

Product/Process Change Notice

No.	02756	PCN Date	October 15, 2014	Effective Date	November 15, 2014	
Title	Additional assembly site for 16Mb MRAM in 48-BGA Package					

Approval Notice

Everspin is adding ASE-Malaysia as a qualified assembly site for 16Mb MRAM products in the 48-BGA package. Everspin will consider this change accepted unless specific conditions for acceptance are provided in writing within 30 days of receipt of this notice.

Description and Purpose - Affected Products

In order to increase capacity and improve supply flexibility, Everspin is adding ASE-Malaysia as a qualified assembly site for 16Mb MRAM products in the 48-BGA package. Additionally, the moisture sensitivity level for these products improves from MSL-6 to MSL-5. Everspin's 16Mb BGA products packaged at ASE-Malaysia with MSL-5 will be available on a limited basis starting November 2014. The moisture sensitivity level of all Everspin 16Mb MRAM products in the 48-BGA package listed in the table below will achieve MSL-5 starting April 1, 2015, or work week 1514, which will be visible in the lot trace code.

Part Number	Description	Part Number	Description
MR4A08BMA35	Commercial Temp.	MR4A08BCMA35	Industrial Temp.
MR4A08BMA35R	Commercial Temp. ,T&R	MR4A08BCMA35R	Industrial Temp., T&R
MR4A16BMA35	Commercial Temp.	MR4A16BCMA35	Industrial Temp.
MR4A16BMA35R	Commercial Temp., T&R	MR4A16BCMA35R	Industrial Temp., T&R

Material Differences

There are no changes to the current package drawing for ASE-Malaysia assembled 48-BGA packages. There are differences in material used in the package as compared to our existing assembly site, UTAC China (UDG), but these differences do not affect the product specification. There is no change to product testing. ASE-M 48-BGA assembly uses a 4-layer substrate. A Bill of Materials is available on request.

Package Marking of Products Affected

No change in package marking per our standard marking procedure. The designator for ASE-Malaysia in the product trace code is "M". The designator for UTAC China in the product trace code is "G".

Trace code format: MWLYYWWz

M = Assembly location, WL = Wafer Lot Number, YY = Year, WW = Work Week, z = Assembly lot split (may not be present)

Contact Information

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Originatas

Originator						
<u>Date</u> October 15, 2014	<u>Title</u> VP Marketing	Name Scott Emley				
Approval and Release						
<u>Date</u> October 15, 2014	Title Director of Quality	Name Mehar Mahal				