

**Technology Working Group (TWG) Chairs
2007 iNEMI Roadmap**

Technology Working Group	Chair(s)	Co-chair(s)
Board Assembly	Dongkai Shangguan (Flextronics)	Ravi Bhatkal (Cookson Electronics), Dave Geiger (Flextronics)
Connectors	John McWilliams (Consultant)	
Energy Storage and Conversion Systems	Dan Doughty (Sandia National Laboratories)	Ralph Brodd (Broddarp of Nevada), Randy Malik (IBM)
Environmentally Conscious Electronics	Mark Newton (Dell)	Joe Johnson (Cisco Systems)
Final Assembly	Steve Davidson (Delphi)	Reijo Tuokko (Tampere University)
Interconnect Substrates-Ceramic	Howard Imhof (Metalor Technologies USA)	Ton Schless (Midas Vision Systems)
Interconnect Substrates-Organic	Jack Fisher (Interconnect Technology Analysis)	Henry Utsunomiya (Consultant)
Mass Data Storage	Tom Coughlin (Coughlin Associates)	Roger Hoyt (Consultant)
Modeling, Simulation & Design Tools	Sanjeev Sathe (ASE U.S. Inc.)	Yi-Shao Lai (ASE Taiwan), SB Park (SUNY-Binghamton)
Optoelectronics	Rick Clayton (Clayton & Associates)	Laura Turbini (CMAP)
Organic and Printed Electronics Technology	Dan Gamota (Motorola)	Jan Obrzut (NIST), Jie Zhang (Motorola)
Packaging	Joseph Adam (Skyworks Solutions)	Bill Bottoms (NanoNexus)
Passive Components	Philip Lessner (KEMET Electronics)	Joseph P. Dougherty (Penn State)
Product Lifecycle Information Management	Eric Simmon (NIST)	Joanne Friedman (ConneKted Minds, Inc.)
RF Components and Subsystems	Erid Strid (Cascade Microtech)	John Barr (Agilent Technologies), Steve Kenney (Georgia Tech), Vijay Nair (Intel)
Semiconductor Technology	Paolo Gargini (Intel Corporation)	Alan Allan (Intel Corporation)
Sensors	Tim McBride (Sensata Technologies)	Mike Azarian (CALCE-University of Maryland)
Test, Inspection & Measurement	Mike Reagin (Delphi)	Michael Smith (Teradyne)
Thermal Management	Carl Fisher (3M), Cam Murray (3M)	

The TWGs forecast trends for 19 technology and infrastructure areas, and contrast technology trends with anticipated product needs. TWGs are composed of experts from OEMs, EMS providers, suppliers, government agencies, universities and related consortia/trade associations.