



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

Intel Technical Advisory

TA-1023-1

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Intel® Integrated RAID Module with IR RAID firmware upgrade to correct Potential Data Loss Issue

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Products Affected

Table 1. Products Affected

Product	Product code	MM#
Intel® Integrated RAID Module RMS25JB040	RMS25JB040	917088
Intel® Integrated RAID Module RMS25JB080	RMS25JB080	917087
Intel® Integrated RAID Module RMS25KB040	RMS25KB040	917090
Intel® Integrated RAID Module RMS25KB080	RMS25KB080	917089
Intel® Integrated RAID Module RMS2LL080	RMS2LL080	907855
Intel® Integrated RAID Module RMS2LL040	RMS2LL040	907856

Product	Product code	MM#
Intel® RAID Controller RS25FB044	RS25FB044	921700

Description

Intel has discovered a potential data loss when using a RAID controller or module listed above with firmware version ph13.5_2012.06.22 that has shipped on the products listed above. This issue has a very low occurrence rate and can only be seen when the column 0 drive in a volume is removed and a reset is conducted which will cause the start of day code to execute.

Root Cause

The root cause for this issue has been identified and corrected. The constructor for a Raid controller/module volume assigns the volume block size based on the size of the drive in the first column (column 0) of the volume. If the column 0 drive is physically removed and a RAID controller/module reset is conducted, the RAID controller/module firmware initialization process will run the "start of day" code and when no drive is found in column one, the block size will be initialized to 0. The length of all I/Os generated by Intel® RAID controller/module will be 0. The Protocol Layer in the RAID Controller/Module firmware will then return success status without accessing the physical drive and the Intel® RAID Controller/Module will pass on the success status, however, no data transfer occurs. This action results in data remaining on the raid volume being inaccessible.

Corrective Action / Resolution

This issue is fixed in Intel® RAID controller/module firmware version ph13.5upd_13.00.66.00_2012.10.09. Please upgrade your affected products' firmware to version ph13.5upd_13.00.66.00_2012.10.09 or later. The latest RAID firmware with the fix is available on the Intel web site at (<http://downloadcenter.intel.com/default.aspx>), and will be included on all above products manufactured after October 15th.

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

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