

AGREEMENT
with the
University of Maryland Foundation and the
University of Maryland
for MEMBERSHIP in the
CENTER FOR ADVANCED LIFE CYCLE ENGINEERING (CALCE) CONSORTIA
UNIVERSITY OF MARYLAND

This Agreement, effective as of the date of execution by the last party to sign this Agreement (“Effective Date”), is entered into by and between _____ (“Member”) a corporation registered under the laws of _____ and having an address of _____; the University of Maryland Foundation (“Foundation”), a private non-profit corporation chartered under the laws of the State of Maryland and located at the Wilson H. Elkins Building, 3300 Metzert Road, Adelphi, Maryland 20783, and the University of Maryland, a constituent institution of the University System of Maryland, itself a public agency and instrumentality of the State of Maryland, located at College Park, Maryland 20742 (“University”), acting on behalf of the Center of Advanced Life Cycle Engineering (“CALCE”) Consortia.

Whereas, CALCE, operating within the University’s Clark School of Engineering, conducts broad research in several areas, described in Exhibit 3, through specialized groups that together constitute the CALCE Consortia; and

Whereas, members of the CALCE Consortia represent avionics, automotive, computer, telecommunications, and electronic manufacturers, as well as government agencies, and academic leaders; and

Whereas, by agreement with the University, the Foundation serves as the financial administrator of the CALCE Consortia and is authorized to receive and commit membership payments on behalf of the University and the CALCE Consortia; and

Whereas, CALCE administers all other aspects and performs all other activities of the CALCE Consortia; and

Whereas, Member wishes to join one or more of the consortia and thereby obtain the benefits of the selected membership and University and Foundation desire to grant the requested membership,

Now, therefore, for the mutual benefits and considerations each to the other, the parties hereto agree to the following terms and conditions:

1. Definitions

1.1 “Consortium Research” means studies conducted within and for a specific CALCE consortium and supported by its membership fees. Results of Consortium Research are

distributed to members of the specific consortium through the consortium web site.

1.2 “Consortium Research Project” means a study a particular CALCE Consortium chooses to conduct from topics proposed by its members. A Consortium Research Project is funded by the consortium’s membership fees and defined by title, objectives, background, methodology, duration and expected deliverables.

1.3 “Supplemental Consortium Research” means a Consortium Research Project a particular consortium undertakes at the request of at least one Consortium member who funds the Project by paying the Supplemental CALCE Research Fee. Results of Supplemental Consortium Research are distributed to members of the particular consortium.

1.4 ”Designated Site(s)” means the location(s) identified in Exhibit 1 for a Designated Site option.

1.5 “Designated Users” means those individuals that a member authorizes to access and use Materials for the benefit of the member.

1.6 "Materials" means Software, documentation, manuals, reports, papers and other information licensed or otherwise furnished or made accessible to a member by the University under the terms of this Agreement.

1.7 "Software" means the "Run Time" versions of the computer software identified on Exhibit 3 and any modifications of or updates thereto that are created by or on behalf of CALCE and made available to members pursuant to the terms of this Agreement.

2. Administration of CALCE CONSORTIA

2.1 CALCE CONSORTIA are financially administered by the Foundation. All other CALCE CONSORTIA administrative and research functions are performed by University through CALCE. The administration of the CALCE CONSORTIA is described in Exhibit 2 to this Agreement.

2.2 CALCE CONSORTIA are supported by the State of Maryland, the University, CALCE CONSORTIA membership fees, and other charitable gifts.

3. CALCE CONSORTIA Memberships and Benefits

3.1 Member selects membership in the consortium and at the level designated in Exhibit 1 and agrees to pay the corresponding membership fee presented therein. Membership benefits are described in Exhibit 3.

3.2 All membership fee payments are dedicated to the selected CALCE consortium and its program of research, support, and education and shall not include any overhead charges.

3.3 When a selected membership requires payment of an Initiation Fee, the Initiation Fee will

be paid simultaneously with member's submission of this executed Membership Agreement.

