## Top Marking Change for 7 Series, UltraScale, and UltraScale+ Products

## Overview

The purpose of this notification is to advise customers of the phased introduction of top marking changes for Xilinx® 7 series, Zynq ${ }^{\circledR}-7000$, Zynq ${ }^{\circledR}$ UltraScale $+^{\top M}$, UltraScale ${ }^{\top M}$, and UltraScale $+^{\top M}$ commercial / industrial "XC", Automotive "XA", and Defense-grade "XQ" devices. There is no change to fit, form, function, or reliability.

## Description

Xilinx will be adding a 2D barcode to the topside marking for all Xilinx 7 series, Zynq-7000, Zynq UltraScale+, UltraScale, and UltraScale+ commercial / industrial "XC", Automotive "XA", and Defense-grade "XQ" devices. The addition of this 2D barcode allows for improved device-level traceability. The change will be introduced in phases as outlined in Table 1 (refer to XTP424 for transition updates).

To aid in device identification, speed, temperature grade and specification control document (SCD) information will continue to be provided in a human readable format on the moisture barrier bag labels, box labels, and invoice. An example of the device marking will also be included on the bag label as a visual guide to aid in inspection.

Through the enhanced device-level traceability provided to customers using the 2D barcode, Xilinx as a $2^{\text {nd }}$ phase will be improving its delivery support and manufacturing scalability by removing selected topside marking information (line 4 speed, temperature grade and SCD information), as indicated in Table 2 and illustrated in Phase II of Figure 1 and Figure 2.

This enhanced device-level traceability also allows improved material selection based on individual device performance rather than date code and lot number. Xilinx will be combining devices in a shipment based on the device performance characteristics rather than controlling combinations by lot or date codes.

The 2D barcode contains a unique serial number that must be scanned using a camera based application to determine the serial number. The device's speed grade, temperature grade and SCD that were previously found on line 4 can only be retrieve using the unique serial number through an internet based application either on a mobile device or through a web browser using a portal (refer to XTP424 for details). Scanning the existing License Plate Number (LPN) provided on the inner box and bag label will allow access to all device information and codes contained within a specific bag or box using the same portal.

## Products Affected

This change affects all package, speed, and temperature grade variations for Xilinx 7 series, Zynq-7000, Zynq UltraScale+, UltraScale, and UltraScale+ commercial / industrial "XC", Automotive "XA", and Defense-grade "XQ" devices, including SCD product.

[^0]Table 1: Addition of 2D Barcode to Top Mark - Phase I (Figures 1 and 2)

| Product Line | Device | Anticipated Shipments |
| :---: | :--- | :--- |
| XC | Zynq UltraScale+, and UltraScale+ | Now - Shipping Engineering <br> Samples (ES) |
| XC | 7 series, Zynq-7000, and UltraScale | November 2016 |
| XA | 7 series, Zynq-7000, and Zynq UltraScale+ | November 2016 |
| XQ | 7 series, Zynq-7000, UltraScale, Zynq UltraScale+, <br> and UltraScale+ | November 2016 |

Table 2: Marking Simplification (line 4 speed, temperature grade, and SCD) - Phase II (Figures 1 and 2)

| Product Line | Device | Anticipated Shipments |
| :---: | :--- | :--- |
| XC | Zynq UltraScale $+^{\star}$, and UltraScale $+^{\star}$ | Upon Production Release |
| XC | 7 series, Zynq-7000, and UltraScale | May 2017 |
| XA | 7 series, Zynq-7000, and Zynq UltraScale $+^{\star}$ | July 2017 |

*Note: UltraScale+ products will not be marked with lot number or date code.

## Key Dates and Ordering Information

Xilinx will begin cross shipping devices with either mark as indicated in Table 1 and Table 2 above. For exact transition dates, please refer to Xilinx XTP424.

## Traceability

Affected devices are identified by the following package top marks as shown in Figure 1 and Figure 2.


Figure 1: Product marking examples


Figure 2: Product marking examples

## Response

No response is required. For additional information or questions, please contact Xilinx Technical Support.
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## Revision History

The following table shows the revision history for this document.

| Date | Version |  |
| :---: | :---: | :--- |
| $07 / 04 / 2016$ | 1.0 | Initial release. |

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