



January 13, 2020

**Subject: PCN#09A-19 Product Change Notification Alternate Additional Assembly / Test Supplier Qualification for Select Lattice Products**

**Overview**

Lattice is providing this Product Change Notification (PCN) of our intent of using Advanced Semiconductor Engineering Inc., Kaohsiung (ASEK) as alternate assembly and test source for select Lattice Semiconductor products. Unless otherwise noted, there is no change in form, fit or function of the affected products.

**Description**

Founded in 1984, ASEK has a long history of innovation and technology leadership. ASEK's technology and manufacturing strengths cover processes that include Cu Wire Bonding, Wafer Bumping, Cu Pillar Bumping, Flip Chip Packaging, Wafer Level Chip Scale Packaging (WLCSP) and System in Package (SiP), MEMS & Sensor Packaging, Fan Out, 2.5D/3D IC Packaging, Green Packaging and 300mm turnkey backend solutions.

Since 2015 ASEK has been a primary site for majority of Lattice's products such as Cu-wire bonded BGA, QFP, WLCSP and flip chip BGA products. In order to improve supply chain flexibility and additional capacity, Lattice is now qualifying additional products at ASEK.

**Effects to Customer Design**

The iCE40UP5K-SG48 (48 QFN package) has a pad width change.

All other affected products have no change in form, fit and function. There will be no impact on customer designs.

Details of the iCE40UP5K-SG48 change and other cosmetic product differences are available [here](#).

## **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**

All devices to be qualified at ASEK will follow standard ASEK Bills of Materials (BOMs) or previously qualified and in use for existing production Lattice devices. This leverages actual Lattice reliability data available on current products that are already in production at ASEK as well as ASE's high volume production experience across their customer base for these BOMs. The use of ASE's standard BOM will provide high quality and manufacturability.

Please refer to the Excel spreadsheet [here](#) for details of material set changes associated with this PCN.

## **Data Sheet Specifications**

This PCN has no impact on any electrical data sheet performance specifications.

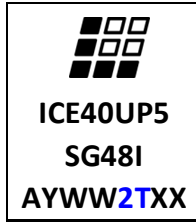
## **Qualification Data**

Qualification report is available upon request from [custreq@latticesemi.com](mailto:custreq@latticesemi.com).

## **Device Identification**

Devices manufactured at ASEK can be identified by a numeric value (“**2 or T**”) 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:

**Example:**     ICE40UP5K in 48 QFN



5<sup>th</sup> character in the Datecode will be “2” or “T” and 6<sup>th</sup> character will be “T” indicates devices built at ASEK  
**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, **they can be ordered now.** Samples for this PCN will use the “ANZ” suffix appended to the standard OPNs as shown in the example below:

**Example:**

Standard OPN: LCMXO3L-1300E-5MG121C

ASEK sample specific OPN: LCMXO3L-1300E-5MG121CANZ

**Conversion Timing Summary**

- **Sample Request Cut-off Date:** February 13, 2020
- **PCN Expiration Date:** April 13, 2020

**Recommended Actions**

Please work closely with your normal Lattice Sales contact to provide further clarification on your sample needs.

Customers who have further questions regarding this specification change are encouraged to contact local field support or [sales@latticesemi.com](mailto:sales@latticesemi.com).

**Response**

In accordance with J-STD-46, 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.

Sincerely,

Lattice PCN Administrator