3.4 All payments are due within 30 days of Member's receipt of an invoice.

3.5 All payments due hereunder shall be made payable to the University of Maryland Foundation, Inc. and sent to:

Center for Advanced Life Cycle Engineering
University of Maryland
Room 1103, Engineering Laboratory Building 89
College Park, MD 20742 - USA
ATTN: Erin Chen - CALCE CONSORTIA Membership.

3.6 The rights and benefits of membership shall accrue to Member only upon University's receipt of an executed Membership Agreement and the Annual Membership Fee and Initiation Fee payment, if applicable.

3.7 Member may, at its election, request that the Consortium undertake a particular research project that is not included on the Consortium Research schedule by submitting a written request that describes the scope and objectives of the proposed Supplemental Consortium Research Project. If the director of the Consortium determines the proposed Supplemental Consortium Research Project is consistent with the research goals of the consortium and accepts the proposal, the consortium director and Member will agree upon a scope of work for the Supplemental Consortium Research Project and the parties will execute a Supplemental Research addendum to this Agreement, which addendum will include the scope of work. Work will commence on the Project once the Member issues payment of a Supplemental Consortium Research Fee of (a) Forty Thousand Dollars (\$40,000) if the project does not involve laboratory work or (b) Sixty Thousand Dollars (\$60,000) if the project does involve laboratory work. The results of Supplemental Consortium Research Projects shall constitute Materials, as defined in Section 1.6, and will be subject to provisions in this Agreement that apply to Materials.

4. License

4.1 This Agreement grants Member a nonexclusive, royalty-free, nontransferable right and license to access and use Materials of the selected consortium during Member's term of membership provided it satisfies all responsibilities and obligations under this Agreement.

4.2 The license granted under Section 4.1 is subject to the following terms and conditions:

4.2.1 Materials may be used only by Designated Users, as specified in Exhibit 1, in Member facilities, at their homes, and during short business trips.

4.2.2 Member is authorized to use in or apply to Member products the results of analyses Member conducts using consortium Materials.

4.2.3 Member shall not (a) sell, license, sublicense or otherwise distribute Materials, in whole or in part, to third parties; (b) publicly post or display Materials, in whole or in part, or (c) use or cause Materials to be used, in whole or in part, to provide services to third parties, without first obtaining a commercial license from University.

4.2.4 Member may view, download, and print consortium Materials as necessary for

authorized use and backup. Member is not authorized to copy or download the entire consortium web site.

4.2.5 Member shall not modify, hide or interfere with any proprietary and restrictive legends and notices that may be incorporated in Materials as furnished to Member. In the event University adopts modified legends or notices which it furnishes to Member, Member shall incorporate the modified legends or notices into Materials in accordance with reasonable programming practices.

4.2.6 Member shall not mirror/duplicate Materials in whole or in part on internal Member computer systems without prior written permission from CALCE.

5. Support and Operation of Software

5.1 Member is solely responsible for the installation of the Software and any fixes and updates that may be issued.

5.2 University support for Software shall be limited to providing reasonable efforts to design and implement programming changes to correct verifiable and reproducible errors about which the University has received notice in the most current released version of Software.

5.3 University shall not be responsible for correcting any error attributable to Member's misuse or improper use of Software or for maintaining computer program code which has been modified or enhanced from the version delivered or made available under this Agreement.

5.4 Network use of Software is authorized as long as adequate precautions are taken to avoid unauthorized use by third parties and persons not identified as Designated Users.

5.5 Member may report problems and request assistance on use of Software to software@calce.umd.edu, or such other E-mail address as University may designate on the CALCE Web site.

6. Ownership of Materials and Use of Trademarks

6.1 University shall own all rights, title, and interest in and to Materials.

6.2 Member's rights in Materials are limited to those rights expressly granted under this Agreement. Member shall have no title to or ownership interest in Materials and shall not cause any claims, liens, or encumbrances to attach to Materials.

