



International Electronics Manufacturing Initiative

**iNEMI Substrates
for Medical Devices
Project**

David Godlewski, iNEMI

Lake Oswego, OR

November 13, 2006

Status:

- **Founding Champion:
Denny G. Aeschliman, 3M Electronics**
- **“Call for Participation” Teleconference held June 2006**
- **Held bi-weekly meeting until September 2006**
- **Developed draft SOW**
- **Inactive**

Purpose:

- **Define the key gaps between the electronic industry standards and medical devices and then define the required performance and quality for these medical devices**

Background and Motivation:

- **Substrates are one of the key interconnects in modern electronic medical devices and consist of system (mother) boards, subsystem (daughter) boards, chip packages and flexible interconnects**
- **Generally, this project will focus on the high density, high performance, and higher quality substrates that the normal electronic industry will use**
- **The project will use the existing standards such as IPC, Military, and JEDEC standards to provide baseline design, performance and quality standards**

Scope of Work:

- **Define gaps in design requirements between industry standards and medical electronic device manufactures:**
 - Implantable
 - Large-scale medical electronics
 - Portable electronics.
- **Define performance gaps between electronic industry standards and medical devices**
- **Key is to identify where the medical device's performance (as differentiated from consistent quality) is affected by substrates that meet today's electronic industry substrate standards**
- **Define quality gaps between electronic industry and medical device manufacturers**

