



# Package Substrate Change for Chip Scale (Tape) and Lead-Free Chip Scale (Tape)

XCN05018 (v1.0.1) December 21, 2007

Process Change Notice

## Overview

The purpose of this notification is to communicate a change in the Chip Scale and lead-free Chip Scale packages.

## Description

Device families available in the Chip Scale (package code CS) and lead-free Chip Scale (package code CSG) will be manufactured with a laminate substrate at Amkor Philippines beginning in December 2005. The CS and CSG packages are currently manufactured with a flex tape substrate at Amkor Korea. This change only affects devices currently manufactured in the CS144, CSG144, CS280 and CSG280 packages.

This change was initiated because the flex tape substrate is being discontinued by Amkor. This change is backward compatible with the flex tape substrate.

## Products Affected

This change affects all speed, package, and temperature variations of the commercial (C) and industrial (I) grade devices. Automotive and Q grade devices are not affected by this process change. Affected devices and packages are included in [Table 1](#). See the [Appendix](#) for a complete list of ordering parts numbers.

Table 1: Products Affected

Device	Package	Speed/Temperature
XC2V40	CS144	All speeds and grades (C/I)
XC2V40	CSG144	All speeds and grades (C/I)
XC2V80	CS144	All speeds and grades (C/I)
XC2V80	CSG144	All speeds and grades (C/I)
XC2V250	CS144	All speeds and grades (C/I)
XC2V250	CSG144	All speeds and grades (C/I)
XCV50	CS144	All speeds and grades (C/I)
XCV100	CS144	All speeds and grades (C/I)
XCV50E	CS144	All speeds and grades (C/I)
XCV100E	CS144	All speeds and grades (C/I)
XCV200E	CS144	All speeds and grades (C/I)
XC2S30	CS144	All speeds and grades (C/I)
XC2S30	CSG144	All speeds and grades (C/I)
XC95144XL	CS144	All speeds and grades (C/I)
XC95144XL	CSG144	All speeds and grades (C/I)
XC95288XL	CS280	All speeds and grades (C/I)
XC95288XL	CSG280	All speeds and grades (C/I)

Table 1: Products Affected (Continued)

Device	Package	Speed/Temperature
XC95144XV	CS144	All speeds and grades (C/I)
XC95288XV	CS280	All speeds and grades (C/I)
XC95288XV	CSG280	All speeds and grades (C/I)
XCR3128XL	CS144	All speeds and grades (C/I)
XCR3128XL	CSG144	All speeds and grades (C/I)
XCR3256XL	CS280	All speeds and grades (C/I)
XCR3256XL	CSG280	All speeds and grades (C/I)

## Key Dates and Ordering

During the 90-day PCN period, standard product orders will be fulfilled with the flex package; laminate package can be ordered with an SCD ordering code (SCD0997). To use SCD0997, append "0997" to the end of the standard ordering part number (e.g., XC95144XL-7CS144C**0997**).

After the 90-day PCN period, standard product orders will be fulfilled with either the flex package or laminate package; SCD0997 will be discontinued. Xilinx will continue to cross ship devices in either flex tape package or laminate package, until flex tape inventory is depleted.

The four-digit SCD number (0997) will not be top-marked on the devices.

Table 2: Key Dates

Time Period	Flex Package	Laminate Package
Prior to December 12, 2005	Standard ordering code	Not available
December 12, 2005 - March 12, 2006	Standard ordering code	SCD0997 ordering code
After March 12, 2006	Standard ordering code (until inventory is depleted)	Standard ordering code

## Traceability

The substrate material can be identified by the assembly site code on the package top mark. The assembly site is indicated by the first letter on line 3 of the package top mark. An “A” indicates flex tape (Amkor Korea), while an “F” indicates laminate (Amkor Philippines). [Figure 1](#) illustrates the package top mark.



Figure 1: Package Top Mark Showing Assembly Site Code

## Qualification Data

Qualification data associated with this change is available in *Qualification Data for Laminate Substrate Packages* (RPT039): [http://www.xilinx.com/support/documentation/customer\\_notices/rpt039.pdf](http://www.xilinx.com/support/documentation/customer_notices/rpt039.pdf).

