TAB 31

1635254   *MAR-08-11 06:32 PM*

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IBA - Boeing Proprietary:

Document Number	1635254	Status: Open	Owner:	IBA IDS

Initiation Date: 23-DEC-2010 11:38	Response Due: 22-JAN-11		Technical Contact : Jeff Mitroka		Phone: ▇▇▇
Originator: Joann Beihl (339808)	Site: MO002	Dept: ZE6	Mfg POC: Ed Cashmere		
Title: Suspect Counterfeit, Microcircuit, Xilinx FPGA			Mfg Name: Honeywell International Inc.		
Rep: Jeff Mitroka			Mfg Address: 111 South 34th Street, Phoenix, AZ 85034		
Original Document Nbr:			Mfg Cage Code: 97896		

☐ Supplier   ☐ In-House   ☐ Other

Description of Problem

As Is / Should Be Condition:

C-17 subcontractor Honeywell has reported that Xilinx XC4006/XC4006E FPGAs procured from independent brokers Zelcon and Serenity in 2008 are suspect counterfeit parts. Some packages had incorrect die, others had delamination failures, numerous packages were marked with incorrect lot date codes and some were relabeled. Honeywell stated that all of the FPGAs procured from both Serenity and Zelcon showed evidence of having been remarked. Reference attached Honeywell White Paper and Failure Analysis Report for Details and pictures.

The FPGAs are used on the Video Processor Module which is a circuit card assembly in the Honeywell DME-37B. The Distance Measuring Equipment (DME) was engineered at Redmond, WA and manufactured in Malaysia. In March of 2009 DME manufacturing was transferred from Olathe, Kansas to Penang, Malaysia.

Honeywell part number 12051388-0008 (Xilinx XC4006-6PC84I or (XC4006E-4PC84I)) lot date codes considered suspects are:

Serenity
0046
0421
0221

Zelcon
0313
0308 (investigation not complete)

Actions Taken to Prevent Recurrence:

Short term Honeywell will add new processes such as electrical testing and possibly upscreening to their existing processes in place to detect counterfeiting (Reference attached Procedure #SPOC 419 on Honeywell Part Authenticity Testing). Long term is to replace the part with the still OEM procurable Xilinx component XC4010E. Note: Actions are being reviewed and updated so future White Paper revisions will further detail actions to prevent recurrence.

Suggestions / Recommendations:

Please respond back to the C-17 Program if you have used any of these parts, since Boeing wants to capture any other product that might be impacted.

Attachments

White Paper ? Honeywell DME-37B Xilinx Parts Issue ? Boeing Applications ? Rev J dated December 3, 2010

Failure Analysis report # 501331-1 (dated 2 Dec 2010, date code: 0421, Xilinx P/N: XC4006E-4PC84I) from Honeywell on the Xilinx Suspect Parts Issue

Honeywell Part Authenticity Testing Procedure SPOC 419

Modified By: Joann Beihl (339808)	Date Modified: 23-DEC-10 12:07

Special Flags			
Current Assignment Information			
Work Message:			

Queue:	IBA IDS	Assignee:		Dept:

1635254_501331-1_Xilinx_0421_lot.pdf	Joann Beihl (339808)	23-DEC-10 11:48
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1635254_SPOC_419_-_SOW_template.pdf	Joann Beihl (339808)	23-DEC-10 11:49

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