



July 21, 2011

### **Revision History**

<b>PCN#</b>	<b>Issue Date</b>	<b>Description</b>
04A-11	April 11, 2011	Initial release.
04B-11	July 21, 2011	Device Characterization Report and Qualification Data added.

**Subject: PCN# 04B-11 Notification of Intent to Utilize an Alternate Qualified Mask Set and Foundry for the ispMACH 4000ZE Products**

Dear Lattice Customers:

Lattice is providing this Notification of our intent to utilize an alternate qualified mask set and foundry for the ispMACH<sup>®</sup> 4000ZE products.

### **CHANGE DESCRIPTION**

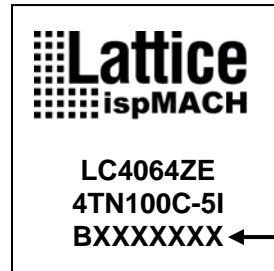
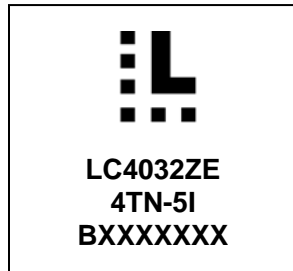
Currently, Lattice's ispMACH 4000ZE products are fabricated at our Seiko Sakata facility, Japan using Lattice's EE9 E<sup>2</sup>CMOS<sup>®</sup> process technology. In an effort to expand our fabrication capacity to meet growing demand for the LC4000ZE products, Lattice will now use United Microelectronics Company (UMC) in Taiwan without making any design modifications. UMC Taiwan has been a high volume foundry for Lattice's EE9 process technology for almost 10 years, on which the ispMACH 4000V/B/C/ZC products are currently manufactured. There have been no changes made to device form, fit or function.

### **AFFECTED DEVICES**

The Ordering Part Numbers (OPNs) affected by this PCN are listed in the Exhibit A. This PCN also affects any custom devices (i.e. factory programmed, special test, tape & reel, etc.), which are derived from any of the devices listed.

## **DEVICE IDENTIFICATION**

Devices with this new alternate qualified mask set can be identified by the first alpha character of the Inspection Lot Number (“B” for this alternate qualified mask set and foundry), which is marked on the topside of the device. Inspection lot numbers are also marked on the label (“Mark Code” field) on the outside of the inventory box as well as on the anti-static, moisture barrier bag within. See device topside marking examples below.



Inspection Lot Number

## **DATA SHEET SPECIFICATIONS**

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

## **DEVICE CHARACTERIZATION REPORT**

A device characterization report is available [here](#)

## **QUALIFICATION DATA**

Reliability testing for the qualification of the LC4000ZE devices has been completed. A summary of the qualification is available [here](#).

## **CONVERSION TIMING**

Conversion timing for this PCN is 90 days from the date of this Notice. Should samples be required to complete evaluation of this PCN, such sample request must be received **no later than May 11, 2011** (30 days after the date of this Notice).

Lattice is providing this advance notice of our intent to utilize the alternate mask set and foundry to allow customers to plan for this change. Lattice will be providing Qualification and Characterization data when they become available.

## **CONVERSION TIMING – SUMMARY**

- **Sample Request Cut-off Date:** **May 11, 2011**
- **PCN Expiration Date:** **July 11, 2011**

## **RESPONSE**

In accordance with JESD46-C, 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



**EXHIBIT “A” – Affected Device List**

Product Line	Ordering Part Number	Package	Product Line	Ordering Part Number	Package
<b>LC4032ZE</b>	LC4032ZE-4TN48C	Pb-Free 48-TQFP	<b>LC4064ZE (Cont'd)</b>	LC4064ZE-4UMN64C	Pb-Free 64-ucBGA
	LC4032ZE-5TN48C			LC4064ZE-5UMN64C	
	LC4032ZE-7TN48C			LC4064ZE-7UMN64C	
	LC4032ZE-5TN48I			LC4064ZE-5UMN64I	
	LC4032ZE-7TN48I			LC4064ZE-7UMN64I	
	LC4032ZE-4MN64C	Pb-Free 64-csBGA	<b>LC4128ZE</b>	LC4128ZE-5TN100C	Pb-Free 100-TQFP
	LC4032ZE-5MN64C			LC4128ZE-7TN100C	
	LC4032ZE-7MN64C			LC4128ZE-7TN100I	
	LC4032ZE-5MN64I			LC4128ZE-5UMN132C	Pb-Free 132-ucBGA
	LC4032ZE-7MN64I			LC4128ZE-7UMN132C	
<b>LC4064ZE</b>	LC4064ZE-4TN100C	Pb-Free 100-TQFP		LC4128ZE-7UMN132I	Pb-Free 144-csBGA
	LC4064ZE-5TN100C			LC4128ZE-5MN144C	
	LC4064ZE-7TN100C			LC4128ZE-7MN144C	
	LC4064ZE-5TN100I			LC4128ZE-7MN144I	
	LC4064ZE-7TN100I			LC4128ZE-5TN144C	
	LC4064ZE-4MN144C	LC4128ZE-7TN144C			
	LC4064ZE-5MN144C	Pb-Free 144-csBGA	LC4128ZE-7TN144I	Pb-Free 100-TQFP	
	LC4064ZE-7MN144C		LC4256ZE-5TN100C		
	LC4064ZE-5MN144I		LC4256ZE-7TN100C		
	LC4064ZE-7MN144I		LC4256ZE-7TN100I		
	LC4064ZE-4TN48C		Pb-Free 48-TQFP	LC4256ZE-5MN144C	Pb-Free 144-csBGA
	LC4064ZE-5TN48C	LC4256ZE-7MN144C			
	LC4064ZE-7TN48C	LC4256ZE-7MN144I			
	LC4064ZE-5TN48I	LC4256ZE-5TN144C		Pb-Free 144-TQFP	
	LC4064ZE-7TN48I	LC4256ZE-7TN144C			
	LC4064ZE-4MN64C	Pb-Free 64-csBGA	LC4256ZE-7TN144I		
	LC4064ZE-5MN64C				
	LC4064ZE-7MN64C				
	LC4064ZE-5MN64I				
	LC4064ZE-7MN64I				

**Note:** This PCN also affects any custom devices (i.e. factory programmed, special test, tape & reel, etc.), which are derived from any of the devices listed above.