Karl went on to devote his career in providing sustained technical innovations and technical leadership that greatly contributed to the success of this unique interconnection scheme and other packaging innovations. Karl is recognized throughout the world as a lending expert in microelectronic packaging, and particularly for his contributions to area array technology at both the first (chip-to-carrier) and second (carrier-to-card) levels of packaging.

Karl's technical contributions and leadership are widely recognized. IBM honored him with a Corporate Outstanding Innovation Award, and was elected a Fellow of the American Society of Materials (ASM) International and also an IEEE Fellow "-- for developments and leadership in the microelectronic packaging sciences, particularly area array interconnection technology."

Other Achievements: Karl has made numerous contributions to second level (component-to-board) interconnection technology as well, a few examples are noted.

1. CBGA Dual Solder System: Karl led the effort to define and optimize IBM's dual solder system used for ceramic ball grid array components whose fixed standoff height provides greatly enhanced reliability.

2. Replacement of Components Mounted on PCBs: Karl was a key participant in defining a method and tooling to locally remove surface mount (SM) components like CBGAs from even very thin printed circuit boards (PCBs) and locally reflow replacement components.

3. Rework CBGA/CCGA Components: Karl led a team that defined the method and tooling to rework both CBGA and CCGA components allowing one or more balls/columns to be replaced to enhance yields and reduce costs.

4. National Test Specification: Co-authored "The Production Ball Grid Array (BGA) Socket Test Specification," adopted as a national standard by the Electronics Industries Association (EIA): IS- 701, 7/96. Co-author: T. Peel, Contech Research, Inc.

5. Lead-free Technology: Karl had corporate responsibility working with all aspects of the business (development, purchasing, manufacturing, marketing, quality, legal, etc.) for compliance of all IBM products worldwide with Pb-free legislation. He initiated the program at IBM in 1999 and served as Corporate Program Manager until his retirement in 2004. He played a major role in obtaining flip chip and other exemptions from the European Union Commission favorable to the industry. He is the co-editor/co-author of a lead-free handbook, and actively involved in Pb-free solder joint development.

In summary, Paul and Karl made many vital and sustained contributions in advancing the state-of-the-art of flip chip technology in its infancy. They by necessity worked as a very successful team to develop complimentary thin film and thick film technology to make the C4 interconnection system successful for IBM. Now this technology in the form of flip chip interconnection has spread throughout the industry and remains a major driver and enabler for new products and packages around the world.

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Call for Candidates

Submitted by Ms. Marsha Tickman, Executive Director, IEEE CPMT Society

The CPMT Society is governed by a Board of Governors composed of officers, 18 elected members-at-large, and various committee chairs and representatives (see inside cover of this Newsletter for details.)

Annually, Society members are asked to elect six members-at-large for a three-year term of office. Candidates for member-at-large are selected in two ways: either by the Society Nominating Committee, or by petition.

This year's election is the fourth in which members-at-large will be elected to achieve totals proportionate to the geographic distribution of CPMT members. Voting members will elect members-at-large from within their Region only (that is, members in Region 8 will vote for members-at-large from Region 8, etc.)

Elected Members of the Board of Governors must be willing to attend two annual Board meetings and participate actively in areas of their interest (publications, conferences, membership development, chapter development, etc.) The term of office for this election is 1 January 2009 through 31 December 2011.

If you are an IEEE and CPMT Society member in good standing and are interested in serving on the Board of Governors, you can become a candidate via petition by following the procedures below.

- Prepare a petition that contains your name, member number, and statement of your qualifications for office.
- Provide lines for signatories. Each line should include space for a printed name, member number, and signature.
- Have the petition signed by a MINIMUM of 46 CPMT Society members in good standing (Student grade members are not eligble to sign.)
- Submit your petition by mail no later than Friday, 25 July 2008 to:

CPMT Society Nominations Committee
c/o Marsha Tickman
IEEE CPMT Society Executive Office
445 Hoes Lane, PO Box 1331
Piscataway, NJ 08855-1331 USA

OR

- Request establishment of electronic petition process, allowing signatures to be collected on-line.

You must contact Marsha Tickman to implement electronic petition process.

Membership status of all signatories will be validated. It is suggested that you gather more than 46 signatures in order to assure meeting the minimum required number of valid signatures.

If you have questions or need additional information, contact Marsha Tickman at the above address, by phone at 732-562-5529, or by e-mail at m.tickman@ieee.org.

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