November 17, 2014

Subject: PCN#03B-14 Notification of Intent to Utilize an Alternate Qualified Assembly Site/Test Site and/or Alternate Qualified Material Sets for Select Lattice Products

Dear Lattice Customers,

Lattice is providing this 90-day Notification of our intent to utilize an alternate qualified assembly site/test site and/or alternate qualified material sets for select devices and packages.

In an effort to expand Copper bond wire (Cu-wire) manufacturing capacity, Lattice will now use Amkor Philippines for select devices. Amkor Philippines utilizes industry standard raw material, assembly and test processes. The use of these alternate qualified material sets will not change external package dimensions. The package footprints remain the same and are published on the Lattice website.

Affected Products
The Ordering Part Numbers (OPNs) affected by this PCN are listed in an Excel spreadsheet here. This PCN also affects any custom devices (i.e. factory programmed, special test, tape and reel, non-standard speed grade and package, etc.), which are derived from any of the devices listed in the table.

Material Set Changes
Please refer to the Excel spreadsheet here for details of material set changes associated with this PCN.

Device Identification
Devices with Cu-wire material sets manufactured at Amkor Philippines can be identified by a numeric value (“3”) in the fifth position of the datecode marked on the topside of the devices. This datecode is also marked on the label on the outside of the inventory box as well as on the anti-static moisture barrier bag within. See device topside marking example below:
Data Sheet Specifications
This PCN has no impact on any data sheet specifications.

Qualification Data
Qualification data pertinent to this PCN can be found here.

Characterization Data
A device characterization report is available here.

Frequently Asked Questions (FAQ)
Lattice recommends that customers refer to the FAQ document available here to find answers to commonly asked questions regarding this PCN.

Conversion Timeline
Conversion timing for this PCN is 90 days from the date of this Notice. No action is required (meaning no changes to OPNs, your internal Bills of Material, backlog or orders) unless you plan to do further evaluation. Should samples be required to complete evaluation of this PCN, such sample requests must be received no later than May 14, 2014 (30 days after the date of this Notice). Samples for this PCN will use the “CU3” suffix appended to the standard OPNs as shown in the example below:

Example:
Standard OPN: LCMXO2-1200ZE-1TG144C
Amkor Philippines Cu-wire Custom OPN: LCMXO2-1200ZE-1TG144CCU3

Conversion Timing Summary
- Sample Request Cut-off Date: May 14, 2014
- PCN Expiration Date: July 14, 2014

Backlog
Lattice recommends that customers complete their evaluation before the PCN Expiration Date (July 14, 2014). Lattice will begin shipping devices manufactured at Amkor Philippines with Cu-wire as early as July 14, 2014. Any customer who does not want to receive devices manufactured at Amkor Philippines w Cu-wire beyond the PCN Expiration Date must initiate a change order request to convert their backlog to the “CA2” suffix appended to the standard OPN as shown in the example next page:
Example:
Standard OPN: LCMXO2-1200ZE-1TG144C
Existing Materials/Assembly Locations Custom OPN: LCMXO2-1200ZE-1TG144CCA2

After the customer completes evaluation of Amkor Philippines manufactured device, any backlog with the “CA2” custom OPNs must be converted back to the standard OPN.

Response
In accordance with JESD46-D, this change is deemed accepted by the customer if no acknowledgement is received within 30 days from this Notice. Lattice PCNs are available on the Lattice PCN web page. Please sign up to receive e-mail PCN alerts by registering here. If you already have a Lattice web account and wish to receive PCN alerts, you can do so by logging into your account and making edits to your subscription options.

Contact
If you have any questions or require additional information, please contact pcn@latticesemi.com.

Sincerely,
Lattice Semiconductor PCN Administration

PCN History

<table>
<thead>
<tr>
<th>PCN#</th>
<th>Issue Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>03A–14</td>
<td>April 14, 2014</td>
<td>Initial release</td>
</tr>
<tr>
<td>03B–14</td>
<td>November 17, 2014</td>
<td>Revision to the material set table; adding wire, solder ball, and lead-frame composition information</td>
</tr>
</tbody>
</table>