

## 2007 iNEMI ROADMAP NEWSLETTER

August 2005

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Welcome to the first newsletter of the *2007 iNEMI Roadmap* cycle. This and subsequent newsletters will be completely dedicated to keeping you informed about the progress of the *2007 iNEMI Roadmap*. Please pass this newsletter on to anyone within your technical network who might be interested in becoming involved in this effort.

### Name Changes

Our first piece of news is regarding two important name changes. First, the consortium's name, formerly NEMI (National Electronics Manufacturing Initiative) has been changed to **iNEMI (International Electronics Manufacturing Initiative)** to better reflect the expanding international scope of the consortium and our members. The second modification is the name of the roadmap. This latest roadmap will be called the *2007 iNEMI Roadmap* (instead of 2006). Even though the roadmap will be developed during 2006, it will not be "published" or available to industry until 2007. Calling it the 2007 iNEMI Roadmap more accurately reflects the publication schedule.

These changes will likely take some time for everyone to get used to. I know I find myself still referring to "NEMI" every now and then.

### Roadmap Overview

As a reminder, and to inform new recipients, my name is Chuck Richardson. Working with Jim Arnold (Motorola), iNEMI's Director of Roadmapping, I am responsible for staff management of the roadmap effort. Since I don't know how familiar you are with the roadmap, I would like to give you a quick overview of its make-up. This document is made possible by volunteers from the industry (iNEMI members and non-members) that form groups and committees to develop chapters for seven Product Emulator Groups (PEGs) and 19 technology and business/infrastructure areas. Each chapter anticipates manufacturing technology needs over a 10-year horizon. Each of the PEGs has a chair or co-chairs and as many group members as needed for a broad-based view of that emulator's scope (usually 2-5 individuals).

### 2007 iNEMI Roadmap Product Emulator Groups (PEGs):

1. Aerospace/Defense
2. Automotive
3. Consumer/Portable
4. Medical
5. Netcom (Network, Datacom & Telecom)
6. Office/Large Business Systems
7. System-in-Package (SiP)

The PEGs will define OEM requirements for their product sectors from both a business and technology perspective. Needs are presented in each PEG chapter, using key attribute tables and text according to templates that are furnished by the iNEMI Technical Committee. Each PEG chair will be expected to attend two to three face-to-face meetings during the 2006 calendar year, but most of the group's work is done by telephone and over the web.

The Technology Working Groups (TWGs) use the OEM requirements detailed in the seven PEG chapters to prepare each of their roadmap chapters, detailing where they stand — and expect to progress over the next 10 years — with respect to the stated needs. Other than the TWG chairs, who are expected to attend a minimum of three meetings, no travel is required to participate in a TWG, and this activity requires only as many hours as you want to dedicate to it, depending upon how involved you wish to be.

### 2007 iNEMI Roadmap Technology Working Groups (TWGs):

1. Board Assembly
2. Connectors
3. Displays
4. Energy Storage Systems
5. Environmentally Conscious Electronics
6. Final Assembly
7. Interconnect Substrates - Ceramic
8. Interconnect Substrates - Organic
9. Mass Data Storage
10. Modeling, Simulation & Design Tools
11. Optoelectronics
12. Packaging
13. Passive Components
14. PLIM (Product Lifecycle Information Management)
15. RF Components & Subsystems
16. Semiconductor Technology
17. Sensors
18. Test, Inspection & Measurement
19. Thermal Management

### **Recent Activity**

Work has already begun. The Technical Committee has approved the 2006 schedule, we have filled several of the openings for committee chairs, and our first big event is the PEG meetings at SMTA International in Chicago this September (see related item). The schedule is included at the end of this newsletter. You will notice that, in response to the debriefing sessions following the last cycle, we moved the schedule forward to hopefully reduce the impact of vacations (scheduled for the summer months) on the TWGs' completion schedules. In order to do that, we had to move the PEG schedule ahead as well. You will notice that, when possible, we have scheduled roadmap meetings in connection with other popular industry venues and meetings to help participants to justify their travel plans around both.

### **Upcoming Events**

The *2007 iNEMI Roadmap* Product Emulator Group Working Meetings and Kick-off are scheduled for September 29 and 30, at SMTAI in Chicago. Individual PEG meetings will be held 10:00 a.m.—4:00 p.m. CDT in the Donald Stephens Convention Center, room 11 on the 29th. Any PEG Chair that would like to reserve this room for a two-hour block should let me know as soon as possible. Jim Arnold and I will also be holding an informational meeting in room 11

from 4:00-5:00 p.m. This session is to answer any questions posed by new or existing PEG or TWG Chairs who would like to attend.

To date, there has been one PEG meeting announced — the Medical PEG will meet from 10:00 a.m. to noon, hosted by Anthony Primavera (Guidant). The following day, there will be a joint PEG / TWG Chair / Technical Committee meeting to review and discuss the seven PEG emulators.

