November 17, 2014

Subject: PCN#06B-14 Notification of Intent to Utilize an Alternate Qualified Assembly Site/Test Site and 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 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 J-Devices for select devices. J-Devices (Oita, Japan) 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 J-Devices can be identified by a numeric value (“4”) in the fifth position of the datecode marked on the topside of the devices. “B” alpha character in the sixth position of the datecode indicates that the device is tested at J-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:

```
4
```

“4” in the fifth position of Datecode indicates Cu-wire material set from J-Devices, “B” in the sixth position of Datecode indicates that the device is tested at J-Devices.

PCN#06B-14 supersedes PCN#06A-14

see PCN history for change descriptions.
**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](#).

**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 November 6, 2014 (30 days after the date of this Notice). Samples for this PCN will use the “CU4” 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-1TG144CCU4

**Conversion Timing Summary**
- Sample Request Cut-off Date: November 6, 2014
- PCN Expiration Date: January 6, 2015

**Backlog**
Lattice recommends that customers complete their evaluation before the PCN Expiration Date (January 6, 2015). Lattice will begin shipping devices manufactured at J-Devices with Cu-wire as early as January 7, 2015. Any customer who does not want to receive devices manufactured at J-Devices with 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 below:

**Example:**
- Standard OPN: LCMXO2-1200ZE-1TG144C
- Existing Materials/Assembly Locations Custom OPN: LCMXO2-1200ZE-1TG144CCA2

After the customer completes evaluation of J-Devices 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>06A-14</td>
<td>October 6, 2014</td>
<td>Initial release</td>
</tr>
<tr>
<td>06B-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>