October 31, 2016

Subject: PCN#13A-16 Notification of Changes to Device Topside Mark for Silicon Image Products and Shipping Box/Label Design for all Lattice Products

Dear Lattice Customer,

Lattice is providing this notification of our intent to change the topside marks for Silicon Image (SIMG) products and shipping box/label design for all Lattice products. As part of the continued integration effort of the Silicon Image acquisition, these changes will ensure that the Silicon Image products are consistent with existing Lattice products. The conversion to the new device topside mark, shipping boxes/labels will be a gradual transition until existing inventories have been exhausted.

A description of each of the changes follows:

1. **Device Topside Marking:** There are three changes pertaining to the device topside marks:

   - **Datecode and Lot ID:**
     The work week information currently available on most Silicon Image devices (YYWW format) will now be available in a “YWW” format in the second, third and fourth positions of Lattice’s 8-character datecode as shown below. The Lot ID information and trace code that currently appears on Silicon Image devices will no longer be available on the topmark. Please refer to Exhibit “A” to understand the changes with respect to individual packages.

   **Lattice Datecode (Lot ID) Format:**

   ![Lattice Datecode Diagram]

   - Sequential Inspection Lot Number
   - Lattice Internal Alpha-Numeric Codes
   - Work Week of Inspection Lot Formation
   - Year of Inspection Lot Formation
   - Lattice Internal Alpha Code
• **Logo Change:**
Depending on the package size, Silicon Image devices may or may not have a logo marked on the topmark. For packages that currently have a logo, the device topmark can either carry a full form or a short form Lattice logo. Logo formats for individual packages are listed in Exhibit “A”. Custom devices that currently use a custom logo will continue to be marked with the same custom logo. A comparison of topside marks using the current and new logos (in both formats) is shown in the examples below:

<table>
<thead>
<tr>
<th></th>
<th>Current Logo Format (Example)</th>
<th>New Logo Format (Example)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Logo</td>
<td>6031 DNLLL A2YWW</td>
<td>6031 A64 35D55</td>
</tr>
<tr>
<td>Short Format</td>
<td><img src="image" alt="Silicon Image Logo" /> SiI6400CZU LLLLLL.LL-L LLLLLL.LL-L YYWW AH0110AD2</td>
<td><img src="image" alt="Silicon Image Logo" /> SiI6400CZU A643DD55 TAIWAN</td>
</tr>
<tr>
<td>Full Format</td>
<td><img src="image" alt="Silicon Image Logo" /> SiI9293CNUC LLLLLL.LL-L YYWW AH02ND2</td>
<td><img src="image" alt="LATTICE Logo" /> SiI9293CNUC A6435D55 TAIWAN</td>
</tr>
</tbody>
</table>

• **Country of Origin:**
The Country of Origin (COO) information will also be added following Lattice’s format.

• **AFFECTED DEVICES**
Topmark changes in this PCN apply to all Silicon Image devices.
2. Shipping Box/Label Changes:

Lattice will also be altering our shipping box and labels. Both Lattice and Silicon Image products will be subject to the following changes.

- **Shipping Box (Outer Box) Changes:**
  - For all shipping boxes that are designed to ship multiples of our innermost shipping box, they will have all art work removed and will be a brown color.

- **Innermost Shipping Box:**
  - The return address on all boxes will now be Lattice SG Pte. Ltd.
  - A patent statement will be added
  - Silicon Image logos & elements will be replaced with Lattice logos and elements. Physical dimensions and properties of the boxes are unchanged.

- **Label Changes:**
  All Lattice and Silicon Image labels for inner box, moisture barrier bag, outer box and factory seal will now be replaced by the new label format. See Exhibit “B.”

  The Changes include the following:

  - 2D Barcode is being added, following the ECIA standard EIG114.1
  - Silicon Image Datecode changes
  - Lattice Lot number is 1D barcode readable

**There are no changes to the customer specific shipping labels.**

**AFFECTED DEVICES**

Topmark changes will apply to all Silicon Image devices. Label changes will apply to all Silicon Image and Lattice products. There are no changes to the customer specific shipping labels.

**TIMING**

This change is effective immediately. As stated earlier, specific conversions will be a function of existing inventories.
**RESPONSE**

No response is required.

Lattice PCNs are available on the [Lattice website](http://www.latticesemi.com). Please sign up to receive e-mail PCN alerts by registering [here](http://www.latticesemi.com).

