

## Product Change Notice (PCN)

**Subject:** Change in the current Q-die memory used in our product(s) to a new version called F-die memory.

**Publication Date:** 1/16/2020

**Effective Date:** 4/16/2020

### Revision Description:

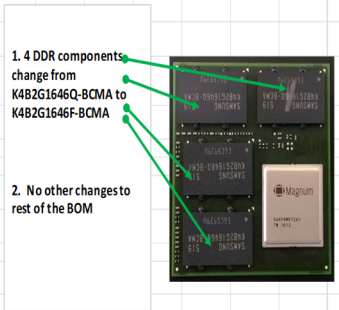
Initial Release

### Description of Change:

This notification is to advise our customers that our supplier Samsung Semiconductor has changed the current Q-die memory used in our product(s) to a new version called F-die memory. There is shrink in SDRAM process geometry from 35nm (Q-die) to 25.3nm (F-die). Other than the SDRAM change there will be no other changes to the parts referenced in this PCN.

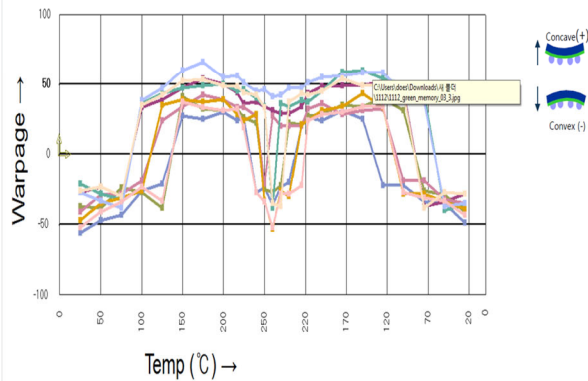
Details of the change are documented as below.

Item	DDR-Q(Current Production)	DDR-F(New)
Part#	K4B2G1646Q-BCMA	K4B2G1646F-BCMA
Package Type	96FCFBGA	96FCFBGA
Technology	35nm	25.3nm
Die -Size	34.13mm <sup>2</sup>	20.56mm <sup>2</sup>
Chip Thickness	0.2mm	0.2mm
Substrate-Core	0.2mm	0.2mm
Substrate thickness	0.26mm	0.26mm
1st Interconnection	Flip chip - Cu+Solder	Flip chip - Cu+Solder
Underfill	EMC	EMC
Mold Compound	Epoxy Mold Compound	Epoxy Mold Compound
2nd Interconnection	Lead-Free Sn:Ag:Cu=(97:2.5:0.5)	Lead-Free Sn:Ag:Cu=(97:2.5:0.5)



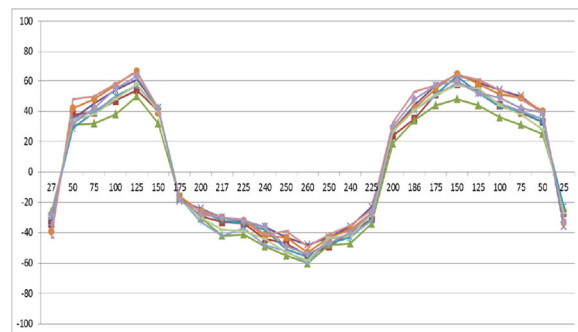
DDR-Q Warpage( Within Spec +/-100um)

PN : K4B2G1646Q-



DDR-F Warpage(Within Spec +/-100um)

Part number : K4B2G1646F-BCMA



**Affected Product List:**

DX7753-ULG2B01-A4

**Reason for Change:**

Our supplier Samsung Semiconductor has changed the current Q-die memory used in our product(s) to a new version called F-die memory.

**Impact on Fit, Form, Function, Quality & Reliability:**

No change to the form, fit, function, quality, or reliability of the product except the change in SDRAM.

**Product Identification:**

A new orderable part number 'DX7753-ULG2F01-A4' is issued to distinguish this change. The current version of this device is being discontinued (PDN# OV-19-03).

Current Orderable Part	New Orderable Part
DX7753-ULG2B01-A4	DX7753-ULG2F01-A4

**Qualification Status:** Completed

**Sample Availability Date:** 1/16/2020

**Device Material Declaration:** Available upon request

*Questions or requests pertaining to this change notice, including additional data or samples, must be sent to Renesas within 30 days of the publication date.*

For additional information regarding this notice, please contact [idt-pcn@lm.renesas.com](mailto:idt-pcn@lm.renesas.com)