

April 9, 2012

**Revision History**

PCN#	Issue Date	Description
08A-12	April 9, 2012	Initial release
08B-12	April 11, 2012	Exhibit A – Discontinued Device and Potential Alternative List has been corrected for a typo error

**Subject: PCN# 08B-12 Notification of Intent to Discontinue the iCE65 Product Family**

Dear Lattice Customer,

Lattice is providing this notification of our intent to discontinue the iCE65™ product family. It no longer makes economic sense to manufacture these devices given the pricing expectations of our high volume customers.

**Affected Products**

The Ordering Part Numbers (OPNs) affected by this PCN, along with recommended replacement alternatives, are listed in Exhibit "A" (also available 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. It should be noted that not all recommended alternatives are pin compatible and many will require a redesign. All recommended replacement alternatives will require the generation of a new bitmap file.

**Discontinuance Timing**

Customers will have 6 months to place their last time buy (LTB) orders for these devices. All LTB orders for these devices will be non-cancelable and non-returnable. All LTB orders must be placed no later than October 9, 2012 (6 months after the date of this notice) with all deliveries taken no later than April 9, 2013 (12 months after the date of this notice). Orders received after October 9, 2012 will only be accepted based on available on-hand inventory.

**Discontinuance Timing – Summary**

<b>Last Time Buy Order Date</b>	<b>October 9, 2012</b>
<b>Last Shipment Date</b>	<b>April 9, 2013</b>

## **Response**

In accordance with JESD48B, 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](mailto:pcn@latticesemi.com).

Sincerely,

Lattice Semiconductor PCN Administration

**Exhibit A – Discontinued Device and Potential Alternative List**

Discontinued Device				Recommended Alternatives			
Device	Ordering Part Number	Package	Pitch (mm)	Ordering Part Number	Package	Pitch (mm)	Pin Compatible?
iCE65L01	iCE65L01F-TCS36I	36-WLCSP	0.4	iCE40LP1K-CM36 iCE40LP1K-CY36	36-BGA 36-BGA	0.4	No Yes <sup>1</sup>
	iCE65L01F-LCB81C	81-BGA	0.5	iCE40LP1K-CM81	81-BGA	0.4	No
	iCE65L01F-LCB81I						
	iCE65L01F-TCB81C						
	iCE65L01F-TCB81I						
	iCE65L01F-TCB121C	121-BGA	0.5	iCE40LP1K-CB121	121-BGA	0.5	Yes <sup>2</sup>
	iCE65L01F-TCB121I						
	iCE65L01F-LQN84C	84-QFN	0.5	iCE40LP1K-QN84	84-QFN	0.5	Yes
	iCE65L01F-LQN84I						
	iCE65L01F-TQN84C						
	iCE65L01F-TQN84I						
	iCE65L01F-LVQ100C	100-VQFP	0.5	iCE40HX1K-VQ100	100-VQFP	0.5	Yes
	iCE65L01F-LVQ100I						
	iCE65L01F-TVQ100C						
	iCE65L01F-TVQ100I						
	iCE65L01F-LCB132C	132-BGA	0.5	iCE40HX1K-CB132	132-BGA	0.5	Yes <sup>3</sup>
iCE65L01F-LCB132I							
iCE65L01F-TCB132C							
iCE65L01F-TCB132I							

<sup>1</sup> Only available to support existing iCE65 designs. Not all pins map identically. Contact marketing for documentation and details.

<sup>2</sup> Two No connect pins have been replaced with two dedicated PLL pins

<sup>3</sup> Two User I/O pins have been replaced with two dedicated PLL pins

**Note:** 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 above.

Discontinued Device				Recommended Alternatives			
Device	Ordering Part Number	Package	Pitch (mm)	Ordering Part Number	Package	Pitch (mm)	Pin Compatible?
iCE65L04	iCE65L04F-TCS63I	63-WLCSP	0.4	iCE40LP4K-CM81	81-BGA	0.4	No
	iCE65L04F-LVQ100C	100-VQFP	0.5	iCE40LP4K-CM121 iCE40HX4K-CB132	121-BGA 132-BGA	0.4 0.5	No
	iCE65L04F-LVQ100I						
	iCE65L04F-TVQ100C						
	iCE65L04F-TVQ100I						
	iCE65L04F-LCB132C	132-BGA	0.5	iCE40HX4K-CB132	132-BGA	0.5	Yes <sup>4</sup>
	iCE65L04F-LCB132I						
	iCE65L04F-TCB132C						
	iCE65L04F-TCB132I						
	iCE65L04F-LCB196C	196-BGA	0.5	iCE40LP4K-CM225	225-BGA	0.4	No
	iCE65L04F-LCB196I						
	iCE65L04F-TCB196C						
	iCE65L04F-TCB196I						
	iCE65L04F-LCB284C	284-BGA	0.5	iCE40LP4K-CM225 iCE40LP8K-CM225	225-BGA	0.4	No
	iCE65L04F-LCB284I						
	iCE65L04F-TCB284C						
iCE65L04F-TCB284I							
iCE65P04	iCE65P04F-TCB121C	121-BGA	0.5	iCE40HX4K-CB132	132-BGA	0.5	No
	iCE65P04F-TCB121I						
	iCE65P04F-TCB196C	196-BGA	0.5	iCE40LP4K-CM225	225-BGA	0.4	No
	iCE65P04F-TCB196I						
	iCE65P04F-TCB284C	284-BGA	0.5	iCE40LP4K-CM225 iCE40LP8K-CM225	225-BGA	0.4	No
	iCE65P04F-TCB284I						

<sup>4</sup> Four User I/O pins have been replaced with four dedicated PLL pins

**Note:** 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 above.

Discontinued Device				Recommended Alternatives			
Device	Ordering Part Number	Package	Pitch (mm)	Ordering Part Number	Package	Pitch (mm)	Pin Compatible?
iCE65L08	iCE65L08F-TCC72I	72-WLCSP	0.5	iCE40LP8K-CM121	121-BGA	0.4	No
	iCE65L08F-TCS110I	110-WLCSP	0.4	iCE40LP8K-CM121	121-BGA	0.4	No
	iCE65L08F-LCB132C	132-BGA	0.5	iCE40HX8K-CB132	132-BGA	0.5	Yes <sup>4</sup>
	iCE65L08F-LCB132I						
	iCE65L08F-TCB132C						
	iCE65L08F-TCB132I						
	iCE65L08F-LCB196C	196-BGA	0.5	iCE40LP8K-CM225 iCE40HX8K-CT256	225-BGA 256-BGA	0.4 0.8	No
	iCE65L08F-LCB196I						
	iCE65L08F-TCB196C						
	iCE65L08F-TCB196I						
	iCE65L08F-LCB284C	284-BGA	0.5	iCE40HX8K-CT256	256-BGA	0.8	No
	iCE65L08F-LCB284I						
	iCE65L08F-TCB284C						
	iCE65L08F-TCB284I						

<sup>4</sup> Four User I/O pins have been replaced with four dedicated PLL pins

**Note:** 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 above.