



Minor Marking Template and Tray Change For FG(G) & BG(G) Wire Bond Packages - Automotive (XA) and HiRel (XQ)

XCN12024 (v1.0.1) January 25, 2013

Product Change Notice – For Information Only

Overview

The purpose of this notification is to communicate that Xilinx is making a minor marking template and tray change to some plastic ball grid array FG(G) and BG(G) packages. This change is due to Xilinx XC commercial (C) and (I) grade FPGA devices transitioning to pin gate mold (PGM) in plastic ball grid array (Ref. [XCN12023](#)). This notification applies to Automotive (XA) and HiRel (XQ) FPGA products.

Description

Xilinx's Assembly Suppliers are transitioning from corner gate mold to pin gate mold for FG(G) and BG(G) packages affecting XC commercial (C) and (I) grade FPGA devices (Ref. [XCN12023](#)). Xilinx will not implement PGM method to Automotive (XA) and HiRel (XQ) FPGA products. However, a minor top marking template package and tray change are necessary.

1. Minor Change in the Marking Template: PGM ejector pin will move to the center of the package while CGM ejector pin remains at the pin 1 indicator location. The new marking template with PGM & CGM will be applied to all of BG(G)256, FG(G)320, FG(G)400, FG(G)456, FG(G)484 and FG(G)676 FPGA devices packages as shown in [Figure 1](#).
2. Shipping Tray: change in the shipping tray for the 23mmx23mm PBGA packages. The new 23mmx23mm PBGA Daewon tray matrices are designed to be compatible with the current shipping trays, and will have the same X/Y tray dimensions. However, the new 23mmx23mm Daewon trays are non-stackable with current tray due to a slip lock feature. The new trays have larger cavity pockets at bottom of cell cavity that is designed for CGM and PGM (larger mold body). Xilinx recommends that customers not stack or mix the new Daewon trays with the current shipping trays. Please reference [Table 2](#) and [Figure 2](#) for clarification.

These changes have no effect on form, fit, function or reliability.

Products Affected

This change affects all standard and specification control document (SCD) Automotive (XA) and HiRel (XQ) FPGA products for new marking template and tray. Affected part numbers are included in [Table 1](#) below:

Table 1: Affected FPGA devices family using new CGM marking template

Device	Package	Device	Package	Device	Package	Device	Package
XQV100	BG(G)256	XA3S400	FG(G)456	XA6SLX45	FG(G)484	XA3S1500	FG(G)676
XA3S1200E	FG(G)400	XQ2V1000 *	FG(G)456	XA6SLX45T	FG(G)484	XA3SD1800A	FG(G)676
XA3S1600E	FG(G)400	XA3S1400A	FG(G)484	XA6SLX75	FG(G)484	XA3SD3400A	FG(G)676
XA3S400A	FG(G)400	XA3S1600E	FG(G)484	XA6SLX75T	FG(G)484	XQ2VP40	FG(G)676
XA3S700A	FG(G)400	XA3S700A	FG(G)484	XQ6SLX150	FG(G)484	XQ6SLX150T	FG(G)676
XADAI5Y	FG(G)400	XA6SLX100	FG(G)484	XQ6SLX150T	FG(G)484	XQ6SLX75T	FG(G)676
XA3S1000	FG(G)456	XA6SLX25	FG(G)484	XQ6SLX75	FG(G)484		
XA3S1500	FG(G)456	XA6SLX25T	FG(G)484	XQ6SLX75T	FG(G)484		

* Devices are under [XCN12026](#) PDN.

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Minor marking template and tray change for FG(G) and BG(G) wire bond packages for XA and XQ devices

Below examples are for new marking templates of both PGM & CGM.

Current CGM marking



**New PGM marking
(For XC C & I grade only)**



Laser mark a pin 1 Indicator as same as eject pin of CGM

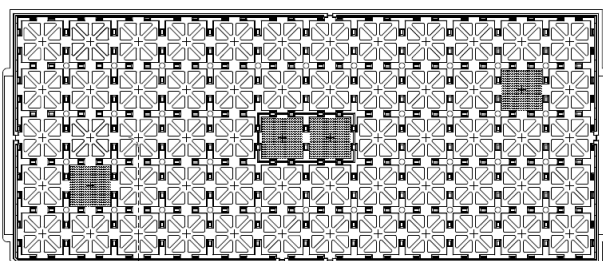
**New CGM marking
(For XA & XQ only)**



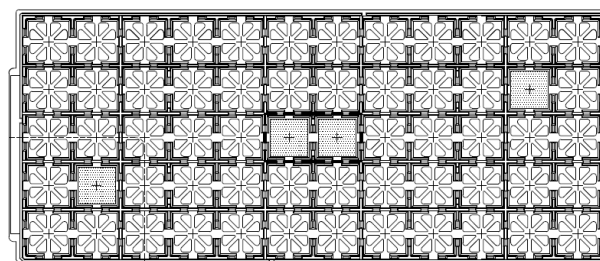
Figure 1: marking templates

Table 2: Tray Information

Tray Description	Current Tray		New Tray	
	Daewon Tray Part Number	Xilinx Drawing	Daewon Tray Part Number	Xilinx Drawing
JEDEC L/P PBGA TRAY (60 pockets) for 23x23mm pkg	1F1-2323-919 Rev. A	SIT0089	T0812012 Rev. B	SIT0148



Current Tray: 1F1-2323-919 Rev.A
Vendor: Daewon



New Tray: T0812012 Rev.B
Vendor: Daewon

Figure 2: Tray Details

Key Dates and Ordering Information

Xilinx will begin to cross ship both PGM and CGM packages with the new marking template by Feb 1st, 2014.

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	Description of Revisions
12/17/12	1.0	Initial release.
01/25/13	1.0.1	Minor update to add “PGM” to shipping tray under the description section.

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