; provided that, if the annual meeting is not held within thirty (30) days before or after the anniversary of such preceding annual meeting, such stockholder's notice to be timely must be so received not later than the close of business on the later of (i) the one hundred twentieth (120th) day before the date of such annual meeting or (ii) the tenth (10th) day after the day on which notice of the date of the annual meeting was transmitted to stockholders or other public disclosure of the date of the annual meeting was made, whichever occurs first. Notwithstanding the foregoing, the postponement or adjournment of any annual meeting for which notice has been provided to stockholders shall not commence a new time period for giving the stockholder's notice.

(c) To be timely with respect to a special meeting, a stockholder's notice must be received by the Secretary not less than ninety (90) days nor more than one hundred twenty (120) days before the date of the special meeting; provided that, if the first day on which notice of the special meeting is transmitted to stockholders or on which public disclosure of the date of the special meeting is made is less than one hundred (100) days before the date of the special meeting, such stockholder's notice to be timely must be so received not later than the close of business on the tenth (10th) day after the day on which notice of the date of the special meeting was transmitted to stockholders or other public disclosure of the date of the special meeting was made, whichever occurs first. Notwithstanding the foregoing, the postponement or adjournment of any special meeting for which notice has been provided to stockholders shall not commence a new time period for giving the stockholder's notice.

(d) Such stockholder's notice shall set forth (a) as to each person whom the stockholder proposes to nominate for election or re-election as a director: (i) the name, age, business address and residence address of the person, (ii) the principal occupation or employment of the person, (iii) the class and number of shares of capital stock of the corporation that are beneficially owned by the person, (iv) whether or not the person is currently "independent" from the corporation under the independence standards of the principal national securities exchange on which the corporation's shares are then traded and all facts that currently prevent the person from being independent under such standards, if applicable, and (v) any other information relating to the person that is required to be disclosed in solicitations for proxies for election of directors pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended; (b) as to the stockholder giving the notice: (i) the name and record address of such stockholder and the name and address of the beneficial owner, if any, on whose behalf the proposal is made and (ii) the information described in Section 1.10(d)(iii); and (c) a description of all familial, compensatory, financial and/or other relationships, arrangements and transactions, existing at any time within the preceding three years or currently proposed, between the person proposed to be nominated as a director and such stockholder or such beneficial owner, if any, or any of their respective affiliates and associates. The corporation may require any proposed nominee to furnish such other information as it may reasonably require to determine the proposed nominee's eligibility, or lack thereof, to serve as an independent director of the corporation.

(e) The chairman of the meeting shall, if the facts warrant, determine and declare to the meeting that a nomination was not made in accordance with this Section 2.3, and if he should so determine, he shall so declare to the meeting and the defective nomination shall be disregarded.

2.4 Enlargement of the Board. Subject to Section 2.2 above, the number of Directors may be increased at any time and from time to time by the stockholders or by a majority of the Directors then in office.

2.5 Tenure. Subject to Section 2.2 above, each Director shall hold office until the next annual meeting of stockholders and until his successor is elected and qualified or until his earlier death, resignation or removal.

2.6 Vacancies.

(a) Unless and until filled by the stockholders, any vacancy in the Board of Directors, however occurring, including a vacancy resulting from an enlargement of the Board, may be filled by vote of a majority of the Directors present at any meeting of Directors at which a quorum is present. Each such successor shall hold office for the unexpired term of his predecessor and until his successor is chosen and qualified or until his earlier death, resignation or removal.

(b) Notwithstanding the foregoing provisions, if the corporation is a "public corporation" within the meaning of Section 8.06 of the Massachusetts Business Corporation Act and has not elected, pursuant to paragraph (c) of such Section 8.06, to be exempt from the provisions of paragraph (b) of such Section 8.06, then (i) vacancies and newly created directorships, whether resulting from an increase in the size of the Board of Directors, from the death, resignation, disqualification or removal of a director or otherwise, shall be filled solely by the affirmative vote of a majority of the remaining Directors then in office, even though less than a quorum of the Board of Directors, and (ii) any Director elected in accordance with clause (i) shall hold office for the remainder of the full term of the class of Directors in which the vacancy occurred or the new directorship was created and until such Director's successor shall have been elected and qualified or until his earlier death, resignation or removal.

2.7 Resignation. Any Director may resign by delivering his written resignation to the corporation at its principal office or to the Chairman of the Board, the Chief Executive Officer or Secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event.