The preliminary agenda for the joint emulator review meeting is as follows:

### **Friday, September 30**

<b>TIME:</b>	<b>TOPIC:</b>	<b>DISCUSSION LEADER:</b>
8:00 AM	Introduction and Review of Agenda:	Bob Pfahl
8:10 AM	2006 PEG Review Introduction	Jim Arnold
8:20 AM	Automotive PEG Review Discussion	Spall / Kuhlman *
9:05 AM	System in Package PEG Review Discussion	Adam / Abteu
9:50 AM	Break	
10:00 AM	Office PEG Review Discussion	Pearson / Knoblen
10:45 AM	Aerospace/Defense PEG Review Discussion	Murphy / Hyland
11:30 AM	Lunch	
12:15 PM	Network, Datacom, Telecom PEG Review	TBD / Guth
1:00 PM	Medical PEG Review Discussion	Primavera / Barthel
1:45 PM	Consumer PEG Review Discussion	Noe/ Arnold
2:00 PM	Break	
2:10 PM	T.C. Business Meeting	Bob Pfahl / Fred Kuhlman
3:00 PM	Adjourn	

\*Each PEG presentation will consist of a 25-minute presentation by the PEG Chair followed by a 20-minute discussion led by the Technical Committee discussion leader.

Anyone attending either the PEG working meetings on Thursday or the joint meeting on Friday needs to register for SMTAI in order to receive a badge for admission to the building and meeting rooms. This registration is free, and allows access to the show floor as well as our meeting rooms. Of course, there will be numerous opportunities to participate in the SMTAI Conference activities as well; however you will be required to pay for conference attendance. The registration process is relatively painless and can be accomplished on-line at [www.smta.org/smtai](http://www.smta.org/smtai). All information for show registration and hotel reservations is available on the SMTAI website or the iNEMI public website at [www.inemi.org](http://www.inemi.org). Please sign up as soon as possible as space is limited. Individuals from all TWGs are invited to attend these meetings and be involved in PEG development and improvement. Please contact Linda Jessup at iNEMI headquarters to let her know that you are planning to attend the meetings. Linda can be reached at [Linda.Jessup@inemi.org](mailto:Linda.Jessup@inemi.org) or 1-703-834-0330.

## Get Involved

Work is continuing to fill a few remaining openings for both PEG and TWG leadership positions. We are presently requesting applicants for the positions of Netcom PEG Chair/Co-Chair and TWG Chapter Chairs for the RF Components & Subsystems, Displays, and Optoelectronics Chapters. If you have been thinking about serving the industry in a position of Chapter Chair, please contact me and I will work with you to decide if this is the cycle to get involved. You are not required to be an iNEMI member to participate in roadmap development or to serve as a chair of one of the groups. In fact, the more diversified the representatives working on the roadmap, the broader the reach and the more valuable the final product is to the industry. With the wide range of technology categories, it should be easy to find one that stirs your interest and calls you to participate.

The iNEMI roadmap has become recognized as an important tool for defining the "state of the art" in the electronics industry as well as identifying emerging and disruptive technologies. It also fuels development of future iNEMI projects and sets priorities for industry R&D over the next 10 years.

With the "globalization" of the iNEMI roadmap, the next "edition" should become even more important as a tool for identifying technology gaps and possible solutions for an increasingly global industry.

If you would like to be involved with the *2007 iNEMI Roadmap* team, or be added to the mailing list of this monthly newsletter, please contact Chuck Richardson at [Chuck.Richardson@inemi.org](mailto:Chuck.Richardson@inemi.org).

For more detailed information about the meetings discussed above, please contact Linda Anderson-Jessup at +1 703-834-2086 or [linda.jessup@inemi.org](mailto:linda.jessup@inemi.org).

**From the Editor:** We hope that you will find this newsletter interesting and informative. If you would like to access an issue of a past roadmap newsletter or check other roadmap information please use the public iNEMI website link: <http://www.inemi.org/roadmapping/status.html>. Please provide comments to Chuck Richardson at 1-256-880-0922 or email [Chuck.Richardson@inemi.org](mailto:Chuck.Richardson@inemi.org).

## 2007 iNEMI Roadmap Calendar

### 2005

Third quarter	Select Product Sector Champions, teams and refine data charts
Third & fourth quarters	Product Sector Champions develop emulators
September	Teleconference with Product Emulator Group (PEG) Chairs
September 30	PEG kick-off with PEGs/TWGs/Technical Committee at SMTAI (Chicago)
November 16	European kick-off at Productronica
December	PEG review meeting with TC

### 2006

January 4	2004 chapter, format, Executive Summary mailed to each Technology Working Group (TWG) chair (Word 6.0)
January 11	Organizing teleconference with TWG Chairs
February	PEG Workshop/TWG kick-off at APEX (Anaheim): <ul style="list-style-type: none"><li>• Product sector tables complete – PEG chapters written</li><li>• Cross-cut issues addressed</li></ul>
April	Roadmap workshop - Japan
May 15	Teleconference With TWG Chairs
May 24	Open Roadmap review at iNEMI (Herndon, VA)
May 25	TC meeting in Herndon
May 25	TWG/PEG cross-cut meeting (Herndon)
June	Roadmap workshop in Europe
July 1	TWG chapter drafts due for TC review
August 9	TC Face-to-Face review with TWG Chairs in Kokomo
September	iNEMI Council review of key issues and preliminary summary at SMTAI
September 22	Final Roadmap chapters due
October 31	Edit, prepare Appendix A-D, Executive Summary
November 20	Go to “press”
December 4	Ship to members

### 2007

February	2007 iNEMI Roadmap released to industry at APEX
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