



July 25, 2016

**Subject: PCN#10A-16 90-Day Notification of Intent to Utilize an Alternate Qualified Mask Set for the iCE40 UltraLite™ Products**

Dear Customer,

Lattice is providing this notification of our intent to utilize an alternate qualified mask set for the iCE40 UltraLite™ Products.

**Change Descriptions**

As part of Lattice continuous improvement efforts, Lattice is releasing an alternate qualified mask set as a manufacturing enhancement.

The use of this alternate qualified mask set will not change function, form, fit or external package dimensions.

**Affected Devices**

The Ordering Part Numbers (OPNs) affected by this PCN are as follows:

**ICE40UL1K-CM36AI**  
**ICE40UL1K-CM36AITR**  
**ICE40UL1K-CM36AITR1K**  
**ICE40UL1K-SWG16ITR**  
**ICE40UL1K-SWG16ITR1K**  
**ICE40UL1K-SWG16ITR50**  
**ICE40UL640-CM36AI**  
**ICE40UL640-CM36AITR**  
**ICE40UL640-CM36AITR1K**  
**ICE40UL640-SWG16ITR**  
**ICE40UL640-SWG16ITR1K**  
**ICE40UL640-SWG16ITR50**

This PCN also affects any custom devices (i.e. factory programmed, special test, non-standard speed grade, etc), which are derived from these devices.

**Device Identification**

Lattice Semiconductor Home Page: <http://www.latticesemi.com>

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Devices with this new alternate qualified mask set can be identified by the first alpha character of the Inspection Lot Number (“**B**” for the alternative mask product), which is marked on the topside of the device. Inspection lot numbers are 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 examples below.

**iCE40UL1K in 36 BGA**

UL1K36A  
**B**YWWATXX  
COO

**iCE40UL1K in WLCSP**

UL1K16  
**B**Y  
WWATXX

**“B” in the first position of Datecode indicates the alternate mask set**

**COO = Country Of Origin code**

**Data Sheet Specifications**

This PCN has no impact on any data sheet specifications. The alternate mask set devices are fully backward compatible in all applications.

**Qualification Data**

Qualification reliability testing for iCE40 UltraLite devices has been completed. A summary of the qualification data is available [here](#).

**Sample Support**

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 August 15, 2016 (30 days after the date of this Notice). Samples will be available in middle of August. Samples for this PCN will use the “**ALE**” suffix appended to the standard OPNs as shown in the example below. PLEASE NOTE: Samples are available only in tray packaging for the CM36A package, and TR50 reel quantities for the SWG16 package.

**Example:**

Standard OPN: ICE40UL1K-CM36AI  
ICE40UL640-SWG16ITR

Available Alternate Device Sample OPNs:

ICE40UL1K-CM36AIALE

ICE40UL1K-SWG16ITR50ALE

ICE40UL640-CM36AIALE

ICE40UL640-SWG16ITR50ALE

Customers will have 90 days to evaluate this PCN from receipt of samples.

### **PCN Timing**

Conversion timing for this PCN is 90 days from the date of this Notice. Samples will be available in the middle of August.

Customers will have 90 days to evaluate this PCN from receipt of samples.

### **PCN Timing Summary**

- **Sample Request Cut-Off Date:**      **August 25 , 2016**
- **PCN Expiration Date:**              **October 25, 2016**

### **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 website](#). 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](mailto:pcn@latticesemi.com).

Sincerely,

Lattice Semiconductor PCN Administration