



Product Change Notice

Micron PCN: 30462

Date: 5/11/2011

Type of Change: Process Change / Assembly Site Proliferation

Title of Change: 256Mb and 256/256Mb 65nm P33 Silicon Metal Layer Change and Assembly Site Proliferation

Description of Change: *This PCN supersedes PCN FMG-EMF/10/4395, dated 06/02/2010.*

A1 to A2 stepping

256Mb and 256Mb/256Mb P33 products will be moving from A1 to A2 stepping. Details of the new stepping of silicon (A2) fixed Flexlock Write Timing erratum are described in the document at the following link:

<http://www.micron.com/get-document/?documentId=6657>

If customers implemented the suggested workaround on A1 stepping, they can choose to remove the workaround or leave it in as they migrate to A2 stepping. Customers who were not affected by the erratum will not see any change in functionality as they move from A1 to A2 stepping.

Assembly Site Proliferation

P33 256Mb and 256/256M in easyBGA leaded and lead-free packages and also P33 256Mb in 56 TSOP lead-free packages will be proliferated to additional assembly sites. EasyBGA packages for these products will be proliferated to ASE Chung-Li, Taiwan and 56 TSOP packages will be proliferated to ASE Kun-Shan China. Both of these sites are in addition to the current Amkor Shanghai assembly site. Customers should be ready to accept these products from any of the three assembly site. There will be no impact to product functionality from the assembly site proliferations.

TSOP Package Changes

Lead width for TSOP package option will change from 0.15mm (± 0.05 mm) to 0,22mm (± 0.05 mm) and a mark for the eject pin will be added (see illustrations on page 4).

Reason for Change: Silicon metal layer change required to fix the erratum in current product (A1) to provide full functionality to customers.

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Product Affected: 256Mb and 256/256Mb 65nm P33 Silicon in easyBGA and TSOP Packages

A1 Part number	A2 Special Mark at end of FPO-Line (Line 2)	A2 Part Number	A2 Special Mark at end of FPO-Line (Line 2)	Description	Shipping Media
PC48F4400P0TB0EA	None	PC48F4400P0TB0EE	E	256/256Mb (512Mb); LF easyBGA; Top/Bottom Boot (P33)	Tray

Note: Per JEDEC Standard JESD46-C Section 3.2.3; lack of acknowledgment of this PCN within 30 days constitutes acceptance of change



PC48F4400P0TB0ED	D	PC48F4400P0TB0EH	H	256/256Mb (512Mb); LF easyBGA; Top/Bottom Boot (P33), OTP	Tray
RC48F4400P0TB0EA	None	RC48F4400P0TB0EJ	J	256/256Mb (512Mb); Leaded easyBGA; Top/Bottom Boot (P33)	Tray
JS28F256P33BFA	None	JS28F256P33BFE *	E	256Mb; LF TSOP Bottom Boot (P33)	Tray
JS28F256P33TFA	None	JS28F256P33TFE *	E	256Mb; LF TSOP Top Boot (P33)	Tray
PC28F256P33BFA	None	PC28F256P33BFE	E	256Mb; LF easyBGA Bottom Boot (P33)	Tray
PC28F256P33BFB	None	PC28F256P33BFF	E	256Mb; LF easyBGA Bottom Boot (P33)	Tape & Reel
PC28F256P33BFP	P	PC28F256P33BFR	R	256Mb; LF easyBGA Bottom Boot (P33), OTP	Tray
PC28F256P33TFA	None	PC28F256P33TFE	E	256Mb; LF easyBGA Top Boot (P33)	Tray
RC28F256P33BFA	None	RC28F256P33BFE	E	256Mb; Leaded easyBGA Bottom Boot (P33)	Tray
RC28F256P33BFB	None	RC28F256P33BFF	E	256Mb; Leaded easyBGA Bottom Boot (P33)	Tape & Reel
RC28F256P33TFA	None	RC28F256P33TFE	E	256Mb; Leaded easyBGA Top Boot (P33)	Tray

* Lead width will change from 0.15mm (±0.05mm) to 0,22mm (±0.05mm) and a mark for the eject pin will be added.⁵

