



Package Bill of Material Gold (Au) To Copper (Cu) Wire Change For Spartan-6 FPGA Products

XCN15004 (v1.0) June 1, 2015

Product Change Notice

Overview

The purpose of this notification is to announce the transitioning of all wire bond package types for Spartan®-6 FPGA products from gold (Au) to copper (Cu) wire. This change will not affect fit, form, function or MSL rating of the packages.

Description

Xilinx is converting Spartan-6 to copper wire in order to align with the rest of our Spartan®-3/-3E/-3A/-3A-DSP/-3AN products and the current industry trend to better support long-term demand for the affected products. Copper wire has demonstrated better electrical and mechanical performance than gold wire. Xilinx assembly suppliers have qualified copper wire technology and have been using it in high volume production since 2008. Xilinx has successfully implemented Spartan-3/-3E/-3A/-3A-DSP/-3AN with copper wire since August 2011 (please refer to [XCN11002](#), [XCN14001](#) and [XCN14003](#)).

In addition, Xilinx is also changing passivation material on the Spartan-6 wafers. This is to align with industry best practice and secure equipment capacity. The passivation material is already applied on 7 Series FPGAs products and is in mature production phase.

Xilinx will continue to support packages assembled with tin lead (SnPb) solder balls and leadframe plating. Any planned capacity expansion will be for copper wire packages only.

Products Affected

This change affects all speed, package, and temperature variations of commercial (C) and industrial (I) grade product families include specification control document (SCD) versions of the standard part numbers mentioned in the title and overview. Automotive “XA” and Defense-grade “XQ” products are not affected by this notice.

Affected device packages are included in the [Table 1](#).

Table 1: Spartan-6 FPGA XC Devices Packages Affected and Cross-Ship Schedule

Device	Package-Pin	Target Cross Shipping Date	Device	Package-Pin	Target Cross Shipping Date		
XC6SLX4	TQ(G)144	Sep 1 st , 2015	XC6SLX25	FT(G)256	Sep 1 st , 2015		
	CPG196			CS(G)324			
	CS(G)225			FG(G)484			
XC6SLX9	TQ(G)144		XC6SLX25T	CS(G)324		FG(G)484	
	CPG196			FG(G)484			
	CS(G)225			XC6SLX45			CS(G)324
	FT(G)256						CS(G)484
	CS(G)324						FG(G)484
XC6SLX16	CPG196		XC6SLX45T	FG(G)676		CS(G)324	
	CS(G)225			CS(G)484			
	FT(G)256			CS(G)484			
	CS(G)324			FG(G)484			
XC6SLX75	CS(G)484		XC6SLX150	CS(G)484		FG(G)900	
	FG(G)484			FG(G)484			
	FG(G)676			FG(G)676			
XC6SLX75T	CS(G)484		XC6SLX150T	CS(G)484		FG(G)900	
	FG(G)484			FG(G)484			
XC6SLX100	FG(G)676		XC6SLX100T	FG(G)676		FG(G)900	
	CS(G)484			CS(G)484			
	FG(G)484			FG(G)484			
XC6SLX100T	FG(G)676		XC6SLX100T	FG(G)900		FG(G)900	
	CS(G)484			CS(G)484			
	FG(G)484			FG(G)484			
	FG(G)900			FG(G)900			

Key Dates and Ordering Information

Xilinx will begin to cross-ship products using both gold wire and copper wire after 90 days from the release of this PCN.

Qualification Data

Xilinx has successfully passed and completed the Cu wire qualification. The qualification data is available upon request.

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	Revision
06/01/2015	1.0	Initial release.

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