6.3 Member shall own data files, designs, analyses, and similar works that result from its use of Materials.

6.4 Neither party shall use the name or trademarks of the other party or names of employees of the other party for commercial purposes without the prior written approval of the other party. Notwithstanding the preceding statement, each party is free to publicize the fact and nature of this Agreement.

6.5 The provisions of this Section 6 shall survive termination or expiration of this Agreement.

7. Proprietary and Confidential Information and Publications

7.1 University Confidential and Proprietary Information means Materials furnished to Member.

7.2 Member shall take reasonable steps to protect against the unauthorized disclosure and use of University Proprietary and Confidential Information, using at least the same degree of care to protect University Proprietary and Confidential Information that it uses to protect similar information of its own. Specifically, Member shall

7.2.1 Not disclose Proprietary and Confidential Information to any third party without the prior written permission of the disclosing party; and

7.2.2 Limit disclosure of Proprietary and Confidential to those of the receiving party's officers, employees, agents, and representatives who have a need to access Proprietary and Confidential Information and advice and obtain the agreement of such persons to comply with the confidentiality obligations under this Section 7.

7.2.3 The obligations set forth for Proprietary and Confidential Information in this Section 7 shall last for a period of five (5) years from the termination or expiration of this Agreement or until the University Proprietary and Confidential Information ceases to be confidential, whichever occurs first.

7.3 University will not accept Proprietary and Confidential Information from Member unless and until the parties execute the University Nondisclosure Agreement, available at http://www.umresearch.umd.edu/ORAA/um_references/model_agreement/nda.html. The nondisclosure agreement will be incorporated as part of this Agreement. Confidential and Proprietary Information is defined in that nondisclosure agreement

8. Export Control Laws

8.1 The parties are subject to and agree to abide by United States laws and regulations (e.g., the Arms Export Control Act, the Export Administration Act) that govern the export of specific technical data and technologies, including software, prototypes and other intellectual property, to foreign countries and foreign nationals ("Export Control Laws").

9. Disclaimer and Limitation of Warranty

9.1 MATERIALS ARE MADE AVAILABLE ON AN "AS IS" BASIS. THE FOUNDATION AND UNIVERSITY DISCLAIM ANY AND ALL PROMISES, REPRESENTATIONS AND WARRANTIES – WHETHER EXPRESS OR IMPLIED, ORAL OR IN WRITING, IN FACT OR ARISING BY OPERATION OF LAW – WITH RESPECT TO ANY MATERIALS AND SERVICES PROVIDED HEREUNDER, INCLUDING THEIR CONDITION, CONFORMITY TO ANY REPRESENTATION OR DESCRIPTION, THE EXISTENCE OF ANY LATENT OR PATENT DEFECTS THEREIN, AND/OR THEIR

MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE.

9.2 WITHOUT LIMITING THE FOREGOING, IN NO EVENT SHALL THE FOUNDATION, THE STATE OF MARYLAND OR THE UNIVERSITY BE LIABLE TO MEMBER FOR ANY BUSINESS EXPENSE OR INTERRUPTION; LOSS OF PROFITS, AND/OR ANY INCIDENTAL, SPECIAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES OF ANY KIND, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH CLAIMS OR DEMANDS, HOWEVER CAUSED, ARISING IN CONNECTION WITH OR OUT OF THE FURNISHING, USE OR PERFORMANCE OF MATERIALS OR SERVICES PROVIDED HEREUNDER. THIS LIMITATION UPON DAMAGES AND CLAIMS IS INTENDED TO APPLY WITHOUT REGARD TO WHETHER OTHER PROVISIONS OF THIS AGREEMENT HAVE BEEN BREACHED OR HAVE PROVEN INEFFECTIVE.

9.3 The provisions of this Section 9 shall survive termination or expiration of this Agreement.

10. Term, Termination and Renewal

10.1 The initial term of this Agreement shall commence upon the University's timely receipt of the signed membership agreement and Membership Fee specified in Exhibit 1. Thereafter, this Agreement shall renew automatically upon payment of the Annual Membership Fee for successive one-year terms commencing on the membership cycle of the selected consortium defined in Exhibit 3.