Micron Sites Affected: All

A2 Stepped Material

Product Ship Date 13-Aug-2011
Samples Available: 13-Jun-2011
Qual Data Available: 20-Jun-2011

A1 Stepped Material

Last Time Buy: 03-Oct-2011
Last Time Ship: 05-Dec-2011

Method of Identification:

A1 to A2 Stepping:

A2 stepping devices will have new dedicated part numbers. Please refer to the part number table on pages 1–2. A2 stepping can also be identified through marking on the package. The last digit at the end of the

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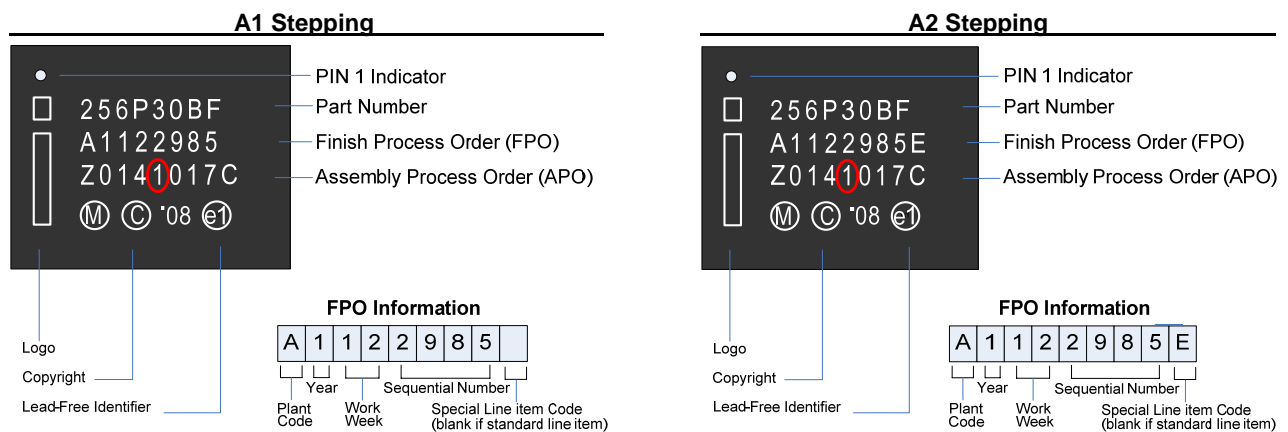
FPO line (line 2 on both BGA and TSOP packages) identifies A2 stepping. Please refer to the part number table for the exact character. Illustrations of the special mark in the FPO line for easy BGA and TSOP packages are provided below.

Assembly Proliferation:

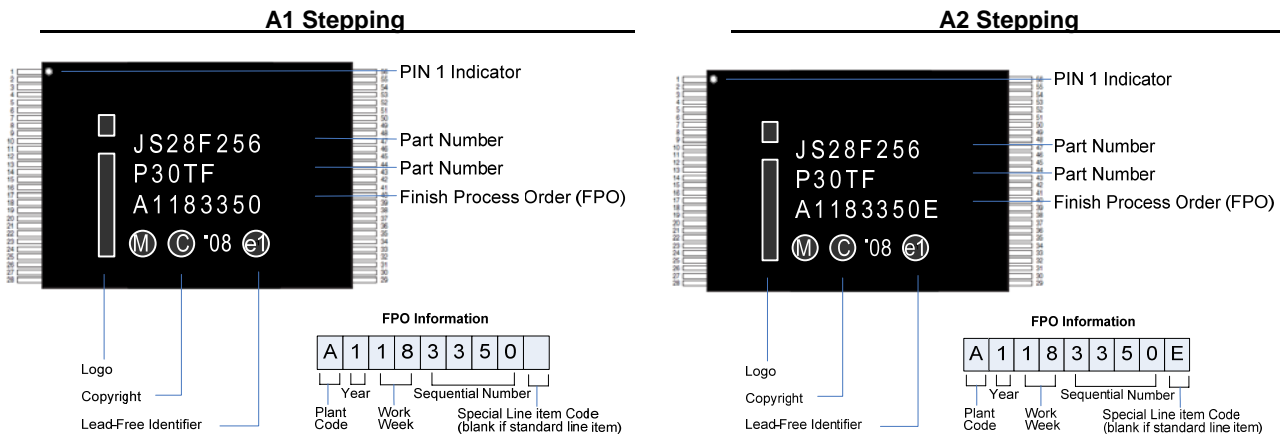
The 5th Digit in the assembly mark will reflect the assembly site. Illustrations of the 5th Digit in the assembly mark for easy BGA and TSOP packages are provided below.

