

PROCESS CHANGE NOTIFICATION

PCN1003

ALTERNATIVE ASSEMBLY SITE FOR THE EPCS SERIAL CONFIGURATION DEVICE FAMILY

Change Description

This is an update to PCN1003, please see revision history table for information specific to this update.

The EPCS serial configuration devices will be manufactured in Advanced Semiconductor Engineering China (ASEC), Shanghai as an additional assembly source. The EPCS devices are currently assembled out of Micron Muar, Malaysia and Amkor, Philippines (ATP). In addition to the assembly site, the bill of materials utilized by ASE has been qualified. These packages are EU-RoHS compliant, and do not contain published REACH SvHC.

Recommended Action

No action is recommended as a result of this change. The additional assembly site and the construction material set change have been verified through the successful completion of full qualification per JEDEC requirements. Supporting reliability data are included in this notification.

This change does not affect the form, fit, or function as defined in Altera's datasheet.

Reason for Change

This change is to improve manufacturing efficiency and to better support long-term demand for the affected products. This change also supports Altera's supply-chain risk-mitigation strategy by establishing the capability to produce equivalent product from multiple qualified locations. ASE is a fully qualified manufacturer for Altera products.

Altera is committed to conducting its business operations in a manner that sustains the environment. This includes maintaining the compliance of Altera products to applicable environmental regulations.

Products Affected

The product lines affected by this change are listed in Table 1. A list of ordering part numbers is included in Appendix 1.

The product will transition to the new assembly site as the current inventory is consumed. Estimated earliest shipment dates are subject to change.

Table 1: Affected Product Lines

Product	Assembly Location		Estimated Sample Availability	Estimated Earliest Shipment
	Current	Additional		
EPCS1SI8N	Muar & ATP	ASEC	Sept	Dec 2010
EPCS1SI8	Muar & ATP	ASEC	Sept	Dec 2010
EPCS4SI8N	Muar & ATP	ASEC	Sept	Dec 2010
EPCS4SI8	Muar & ATP	ASEC	Sept	Dec 2010
EPCS16SI8N	Muar & ATP	ASEC	Sept	Dec 2010
EPCS64SI16N	Muar & ATP	ASEC	Sept	Dec 2010
EPCS128SI16N	Muar & ATP	ASEC	Sept	Dec 2010

For device samples please visit <http://www.samplecomponents.com/scripts/SampleCenter.dll?Altera>

Product Traceability

Devices assembled at the ASE, China location can be identified by the unit topside marking and box label, See Figures 1 and 2.

Figure 1. Assembly Site Location Identifier Examples

All SOIC8 Packages

<p>EPCS1 PYWWT</p>

All SOIC16 Packages

<p>EPCS64 PPLLL WX COO YWW</p>
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P = Assembly site decoder
 “0” = ASEC Shanghai
 “9” = Muar, Malaysia
 “B” = Amkor Philippines

COO = Assembly site decoder
 “CHN” = China, Shanghai
 “MYS” = Muar, Malaysia
 “PHL” = Amkor Philippines

Figure 2. Assembly Site Location Identification on Box label



Qualification Data

Qualification data is summarized in Table 2.

Table 2. Summary of Qualification Data

Product Line	Package	Qualification Test	Read Out	Results
EPCS	SOIC8	High Temp Storage Life @ 150°C	1000 hrs	0 /231
		Temp Humidity Bias (85°C /85% RH)	1000 hrs	0 /231
		Temperature Cycle “C” (-65°C to 150°C)	500 cyc	0 /231
		Unbiased HAST (130°C / 85% RH)	96 hrs	0 /231
	SOIC16	High Temp Storage Life @ 150°C	1000 hrs	0 /231
		Temp Humidity Bias (85°C /85% RH)	1000 hrs	0 /231
		Temperature Cycle “C” (-65°C to 150°C)	500 cyc	0 /231
		Unbiased HAST (130°C / 85% RH)	96 hrs	0 /231

Contact

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

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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.

Revision History

Date	Rev	Description
09/10/2010	1.0.0	Initial Release
10/14/2010	1.1.0	Added SOIC16 qualification data
03/24/2011	1.2.0	Clarify SOIC16 Country of Origin traceability

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Appendix 1. Affected Ordering Part Numbers

EPCS Serial Configuration Device

EPCS1SI8N	EPCS4SI8N	EPCS4SI8NAA	EPCS64SI16N
EPCS1SI8	EPCS4SI8	EPCS16SI8N	EPCS128SI16N