



# CPLD Part Number Changes: XC to XA for Automotive Customers

XCN07016 (v1.0.1) October 6, 2009

Product Discontinuation Notice

## Overview

The purpose of this notification is to communicate a part number change for certain I-Grade and Q-Grade products used by automotive customers.

## Description

Xilinx is committed to the automotive market and has completed the full AEC-Q100 qualifications for select XC9500XL and CoolRunner™-II products. These parts have been released as part of the Xilinx Automotive (XA) family of products and offer customers the benefits of PPAP documentation, BOM, site, and change controls per automotive requirements. To meet the stringent demand of automotive applications, Xilinx has introduced multiple requirements and design recommendations when using XA devices. An overview about the requirements and recommendations is provided in the [XA9500XL Automotive CPLD Product Family Data Sheet \(DS108\)](#) and the [CoolRunner-II Automotive CPLD Product Family Data Sheet \(DS315\)](#).

For details about the XA9500XL devices, refer to the following documents:

- [XA9536XL Automotive CPLD Data Sheet \(DS598\)](#)
- [XA9572XL Automotive CPLD Data Sheet \(DS599\)](#)
- [XA95144XL Automotive CPLD Data Sheet \(DS600\)](#)

For details about the CoolRunner-II products, refer to the following documents:

- [XA2C32A CoolRunner-II Automotive CPLD Data Sheet \(DS552\)](#)
- [XA2C64A CoolRunner-II Automotive CPLD Data Sheet \(DS553\)](#)
- [XA2C128 CoolRunner-II Automotive CPLD Data Sheet \(DS554\)](#)
- [XA2C256 CoolRunner-II Automotive CPLD Data Sheet \(DS555\)](#)
- [XA2C384 CoolRunner-II Automotive CPLD Data Sheet \(DS556\)](#)

This PDN affects standard (Pb), as well as Pb-free versions of the listed products, however, suggested replacements exist only in Pb-free package versions. Lead-frame packages (such as TQG and VQG from Xilinx) can be soldered with Sn/Pb solder using the Sn/Pb soldering process (backward-compatible). Please see the "[Implementation and Solder Reflow Guidelines for Pb-Free Packages](#)" Application Note: (XAPP427) for further details.

The affected devices and their recommended replacement part numbers are shown in XC9500XL Devices Affected and CoolRunner-II Devices Affected .

## Products Affected

The following I-Grade and Q-Grade devices are affected by this notice:

**Table 1: XC9500XL Devices Affected**

Family	Discontinued Products	Replacement Products	Customer Part Number(s) <sup>1</sup>
XC9536XL	XC9536XL-10VQG44I	XA9536XL-15VQG44I	
	XC9536XL-10VQ44I		
	XC9536XL-10VQG44Q	XA9536XL-15VQG44Q	
	XC9536XL-10VQ44Q		
XC9572XL	XC9572XL-10VQG44I	XA9572XL-15VQG44I	
	XC9572XL-10VQ44I		
	XC9572XL-10VQG44Q	XA9572XL-15VQG44Q	
	XC9572XL-10VQ44Q		
	XC9572XL-10VQG64I	XA9572XL-15VQG64I	
	XC9572XL-10VQ64I		
	XC9572XL-10VQG64Q	XA9572XL-15VQG64Q	
	XC9572XL-10VQ64Q		
	XC9572XL-10TQG100I	XA9572XL-15TQG100I	
	XC9572XL-10TQ100I		
	XC9572XL-10TQG100Q	XA9572XL-15TQG100Q	
	XC9572XL-10TQ100Q		
XC95144XL	XC95144XL-10CSG144I	XA95144XL-15CSG144I	
	XC95144XL-10CS144I	No Replacement	

1. Customer-specific part numbers are to be filled-in by sales before handing this document to the customer.

Speed grade -10 will no longer be offered for automotive applications and is replaced by products having a speed grade of -15 (XA). For further details, consult the list of XA product data sheets on Description.

**Table 2: CoolRunner-II Devices Affected**

Family	Discontinued Products	Replacement Products	Customer Part Number(s) <sup>1</sup>
XC2C32A	XC2C32A-6VQG44I	XA2C32A-6VQG44I	
	XC2C32A-6VQ44I		
XC2C64A	XC2C64A-7VQG44I	XA2C64A-7VQG44I	
	XC2C64A-7VQ44I		
	XC2C64A-7VQG100I	XA2C64A-7VQG100I	
	XC2C64A-7VQ100I		
XC2C128	XC2C128-7VQG100I	XA2C128-7VQG100I	
	XC2C128-7VQ100I		
	XC2C128-7CPG132I	XA2C128-7CPG132I	
	XC2C128-7CP132I	No Replacement	
XC2C256	XC2C256-7VQG100I	XA2C256-7VQG100I	
	XC2C256-7VQ100I		
	XC2C256-7TQG144I	XA2C256-7-TQG144I	
	XC2C256-7TQ144I		
XC2C384	XC2C384-10TQG144I	XA2C384-10TQG144I	
	XC2C384-10TQ144I		

1. Customer-specific part numbers are to be filled-in by sales before handing this document to the customer.

The XC I-Grade parts listed in XC9500XL Devices Affected and CoolRunner-II Devices Affected will still be offered for non-automotive applications. All listed XC I-Grade and Q-Grade parts used in automotive applications must transfer to XA. For further details, consult the list of XA product data sheets on Description.

## Key Dates and Ordering Information

Final orders are accepted until December 31, 2007.

Final deliveries must occur on or before March 31, 2008.

## Qualification Data

Qualification data for the XA parts are available upon request.

## Response

Customer response and written acceptance is required for parts under PPAP control. Those controlled parts are listed in the section “Customer Part Number(s)” of XC9500XL Devices Affected and CoolRunner-II Devices Affected (customized by sales).

For additional information or questions, please contact your local Sales representative or [Xilinx Technical Support](#).

**Important Notice:** Xilinx Customer Notifications (XCNs, XDNs, and Quality Alerts) can be delivered via e-mail alerts sent by the MySupport website (<http://www.xilinx.com/support>). Register today and personalize your “MyAlerts” area to include Customer Notifications. This change provides many benefits, including the ability to receive alerts for new and updated information about specific products, as well as alerts for other publications such as data sheets, errata, application notes, etc. For information on how to sign up, refer to Xilinx [Answer Record 18683](#).

## Automotive Warranty Disclaimer

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## Revision History

The following table shows the revision history for this document.

Date	Version	Revision
08/17/07	1.0	Initial release.
10/06/09	1.0.1	Initial release to web.