

PROCESS CHANGE NOTIFICATION PCN0805

WAFER FABRICATION SITE CHANGE FOR SERIAL CONFIGURATION DEVICES

Change Description

This is an update to PCN0805; please see the revision history table for information specific to this update.

Serial Configuration devices, currently manufactured in the Numonyx Catania (Italy) fabrication plant, will be manufactured in the Numonyx Ang Mo Kyo (Singapore) Wafer fabrication plant.

Recommended Action

No action is required as a result of this change.

Reason for Change

This change is to ensure product availability and to be in a better position to meet long-term customer demand.

Products Affected and Transition Dates

Table 1 lists the products affected by this change and the transition time frame.

Transition by product is dictated by the consumption of current inventory. As such, estimated transition dates are subject to change. The 90 day notification period will not be violated.

Table 1. Products Scheduled to Ship from Numonyx Ang Mo Kyo fabrication plant

Product	Fab Location		Process Technology (μm)		Sample Availability	Estimated Transition Time Frame
	Current	New	Current	New		
EPCS16SI8N	Catania	AMK	0.11 μm	No Change	Now	Oct 2009
EPCS16SII16N	Catania	AMK	0.11 μm	No Change	Now	Q3 2010
EPCS1SI8N	Catania	AMK	0.15 μm	No Change	Now	Jan 2010
EPCS1SI8	Catania	AMK	0.15 μm	No Change	Now	Jan 2010
EPCS4SI8N	Catania	AMK	0.15 μm	0.11 μm	Now	Mar 2010
EPCS4SI8	Catania	AMK	0.15 μm	0.11 μm	Now	Mar 2010
EPCS64SII16N	Catania	AMK	0.13 μm	0.11 μm	Now	Aug 2009
EPCS128SII16N	Catania	AMK	0.13 μm	65nm	Mar 2010 ⁽¹⁾	Jun 2010

Note (1) – Samples will be assembled out of Amkor Philippines. Amkor Philippines is already a qualified site for the other configuration devices.

Product Traceability

Devices manufactured at the Numonyx Ang Mo Kyo fabrication plant can be identified on the box label. See Figure 1. For SOIC 16 packages, the unit marking will also indicate the fabrication plant. See Figure 2.

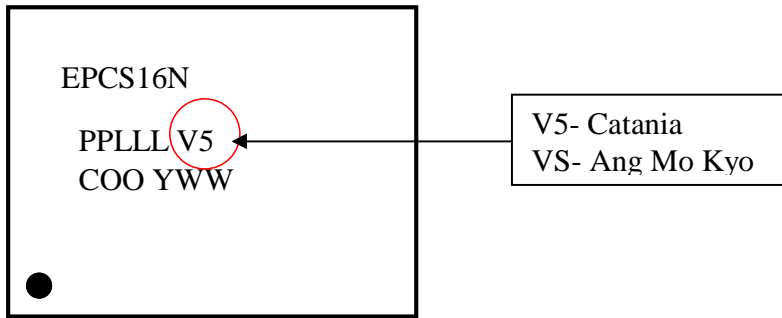
Figure 1. Fabrication Site Location Identification on Box label

ALTERA PK: P3
Origin: MALAYSIA
PART #: EPCS16SI16N
LOT#1: 99803AJFV5A FAC#1: 807ST02
D/C#1: 4 99AAA0801A
TraceCode#1:
LOT#2: FAC#2:
D/C#2:
TraceCode#2:
BOXED QTY: 1225
DRYPACKED?(Y=YES,N=NO): Y (LEVEL 3)
LINE THIS UP WITH BOX EDGE 030708 11:11
ALTERA QTY: 1225
PART#: EPCS16SI16N
LOT #: 99803AJFV5A PK: P3
D/C: 4 99AAA0801A

V5- Catania
VS- Ang Mo Kyo

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Figure 2. Fabrication Site Location Identification on Unit Marking for SOIC 16 Packages



Qualification Data

The device qualification data is summarized in Table 2

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
03/12/2008	1.0.0	Initial Release
04/30/2008	1.1.0	Updated Table 1 to include process technology information, revised EPCS1 transition date to August 2008 and added note with respect to operating voltage.
09/23/2008	1.2.0	Updated Table 1 to include sample availability and revised transition dates.
11/12/2008	1.3.0	Removed Note ⁽¹⁾ : <i>The EPCS1 mask will be revised to support an operating voltage range of 2.3V to 3.6V.</i>
12/23/2008	1.4.0	Updated Table 1 to include revised transition dates. New dates reflect the necessity to deplete existing "Catania" inventory
08/28/2009	1.5.0	Updated Table 1 to include revised transition dates. New dates reflect the necessity to deplete existing "Catania" inventory Changed the manufactures name from ST Microelectronics to Numonyx. EPCS128SI16N Assembly out of ATP
12/01/2009	1.6.0	Updated Table 1 to include revised EPCS128SI16N sample availability and transition dates.

Table 2: Summary of Qualification Data (EPCS64 and EPCS16)

Sub-group	Test Procedure	Method	Test Conditions	Lot #1 EPCS6 4	Lot #2 EPCS16
1	High Temperature Operating Life	JEDEC/ JESD22-A108	140° C, 4.2V 168 hrs 500 hrs	0/77 0/77	0/77 --
2	Erase / Write Cycles	Internal	25° C 10,000 cyc 50,000 cyc 100,000 cyc	0/77 0/77 0/77	0/77 -- --
3	High Temperature Bake	JEDEC/ JESD22-A103	250° C 168 hrs 500 hrs	0/77 0/77	-- --
4	Electrostatic Discharge	JEDEC / JESD22 -A114 -A115	Human Body Model 1.5K Ω , 100pF Machine Model 0 Ω , 200pF	-- --	> 2000 V > 200 V
5	Latch-Up	JEDEC- JESD78A	Class II – Level A	--	PASS