



June 23, 2015

Subject: PCN#02A-15 Notification of Intent to Discontinue All SnPb (Tin/Lead) Ordering Part Numbers along with Select Mature Product Families

Dear Lattice Customer,

Lattice is providing this notification of our intent to discontinue all SnPb ordering part numbers (OPNs) along with select mature product families.

Over the past 10 years, the semiconductor industry has substantially completed the transition from SnPb to Pb-Free package configurations. Worldwide semiconductor demand for SnPb package configurations has now dropped below 5%. Lattice is no longer able to economically sustain these SnPb package configurations. In addition, there are a number of mature product families which are substantially comprised of SnPb package OPNs with diminishing overall customer demand. As such, Lattice will also discontinue these mature product families in their entirety.

Following this PCN, all remaining Lattice products will be Pb-Free and/or Halogen-Free.

AFFECTED PRODUCTS

The affected products can be segmented into two groups:

- **Group 1** contains those discontinued SnPb OPNs in families in which their now, industry-standard Pb-Free (and/or Halogen-Free) OPN counterparts will continue to be supported in volume production.
- **Group 2** identifies those select mature families which are being discontinued in their entirety as they are at the end of their lifecycle, have relatively low and declining customer demand and include a significant amount of SnPb OPNs.

A summary of the product families included in Groups 1 and 2 are provided in the Tables below.

GROUP #1 - Discontinued SnPB OPNs ONLY

Product Family	Product Line
ispMACH 4000	LC4000V/ZC
ispClock	CLK5300S/5600/5600A
ispMACH 4A3/5	All
LatticeECP2/2M/3*	All
Power Manager 2	POWR1014/A POWR1220AT8 POWR607
LatticeSC/M	All
MachXO/XO2*	All
LatticeXP2	All

* Discontinued ECP3 and XO2 SnPb OPNs are custom products. The standard, Pb-Free ECP3 and XO2 OPNs remain in high-volume production.

GROUP #2 - Discontinued Mature Families

Product Family	Product Line
ispMACH 4000	LC4000B/C
ispClock	CLK5500
ispLSI 1000E/EA	All
ispLSI 2000A/E/VE	All
ispLSI 5000VA/VE	All
ispGDXV	GDXV
ispGDX2	GDX2V/EV
ispXPGA	LFX-B/EB/C
ispXPLD 5000MX	LC5000MB/MV

A detailed listing (spreadsheet) of all OPNs affected by this PCN, along with recommended potential replacement alternatives, is available [here](#). There are a number of tabs available in this spreadsheet which provide visibility as to which Group the affected OPN is in.

RECOMMENDED REPLACEMENT ALTERNATIVES

When there is a specific Pb-Free suggested replacement OPN, the spreadsheet provides information as to whether the OPN is pinout-compatible, voltage-compatible and/or backward compatible with a SnPb manufacturing process.

Over 95% of the SnPb OPNs in Group 1 have a pinout- and voltage-compatible replacement OPN available. Many of these replacement OPNs are also fully compatible with a SnPb manufacturing process. The replacement options for Group 2 OPNs contain some specific OPN options, but most suggest an upgrade to a newer Lattice product family.

For more information on backward compatible Pb-Free devices, please refer to the following link on the Lattice web site:

<http://www.latticesemi.com/Solutions/Packaging/RoHSLeadAndHalogenFree.aspx>

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-cancellable and non-returnable. All LTB orders must be placed no later than December 23, 2015 (6 months after the date of this Notice). Customers may schedule

delivery of their LTB orders over a one year period of time. Orders placed by December 23, 2015 will be supported at existing pricing for shipment through December 30, 2016. Orders received after December 23, 2015 will be accepted on a “best effort” basis.

DISCONTINUANCE TIMING - SUMMARY

- **Last Time Buy Order Date:** **December 23, 2015**
- **Last Shipment Date:** **December 30, 2016**

FREQUENTLY ASKED QUESTIONS (FAQ)

Lattice recommends that customers refer to the FAQ document available [here](#) to find answers to commonly asked questions regarding this PCN.

TECHNICAL SUPPORT

For technical support, please visit the Lattice Tech Support web page:
(www.latticesemi.com/support)

RESPONSE

In accordance with JESD48-B, 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.

Sincerely,

Lattice Semiconductor PCN Administration