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Co-Chair: Mumtaz Bora, Peregrine Semiconductor

Complicated Board Programming for Automated Printed Solder Paste Inspection Without CAD Data File """""+*)
Run-Sheng Mao, Ph.D. and Ning-Cheng Lee, Ph.D., Indium Corporation

Inspection Strategies for More Accurate, Faster and Smarter Inspection """""++(
Subodh Kulkarni, Ph.D., Sean Langbridge and Dick Johnson, CyberOptics Corporation

Highly Accurate 3D Solder Paste Inspection Comparing Nano Coated Stencils With Non-Coated Results """""++,
Carsten Salewski and Jacques L'Heureux, Viscom Inc.

SUBSTRATES

Substrate Sessions Organized by Raiyo Aspandiar, Ph.D., Intel Corporation, Don Banks, St. Jude Medical and Srinivas Chada, Ph.D., Schlumberger

SUB1: Solderable Final Finishes
Chair: Don Banks, St. Jude Medical
Co-Chair: Rob Rowland, Axiom Electronics

Critical Process and Chemical Parameters Affecting the Assembly Performance of Organic Solderability Preservatives (OSP) """""- ' (
*Michael Carano, OM Group Electronic Chemicals, LLC

Immersion Tin Surface Finish – Reviewing the Past and a Look to the Future
Mustafa Oezkoek, Ph.D., P.E., Hubertus Mertens and Maren Bruder, Atotech Deutschland GmbH

Controlling High Copper Roughness for Enhancing Immersion Metal Surface Finish Performance """""- ( )
*Lenora Toscano, Aaron Karoly and Ernest Long, Ph.D., MacDermid

SUB2: PCB Technology: Assembly Challenges and Defects Resulting from PCB Design
Chair: Lenora Toscano, MacDermid
Co-Chair: Barry Hindin, Battelle

Thick Copper PCBA Technology and Process Development '''''r-) '
Dennis Willie, Richard Loi, Ph.D. and David Geiger, Flextronics

Spherical Bend Test Failure Criteria Correlation in Compliant Systems '''''r-) -
*John McMahon, P.E. and Brian Standing, Celestica Inc.; Meisam Salahi, Ryerson University

Electroless Nickel Immersion Gold (ENIG) and Black Tar - What Is It and How Can It Be Prevented? '''''r- * +
James Trainor, OMG Electronic Chemicals, LLC

SUB3: New PCB Finishes
Chair: Raiyo Aspandiar, Ph.D., Intel Corporation
Co-Chair: Robert Kinyanjui, Ph.D., John Deere Electronic Solutions

Comparative Study of Next-Generation Surface Finishes for Printed Circuit Assembly '''''r- +'
S.Y. Teng and S. Priore, Cisco Systems, Inc.

Soldering Evaluations on the New Direct Palladium Gold Finish (EPAG) '''''r- , %
Arnd Kilian, Petra Schreier, Maren Bruder, Mustafa Oezkoek, Ph.D., P.E. and Gustavo Ramos, Atotech Deutschland GmbH

Improving Electronics Assembly Process Through Organic-Metal Final Finish '''''r- , *
*Rita Mohanty, Ph.D., John Fudala and Sathiya Narayanan, Enthone Inc.

SUB4: Impact of Surface Finishes on Reliability of Interconnects
Chair: Srini Chada, Ph.D., Schlumberger
Co-Chair: Joe Colangelo, Raytheon

The Effect of Isothermal Aging on the Reliability of Sn-Ag-Cu Solder Joints Using Various Surface Finishes '''''r- - &
Chaobo Shen, Zhou Hai, Cong Zhao, Jiawei Zhang, John L. Evans, Ph.D. and MJ Bozack, Auburn University

Connector Reliability: Tradeoff Between Surface Plating and Mechanical Solutions '''''r%$$$
Karumbu Meyyappan, Alan McAllister, Anil Kurella and Balu Pathangey, Intel Corporation

Pb Free Solder Joint Reliability of Various Surface Finishes '''''r%$$)
Yoshinori Ejiri, Takehisa Sakurai, Yoshinori Arayama, Yoshiaki Tsubomatsu, Kunihiko Akai, Masashi Nakagawa and Kiyoshi Hasegawa, Hitachi Chemical Co., Ltd.

SPOTLIGHT SESSIONS

Spotlight 2
Chair: Mike Zurn, John Deere Electronic Solutions, Inc.

3D Electroform Stencils for Two Level PCB '''''r- $-
Rachel Miller-Short, Photo Stencil

Spotlight 4
Chair: TBD

ESD Sources in a Production Line (SMT) and Solutions - Requirements for Today and in the Future '''''r- &%
Hartmut Berndt, B.E. STAT European ESD Competence Center

Spotlight 7: Counterfeits – Risks in the Supply Chain, Reporting Requirements, Authentication and Testing Techniques

Chair: Sally Arno, Plexus Corp.
Co-Chair: John Radman, Trace Laboratories

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Richard McDermott, SignaKey LLC