

This Technical Advisory describes an issue which may or may not affect the customer's product

Intel Technical Advisory

TA-1005-1

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Intel® Integrated RAID Module rework to resolve an AC power cycling cache backup issue

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Products Affected

Table, 1, Products Affected

Product	Product code	MM#	PBA#
Intel [®] Integrated RAID Module RMS25PB080	RMS25PB080	917056	G27504-502
Intel [®] Integrated RAID Module RMS25PB040	RMS25PB040	917078	G45802-502
Intel [®] Integrated RAID Module RMT3PB080	RMT3PB080	917079	G45803-502
Intel [®] Integrated RAID Module RMS25CB080	RMS25CB080	917084	G35316-502
Intel [®] Integrated RAID Module RMS25CB040	RMS25CB040	917085	G41024-502
Intel® Integrated RAID Module RMT3CB080	RMT3PB080	917086	G41025-502

Description

The PCB's (Print Circuit Boards) for the controllers listed above are being modified to resolve an AC power cycling cache backup issue with the Intel[®] RAID Smart Battery AXXRSBBU9 and the Intel[®] RAID Maintenance Free Backup Unit AXXRMFBU2 cache backup solutions. In addition to some minor component changes a jumper wire will be added to the PCB's during manufacturing. Intel has completed process and product qualification for the changes to verify that there is no impact to product quality and reliability.

See the photos below of the jumper wire on the Intel® Integrated RAID Modules:

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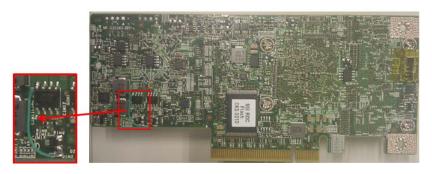


Figure 1. The jumper wire on Intel® Integrated RAID Module RMS25PB080, RMS25PB040 and RMT3PB080

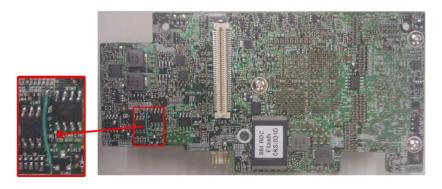


Figure 2. The jumper wire on Intel® Integrated RAID Module RMS25CB080, RMS25CB040 and RMT3CB080

Root Cause

During AC power cycle testing Intel found a rare occurrence where data yet to be written to disk from the RAID module's DDR3 memory may be lost even though cache protection is enabled by the Battery Backup Unit (Intel® RAID Smart Battery AXXRSBBU9) or the RAID Maintenance Free Backup Unit (Intel® RAID Maintenance Free Backup Unit AXXRMFBU2) that is installed. The issue has a very low occurrence rate and is observed on a small percentage of modules. The component changes and jumper wire solution provides a resolution to this issue.

Corrective Action / Resolution

The component changes and jumper wire are an interim solution. A new version of the PCB has been designed that incorporates the necessary changes and product based on the new PCB is scheduled for availability in July 2012. Intel does not anticipate any functional or quality impact with the jumper wire solution. If the jumper wire solution is not acceptable, please order the new modules with the changes designed into the PCB solution, new MM# for the new revision of these products are listed below.

-	Intel [®] Integrated F	RAID Module	RMS25PB080	MM# 923072
-	Intel® Integrated F	RAID Module	RMS25PB040	MM# 923083
-	Intel® Integrated F	RAID Module	RMT3PB080	MM# 923084
-	Intel® Integrated F	RAID Module	RMS25CB080	MM# 923085
-	Intel® Integrated F	RAID Module	RMS25CB040	MM# 923086
-	Intel® Integrated F	RAID Module	RMT3CB080	MM# 923087

The modules, which do not support cache backup solution, are available as well if the jumper wire solution is not acceptable.

Intel[®] Integrated RAID Module RMS25PB080N
Intel[®] Integrated RAID Module RMS25CB080N
MM# 922598
MM# 922598

Please contact your Intel Sales Representative if you require more specific information about this issue.

Enterprise Platforms & Services Division

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