2.8 Removal.

(a) A Director may be removed from office with or without cause by vote of the holders of a majority of the shares entitled to vote in the election of Directors. However, the Directors elected by the holders of a particular class or series of stock may be removed from office with or without cause only by vote of the holders of a majority of the outstanding shares of such class or series. In addition, a Director may be removed from office for cause by vote of a majority of the Directors then in office. A Director may be removed for cause only after reasonable notice and opportunity to be heard before the body proposing to remove him.

(b) Notwithstanding the foregoing provisions, if the corporation is a "public corporation" within the meaning of Section 8.06 of the Massachusetts Business Corporation Act and has not elected, pursuant to paragraph (c) of such Section 8.06, to be exempt from the provisions of paragraph (b) of such Section 8.06, then stockholders may effect, by the affirmative vote of a majority of the shares outstanding and entitled to vote in the election of Directors, the removal of any Director or Directors or the entire Board of Directors only for cause, as defined in paragraph (f) of such Section 8.06.

2.9 Regular Meetings. Regular meetings of the Directors may be held without call or notice at such places, within or without Massachusetts, and at such times as the Directors may from time to time determine, provided that any Director who is absent when such determination is made shall be given notice of the determination. A regular meeting of the Directors may be

held without a call or notice immediately after and at the same place as the annual meeting of stockholders.

2.10 Special Meetings. Special meetings of the Directors may be held at any time and place, within or without Massachusetts, designated in a call by the Chairman of the Board, Chief Executive Officer, Treasurer, two or more Directors or by one Director in the event that there is only a single Director in office.

2.11 Meetings by Telephone Conference Calls or Other Electronic Communication. Directors or members of any committee designated by the Directors may participate in a meeting of the Directors or such committee by means of a conference telephone or other electronic communications equipment by means of which all persons participating in the meeting can hear each other at the same time and participation by such means shall constitute presence in person at a meeting.

2.12 Notice of Special Meetings. Notice of any special meeting of the Directors shall be given to each Director by the Secretary or by the officer or one of the Directors calling the meeting. Notice shall be duly given to each Director (i) by notice given to such Director in person or by telephone at least 48 hours in advance of the meeting, (ii) by sending an electronic communication, or by delivering written notice by hand, to his last known business or home address at least 48 hours in advance of the meeting, or (iii) by mailing written notice to his last known business or home address at least 72 hours in advance of the meeting. Notice need not be given to any Director if a written waiver of notice, executed by him before or after the meeting, is filed with the records of the meeting, or to any Director who attends the meeting without protesting prior to the meeting or at its commencement the lack of notice to him. A notice or waiver of notice of a Directors' meeting need not specify the purposes of the meeting. If notice is given in person or by telephone, an affidavit of the Secretary, officer or Director who gives such notice that the notice has been duly given shall, in the absence of fraud, be conclusive evidence that such notice was duly given.

2.13 Quorum. At any meeting of the Board of Directors, a majority of the Directors then in office shall constitute a quorum. Less than a quorum may adjourn any meeting from time to time without further notice.

2.14 Action at Meeting. At any meeting of the Board of Directors at which a quorum is present, the vote of a majority of those present shall be sufficient to take any action, unless a different vote is specified by law, by the Articles of Organization or by these By-Laws.

2.15 Action by Consent. Any action required or permitted to be taken at any meeting of the Board of Directors may be taken without a meeting if all the Directors consent to the action in writing, signed by each director or delivered to the corporation by electronic transmission, and the written consents are filed with the records of the Directors' meetings. Each such consent shall be treated for all purposes as a vote at a meeting.

2.16 Committees. The Board of Directors may, by vote of a majority of the Directors then in office, elect from their number an executive committee or other committees and may by like vote delegate to committees so elected some or all of their powers to the extent permitted by law. Except as the Board of Directors may otherwise determine, any such committee may make rules for the conduct of its business, but unless otherwise provided by the Directors or in such rules, its business shall be conducted as nearly as possible in the same manner as is provided by these By-Laws for the Directors. The Board of Directors shall have the power at any time to fill vacancies in any such committee, to change its membership or to discharge the committee.

2.17 Chairman of the Board and Vice-Chairman of the Board. The Board of Directors may appoint a Chairman of the Board. If the Board of Directors appoints a Chairman of the Board, he shall preside at meetings of the Directors and the stockholders and shall perform such other duties and possess such powers as are assigned to him by the Board of Directors. If the Board of Directors appoints a Vice-Chairman of the Board, he shall, in the absence or disability of the Chairman of the Board, perform the duties and exercise the powers of the Chairman of the Board and shall perform such other duties and possess such other powers as may from time to time be vested in him by the Board of Directors.

2.18 Compensation of Directors. Directors may be paid such compensation for their services and such reimbursement for expenses of attendance at meetings as the Board of Directors may from time to time determine. No such payment shall preclude any Director from serving the corporation in any other capacity and receiving compensation therefor.

