Proposed Serial ATA Draft International Organization

Serial ATA Revision 3.3 ECN 093
Title : DIPM and HIPM Corrections

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1 Introduction

A clarification was made to the SATA Revision 3.3 DIPM and HIPM description in the section 13.2.3.16, 13.7.9.2.5 and 13.7.9.2.19. These descriptions indicated the support of DIPM and HIPM is either and or. This ECN is to clarify that at least one of the DIPM and HIPM support is required, and the device can support both DIPM and HIPM.

2 Technical Specification Changes

[editor’s note: make the following modifications]

[editors note: blue underscore is text to be inserted. red strikethru text is to be deleted. black text is unchanged.]
13.2.3.16 Word 78, Serial ATA features supported

Bit 3 indicates whether the device supports initiating power management requests to the host. If set to one the device supports initiating interface power management requests and if cleared to zero the device does not support initiating power management requests. A device may support reception of power management requests initiated by the host as described in the definition of bit 9 of Word 76 without supporting initiating such power management requests as indicated by this bit. Devices shall support either host-initiated interface power management or device-initiated interface power management. Devices shall support host-initiated interface power management, device-initiated interface power management, or both. Devices shall set this bit to one if Word 76 bit 9 is cleared to zero.

13.7.9.2.5 RECEIPT OF HOST INITIATED POWER MANAGEMENT REQUESTS SUPPORTED bit

If the RECEIPT OF HOST INITIATED POWER MANAGEMENT REQUESTS SUPPORTED bit is set to one, then the device supports Partial and Slumber interface power management states (see 8.4.2) when initiated by the host.

If the RECEIPT OF HOST INITIATED POWER MANAGEMENT REQUESTS SUPPORTED bit is cleared to zero, then the DEVICE INITIATED POWER MANAGEMENT SUPPORTED RECEIPT OF HOST INITIATED POWER MANAGEMENT REQUESTS SUPPORTED bit shall be set to one.

13.7.9.2.19 DEVICE INITIATED POWER MANAGEMENT SUPPORTED bit

If the DEVICE INITIATED POWER MANAGEMENT SUPPORTED bit is set to one the device supports device initiated power management (DIPM) requests. If the DEVICE INITIATED POWER MANAGEMENT SUPPORTED bit is cleared to zero the device does not support device initiated power management requests.

Devices shall support either host-initiated interface power management or device-initiated interface power management. Devices shall support host-initiated interface power management, device-initiated interface power management, or both. If the RECEIPT OF HOST INITIATED POWER MANAGEMENT REQUESTS SUPPORTED bit is cleared to zero, then the DEVICE INITIATED POWER MANAGEMENT SUPPORTED bit shall be set to one.

13.18 Serial ATA Link power management support

Devices shall support host-initiated interface power management, or device-initiated interface power management, or both.