CMSE 2009 PROGRAM

Tuesday, February 10, 2009

Welcome and Introduction 8:30am

Keynote 1: Export Pitfalls with Technology Information & Electronics
Russell VanDegrift, Senior Consultant & Director
MK Technology 3

Session 1: Supply Chain Fight Agains Counterfeit Components 9:00am - 12:00pm
Chairman: Leon Hamiter, CTI Inc.

Military OEMs:

1.1 Parvez Siddiqi, DRS-TEM - Huntsville .....
1.2 Chet O'Brien, BAE - San Diego .....
1.3 BAE .....

Independent Distributors:

1.4 Lena Lauer, North Shore Components .....
1.5 Robb Hammond, American Electronic Resource Inc. .....
1.6 M. Lanning, EXTREME Semiconductor .....
1.7 J. Jowers, Velocity Electronics .....

Panel Discussion

Buffet Lunch in the Exhibition Area 12:00 - 2:00pm

Session 2: COTS Electronics & Applications 2:00 - 4:45pm
Chairman: Lori Bechtold, Boeing Co.

2.1 ***Thermal Challenges for Deployed Applications;***
M. Gust, D. McKenney, Mercury Computer Systems Inc. .....
2.2 ***Stacked Memory Packaging: Increasing Density while Decreasing Area;***
J. Larsen, T. Meade, C. Kenyon, S. Thorne, R Jadomski,
Aeroflex Colorado Springs .....
2.3 ***Processes for Trusted COTS Electronic Parts;***
P. Plunkett, R. Heath, J. Marchiondo, Sandia National Labs .....
2.4 ***State of the Art of Power Semiconductor Modules;***
S. Leslie, Powerex Inc. .....
2.5 ***Value-add Solutions for the BGA Supply Chain;***
H. Rotchadl, Premier Semiconductor Services .....
2.6 ***Experience and Techniques for PEM Replacements of Obsolete Electronic Components;***
M. Marshall, Integra Technologies .....
2.7 ***"Upgrade Screening" Processes;***
C. O'Brien, BAE Systems Inc. .....

Exhibitor Session 4:45 - 5:15pm

Chair: Ed Erginsoy, Aitech Defense Systems

S. Groeshel, Aeroflex Colorado
M. Haller, Fischer Technology, Inc.
D. Albright, Six Sigma
D. Richardson, Vishay Intertechnology
J. Castaldo, Aeroflex Plainview

Exhibits and Get Acquainted Reception with Refreshment 5:30 - 7:30pm

Wednesday, February 11

Session 3: Impact & Mitigation of Pb Free Materials on Reliability 8:00 - 9:45am

Chairman: Larry Harzstark, The Aerospace Corp.

3.1 ***Metal Whiskers: A Discussion of Risks and Mitigation;***
M. Sampson, J. Brusse, Perot Systems NASA Goddard;
Lyudmyla Panashchenko, Univ. of MD-CALCE .....

3.2 ***Reliability Impacts of Lead-Free Materials on Rugged MIL-COTS Modules;***
I. Straznicky, Curtiss-Wright Controls Embedded Computing.....

3.3 ***Tin Whisker Mitigation Methods;***
J. Aragon, R. Wavrik, J. Witham, B. Mckenzie, Sandia National Labs.....

3.4 ***Novel Flexible Ceramic Conformal Coatings for MIL-SPEC Environmental Endurance and Tin Whisker Containment;***
O. Sneh, J. Winkler, C. Sneider, S. Davidson, Sundew Technologies;
R. Lasater, US Navy .....

Session 4: Reliability Practices & Improvements 10:00am - 12:00pm

Chairman: Paul Plunkett, Sandia National Labs

4.1 ***Physics of Failure in Handbook Reliability Predictions;***
L. Bechtold, Boeing Phantom Works.....

4.2 ***Flexible Terminations - Reliability in Stringent Environements;***
J. Prymak, B. Sloka, C. Antoniades, P. Staubli, K. Lai, A. Hill,
C. Riedl, P. Blais, A. Schmidt, KEMET Electronics .....

4.3 ***Reliable Solder Identification by X-ray Fluorescence Spectroscopy;***
M. Haller, V. Roessiger, J. Kessler, Fischer Technology, Inc. .....

4.4 ***Stable, Reliable and Efficient Tantalum Capacitors;***
J. Prymak, KEMET Electronics.....

Buffet Lunch in the Exhibition Area 12:00 - 2:00pm

Thursday, March 12

Session 7: FPGA and Complex ICs 8:00am - 12:00pm

Chairman: Anthony Lai, Aitech Defense Systems Inc.

Overview: ***Performance Computing Trends in Relation to Component Selection***
A. Lai, Aitech Defense Systems Inc.

7.1 ***Secure, High-Performance, Parallel Embedded Architectures Using Acalis® CPU872 PowerPC® Multicore;***
J. Swensen, G. Walters, CPU Technology Inc. .....

7.2 ***The Case for Applying Formal Verification to Designs with FPGAs and ASICs;***
R. Hughes, Actel Corporation.....

7.3 ***FPGA to ASIC Conversion for Radiation Hardened Applications;***
B. Coco, Aeroflex Colorado Springs .....

7.4 ***Using FPGA Devices as Application Specific Standard Products (ASSP);***
S. Habinc, J. Gaisler, Aeroflex Gaisler AB .....

7.5 ***Hybird DC-DC Converters are Standard "Bricks" for Satellite Power Systems;***
T. Bussarakons, International Rectifier.....

7.6 ***Hermetic High Frequency Packaging for Hybrids & MMIC's for Military and Space Applications;***
D. Apte, Microwave Technology Inc. .....

Close of CMSE 2009

Study Group: 1:00 - 2:30pm

Screening & Characterization Process

Chairman: Jerome Trupiano, BAE Systems

All attendees are invited