ARTICLE 3 - Officers

3.1 Enumeration. The officers of the corporation shall consist of a Chief Executive Officer, a President, a Treasurer, a Secretary and such other officers with such other titles as the Board of Directors or the Chief Executive Officer may determine, including, but not limited to one or more Vice Presidents, Assistant Treasurers, and Assistant Secretaries.

3.2 Election. The Chief Executive Officer, President, Treasurer and Secretary shall be elected annually by the Board of Directors at their first meeting following the annual meeting of stockholders. Other officers may be chosen or appointed by or under the authority of the Board of Directors.

3.3 Qualification. No officer need be a director or stockholder. Any two or more offices may be held by the same person. Any officer may be required by the Directors to give bond for the faithful performance of his duties to the corporation in such amount and with such sureties as the Directors may determine. The premiums for such bonds may be paid by the corporation.

3.4 Tenure. Except as otherwise provided by law, by the Articles of Organization or by these By-Laws, the Chief Executive Officer, President, Treasurer and Secretary shall hold office until the first meeting of the Directors following the next annual meeting of stockholders and until their respective successors are chosen and qualified, or until their earlier death, resignation or removal; and all other officers shall serve at the pleasure of the Directors.

3.5 Resignation and Removal.

(a) Any officer may resign by delivering his written resignation to the corporation at its principal office or to the Chief Executive Officer or Secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event.

(b) An officer may be removed at any time, with or without cause, by or under the authority of the Board of Directors.

(c) Except as the Board of Directors may otherwise determine, no officer who resigns or is removed shall have any right to any compensation as an officer for any period following his resignation or removal, or any right to damages on account of such removal, whether his compensation be by the month or the year or otherwise, unless such compensation is expressly provided in a duly authorized written agreement with the corporation.

3.6 Vacancies. Any vacancy occurring in any office for any reason may be filled by or under the authority of the Board of Directors, which may, in its discretion, leave unfilled for such period as it may determine any offices other than those of President, Treasurer and Secretary. Each such successor shall hold office for the unexpired term of his predecessor and until his successor is chosen and qualified, or until he sooner dies, resigns or is removed.

3.7 Chief Executive Officer. The Chief Executive Officer shall, subject to the direction of the Board of Directors, have general charge and supervision of the business of the corporation. Unless a separate Chairman of the Board has been appointed, or except as otherwise provided by the Board of Directors, he shall preside at all meetings of the stockholders and, if he is a Director, at all meetings of the Board of Directors.

3.8 President. The President shall, subject to the direction of the Chief Executive Officer, have general charge and supervision of the business of the corporation and shall perform such other duties and shall possess such other powers as the Chief Executive Officer may from time to time prescribe. If no other Chief Executive Officer has been appointed, or in the event of the absence, inability or refusal to act of the Chief Executive Officer, the President shall perform the duties of the Chief Executive Officer and when so performing shall have all the powers of and be subject to all the restrictions upon the Chief Executive Officer.

3.9 Vice Presidents. Any Vice President shall perform such duties and possess such powers as the Board of Directors, the Chief Executive Officer or the President may from time to time prescribe. The Board of Directors or the Chief Executive Officer may assign to any Vice President the title of Executive Vice President, Senior Vice President or any other title.

3.10 Treasurer and Assistant Treasurers.

(a) The Treasurer shall perform such duties and shall have such powers as may from time to time be assigned to him by the Board of Directors or the Chief Executive Officer. In addition, the Treasurer shall perform such duties and have such powers as are incident to the office of treasurer, including without limitation the duty and power to keep and be responsible for all funds and securities of the corporation, to deposit funds of the corporation in depositories selected in accordance with these By-Laws, to disburse such funds as ordered by the Board of Directors, to make proper accounts of such funds, and to render as required by the Board of Directors statements of all such transactions and of the financial condition of the corporation.

(b) The Assistant Treasurers shall perform such duties and possess such powers as the Board of Directors, the Chief Executive Officer or the Treasurer may from time to time prescribe. In the event of the absence, inability or refusal to act of the Treasurer, the Assistant Treasurer (or if there shall be more than one, the Assistant Treasurers in the order determined by the Board of Directors) shall perform the duties and exercise the powers of the Treasurer.

3.11 Secretary and Assistant Secretaries.

(a) The Secretary shall perform such duties and shall possess such powers as the Board of Directors or the Chief Executive Officer may from time to time prescribe. In addition, the Secretary shall perform such duties and have such powers as are incident to the office of the clerk, including without limitation the duty and power to give notices of all meetings of stockholders and special meetings of the Board of Directors, to attend all meetings of stockholders and the Board of Directors and keep a record of the proceedings, to maintain a stock ledger and prepare lists of stockholders and their addresses as required, to be custodian of corporate records and the corporate seal and to affix and attest to the same on documents.