10.2 If Member elects not to renew this Agreement after the initial term or any subsequent term, it shall notify the University, in writing, thirty (30) days prior to the start of the next membership cycle as defined in Exhibit 3.

10.3 University and/or Foundation may terminate this Agreement upon issuance of written notice to Member of its breach of any provision in Sections 3, 4 or 6 through 8 inclusive of this Agreement and Member's failure to rectify the breach in a satisfactory manner within thirty (30) days of its receipt of such notice. Termination shall become effective on the 31st day after Member's receipt of notice of breach if Member has not cured its breach by the end of the cure period. Member shall comply with any directive in the notice of breach to suspend all use of Materials during the thirty (30) day cure period.

10.4 University may terminate this Agreement effective upon the expiration of any term of this Agreement, upon written notice to Member.

10.5 This Agreement may be terminated at any time upon mutual written agreement of the parties.

10.6 Upon the termination or expiration of this Agreement for any reason, Member shall, at University's request, return to University or certify the destruction of all Materials in Member's possession, including copies and portions thereof and updates and enhancements thereto in any form, including electronic versions contained on storage devices. Termination or expiration of

this Agreement shall not affect Member's right to continue use of data files, designs, and similar works that it created with the use of Materials prior to the date of expiration or termination.

11. Miscellaneous

11.1 The parties are and shall remain independent contractors and nothing herein shall be construed to create a partnership, agency, joint venture, or teaming agreement between or among the parties. Nothing herein shall be construed as implying that the employees of one party are employees of another party.

11.2 This Agreement shall be binding upon and inure to the benefit of the parties. This Agreement shall not be assigned or transferred by Member, in whole or in part, except by way of sale of substantially all of Member's assets by merger or consolidation, to any third party without the prior written consent of University and the Foundation, which consent shall not be unreasonably withheld; any attempted assignment in violation of this section shall be void.

11.3 Notwithstanding anything to the contrary herein, each party shall abide by the other's applicable policies, rules, and regulations with respect to use of another party's facilities hereunder, provided the visiting party received notice of such policies, rules and regulations.

11.4 Any notice required to be given hereunder shall be in writing and shall be deemed effective if delivered (a) in person, (b) by first class mail, postage prepaid, (c) by over night courier, or (d) by facsimile with documentation of transmission followed by first class mail, postage prepaid to each party at the address/number provided below or such other address as may be designated in writing. Notices shall be effective upon receipt.

11.4.1 Member: See Exhibit 1

11.4.2 Foundation: University System of Maryland Foundation, Inc.
Wilson H. Elkins Building
3300 Metzert Road
Adelphi, MD 20783
ATTN: CALCE CONSORTIA Membership
Facsimile: 301-445-2738

11.4.3 University: Dr. Michael Pecht, Director and Professor
Center of Advanced Life Cycle Engineering
Room 1103, Building 89 (Engineering Laboratory Bldg)
University of Maryland
College Park, MD 20742
Facsimile: 301-314-9269

11.5 Member designates the person identified in Exhibit 1 to this Agreement as Member's contact with the University on technical matters.

11.6 This Agreement shall be governed by and construed in accordance with the laws of the State of Maryland excluding its conflict of laws rules and further excluding the Maryland

Computer Information Transactions Act, Md Code Ann. [Commercial Law] Sections 21-101 through 21-816 (2000). In accordance with that Act, the parties hereby mutually agree to opt out of the application of the Maryland Computer Information Transactions Act to this Agreement.

11.7 Any disputes arising between the parties arising under this Agreement shall in the first instance be attempted to be settled in good faith negotiations between the respective parties.

11.8 With respect to any claim related to or arising out of the performance or nonperformance of University or Member under this Agreement, Member consents to the exclusive jurisdiction and venue of the United States District Court for the District of Maryland or, if federal jurisdiction is lacking, to the Circuit Court of the State of Maryland, and agrees to waive its right to assert that either forum lacks personal jurisdiction over Member or is an inconvenient forum for resolving the underlying dispute; provided that nothing in the section shall act as or constitute a waiver of the Eleventh Amendment immunity of the State of Maryland or its instrumentality and agency, the University of Maryland.

