June 2, 2014

Subject: PCN# 04A-14, 90-Day Notification of Intent to Utilize an Alternate Qualified Material Set for the ICE40 144-pin TQFP Package Devices

Dear Lattice Customers,

In accordance with our Product Change Notification (PCN) policy, Lattice is providing this 90-day notification of our intent to utilize an alternate qualified material set for the ICE40™ 144-pin Thin Quad Flat Pack (TQFP) package devices.

The Malaysian facility of Advanced Semiconductor Engineering (ASE) has been the primary source of Lattice’s ICE40 devices. ASE Malaysia is standardizing the mold compound by moving to an industry standard material set and this is the only change involved with this PCN. ASE Malaysia utilizes industry standard raw materials, assembly and test processes. All external package dimensions and package footprints remain the same and are published on the Lattice web site (www.latticesemi.com).

AFFECTED DEVICES / PACKAGES
The affected devices are listed below. This PCN also affects any custom devices (i.e. factory programmed, special test, tape and reel, non-standard speed grade, etc), which are derived from any of the devices listed.

ICE40HX1K-TQ144
ICE40HX4K-TQ144

ALTERNATE QUALIFIED MATERIAL SET
The complete material set used is described in Exhibit A.

QUALIFICATION DATA
Reliability testing for the qualification of these ASE Malaysia-manufactured devices using the new material set has completed. A summary of the qualification data is available here.
DATA SHEET SPECIFICATIONS
This PCN has no impact on any data sheet specifications.

PCN TIMING
Conversion timing for this PCN is 90 days from the date of this Notice. Initial products with this new material set from ASE Malaysia will ship no earlier than September 2, 2014. Should samples be required to complete evaluation of this PCN, such sample requests must be received no later than July 2, 2014.

CONVERSION TIMING – Summary

- Sample Request Cut-off Date: July 2, 2014
- PCN Expiration Date: September 2, 2014

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
## EXHIBIT “A” – ASE MALAYSIA ALTERNATE QUALIFIED MATERIAL SET

<table>
<thead>
<tr>
<th>Package Type</th>
<th>Assembly Site</th>
<th>Material Set</th>
<th>Assembly Site</th>
<th>Material Set</th>
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</thead>
</table>

### Note:
The highlighted cells in the “ALTERNATE QUALIFIED” section identify the changes associated with this PCN.