(b) Any Assistant Secretary shall perform such duties and possess such powers as the Board of Directors, the Chief Executive Officer or the Secretary may from time to time prescribe. In the event of the absence, inability or refusal to act of the Secretary, the Assistant Secretary (or if there shall be more than one, the Assistant Secretaries in the order determined by the Board of Directors) shall perform the duties and exercise the powers of the Secretary.

(c) In the absence of the Secretary or any Assistant Secretary at any meeting of stockholders or Directors, the person presiding at meeting shall designate a temporary Secretary to keep a record of the meeting.

3.12 Salaries. Officers of the corporation shall be entitled to such salaries, compensation or reimbursement as shall be fixed or allowed from time to time by the Board of Directors.

ARTICLE 4 - Capital Stock

4.1 Issue of Capital Stock. Unless otherwise voted by the stockholders, the whole or any part of any unissued balance of the authorized capital stock of the corporation or the whole or any part of the capital stock of the corporation held in its treasury may be issued or disposed of by vote of the Board of Directors, in such manner, for such consideration and on such terms as the Directors may determine.

4.2 Certificate of Stock; Uncertificated Shares.

(a) Shares of the corporation's capital stock may be represented by certificates or may be uncertificated as prescribed from time to time by or under the authority of the Directors. Certificates for shares shall be signed by the Chief Executive Officer, the President or a Vice President, and by the Treasurer or an Assistant Treasurer, but when a certificate is countersigned by a transfer agent or a registrar, other than a Director, officer or employee of the corporation, such signature may be a facsimile. In case any officer who has signed or whose facsimile signature has been placed upon such certificate shall have ceased to be such officer before such certificate is issued, it may be issued by the corporation with the same effect as if he were such officer at the time of its issue.

(b) Every certificate for shares of stock which are subject to any restriction on transfer pursuant to the Articles of Organization, the By-Laws, applicable securities laws or any agreement to which the corporation is a party, shall have conspicuously noted on the face or back of the certificate either the full text of the restriction or a statement of the existence of such restrictions and a statement that the corporation will furnish a copy of the restrictions to the holder of such certificate upon written request and without charge. Every certificate issued when the corporation is authorized to issue more than one class or series of stock shall set forth on its face or back either the full text of the preferences, voting powers, qualifications and special and relative rights of the shares of each class and series authorized to be issued or a statement of the existence of such preferences, powers, qualifications and rights and a statement that the corporation will furnish a copy thereof to the holder of such certificate upon written request and without charge. Holders of uncertificated shares shall be provided with a statement of the information set forth above as applicable and as required by the Massachusetts Business Corporation Act.

4.3 Transfers. Subject to the restrictions, if any, stated or noted on the stock certificates or provided to the holder of uncertificated shares, shares of stock may be transferred on the books of the corporation by (a) the surrender to the corporation or its transfer agent of the certificate representing such shares properly endorsed or accompanied by a written

assignment or power of attorney properly executed or (b) proper transfer instructions from the registered owner of uncertificated shares, in each case with such proof of authority or the authenticity of signature as the corporation or its transfer agent may reasonably require. Except as may be otherwise required by law, by the Articles of Organization or by these By-Laws, the corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to vote with respect thereto, regardless of any transfer, pledge or other disposition of such stock until the shares have been transferred on the books of the corporation in accordance with the requirements of these By-Laws. It shall be the duty of each stockholder to notify the corporation of his post office address and of his taxpayer identification number.

4.4 Record Date.

(a) The Board of Directors may fix in advance a time not more than 70 days preceding the date of any meeting of stockholders or the date for the payment of any dividend or the making of any distribution to stockholders or the last day on which the consent or dissent of stockholders may be effectively expressed for any purpose, as the record date for determining the stockholders having the right to notice of and to vote at such meeting, and any adjournment, or the right to receive such dividend or distribution or the right to give such consent or dissent. In such case only stockholders of record on such record date shall have such right, notwithstanding any transfer of stock on the books of the corporation after the record date. Without fixing such record date the Directors may for any of such purposes close the transfer books for all or any part of such period.

(b) If no record date is fixed and the transfer books are not closed, the record date for determining the stockholders having the right to notice of or to vote at a meeting of stockholders shall be at the close of business on the day before the day on which notice is given, and the record date for determining the stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors acts with respect to such purpose.