11.9 In the event any portion of this Agreement shall be deemed by a court of competent jurisdiction to be overly broad in scope, duration or area of applicability, the court shall have the power, and is hereby authorized and directed, to modify and enforce the same as modified. Subject to the foregoing, in the event any provision of this Agreement shall be held to be invalid, illegal or unenforceable for any reason, such invalidity or illegality shall attach only to such provision and shall not affect or render invalid or unenforceable the remaining provisions of this Agreement.

11.10 No failure or delay by a party in exercising any of its rights or remedies hereunder will operate as a waiver thereof, nor will any single or partial exercise of any such right or remedy preclude any other or further exercise thereof or the exercise of any other right or remedy.

11.11 Headings and section numbers in this Agreement are used only for convenience.

11.12 Modifications to this Agreement shall become effective only upon written agreement of the parties.

11.13 This Agreement, together with Exhibits 1, 2 and 3, constitutes the entire Agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements and understandings, whether oral or written.

Before executing the Agreement on the Signature Page, please complete Exhibit 1 to:

1. Designate your membership level
2. Designate administrative contact.
3. Select membership option (Designate Site or Designated User)
4. Identify Designated Site(s) and contacts
5. Sign two copies and send the copies to:

Center of Advanced Life Cycle Engineering
University of Maryland
Room 1103, Building 89 (Engineering Laboratory Building)
College Park, MD 20742
Attn: Joan Lee – Membership agreement

SIGNATURE PAGE

AGREED TO BY:		APPROVED AND AGREED TO BY:	
Company:		University of Maryland Foundation	
Typed Name:		Typed Name:	Pamela Purcell
Title:		Title:	Vice President and General Counsel
Date:		Date:	
Signature:		Signature:	
		University of Maryland	
		Typed Name:	Dr. Michael Pecht
		Title:	Professor and Director
		Date:	
		Signature:	
ACKNOWLEDGED BY:			
Typed Name:		Typed Name:	
Title:	ORAA, University of Maryland	Title:	Dean, Clark School of Engineering
Date:		Date:	
Signature:		Signature:	

EXHIBIT 1

MEMBERSHIP SELECTION, MEMBERSHIP FEES

Please complete both parts of this Exhibit.

I. *Membership Selection:* Please select membership option.

- EPSC Super Membership:** Annual Membership Fee of \$125,000*
 - EPSC Full Membership:** Annual Membership Fee of \$65,000*
 - EPSC Associate Membership:** Annual Membership Fee of \$30,000 (Only for companies having fewer than 250 employees)*
 - EPSC SARA Membership:** Annual Membership Fee of \$15,000
 - EPSC Site Membership:** Annual Membership Fee of \$15,000
(Available only to existing EPSC Full Members)
- *All new EPSC members are required to pay a one-time initiation fee of \$25,000.*
- PHMC Membership:** Annual Membership Fee of \$35,000
 - Working Group Participant** Fee of \$2,500 per working group (*initiation fee does not apply*)

Assign a contact to be responsible for day-to-day interaction with CALCE membership.

Membership Contact:	(contact name, email, phone)
Business contact and address for all written notices	
Business Contact (pursuant to Agreement § 11.4.1):	(contact name, address, email, phone)

II. Designated Site Identification:

Please identify Designated Site and contacts. All Member employees at the Designated Site may be considered Designated Users.

Designated Site	(fill in company name and location)
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Identify each additional site you desire (Attach additional sheet if necessary). All memberships other than EPSC Super Membership require payment of the Site Membership fee for each additional site.

