

PROCESS CHANGE NOTIFICATION

PCN0801

ALTERNATIVE MANUFACTURING SITE FOR EPCS FAMILY

Change Description

This is an update to PCN0801; please see the revision history table for information specific to this update.

Altera introduced Amkor Philippines as an alternative assembly manufacturing site for the Altera serial configuration device family. Amkor Philippines is a qualified assembly manufacturing partner of Altera's and has demonstrated manufacturing excellence and the ability to accommodate Altera's high-volume capacity requirements.

Parts from Amkor Philippines will be manufactured with their standard Bill of Materials for this package. Table 1 lists the Bill of Materials.

Table 1: Summary of Bill of Materials

Package	Material	Assembly Manufacturing Site		
		Existing		Additional
		Malaysia	Morocco	Amkor Philippines
SOIC 8	Wire type	Wire 1.0 mil	Wire 1.0 mil	Wire 1.0 mil
	Die Attach epoxy	Hitachi EN4900	Hitachi EN4900	Ablestik 8290
	Mold Compound	Nitto MP8000CH4-2	Nitto MP8000CH4-2	Sumitomo G600

Recommended Action

This change does not affect the form, fit, or function of the devices. No action is required as a result of the change.

Reason for Change

Altera introduced Amkor Philippines as an additional assembly manufacturing source to ensure product availability and to be in a better position to meet long term customer demand.

Products Affected

Table 2 lists the ordering part numbers affected by this change.

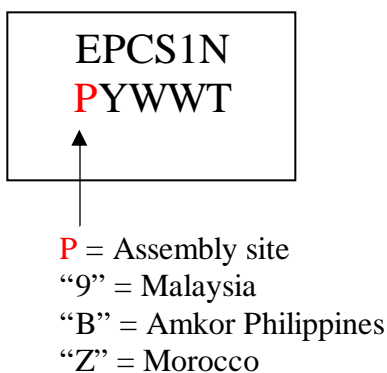
Table 2: Affected Ordering Part Numbers

Package Type	Ordering Part Numbers	Product Transition Timeframe
SOIC 8	EPCS1SI8N	Now
	EPCS4SI8N	Now
	EPCS16SI8N	Now
	EPCS1SI8	Dec 2008
	EPCS4SI8	Dec 2008

Product Traceability and Transition Date

This change was implemented starting April 2008. The different assembly sites can be identified using Figure 1. The Amkor manufacturing site is an additional source to the current assembly sites.

Figure 1. Assembly Site Location Identifier



Qualification Data

Qualification data is listed in Appendix 1.

Contact

For more information, please contact your local Altera sales representative or Altera Customer Quality Engineering at customer-quality@altera.com.

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
01/24/2008	1.0.0	Initial Release
09/10/2008	1.1.0	Add additional part numbers EPCS1SI8 and EPCS4SI8

Appendix 1: Qualification Data for SOIC 8

Package	Test Procedure	Test Conditions	Results
SOIC 8	Temperature Shock	-55°C / +125°C, 100 shocks	0/75
		-55°C / +125°C, 500 shocks	0/75
	Temperature Cycling	-65°C / +150°C, 500 cycles	0/240
		-65°C / +150°C, 1000 cycles	0/240
	Temperature and Humidity Biased	85°C, 85%RH, 3.6V, 500 hrs	0/240
		85°C, 85%RH, 3.6V, 1000 hrs	0/240
	Pressure Pot	121°C, 2Atm, 100%RH, 48 hrs	0/240
		121°C, 2Atm, 100%RH, 96 hrs	0/240
	High Temperature Bake	150°C, 500 hrs	0/240
		150°C, 1000 hrs	0/240
	Solderability	Steam ageing 90°C / 90%RH, 8 hrs Dry Air 150°C, 8 hrs	0/20