Proposed Draft

Serial ATA International Organization

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Serial ATA Revision 2.6 ECN # 001
Title : Slimline Bump Correction

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Document History

Version	Date	Comments
0	02/16/07	Initial release. Re-release of previously ratified Slimline ECN 001 to log against SATA Revision 2.6.

1 Introduction

The original Slimline connector set has been found to have a tolerance overlap condition of the features which provide cable retention. These features are defined as a “bump” on the cable receptacle and a “slot” on the plug. The tolerance stack of feature size and feature location results in an overlap condition which prevents the bump from engaging. This is the same change as ECN 020 for Serial ATA 2.5.

The changes will be made to the feature location tolerances. The proposed changes make use of Geometric Dimensioning and Tolerancing (GD&T) by utilizing Maximum Material Condition (MMC), the new tolerancing scheme allows “bonus” tolerance when protruding features are less than the maximum allowable size.

Glossary:
GD&T = Geometric Dimensioning and Tolerancing
MMC = Maximum Material Condition
WRT = with respect to

2 Technical Specification Changes

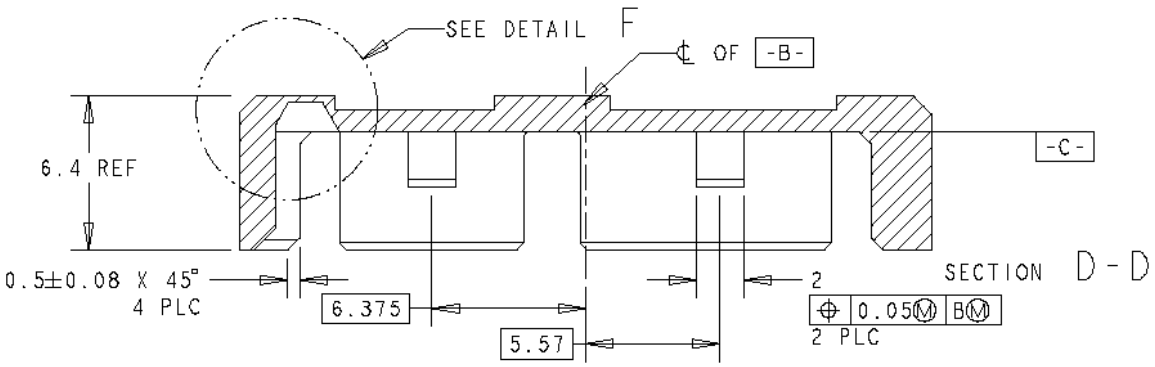
2.1 Slimline Device plug connector

[**Editor's Note:** The changes marked in red (and underlined/strikethrough) will be incorporated in section 6.3.4.1]

Figure 61 – Slimline Device plug connector interface dimensions

Upper View

Delete dimensions for locations of slots (3.825 and 5.78)
Add line defining the centerline of Datum B
Add basic dimensions from that line to the centerlines of each slot (6.735 and 5.57)
Add Feature Control Frame to feature size (2 2 plc)
True position of 0.05 @MMC WRT datum B @ MMC



2.2 Slimline Power cable receptacle connector

[**Editor's Note:** The changes marked in red (and underlined/strikethrough) will be incorporated in section 6.3.4.1.2]

Figure 71 - Slimline Power receptacle connector Option with Bump
Top View

Add Feature Control Frame to bump feature (1.5)
True position of 0.05 @MMC WRT datum B @ MMC