Product / Process Change Notice

No.: Z200-PCN-DM201801-02-A Date: 01/17/2018

Change Title : 1Gb (128Mbx8 and 64Mbx16) DDR3/DDR3L technology migration from 46nm to 38nm for Industrial grade.

Change Classification: ☑ Major ☐ Minor with customer information
Change item : ☑ Design ☐ Raw Material ☐ Wafer FAB ☐ Assembly ☐ Testing ☐ Packing ☐ Others

Affected Product(s) :

W631GG6KB15J ,W631GG6KS15I ,W631GU8KB15I ,W631GU6KB12J ,W631GG6KB12J ,W631GG6KB15I , W631GU6KB12I ,W631GU6KB15I ,W631GU8KB12I ,W631GG6KB11I ,W631GG6KS12I ,W631GU6KB11I , W631GG6KB12I ,W631GG8KB12I ,W631GU8KB11I ,W631GG8KB15I

Description of Change(s)

Technology migration (46nm to 38nm) for 1Gb DDR3/DDR3L Industrial grade.

Reason for Change(s) :

According to Winbond product roadmap, launch new 1Gb DDR3/DDR3L Industrial grade with 38nm technology.

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

Form : No Change

Fit : Change (W631GG6KB/W631GU6KB package size change from 9x13x1.2(46nm) to 7.5x13x1.0(38nm), W631GG6KS/W631GU6KS package size keep 7.5x13x1.0, W631GG8KB/W631GU8KB package size change from 8x10.5x1.2(46nm) to 8x10.5x1.0(38nm), but the ball arrays are identical and pin to pin fully compatible, refer to attachment I)

Function : No Concern (The function is fully compatible between 46nm and 38nm, refer to attachment II)

Reliability : No Concern (The family qual pass, refer to attachment III)

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

Qualification Plan/ Results :

Base on Winbond Reliability report with family qual result, the Industrial grade meets Winbond criteria and no quality concern (refer to Attachment III in detail).

Implementation Plan :

Industrial grade product launch date of the 38nm 128Mb x8 and 64Mb x16 1Gb DDR3/ DDR3L: Jan 04, 2018.
Proposed ship date of the 38nm 128Mb x8 and 64Mb x16 1Gb DDR3/DDR3L Industrial grade: Jan 25, 2018.

The follow-up disposition of 46nm 128Mb x8 and 64Mb x16 1Gb DDR3/DDR3L Industrial grade:
1) The date of Last-buy orders for the 46nm 128Mb x8 and 64Mb x16 1Gb DDR3/DDR3L Industrial grade: Jan 25, 2019.
2) The last shipment date of the 46nm 128Mb x8 and 64Mb x16 1Gb DDR3/DDR3L Industrial grade: Jan 25, 2020.

☐ Date Code: _____ onward ☑ Lot No: 6650A3200ZK onward ☐ Proposed first ship date: _____.

Originator: (QA)	Hyhuang	Approval: (QA Dept. Manager)	YH Chang	Approval: (QRA Director)	Kevin Chen
Contact for Questions & Concerns	Name: Betty Huang TEL:886-3-5678168 (ext.86549) FAX: 886-3-5796124 Address : # 539, Sec. 2, Wenxing Rd., Jhubei City, Hsinchu County 302, Taiwan E-mail: Hyhuang8@winbond.com				

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.*

Major change: ☐ Approval ☐ Disapproval ☐ Conditional Approval : _____

Minor change with customer information: ☐ Recognition

Date: _____

Dept. name: _____

Person in charge: _____

The comparison table of part no between 46nm and 38nm

Product	46nm Part No	38nm Part No
DDR3 64Mb x16	W631GG6KB	W631GG6MB
	W631GG6KS	
DDR3 128Mb x8	W631GG8KB	W631GG8MB
DDR3L 64Mb x16	W631GU6KB	W631GU6MB
	W631GU6KS	
DDR3L 128Mb x8	W631GU8KB	W631GU8MB