Package drawings are available at:

[http://www.xilinx.com/support/documentation/package\\_specifications.htm](http://www.xilinx.com/support/documentation/package_specifications.htm)

## Response

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

## Appendix

Following is a complete list of ordering part numbers affected by this change.

XC2V40-4CS144C	XCV50E-6CS144C	XCR3128XL-10CS144C
XC2V40-4CS144I	XCV50E-6CS144I	XCR3128XL-10CS144I
XC2V40-5CS144C	XCV50E-7CS144C	XCR3128XL-6CS144C
XC2V40-5CS144I	XCV50E-7CS144I	XCR3128XL-7CS144C
XC2V40-6CS144C	XCV50E-8CS144C	XCR3128XL-7CS144I
XC2V40-4CSG144C		XCR3128XL-10CSG144C
XC2V40-4CSG144I	XC95144XL-10CS144C	XCR3128XL-10CSG144I
XC2V40-5CSG144C	XC95144XL-10CS144I	XCR3128XL-6CSG144C
XC2V40-5CSG144I	XC95144XL-5CS144C	XCR3128XL-7CSG144C
XC2V40-6CSG144C	XC95144XL-7CS144C	XCR3128XL-7CSG144I
	XC95144XL-7CS144I	
XC2V80-4CS144C	XC95144XL-10CSG144C	XCR3256XL-10CS280C
XC2V80-4CS144I	XC95144XL-10CSG144I	XCR3256XL-10CS280I
XC2V80-5CS144C	XC95144XL-5CSG144C	XCR3256XL-12CS280C
XC2V80-5CS144I	XC95144XL-7CSG144C	XCR3256XL-12CS280I
XC2V80-6CS144C	XC95144XL-7CSG144I	XCR3256XL-7CS280C
XC2V80-4CSG144C		XCR3256XL-10CSG280C
XC2V80-4CSG144I	XC95288XL-10CS280C	XCR3256XL-10CSG280I
XC2V80-5CSG144C	XC95288XL-10CS280I	XCR3256XL-12CSG280C
XC2V80-5CSG144I	XC95288XL-6CS280C	XCR3256XL-12CSG280I
XC2V80-6CSG144C	XC95288XL-7CS280C	XCR3256XL-7CSG280C
	XC95288XL-7CS280I	
XC2V250-4CS144C	XC95288XL-10CSG280C	XCV100E-6CS144C
XC2V250-4CS144I	XC95288XL-10CSG280I	XCV100E-6CS144I
XC2V250-5CS144C	XC95288XL-6CSG280C	XCV100E-7CS144C
XC2V250-5CS144I	XC95288XL-7CSG280C	XCV100E-7CS144I
XC2V250-6CS144C	XC95288XL-7CSG280I	XCV100E-8CS144C
XC2V250-4CSG144C		
XC2V250-4CSG144I	XC95144XV-5CS144C	XCV200E-6CS144C
XC2V250-5CSG144C	XC95144XV-7CS144C	XCV200E-6CS144I
XC2V250-5CSG144I	XC95144XV-7CS144I	XCV200E-7CS144C
XC2V250-6CSG144C		XCV200E-7CS144I
	XC95288XV-10CS280C	XCV200E-8CS144C
	XC95288XV-10CS280I	
XC95144XV-5CS144C	XC95288XV-6CS280C	XC2S30-5CS144C
XC95144XV-7CS144C	XC95288XV-7CS280C	XC2S30-5CS144I
XC95144XV-7CS144I	XC95288XV-7CS280I	XC2S30-6CS144C
	XC95288XV-10CSG280C	XC2S30-5CSG144C
	XC95288XV-10CSG280I	XC2S30-5CSG144I
XC95288XV-10CS280C	XC95288XV-6CSG280C	XC2S30-6CSG144C
XC95288XV-10CS280I	XC95288XV-7CSG280C	
XC95288XV-6CSG280C	XC95288XV-7CSG280I	
XC95288XV-7CSG280C		
XC95288XV-7CSG280I		

## Revision History

The following table shows the revision history for this document.

Date	Version	Revision
12/12/05	1.0	Initial release.
12/21/07	1.0.1	Minor editorial changes: Removed "form, fit, function" statement in the <a href="#">Description</a> section to coincide with message of this notice. Updated hyperlinks to RPT036 and Package Drawings in <a href="#">Qualification Data</a> section.