(c) A determination of stockholders entitled to notice of or to vote at a meeting of stockholders is effective for any postponement or adjournment of the meeting unless the meeting is postponed or adjourned to a date more than one hundred twenty days after the date fixed for the original meeting, in which case the Board of Directors shall fix a new record date.

4.5 Replacement of Certificates. In case of the alleged loss or destruction or the mutilation of a certificate of stock, a duplicate certificate or uncertificated shares may be issued in place of the lost, destroyed or mutilated certificate, upon such terms as the Directors may prescribe, including the presentation of reasonable evidence of such loss, destruction or mutilation and the giving of such indemnity as the Directors may require for the protection of the corporation or any transfer agent or registrar.

ARTICLE 5 - Miscellaneous Provisions

5.1 Fiscal Year. Except as otherwise set forth in the Articles of Organization or as otherwise determined from time to time by the Board of Directors, the fiscal year of the corporation shall in each year end on September 30.

5.2 Seal. The seal of the corporation shall, subject to alteration by the Directors, bear its name, the word "Massachusetts" and the year of its incorporation.

5.3 Voting of Securities. The Chief Executive Officer, the President, the Chief Financial Officer, the Treasurer, the Secretary or any other person the Board of Directors may designate may waive notice of, and act as, or appoint any person or persons to act as, proxy or attorney-in-fact for this corporation (with or without power of substitution) at, any meeting of or other action by stockholders, shareholders or members of any other corporation or organization, the securities of which may be held by this corporation.

5.4 Corporate Records. The corporation shall keep, in Massachusetts at the principal office of the corporation, or at an office of its transfer agent or of the Secretary, such records as are required by the Massachusetts Business Corporation Act. These copies and records need not all be kept in the same office. They shall be available for inspection by stockholders for any proper purpose and in conformity with said Act.

5.5 Evidence of Authority. A certificate by the Secretary or an Assistant or temporary Secretary as to any action taken by the stockholders, Directors, any committee or any officer or representative of the corporation shall as to all persons who rely on the certificate in good faith be conclusive evidence of such action.

5.6 Articles of Organization. All references in these By-Laws to the Articles of Organization shall be deemed to refer to the Articles of Organization of the corporation, as amended and in effect from time to time.

5.7 Severability. Any determination that any provision of these By-Laws is for any reason inapplicable, illegal or ineffective shall not affect or invalidate any other provision of these By-Laws.

5.8 Pronouns. All pronouns used in these By-Laws shall be deemed refer to the masculine, feminine or neuter, singular or plural, as the identity of the person or persons may require.

5.9 Forum for Adjudication of Disputes. Unless the corporation consents in writing to the selection of an alternative forum, the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director or officer or other employee of the corporation to the corporation or the corporation's stockholders, (iii) any action asserting a claim against the corporation or any director or officer or other employee of the corporation arising pursuant to any provision of the Massachusetts Business Corporation Act or the corporation's Articles of Organization or By-Laws (as either may be amended from time to time), or (iv) any action asserting a claim against the corporation or any director or officer or other employee of the corporation governed by the internal affairs doctrine shall, in all cases subject to such court's having personal jurisdiction over the indispensable parties named as defendants, be either the Business Litigation Session of the Superior Court of Suffolk County, Massachusetts or, if such venue is not permissible, another Massachusetts state court located in Suffolk or Norfolk County, or a federal court located in Massachusetts.

ARTICLE 6 - Amendments

These By-Laws may be amended by vote of the holders of a majority of the shares of each class of the capital stock at the time outstanding and entitled to vote at any annual or special meeting of stockholders, if notice of the substance of the proposed amendment is stated in the notice of such meeting. If authorized by the Articles of Organization, the Directors, by a majority of their number then in office, may also make, amend or repeal these By-Laws, in

whole or in part, except with respect to (a) the provisions of these By- Laws governing (i) the removal of directors and (ii) the amendment of these By-Laws and (b) any provision of these By-Laws which by law, the Articles of Organization or these By-Laws requires action by the stockholders.

Not later than the time of giving notice of the meeting of stockholders next following the making, amending or repealing by the Directors of any By-Law, notice stating the substance of such change shall be given to all stockholders entitled to vote on amending the By-Laws.

Any By-Law adopted by the Directors may be amended or repealed by the stockholders entitled to vote on amending the By-Laws.

PTC INC.

AMENDMENT TO THE AMENDED AND RESTATED BY-LAWS

Amendment to Section 5.9

Amendment added the following to Section 5.9:

“Unless the corporation consents in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act of 1933, as amended. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the corporation shall be deemed to have notice of and consented to the provisions of this Section 5.9.”