

Additional Wafer Fabrication Site for 28nm Product Families

XCN14004 (v1.1) March 24, 2014

Datasheet from www.sunnywale.com

Product Change Notice

Overview

The purpose of this notification is to communicate that Xilinx is introducing an additional wafer fabrication site for all 28nm product families. Xilinx and TSMC are integrating the 28nm/HPL process as part of TSMC's 28nm super manufacturing platform (SMP) and business continuity strategy. As a result, Fab15 is being added as a qualified source for all Xilinx 28nm product family members.

This notification applies to all Artix®-7, Kintex®-7, Virtex®-7, and Zynq®-7000 (XC) Commercial (C) grade, Extended (E) grade and Industrial (I) grade products. Automotive (XA) and Hi-Rel (XQ) products are not impacted by this change as they will be gualified and released to production in TSMC SMP/Fab15.

Description

To ensure business continuity and enable high volume supply chain capabilities for 28nm products, Xilinx intends to include an additional wafer fabrication site, TSMC SMP/Fab 15, for all 28nm product families. Xilinx and TSMC are partnering to create a seamless synchronized process across wafer fabrication sites for the 28nm node with standardized HPL process manufacturing control systems. This super manufacturing platform (SMP) creates centralized alignment for manufacturing management process control.

TSMC SMP/Fab15 is being added as a qualified source for all Artix-7, Kintex-7, Virtex-7, and Zynq-7000 (XC) Commercial (C) grade, Extended (E) grade and Industrial (I) grade products. Automotive (XA) and Hi-Rel (XQ) products will be qualified and released to production in TSMC SMP/Fab15 and are not impacted by this change.

This addition allows the same performance, quality and reliability specifications that apply to all 28nm product families proven through characterization and testing. As a result, there is no change in form, fit, function, or reliability with this SMP/Fab15 addition.

Products Affected

This change affects all standard and specification control document (SCD) XC Commercial (C) grade, Extended (E) grade and Industrial (I) grade devices listed in <u>Table 1</u>.

Table 1: Affected 28nm device families

Device	Device	Device	Device	Device
XC7A100T	XC7K355T	XC7V2000T	XC7VX485T	XC7Z010
XC7A200T	XC7K410T	XC7VH580T	XC7VX550T	XC7Z020
XC7K70T	XC7K420T	XC7VH870T	XC7VX690T	XC7Z030
XC7K160T	XC7K480T	XC7VX330T	XC7VX980T	XC7Z045
XC7K325T	XC7V585T	XC7VX415T	XC7VX1140T	XC7Z100

Key Dates and Ordering Information

Xilinx will begin Fab 15 initial production device shipments to customers in the timelines indicated in <u>Table 2</u> below.

© Copyright 2013, 2014 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.



Table 2: Fab 15 Device Qualification Completion and Transition Schedule

Device	Qualification Completion	Cross-Ship Date
XC7A100T	Dec-13	Apr-14
XC7A200T	Apr-14	Jul-14
XC7K70T	Jun-14	Sep-14
XC7K160T	May-14	Aug-14
XC7K325T	Dec-13	Apr-14
XC7K355T	Jun-14	Sep-14
XC7K410T	Jun-14	Sep-14
XC7K420T	May-14	Aug-14
XC7K480T	May-14	Aug-14
XC7V585T	Jul-14	Oct-14
XC7V2000T	Jun-14	Sep-14
XC7VH580T	Jul-14	Oct-14
XC7VH870T	Jul-14	Oct-14
XC7VX330T	Jul-14	Oct-14
XC7VX415T	Jun-14	Sep-14
XC7VX485T	Jan-14	Jul-14
XC7VX550T	Feb-14	May-14
XC7VX690T	Feb-14	July-14
XC7VX980T	Jun-14	Sep-14
XC7VX1140T	Jul-14	Oct-14
XC7Z010	Dec-13	Apr-14
XC7Z020	Dec-13	Apr-14
XC7Z030	Mar-14	Jun-14
XC7Z045	Mar-14	Jun-14
XC7Z100	Apr-14	Jul-14

Note: All subsequent updates to this table will be provided in XTP262.

Traceability

The package top mark will remain the same with only a single letter change to reflect the Fabrication location.



Figure 1: Top Mark for TSMC Fab 12



Figure 2: Top Mark for TSMC Fab 15



Qualification Data

Qualification data is available and provided upon request.

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 Answer Record 18683: http://www.xilinx.com/support/answers/18683.htm.

Additional Documentation

XTP262: Transition Schedule for Additional Wafer Fabrication Site for 28nm Product Families https://secure.xilinx.com/webreg/clickthrough.do?cid=354251.

Revision History

The following table shows the revision history for this document:

Date	Version	Description of Revisions	
12/16/2013	1.0	Initial release.	
03/24/2014	1.1	Add new traceability section for top mark information. Update XC7VX690T cross-ship date from TBD to July, 2014 on Table 2.	

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.

Sales: Shenzhen Sunnywale Inc, www.sunnywale.com, awin@sunnywale.com, Wechat: 9308762