- 2 = Amkor, Shanghai
- 1 = Chung-Li, Taiwan
- D = ASE- Kunshan, China

EasyBGA Package (Topside) Marks

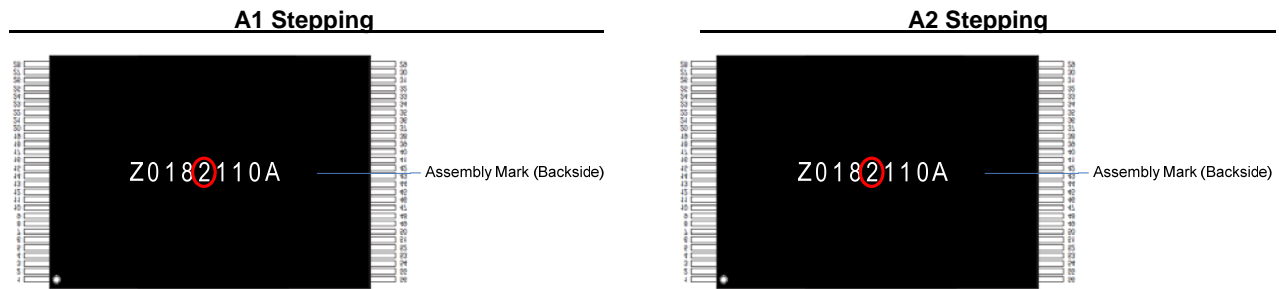


TSOP Package (Topside) Marks



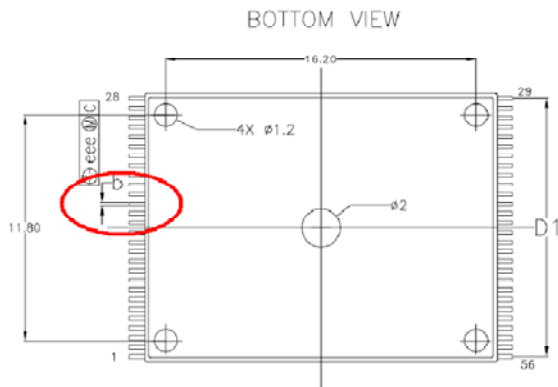
(continued on next page)

TSOP Package (Backside) Mark

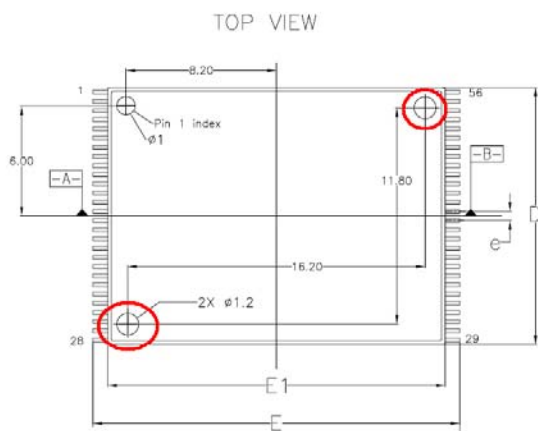


Package (TSOP) Changes

The lead width will change from 0.15mm (+/- 0.05mm) to 0.22mm (+/- 0.05mm).



Eject pin marks have been added.



Qualification Plan:

The move from A1 to A2 stepping and the proliferation of assembly for affected product to additional sites, i.e., ASE Chung-Li, Taiwan and ASE Kun-Shan China, will be qualified according to Company qualification procedure and best practices. Qualification plan will be available upon request.

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