

PROCESS CHANGE NOTIFICATION

PCN1407

Additional Assembly Site for FLEX[®] 6K and Stratix[®] Products

Change Description:

Altera[®] is pleased to announce the addition of Amkor Technology Philippines (ATP), located in Manila, Philippines, as a qualified assembly site for FLEX[®] 6K and Stratix[®] series of products. The list of part numbers affected is available in Table 1 of this notification.

ATP is fully qualified and ready to support production shipments.

Recommended Action:

Customers are encouraged to take advantage of the additional source by approving this change at the earliest. Upon implementation (see dates in Table 2), Altera may ship product sourced from ATP or other existing (qualified) assembly site(s).

There are no changes to device performance, functionality, thermal or package characteristics.

Reason for Change:

Altera is implementing this change to strengthen supply-chain risk-mitigation by establishing the capability to produce equivalent product from multiple qualified locations. ATP is a fully qualified manufacturer for other BGA products in Altera's portfolio.

Benefit of Change:

Customers will benefit from supply chain continuity in the event of unforeseen events.

Products Affected:

This change will apply to all part numbers in the FLEX 6K and Stratix families of products. The part numbers currently open for order entry are listed in Table 1.

Table 1: Affected Ordering Part Numbers

Ordering Part Number
EP1S20B672C6
EP1S20B672C6N
EP1S20B672C7
EP1S20B672C7N
EP1S10B672C6
EP1S10B672C7
EP1S25B672C6
EP1S25B672C6N
EP1S25B672C7
EP1S25B672C7N
EPF6016BC256-2
EPF6016BC256-3
EPF6016BC256-3N
EPF6024ABC256-1
EPF6024ABC256-2
EPF6024ABC256-2N
EPF6024ABC256-3

Product Traceability Information:

ATP material can be distinguished by the Country of Origin (COO) marked on the package top-mark and on the shipment box label. Material assembled at ATP will contain “**Philippines**,” as the COO identifier.

All other elements of marking and box labeling schemes will be consistent with current material.

Product Transition Dates:

Customers are requested to take note of the key dates shown in Table 2.

Table 2: Product Transition Dates

<i>Milestone</i>	<i>Date</i>
Last date to order qualification samples	12/12/2014
Last date to acknowledge receipt of this notification*	12/12/2014
Last date to request additional information or clarification	01/12/2015
Change implementation date (i.e., date shipment will commence from ATP)	05/12/2015

* Note, in accordance with JESD46D, this change is deemed acceptable if no response or acknowledgement is received within 30 days from the date of this notification.

Effective the change implementation date listed in Table 2, shipments of the affected part numbers will be assembled at ATP or other existing (qualified) assembly site(s). In other words, Altera reserves the right to continue shipment of pre-converted product beyond the change implementation date.

Samples:

Samples of ATP assembled material can be ordered at this time via your local Sales Representative. Please visit the following URL to find a sales office in your region:

<http://www.altera.com/corporate/contact/sales/worldwide/con-sales-ww.jsp>

Customers should use the part number in the “Ordering Part Number” column to place sample orders. Sample orders must be placed no later than the last date to order qualification samples, as shown in Table 2. Please note that samples may not be built ahead of time for all part numbers affected, and may be subject to factory published lead-times.

Qualification Data:

Qualification data has been collected to ensure that the products meet or exceed Altera's quality and reliability specifications. This data is summarized in Table 3.

Table 3: Summary of Qualification Data

Qualification Test	Standard	Readout	Results # of Failures / Total Samples Tested
High Temp Bake @ 150°C	JESD22-A103	1000 hrs	0/210
Unbiased HAST (130°C / 85%RH)	JESD22-A110B	96 hrs	0/210
Temperature Cycle "B" (-55°C to 125°C)	JESD22-A104D	1000 cyc	0/280
Temp Humidity Bias (85°C /85%RH)	JESD22-A101B	1000 hrs	0/30
Life Test @ 125°C	JESD22-A108	1000 hrs	0/30

Contact

For more information, please contact Altera Technical Support by submitting a Service Request at Altera's [mySupport](#) website.

Customer Notifications Subscription

Customers that have subscribed to Altera's customer notification mailing list will receive updates automatically via email.

If you would like to receive customer notifications by e-mail, please subscribe to our customer notification mailing list at <https://www.altera.com/subscriptions/email/signup/eml-index.jsp>

In accordance with JESD46D, this change is deemed acceptable to the customer if no acknowledgement is received within 30 days from this notification.

Revision History

Date	Rev	Description
11/12/2014	1.0.0	Initial Release

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