

# PROCESS CHANGE NOTIFICATION

## PCN0716

### ADDITIONAL TSMC WAFER FABRICATION SITE FOR STRATIX® GX FPGAs

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#### Change Description

Altera will begin shipping Stratix® GX FPGAs out of Taiwan Semiconductor Manufacturing Company (TSMC) wafer FAB 14, located in Tainan, Taiwan. The product currently ships out of TSMC FAB 6. The Stratix GX FPGA family is manufactured using the 0.13µm process technology. TSMC's FAB 14 has been fully qualified and has completely satisfied Altera's process technology, quality, reliability, and product performance requirements. In addition to the fabrication site change, the wafer dimension will transition from 200 mm to 300 mm.

#### Reason for Change

Altera is transitioning these products to TSMC FAB 14 to ensure product availability and to be in a better position to meet long term customer demand.

#### Products Affected

Table 1 lists the products affected by this change. A list of ordering part numbers is available upon request.

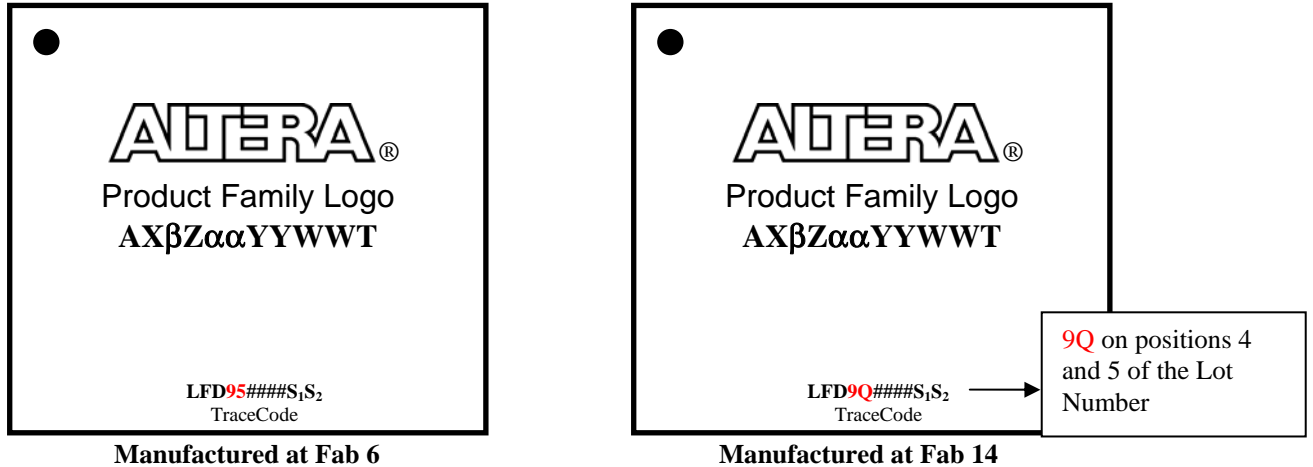
**Table 1. Products Scheduled to Ship from TSMC FAB 14**

Product Family	Products Affected
EP1SGX10	All Ordering Part Numbers
EP1SGX25	All Ordering Part Numbers
EP1SGX40	All Ordering Part Numbers

## Product Traceability and Transition Dates

Stratix GX FPGA devices manufactured at TSMC Fab 14 are marked with **9Q** on the lot number. See Figure 2. Transition dates are indicated in Table 2.

**Figure 2. Fabrication Site Location Marking**



**Table 2. Transition Timeframe**

Product Family	Product Transition Timeframe
EP1SGX10	TBD
EP1SGX25	April 2008
EP1SGX40	April 2008

## Qualification Data

TSMC FAB 14 fabrication site has been qualified using the FabMatch® methodology developed by Altera and TSMC. Altera and TSMC have developed the FabMatch methodology to ensure a process technology is duplicated when transferred from one fabrication facility to another, resulting in identical devices produced at multiple wafer fabs. The FabMatch approach compares the process, reliability, and device performance data on products from two separate facilities to demonstrate that the process technology is duplicated, arriving at a product which has identical electrical and product performance characteristics.

The FabMatch report is available upon request.

## Contact

For more information, please contact your local Altera sales representative or Altera Customer Quality Engineering at [customer-quality@altera.com](mailto:customer-quality@altera.com).

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*In accordance with JESD46-C, this change is deemed acceptable to the customer if no acknowledgement is received within 30 days from this notification.*

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## Revision History

Date	Rev	Description
11/20/2007	1.0.0	Initial Release