May 28, 2019

Subject: PCN#04A-19 90-Day Notification of Intent to Utilize an AlternateQualified Mask Set for the iCE40 Ultra™ (ICE5LP) Products

Dear Customer,

Lattice is providing this notification of our intent to utilize an alternate qualified mask set for the iCE40 Ultra™ (ICE5LP) Products.

Change Descriptions
As part of Lattice’s 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 form, fit, or function.

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

ICE5LP4K-CM36ITR
ICE5LP2K-CM36iTR1K
ICE5LP4K-SWG36iTR1K
ICE5LP1K-SWG36iTR1K
ICE5LP4K-SWG36ITR
ICE5LP1K-CM36ITR
ICE5LP2K-SG48ITR
ICE5LP2K-SWG36iTR1K
ICE5LP1K-CM36iTR1K
ICE5LP1K-SWG36ITR
ICE5LP4K-CM36iTR1K
ICE5LP2K-SWG36ITR
ICE5LP4K-SG48ITR
ICE5LP1K-SG48ITR
ICE5LP2K-CM36iTR

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
Devices with this new alternate qualified mask set can be identified by the first alpha character of the Inspection Lot Number ("C" 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.

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

\[ COO = \text{Country Of Origin code} \]

**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 Ultra 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 June 28, 2019 (30 days after the date of this Notice). Samples will be available in middle of July. Samples for this PCN will use the “ANF” suffix appended to the standard OPNs as shown in the example below. PLEASE NOTE: Samples are available only in trays for the CM36A and 48QFN packages, and TR1K reel quantities for the SWG36 package.
Example:
Standard OPN: ICE5LP4K-CM36ITR
ICE5LP2K-SWG36ITR

Available Alternate Device Sample OPNs:
ICE5LP4K-CM36IANF
ICE5LP2K-SWG36ITR1KANF

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

PCN Timing Summary
- Sample Request Cut-Off Date: June 28, 2019
- PCN Expiration Date: August 28, 2019

Response
In accordance with J-STD-046, 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 web site. 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