Additional Designated Site #1	(mailing address)
Site Contact	(name, phone, and email)

EXHIBIT 2
ADMINISTRATION OF CALCE CONSORTIA

1. The Foundation shall serve as the financial administrator of the Membership fees.
2. The Director of CALCE or a designate will serve as the director of each CALCE consortium.
3. The University shall administer all CALCE CONSORTIA programs and membership benefits.
4. The University shall determine the goals and missions of each consortium in consultation the consortium's Industrial Advisory Board (IAB).
5. The IAB of each consortium will be comprised of one representative of each consortium member.
6. The IAB of each consortium will review and provide advice, reflective of actual industry concerns, to the consortium director regarding consortium practices and research priorities and guide and oversee Consortium Research.
7. The IAB of each consortium may elect a chairperson from among its representatives. The chairperson shall serve a one-year term. The chairperson will be responsible for running two IAB meetings which will be conducted as part of bi-annual technical reviews.

EXHIBIT 3
MEMBERSHIP BENEFITS—PART I

ELECTRONICS PRODUCTS AND SYSTEMS CONSORTIUM (EPSC)

The Electronic Products and Systems Consortium (EPSC) provides a forum for *defining* fundamental research needs, *conducting* research, and *sharing* research findings among participating organizations. The research focus for the CALCE EPSC Consortium includes risk assessment, mitigation, and management of electronic products and systems. The CALCE EPSC operates on an annual membership cycle from October 15th to October 14th. The start date for the EPSC is October 15th.

EPS CONSORTIUM MEMBERSHIPS

Super Membership and Full Membership Benefits

I. MATERIALS

- Access to and use of University of Maryland CALCE EPSC Materials placed under the CALCE EPSC Web Site under the terms and conditions of the Agreement.
- Access to and use of information on CALCE EPSC Web Site under the terms and conditions of the Agreement.
- Access to and use of CALCE Simulation Assisted Reliability Assessment (SARA™) software under the terms and conditions of the Agreement. Full Members and Site Members must identify designated users and designated sites.
- User support for CALCE EPSC Materials in accordance with the Agreement

II. RESEARCH

- Ability to influence the direction of CALCE EPS Consortium Research
- Ability to monitor ongoing CALCE EPS Consortium Research Projects
- Ability to submit CALCE EPS Consortium Research Project proposals to be considered for inclusion on CALCE EPS Consortium annual research agenda (limited to Full and Super Membership)
- Ability to sponsor CALCE EPS Consortium Supplemental Research
- Receipt of results of CALCE EPS Consortium Research up to 6 months before public release
- Immediate access to results of CALCE EPS Consortium Research Projects under the CALCE EPSC Web Site.
- Non-exclusive royalty-free rights and license to use CALCE EPSC inventions solely for internal research and development promptly after disclosure of invention to University

III. EDUCATION

- Information on state-of-the-art trends
- Free attendance for limited number of Member employees to semi-annual technical

- meetings scheduled for CALCE EPS Consortium
- Priority enrollment for Member employees in short courses, workshops, and seminars. (Space considerations may limit the number of Member employees who may attend from any one Designated Site)
- Discounts on CALCE courses, workshops and seminars
- One day of on-site Software training and/or annual presentation of CALCE EPSC research activities each year, at a mutually agreeable time (Limited to Full and Super membership)

IV. COOPERATIVE PROGRAMS

- Participation in cooperative programs with University
- Upon request, specially tailored programs to assist Member with recruiting University of Maryland students
- Representation on EPSC Industrial Advisory Board

Associate Membership Benefits

I. MATERIALS

- Access to and use of University of Maryland CALCE EPS Consortium Materials placed under the CALCE EPSC Web Site under the terms and conditions of the Agreement.
- Access to and use of information on CALCE EPSC Web Site under the terms and conditions of the Agreement.
- Access to and use of CALCE Simulation Assisted Reliability Assessment (SARA™) software under the terms and conditions of the Agreement. Associate Members must identify designated users and designated sites.
- User support for CALCE EPS Consortium Software in accordance with the Agreement

