

Package Bill of Material Gold (Au) To Copper (Cu) Wire Change For Spartan-3A DSP FPGA Products

XCN14001 (v1.0) December 9, 2013

Product Change Notice

Overview

The purpose of this notification is to announce the transitioning of all wire bond package types for Spartan®-3A DSP FPGA Products from gold (Au) to copper (Cu) wire. Automotive "XA" and Hi-Rel "XQ" devices are not affected. This change will not affect fit, form, function or MSL rating of the packages.

Description

Xilinx will be transitioning all wire bond package types for Spartan®-3A DSP FPGA Products from gold (Au) to copper (Cu) wire. For the Cu-wire assembly, only halogen free, EU-ROHS compliant packages and green mold compound will be used. These packages do not contain published REACH SvHC materials.

Xilinx is converting to copper wire in order to align with 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 with copper wire since August 2011 (please refer to XCN11002).

This change will not affect fit, form, function or MSL rating of the packages. 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 "XC" commercial (C) and industrial (I) grade product families mentioned in the title and overview. Automotive "XA" and Hi-Rel "XQ" are not affected.

Affected part numbers are included in the Table 1:

Table 1: Spartan-3A DSP FPGA Products Affected

Part Number
XC3SD1800A-4CS484C
XC3SD1800A-4CS484I
XC3SD1800A-4CS484LI
XC3SD1800A-4CSG484C
XC3SD1800A-4CSG484I
XC3SD1800A-4CSG484LI
XC3SD1800A-4FG676C
XC3SD1800A-4FG676I
XC3SD1800A-4FGG676C
XC3SD1800A-4FGG676I

Part Number
XC3SD1800A-4FGG676I0100
XC3SD1800A-5CS484C
XC3SD1800A-5CSG484C
XC3SD1800A-5FG676C
XC3SD1800A-5FGG676C
XC3SD3400A-4CS484C
XC3SD3400A-4CS484I
XC3SD3400A-4CS484LI
XC3SD3400A-4CSG484C
XC3SD3400A-4CSG484I

Part Number
XC3SD3400A-4CSG484I4184
XC3SD3400A-4CSG484LI
XC3SD3400A-4FG676C
XC3SD3400A-4FG676I
XC3SD3400A-4FGG676C
XC3SD3400A-4FGG676I
XC3SD3400A-5CS484C
XC3SD3400A-5CSG484C
XC3SD3400A-5FG676C
XC3SD3400A-5FGG676C

[©] Copyright 2013 Xilinx, Inc. Xilinx, the Xilinx logo, Artix, ISE, Kintex, Spartan, Virtex, Vivado, Zynq, and other designated brands included herein are trademarks of Xilinx in the United States and other countries. All other trademarks are the property of their respective owners.



Key Dates and Ordering Information

Xilinx will begin to cross-ship products using both gold wire and copper wire per the <u>Table 2</u> schedule.

Table 2: Spartan-3A DSP FPGA Products Cross-Ship Schedule

Devices	Packages	Target Cross Shipping Date
XC3SD1800A XC3SD3400A	CS(G)484	April 1 st , 2014
XC3SD1800A XC3SD3400A	FG(G)676	April 1 st , 2014

Qualification Data

Xilinx has successfully passed and completed the Cu wire qualification. Please refer to Xilinx RPT156 for more detail.

Response

No response is required. For additional information or questions, please contact Xilinx Technical Support.

Important Notice: Xilinx Customer Notifications (XCNs, XDNs, and Quality Alerts) can be delivered via e-mail alerts sent by the Support website (http://www.xilinx.com/support). Register today and personalize your "Documentation and Design Advisory Alerts" area to include Customer Notifications. Xilinx Support 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.

Additional Documentation

Qualification Report (RPT156):

https://secure.xilinx.com/webreg/clickthrough.do?cid=173884



Revision History

The following table shows the revision history for this document.

Date	Version	Revision
12/09/2013	1.0	Initial release.

Notice of Disclaimer

The information disclosed to you hereunder (the "Materials") is provided solely for the selection and use of Xilinx products. To the maximum extent permitted by applicable law: (1) Materials are made available "AS IS" and with all faults, Xilinx hereby DISCLAIMS ALL WARRANTIES AND CONDITIONS, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, OR FITNESS FOR ANY PARTICULAR PURPOSE; and (2) Xilinx shall not be liable (whether in contract or tort, including negligence, or under any other theory of liability) for any loss or damage of any kind or nature related to, arising under, or in connection with, the Materials (including your use of the Materials), including for any direct, indirect, special, incidental, or consequential loss or damage (including loss of data, profits, goodwill, or any type of loss or damage suffered as a result of any action brought by a third party) even if such damage or loss was reasonably foreseeable or Xilinx had been advised of the possibility of the same. Xilinx assumes no obligation to correct any errors contained in the Materials or to notify you of updates to the Materials or to product specifications. You may not reproduce, modify, distribute, or publicly display the Materials without prior written consent. Certain products are subject to the terms and conditions of Xilinx's limited warranty, please refer to Xilinx's Terms of Sale which can be viewed at http://www.xilinx.com/legal.htm#tos; IP cores may be subject to warranty and support terms contained in a license issued to you by Xilinx. Xilinx products are not designed or intended to be fail-safe or for use in any application requiring fail-safe performance; you assume sole risk and liability for use of Xilinx products in such critical applications, please refer to Xilinx's Terms of Sale which can be viewed at http://www.xilinx.com/legal.htm#tos.