



# Technical Advisory

TA-835-00

5200 NE Elam Young Parkway  
Hillsboro, OR 97124

September 7, 2006

## Intel® Server RAID Controller SRCSAS18E, SRCSAS144E, SROMBSAS18E (With The S5000PSL, SR2500ALLX, SR1550ALSAS, FALSASMP); Driver Incorrectly Reports Operating System Status Errors

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### Products Affected

SRCSAS144E  
SRCSAS18E  
S5000PSLROMB  
SR2500ALLX  
SR1550ALSAS  
FALSASMP  
SHW4URM3SA  
SHW6URM3SA

### Description

Intel has identified an issue with the Storport versions of the megasas.sys and msas2k3.sys Windows drivers version 1.20.0 and earlier. The Storport driver, new to Microsoft® Windows Server™ 2003, was developed to deliver greater performance in hardware RAID than the preexisting Miniport driver, which was designed to work optimally with the parallel SCSI interconnects. The Windows operating system will timeout when the driver does not complete a command within the defined timeout period and returns an incorrect command status for other commands received during this timeout period. This can result in data commands not being correctly transacted because a READ or WRITE command isn't processed by the controller and the operating system is given an incorrect command status. This situation can only occur when command timeouts are occurring, and should only occur on a very heavily-loaded system.

### Root Cause

The status of all commands issued to the driver is PENDING. If the driver returns a command to the Operating System with a PENDING status, the Operating System will treat this as an error and log an event in the system log. When the driver returns a command to the Operating System without changing the status, the Operating System treats the command as successful and completes the command to the application. This scenario can result in data not being correctly managed because a READ or WRITE command isn't actually processed by the controller.

### Corrective Action / Resolution

The driver has been updated to set the completion status to BUSY when commands are received during a reset recovery operation. This will force the Operating System to reissue the command for later processing. Driver 1.21.0 is available for download at <http://support.intel.com/support/motherboards/server>. Customers are advised to download and apply this driver, or a later driver, to all production systems that utilize the Intel RAID controllers listed above.



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

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