II. RESEARCH

- Ability to influence the direction of CALCE EPS Consortium Research
- Ability to monitor ongoing CALCE EPS Consortium Research Projects
- Ability to sponsor CALCE EPS Consortium Supplemental Research
- Immediate access to results of CALCE EPS Consortium Research Projects under the consortium Web Site
- Non-exclusive royalty-free rights and license to use CALCE EPSC inventions solely for internal research and development promptly after disclosure of invention to University

III. EDUCATION

- Information on state-of-the-art trends
- Free attendance for limited number of Member employees to semi-annual technical meetings scheduled for CALCE EPS Consortium
- Priority enrollment for Member employees in short courses, workshops, and seminars. (Space considerations may limit the number of Member employees who may attend from

- any one Designated Site)
- Discounts on CALCE courses, workshops and seminars

IV. COOPERATIVE PROGRAMS

- Participation in cooperative programs with University
- Upon request, specially tailored programs to assist Member with recruiting University of Maryland students

SARA Membership Benefits

- Access to and use of CALCE Simulation Assisted Reliability Assessment (SARA™) software under the terms and conditions of the Agreement.
- User support for SARA™ software and supporting Material in accordance with the Agreement
- Access to results of CALCE EPS Consortium Research Projects that are based on or related to CALCE SARA™ software.
- Ability to influence direction of CALCE EPS Consortium Research related to CALCE SARA™ software.

EXHIBIT 3 MEMBERSHIP BENEFITS—PART II

PROGNOSTICS AND HEALTH MANAGEMENT CONSORTIUM (PHMC)

The research of the Prognostics and Health Management Consortium (PHMC) focuses on developing fundamental methodologies for electronics prognostics and health management. The goal of the PHMC is to provide means of measuring the state of health (reliability) of electronic products and systems in real-time, and to forecast the onset of failure in such systems. The CALCE PHMC operates on an annual membership cycle from March 23th to March 22th. The start date for PHMC is March 23rd.

PHMC Membership Benefits

I. MATERIALS

- Access to and use of University of Maryland CALCE Materials under the CALCE PHMC Web Site under the terms and conditions of the Agreement.
- Access to and use of information on CALCE PHMC Web Site under the terms and conditions of the Agreement.

II. RESEARCH

- Ability to influence the direction of CALCE PHM Consortium Research
- Ability to monitor ongoing PHM Consortium Research Projects
- Ability to sponsor CALCE PHM Consortium Supplemental Research
- Immediate access to results of CALCE PHM Consortium Research Projects under the CALCE PHMC Web Site
- Non-exclusive royalty-free rights and license to use CALCE PHMC inventions solely for internal research and development promptly after disclosure of invention to University.

III. EDUCATION

- Free attendance for Member employees to semi-annual PHMC technical meetings (Space considerations may limit the number of Member employees who may attend from any one Designated Site)
- Priority enrollment for Member employees in short courses, workshops, and seminars. (Space considerations may limit the number of Member employees who may attend from any one Designated Site)
- Discounts on CALCE courses, workshops and seminars

IV. COOPERATIVE PROGRAMS

- Representation on the PHMC Industrial Advisory Board
- Participation in cooperative programs with University

- Upon request, specially tailored programs to assist Member with recruiting University of Maryland students

• EXHIBIT 3
MEMBERSHIP BENEFITS—PART III

Working Group Participant

CALCE Consortium Working Groups provide a mechanism for CALCE Members and companies that are not CALCE members to engage CALCE conduct research on specific emerging issues related to reliability of electronics products and systems that are not otherwise on the CALCE research agenda. Due to the complex nature of reliability issues, the life span of individual working groups may vary from a minimum of three months to up to twelve months with the approval of the primary CALCE investigator of a specific working group. The basic cost to join a Working Group is \$2,500 (Exhibit 1) but CALCE reserves the right to increase the fee based on the duration and scope of the project. Participants in CALCE Consortium Working Groups will receive access to CALCE materials generated as a result of Working Group activities.

If you are interested in developing or joining a working group, contact Mike Osterman @ osterman@umd.edu

1101 Engineering Laboratory Building, University of Maryland, College Park, MD 20742 or 301 405 8023 (telephone).