PCN Overview

PCN Original Issue Date: April 12, 2010
Type of Change Notification: Assembly material change
Expected Qualification Date: June 30, 2010
Sample Availability: July 15, 2010
Expected First Ship Date: September 1, 2010
Last Date to Buy Pre-Change Product: March 1, 2011
Affected Products: EN5337QI, EN5327QI, EA101BCM, EN109INT, EX3AV
Reference Documents: JEDEC Standard JESD46C

PCN Revision History:
Revision Date: April 12, 2010  Revision Number: 00  Reason: initial issue

Description of Change

Enpirion is converting to copper wire as a qualified wire bond material for QFN devices.

Customer Impact of Change and Recommended Action

There is no customer impact since there is no change in form, fit, function, reliability and quality of the products.

Reason for Change

Copper wire is increasingly becoming the material of choice for wire bonding in the semi-conductor industry due to the spiraling cost of gold. Conversion to copper wire is an integral part of Enpirion’s cost containment strategy while enabling manufacturing flexibility and ensuring long term continuity of supply.

Product Identification

Products with copper wire will be easily identifiable. The product identification details will be provided in the next issue of this PCN prior to first shipment.
Product Qualification Plan

The qualification data will be provided after completion in the next issue of this PCN.

<table>
<thead>
<tr>
<th>Item</th>
<th>Reliability Test</th>
<th>Test Condition &amp; Standard</th>
<th>Test Results (Qty: Pass/Fail)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High Temperature Storage (HTS)</td>
<td>JESD22-A.103-C (150°C, 1000 hours, Condition B)</td>
<td>Lot #1 Lot #2 Lot #3</td>
</tr>
<tr>
<td>2</td>
<td>Pre-Conditioning</td>
<td>JESD22-A.113 and J STD 020</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Autoclave with Pre-Conditioned Devices from Item 2</td>
<td>JESD22-A102C (100%RH, 121°C, 96 hours, Condition C)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Temperature Cycle with Pre-Conditioned Devices from Item 2</td>
<td>-65°C to +150°C / 500 cycles JESD22-A104, Condition C, Soak Mode 5</td>
<td></td>
</tr>
</tbody>
</table>

Product characterization data and product samples will be available on request.

Customer Acknowledgement

Customers are requested to acknowledge this notification within 30 days of its issue date. Lack of response within 30 days of PCN release will constitute an acknowledgement.

Please contact Enpirion at customerservice@enpirion.com, your manufacturers’ representative, or distributor if you have any issues with this PCN or require additional information.

Customer: _________________________   Name: ____________________________
Title: ____________________ Phone: _______________ Email: ________________
Customer Comments: _________________________________________________________
Customer Signature: ___________________  Date: _______________________

Contact Information

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www.enpirion.com

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