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**Version 5.0**  
**Date: May 15, 2009**

**Project Statement**  
**iNEMI Environmentally Conscious Electronics TIG**  
**iNEMI HFR-Free Technology Leadership**  
**HFR-Free PCB Materials Project**

Due to the complex nature of the work outlined in the associated Statement of Work, this effort will be separated into two interrelated set of tasks or projects. These interrelated set of tasks will be referred to as the PCB Materials Project and the Signal Integrity Project. Participating companies will have the option of joining one or both of the projects. This Project Statement refers specifically to the PCB Materials portion, referred to as the **HFR-Free PCB Materials Project**.

Recognizing that this project is being driven primarily by the OEM participants, an OEM Advisory Board will be formed to oversee and review the activities of the two project teams. All founding OEM participating companies will be allowed to assign two representatives to the Advisory Board, a primary and an alternate.

\_\_\_\_\_ (“Participating Member”) agrees to participate in the  
**Enter Company Name**  
iNEMI project entitled HFR-Free PCB Materials Project<sup>1</sup> pursuant to and as defined in the iNEMI Project Participation Agreement and to carry out the tasks as assigned and agreed to in the HFR-Free Technology Leadership Statement of Work<sup>2</sup> and any approved addendum to this Project Statement. Pursuant to the iNEMI Intellectual Property Policy, the participating member

does  does not  (check one)

have any intellectual property or background technology to disclose in conjunction with this project.<sup>3&4</sup>

<sup>1</sup> A majority of iNEMI HFR-Free PCB Materials Project participants must be in favor of admitting new companies after the initial enrollment period is over.

<sup>2</sup> iNEMI HFR-Free Technology Leadership Program Statement of Work (SOW), Version 5.0; May 15, 2009.

<sup>3</sup> As provided for in the iNEMI Intellectual Property Policy, if background technology or intellectual property is claimed, a Declaration of same must be provided, in writing, to the iNEMI Secretariat within 45 days of signing this agreement.

<sup>4</sup> Intellectual property or background technology disclosed in a declaration can only be used by the project participants for the purpose of research in connection with this project, and not for commercial purposes.

Approval of this Project Statement is a three step process. The first signature verifies company participation, while the second approval acknowledges agreement to the specific tasks and contributions required from each participant. The third signature is the acknowledgement and acceptance of the submitted Project Statement by the iNEMI Vice President of Global Operations.

The iNEMI HFR-Free PCB Materials Project requires each participating company to commit to the first three items and at least two additional items from the eight items which follow (please check those tasks that your firm plans to participate in):

1.  Provide at least one man-month or equivalent in-kind support (e.g., materials, test samples, equipment, etc.) annually.
  - a. Final resource and time commitments will be defined in a task list generated after the final Project Team is formed.
  - b. This includes the agreement to commit appropriate resources (possibly more than 1 man month) to meet accelerated project timeline and targeted end dates. The second signature below indicates acknowledgement and agreement to fulfill all current and future obligations defined by the project team.
2.  In the event project expenses are incurred, the costs will be shared among participants. Cost allocation by iNEMI staff will take into consideration the existing allocation of resources (both human and materials) so that no member firm is unfairly burdened. An amendment to the Statement of Work and Project Statement with the detailed breakdown of the project expenses will be submitted by the Project Team to the OEM Project Leadership Advisory Board for review and approval prior to commencement of the work.
3.  Agree that the project team will provide technical support within its membership in sharing knowledge regarding PCB Defects / Margin Degradation / Test Metrologies / PCB Design / Design Rules and Fabrication for the duration of the project.
4.  Provide Key Electrical / Mechanical parameter requirements by market segment to generate appropriate Stack-Up definitions and Test Plan.
5.  Agree to provide materials, components, Test Vehicles, Design Capability, Modeling Capability, PCB Fabrication, PCB assembly, Test Capability, FA Capability as required by the Test Plan.
6.  Design and/or assemble test samples for evaluation, and/or carry out tests and evaluations as negotiated and agreed to, with other members of the project, to fulfill the Statement of Work.
7.  Collaborate on input to final report. Document results and publish findings to iNEMI members.
8.  Provide recommendations for industry standards to IPC / JEDEC to generate and publish an acceptable industry specification for Halogen-Free Design Rules as necessary.
  - a. Commit to promote the adoption of any recommended standards, tools, or processes that are developed by this project internally within the participating company and its supply chain partners.

The HFR-Free Technology Leadership Project's Statement of Work<sup>5</sup> defines the project terms of three (3) phases as defined in the Statement of Work. This is a gated process, where the subsequent phases of the project will not proceed until a formal review and approval of the planned activities (task assignments, company resources, and costs) has been completed by the OEM Project Leadership Advisory Board.

Upon completion of Phase I: Design, and before the start of the HFR-Free Technology Leadership Project's Phase II: Test / Validation, the project participants will amend this document with a listing of specific project tasks and any associated project expenses. The amendments will be submitted to the OEM Project Leadership Advisory Board for review and approval prior to commencement of the Phase II work.

The iNEMI HFR-Free PCB Materials Project requires iNEMI membership.

The data generated and/or collected during the execution of this project will be controlled by the iNEMI Members, and distribution of any data collected must be agreed on by a majority vote of the official project participants.

The project will adhere to the terms of the iNEMI Intellectual Property Policy for declaring, identifying, and disclosing background (confidential) technical information and background intellectual property.

The data, information, and conclusions developed during this project will be available only to participating members of iNEMI who have formally joined this or the HFR-Free Signal Integrity Project. All iNEMI members will be eligible to receive status reports (e.g., at member council meetings) as well as a summary report once it is released at the end of the project. The status reports as well as the summary report will not contain data that the participants determine<sup>6</sup> should only be shared within the project.

If iNEMI or one individual would like to present data or information gained in this project to another company or companies, in technical paper(s), or in article(s), every member of the project team must be informed and a simple majority is required for approval. Following approval by the project, a majority of the members of the OEM Advisory Board must also ratify the release.

Responsibility for the distribution of data collected will transfer to iNEMI 12 months after the conclusion of each phase of the project. This control will include decisions on how data collected and generated during the course of the project will be distributed and used. This includes the use of any test vehicle designs for use and/or distribution outside a participating member's company. Any company wishing to publish independent analysis or summary of the data collected and/or generated will be required to get approval prior to submitting the work for external publication and/or presentation.

Ownership and control of the data and information gathered during the execution of this project will transfer to the iNEMI Secretariat 12 months after the conclusion of each phase of the project. After that period all requests for publication or transmission of data collected must be reviewed and approved by iNEMI.

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<sup>5</sup> iNEMI HFR-Free Technology Leadership Statement of Work (SOW), Version 5.0; May 15, 2009.

<sup>6</sup> The data not included in the status reports or summary report will be determined by majority vote of the participants.

## Project Participant Verification

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Print or type Name & Title

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Company

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Signature

Date

Email

## Management Approval and Commitment of Resources for Current and Future Tasks

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Print or type Name & Title

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Company

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Signature

Date

Email

## iNEMI Acceptance

Robert C. Pfahl

Vice President of Global Operations

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Print or type Name & Title

iNEMI

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Company

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Signature

Date

bob.pfahl@inemi.org

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Email