

**Proposed
Draft**

**Serial ATA
International Organization**

Version 1
January 11, 2012

Serial ATA ECN # 057

Title : Internal Micro SATA and Slimline Gen3

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Introduction

The internal Micro SATA connector for 1.8" HDD and Slimline uses the same signal plug as the standard signal plug. Only the power stage is different. When Gen3 (6 Gbps) was added to the standard in SATA revision 3.0 the internal Micro SATA and Slimline capabilities were overlooked. This oversight was not discovered until after the release of SATA revision 3.1.

This technical proposal intends to apply Gen3 (6.0 Gbps) to the internal Micro SATA and Slimline connector.

1 Technical Specification Changes

1.1 < Internal Micro SATA Connector for 1.8” HDD and Internal Slimline cables and connectors >

[Editor’s Note: The changes marked in red and blue (strikethrough/underlined) will be incorporated in section 6.2 and section 6.3]

1.2 <6.2> Internal Micro SATA Connector for 1.8” HDD

This section provides capabilities required to enable a smaller Serial ATA 1.8” HDD (hard disk drive).

The definition supports the following capabilities:

- Supports Gen1 (1.5 Gbps), ~~and~~ Gen2 (3.0 Gbps), and Gen3 (6.0 Gbps) transfer rates
- Support for backplane (direct connect) and cable attachment usage models
 - Support for hot plug in backplane (non-cabled) applications
- Support for 8.0 and 5.0 mm slim 1.8” form factor HDDs
- Support of 3.3 V with 5 V to meet future product requirements
- Support optional pins, P8 and P9 for vendor specific use

1.3 <6.3> Internal Slimline cables and connectors

This section provides capabilities required to enable Serial ATA in “Slimline” optical disk drives.

The definition supports the following capabilities:

- Supports Gen1 (1.5 Gbps), ~~and~~ Gen2 (3.0 Gbps), and Gen3 (6.0 Gbps) transfer rates
- Support for backplane (direct connect) and cable attachment usage models
 - Support for warm plug
- Support for 12.7 mm, 9.5 mm and 7.0 mm Slimline devices
- 5V only power delivery