

# Consolidation of On-package Capacitors in Virtex-5 FXT FPGA FF(G)1738 and FF(G)1136 Packages

XCN09012 (v1.0) March 23, 2009

Product Change Notice - For Your Information

#### **Overview**

The purpose of this notification is to inform the customer of a standardization effort for on-package capacitors used in Virtex®-5 FXT FPGA FF(G)1738 and FF(G)1136 packages for the prefix "XC" Commercial "C" and Industrial "I" devices. There is no change to the form, fit, function, or reliability with this notice.

#### **Description**

The on-package capacitors used in the FF(G)1738 and FF(G)1136 packages for the Virtex-5 FXT FPGA product family are being standardized to Controlled-ESR (Equivalent Series Resistance) on-package capacitors. Xilinx assessment of this change shows overall improved I/O noise margin for high-speed SERDES (GTX) capable Virtex-5 FPGA family devices in large form factor packages such as FF(G)1738 and FF(G)1136.

#### **Products Affected**

This change includes all speed and temperature variations of the Virtex-5 FPGA FF(G)1738 and FF(G)1136 "XC" Commercial "C" and Industrial "I" grade devices. Part numbers included in the standardization effort are listed in Table 1:

Table 1: Products Affected

Xilinx Product	Change Description
XC5VFX200T-FF1738	On-package capacitors standardized.
XC5VFX130T-FF1738	On-package capacitors standardized.
XC5VFX100T-FF1738	On-package capacitors standardized.
XC5VFX100T-FF1136	On-package capacitors standardized.
XC5VFX70T-FF1136	On-package capacitors standardized.
XC5VFX200T-FFG1738	On-package capacitors standardized.
XC5VFX130T-FFG1738	On-package capacitors standardized.
XC5VFX100T-FFG1738	On-package capacitors standardized.
XC5VFX100T-FFG1136	On-package capacitors standardized.
XC5VFX70T-FFG1136	On-package capacitors standardized.
All other Virtex-5 FPGA products	No change.



### **Key Dates and Ordering Information**

Virtex-5 FPGA FXT FF(G)1738 and FF(G)1136 packages marked with Date Code 0917 or later will ship with these standardized capacitors.

Table 2: Key Dates and Ordering Information

Ordering	Description	Example of	Date Code	Date of
Code		Ordering Part #	Implementation	Discontinuance
None	On-package capacitors standardized	XC5VFX130T-2FF1738C	0917	N/A

### **Traceability**

Affected devices are identified by the Date Code, as shown in the following package topmark.



xcn09xxx\_01\_031209

Figure 1: Package Topmark

## Response

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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
3/23/09	1.0	Initial release.

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