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”: Topside Mark Format Examples by Package

**Logo Definitions for interpreting Mark Formats**

<table>
<thead>
<tr>
<th>SILICON IMAGE Logo</th>
<th>Full Form Logo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Form Logo</td>
<td>LATTICE</td>
</tr>
</tbody>
</table>

QFN (3x3) SQFN (3x3) WFBGA(3x3) (3.5x3.5) – No Logo

<table>
<thead>
<tr>
<th>SILICON IMAGE Mark Format Example</th>
<th>Lattice Mark Format Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line 1: 6031</td>
<td>6031</td>
</tr>
<tr>
<td>Line 2: SILICON IMAGE Lot #</td>
<td>35D55</td>
</tr>
<tr>
<td>Line 3: A2YYWW</td>
<td></td>
</tr>
</tbody>
</table>

SQFN (4X4) (6X6) WFBGA (4X4) (4.5X4.5) QFN (6X6) (7X7) (9X9) (10x10) TFBGA (6X6) BGA (6.5x6.5) (10x7) VFBGA (6.5x6) (8X5) LQFP (7X7) MQFN (9x9) TQFP (10x10) – Short Form Logo

<table>
<thead>
<tr>
<th>SILICON IMAGE Mark Format Example</th>
<th>Lattice Mark Format Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line 1: SILICON IMAGE Logo</td>
<td>Short Form Logo</td>
</tr>
<tr>
<td>Line 2: Sil6400CZU</td>
<td>Sil6400CZU</td>
</tr>
<tr>
<td>Line 3: SILICON IMAGE Lot#</td>
<td>A643DD55</td>
</tr>
<tr>
<td>Line 4: YYWW</td>
<td>TAIWAN</td>
</tr>
<tr>
<td>Line 5: Trace Code</td>
<td></td>
</tr>
</tbody>
</table>

BGA (12x12) WFBGA (12x15.6) AQFN (13x13) (14X14) QFP (14x14) TQFP(14x14) (20x20) LQFP (14x20) HSBGA (21x21) PQFP(28x28) – Full Form Logo

<table>
<thead>
<tr>
<th>SILICON IMAGE Mark Format Example</th>
<th>Lattice Mark Format Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line 1: SILICON IMAGE Logo</td>
<td>Full Form Logo</td>
</tr>
<tr>
<td>Line 2: Sil9777CLUC</td>
<td>Sil9777CLUC</td>
</tr>
<tr>
<td>Line 3: SILICON IMAGE Lot #</td>
<td>A6435D55</td>
</tr>
<tr>
<td>Line 4: YYWW</td>
<td>TAIWAN</td>
</tr>
<tr>
<td>Line 5: Trace Code</td>
<td></td>
</tr>
</tbody>
</table>
EXHIBIT “B”: Inner Box / Moisture Barrier Bag Label

LATTICE / NEW LABEL COMPARISION

Inner Box Labels

Current Lattice Inner Box Label          New Lattice Inner Box Label

- Lattice “Product” (Ordering Part Number) for the device
- Lattice “Alt-Prod” is used when part is dual marked for both industrial and commercial use. Now has barcode.
- Lattice Lot No. Now has barcode.
- *Date Code is the assembly year and work week. YYWW format.
- Lattice box number is lot ID followed by three character sequence number.
- Lattice quantity unchanged just moved below date code.
- Country of Origin is ISO abbreviation, barcode added.
- Lead Free symbol has moved to upper corner and RoHS and MSL have been added.
- The new 2D barcode contains bag seal, Product, Alt Prod, Lot No, Date Code, Qty, Box No, Country of Origin, Trace Code(internal Lattice tracking number used for some products)
**SILICON IMAGE / NEW LABEL COMPARISON**

**Inner Box Labels**

- **Current SIMG Inner Box Label**
- **New Lattice Inner Box Label**

- **Lattice “Product” (Ordering Part Number) for the device**
- *Lattice “Alt-Prod” is used when part is dual marked for both industrial and commercial use. Will be added to this label*
- **SIMT Lot No. Will be replaced with Lattice Lot number format.**
- **Date Code is the assembly year and work week. YYWW format.**
- **Lattice box number is lot ID followed by three character sequence number. It will be added to this label.**
- **Quantity unchanged.**
- **Lead Free symbol RoHS and MSL Code**
- **Lattice Logo replaces SIMG logo**
- **Country of Origin is ISO abbreviation, barcode added.**
- **The 2D barcode contains Trace Code along with Product, Alt Prod, Lot No, Date Code, Qty, Box No, Country of Origin, Bag seal**
Exhibit B (Cont.) Shipping Label

OLD v. NEW LABEL COMPARISON
Master (Outer) Box Labels

Lattice and Silicon Image Master Box Label

New Lattice Master Box Label

• The Only change to the outer box label for both SIMG and Lattice is the addition of the 2D barcode in pdf417 format.