

Advanced Product / Process Change Notice

No.: Z200-APCN-DM201504-01-Q

Date: 05/08/2015

Change Title : 2Gb (256Mb x8 and 128Mb x16) DDR2 technology migration from 65nm to 46nm

Change Classification: ☑ Major □ Minor Change item : ☑ Design □ Raw Material □ Wafer FAB □ Package Assembly □ Testing □ Others

Affected Product(s) :

W972GG8JB-18, W972GG8JB18A, W972GG8JB18I, W972GG8JB-25, W972GG8JB25A, W972GG8JB25I, W972GG8JB25K, W972GG8JB-3, W972GG8JB-3A, W972GG8JB-3I, W972GG8JB-3K, W972GG6JB-18, W972GG6JB18A, W972GG6JB18I, W972GG6JB-25, W972GG6JB25A, W972GG6JB25I, W972GG6JB25K, W972GG6JB-3A, W972GG6JB-3I, W972GG6JB-3K

Description of Change(s) :

Technology migration (65nm to 46nm) for 2Gb DDR2.

Reason for Change(s) :

According to Winbond product roadmap, launch new 2Gb DDR2 with 46nm technology.

Impact of Change(s) : (positive & negative)

Form : No Change

Fit : No Concern (Package size x16 from 11X13 MM^2 (65nm) to 8X12.5 MM^2 (46nm) / x8 from 11X11.5 MM^2 (65nm) to 8X12.5 MM^2 (46nm)), Refer to attachment II in details)

Function : No Concern (Compatible between 65nm and 46nm)

Reliability : On-going

Hazardous Substances: No Concern (Please refer to attachment I)

Qualification Plan/ Results :

The new sample has passed ESD pass 2KV, latch-up pass 200mA and full qualification is in progress.

The result is expected out on June/22/2015.

Implementation Plan :

The follow-up disposition of 65nm 256Mb x8 and 128Mb x16 DDR2:

1) The date of Last-buy orders for the 65nm 256Mb x8 and 128Mb x16 DDR2: July. 31, 2015.

2) The last shipment date of the 65nm 256Mb x8 and 128Mb x16 DDR2: October, 30, 2015.

Date Code:	onward D Lot	No: onward	☑ Proposed first sh	ip date: <u>04/30/2015</u>	
Originator: (QA Sec. Manager)	ytt chang	Approval: (QA Dept. Manager)	y H Chang	Approval: (QRA Director)	Chon



	Name: <u>Betty Huang</u> TEL: <u>886-3-5678168 (</u> ext.86549) FAX: <u>886-3-5796124</u>			
Contact for Questions & Concerns	Address : # 539, Sec. 2, Wenxing Rd., Jhubei City, Hsinchu County 302, Taiwan			
	E-mail: <u>Hyhuang8@winbond.com</u>			

Customer Comments:

Note: Please sign this notice, and return to Winbond contact within **30** days. If no response is received within **30** days, this Change Request will be assumed to meet your approval.

Approval	Disapproval	Conditional Approval :
Comment:		
Date:		
Dept. name:		
Person in charge:		

DDR2 46nm 128Mb x16 PACKAGE SPECIFICATION

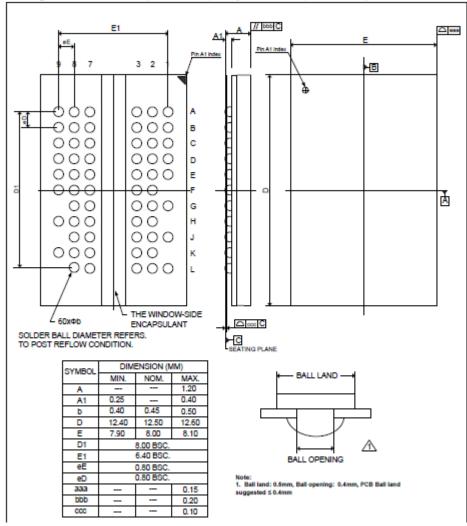


// bbb/C E1 A A1, Е HB eE, PIN A1 A PIN A1 INDEX 2 3 7 4 ₽ ΦO 000 ووروانها والموالية والموالية والموالية والموالية والموالية والموالية والموالية A Ð ООG 000 в କ୍ଷୀ 000 000 С 000 000 D 000 000 Е 000 000 F 000 000 G 000 000 н δ 000 000 J 000 00 ĸ 00 000 L 000 00 М 00 000 Ν 000 00 Р 000 ρo R 84xtb THE WINDOW/SIDE ENCAPSILLANT DAMETER REFERS Ē SEATING PLANE DIMENSION (MM) BALL LAND SYMBOL MIN. NOM. MAX. 1.20 A ----0.40 A1 0.25 b 0.40 0.50 12.50 D 12.40 12.60 F 7.90 8.00 8.10 D1 11.20 BSC 凎 E1 6.40 BSC. BALL OPENING eE 0.80 BSC eD 0.80 BSC Note: 1. Ball land: 0.5mm, Ball opening: 0.4mm, PCB Ball land suggested ≤ 0.4mm 0.15 aaa --bbb 0.20 ----0.10 CCC ------ddd ----0.15 -------0.08 eee

Package Outline WBGA84 (8x12.5 mm², ball pitch: 0.8mm, Ø=0.45mm)

DDR2 46nm 256Mb x8 PACKAGE SPECIFICATION

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Package Outline WBGA60 (8x12.5 mm², ball pitch: 0.8mm, Ø=0.45mm)



Table 1. The comparison table of part no between T65 and T46

Product	65nm Part No	46nm Part No	
DDR2 256Mb x8	W972GG8JB	W972GG8KB	
DDR2 128Mb x16	W972GG6JB	W972GG6KB	