



# Spartan, Virtex and CoolRunner Series Wire Bond BGA Packaging Material Source Addition

XCN11018 (v2.0) July 25, 2011

Product Change Notice – For Information Only

## Overview

The purpose of this notification is to communicate the addition of new supply sources for wire bond BGA package core and prepreg material for Spartan®-XL/-II/-IIE/-3/-3E/-3A/-3AN/-3ADSP/-6, XC95XXX, XC95XXXL, Virtex®, Virtex®-E, Virtex®-II/-II Pro, and CoolRunner™ and CoolRunner™-II product.

## Description of Change

Due to the recent earthquake in Japan, there is a worldwide shortage of Bismaleimide-Triazine (BT) resin material used in the package core and prepreg layers of wirebond packages. To enable supply continuity, additional sources of package core and prepreg are being qualified. The additional package core and prepreg sources are from Nanya, Hitachi and Doosan suppliers. There are no changes in the form, fit or function compared with the previous package material set.

## Products Affected

The products affected by this change are included in [Table 1](#). For inquiries on whether specific devices are affected, see the Response section. The package change affects all production speed, package, and temperature variations of the XC commercial (C) and industrial (I) grade devices. XA Automotive, XQ and Q grade devices are not affected by this Product Change Notice and will not be released with the new substrate.

Table 1: Product Affected

Product Family	Device Name	Package Pin Count
CoolRunner-II	XC2CXXXX/XC2CXXXXA	CP(G)56 ; CP(G)132; FT(G)256
CoolRunner	XCRXXXXX	CS(G)48; CP(G)56; FT(G)256
EasyPath	XCEXXXX	FG256
Spartan-II	XC2SXXX	FG(G)256; FG(G)456
Spartan-IIE	XC2SXXXE	FT(G)256; FG(G)456; FG(G)676
Spartan-3	XC3SXXXX	FT(G)256; FG(G)320; FG(G)456; FG(G)676; FG(G)900; FG1156
Spartan-3A	XC3SXXXXA	FT(G)256; FG(G)320; FG(G)400; FG(G)484; FG(G)676
Spartan-3A DSP	XC3SDXXXXA	CS(G)484; FG(G)676
Spartan-3AN	XC3SXXXAN	FT(G)256; FG(G)400; FG(G)484; FG(G)676
Spartan-3E	XC3SXXXE	FT(G)256; CP(G)132; FG(G)320; FG(G)400; FG(G)484
Spartan-6	XC6SLXXXX	FT(G)256; CS(G)225; CS(G)324; CS(G)484; FG(G)484; FG(G)676; FG(G)900
Spartan-XL	XCSXXXL	BG(G)256
Virtex	XCVXXX	BG(G)256; FG(G)256
Virtex-II	XC2VXXX	BG(G)575; BG(G)728; FG(G)256; FG(G)456; FG(G)676
Virtex-II Pro	XC2VPXXX	FG(G)256; FG(G)456; FG(G)676
Virtex-E	XCVXXXXE	FG(G)256; FG(G)456; FG(G)900; FG1156
XC40XXXLA	XC40XXXLA	BG(G)256; BG(G)352; BG(G)432
XC95XXXL	XC95XXXL	CS(G)48; FG(G)256
XC95XXX	XC95XXX	CS(G)48

## Key Dates and Cross Shipping Information

Xilinx will begin to cross ship product with the additional sources of substrate core and prepreg layers since date code 1125. After this date code, customers ordering the standard part number may receive product manufactured at either MGC core or the alternative core suppliers.

## Qualification Data

Xilinx has successfully completed and passed the Nanya, Hitachi and Doosan core and prepreg qualification with Xilinx devices /packages. Based on the [Table 2](#) qualification summary, the new sources of substrate cores have demonstrated a satisfactory result and meet the qualification requirements for release to wire-bonded BGA package production assembly. Please refer to Xilinx [RPT155](#) for more details.

Table 2: Qualification Summary

Xilinx Device	Package	Assembly Supplier	Substrate Core Supplier	Precondition	Temperature Cycling 'C' Condition (T/C-C)	Highly Accelerated Stress Test (HAST)	Unbiased Accelerated Stress Test (UHAST)
XC2V3000	FGG676	SPIL	Nanya	Pass	Pass	NA	NA
XC3S1200E	FTG256	SPIL	Nanya	Pass	Pass	NA	NA
XC6SLX45T	FGG484	SPIL	Nanya	Pass	NA	Pass	NA
XC6SLX16	CSG324	SPIL	Nanya	Pass	NA	Pass	NA
XC3SD3400A	CSG484	SPIL	Hitachi	Pass	Pass	Pass	NA
XC3S1400A	FGG676	SPIL	Hitachi	Pass	Pass	Pass	NA
XC3S400A	FTG256	AMKOR	Doosan	Pass	Pass	Pass	NA
XC2S150	FGG456	AMKOR	Doosan	Pass	Pass	NA	Pass

## Response

No response is required. For additional information or questions, please contact [Xilinx Technical Support](#).

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## Additional Documentation

Qualification Report (RPT155):

<https://secure.xilinx.com/webreg/clickthrough.do?cid=173270>.

## Revision History

The following table shows the revision history for this document:

Date	Version	Description of Revisions
6/13/2011	1.0	Initial release.
6/15/2011	1.0.1	Minor correction on Xilinx part numbers.
7/25/2011	2.0	Updated Key Dates and Cross Shipping Information to include cut-over dates; also updated Qualification Data to reflect with the release of Qualification Report (RPT155).

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