

Forged to Stamped Lid Conversion for Monolithic FPGA Flip Chip Packages

XCN16004 (v1.0) April 18, 2016

Product Change Notice

Overview

The purpose of this notification is to announce the transition from "forged" to "stamped" lids for selected monolithic flip chip packages of body sizes 35mm and below. Device-packages from Virtex®-1, Virtex®-4, Virtex®-7, Kintex®-7 FPGAs and Zynq®-7000 families will be included in the change. Lid material remains unchanged, as does fit and function. However, form (lid shape) will be slightly modified.

Description

Xilinx will be transitioning selected monolithic flip chip packages for Virtex-II, Virtex-4, Virtex-7, Kintex-7 FPGAs and Zynq-7000 families from forged to stamped lids. Lid material will remain Ni plated Cu and overall package thickness will remain unchanged. Top surface of the stamped lid will be slightly smaller than that of the current flat top, forged lid.

This conversion is being done to standardize lid designs across Xilinx's flip chip package offering for small to medium body sizes. Stamped lids are widely used in the industry and as such, no special risks or considerations are associated with this change. Reliability and manufacturing performance is expected to be on par with that of forged lids.

Products Affected

This change affects all speed, package, and temperature variations of "XC" commercial (C), industrial (I) and Defense "XQ" grade reflected in Table 1 and Table 2. Any associated SCDs or EasyPath are also affected.

Table 1: Virtex-II and Virtex-4 Devices-Packages FPGAs Products Affected

Device	Package-Pin	Body Size
XC2V3000		
XC2V4000	FF(G)1152	
XC2V6000		
XC4VFX40		35mm
XC4VFX60		3511111
XC4VFX100		
XQ4VFX60	FF1152	
XQ4VFX100	FF1152	

Note:

XC2Vxxxx devices are included for Post Last Time Buy requirement. Virtex-II family has been discontinued per XCN12026.

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Table 2: 7-series FPGAs and Zynq-7000 Devices-Packages Product Affected

Device	Package-Pin	Body Size
XC7K325T		
XC7K410T		
XC7Z035	FF(G)900	31mm
XC7Z045		
XC7Z100		
XC7K420T	FF(C)44F6	
XC7K480T	FF(G)1156	
XC7VX330T		
XC7VX415T	FF(C)4457	35mm
XC7VX485T	FF(G)1157	3311111
XC7V585T		
XC7VX415T		
XC7VX485T	FF(G)1158	

Key Dates and Ordering Information

Xilinx will begin cross-shipping products using both forged and stamped lids starting July 18, 2016.

Traceability

No change to any part ordering or top marking. Below is a representation of the lid change.





Figure 1:Lid change representation



Qualification Data

Qualification vehicles and results are shown in Table 3. Additional qualification data can be provided upon request

Table 3: Qualification Test

Device	Package-Pin	TCB 1000 (-55C/125C)	Results
XC2V8000	FF(G)1152	0/25 x 3 lots	Passed
XC4VFX100	FF(G)1152	0/25 x 3 lots	Passed
XC7V585T	FF(G)1157	0/25 x 3 lots	Passed

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
4/18/16	1.0	Initial Release



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