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Draft**

**Serial ATA
International Organization**

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**Title : LIF SATA Clarifications to Serial ATA
Technical Proposal TPC_009 LIF SATA Connector**

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Document History

Version	Date	Comments
0	02/11/2009	Initial release, adding compliance point figure & text changes.
0.2	02/18/2009	Revised per CabCon meeting on 2/18/09
0.3	02/18/2009	Removed color from figure
0.31	02/19/2009	ECN number is 036

1 Introduction

1.1 Problem Statement

In section 5.2.10 Mobile Applications, there is inconsistency in the treatment of the compliance points. Clarifications are made below.

2 Technical Specification Changes

2.1 <5.2.10 Mobile Applications>

5.2.10 Mobile Applications

Applications and compliance points for Serial ATA devices within or connected to mobile computers are not defined in this document. If any proprietary cables/connectors or electrical specifications are developed for this application, the system shall be designed so as to prevent connection with standard SATA components. If standard cables/connectors/electrical interfaces are used within the mobile computer, within the docking bay or to external storage components, these shall comply with the applicable requirements in this specification and interoperate properly with Serial ATA components.

Internal Applications:

It is expected that all internal interfaces comply with the Gen1i and Gen2i specifications. Any mobile computer designer modifying electrical specifications of hosts and devices within the mobile computer is free to do so, however, all proprietary interfaces shall be designed so as to prevent connection with standard SATA components.

Docking Bay Applications:

Proprietary docking bay interfaces shall be designed so as to prevent connection with standard SATA components.

External Applications:

Applications for external Serial ATA interfaces on mobile computers may use either the External Desktop cable/connector (Gen1m/Gen2m) or the System-to-System Data Center cable/connector (Gen1m/Gen2m or Gen1x/Gen2x). Proprietary solutions shall be designed so as to prevent connection with standard SATA components.

Embedded Applications

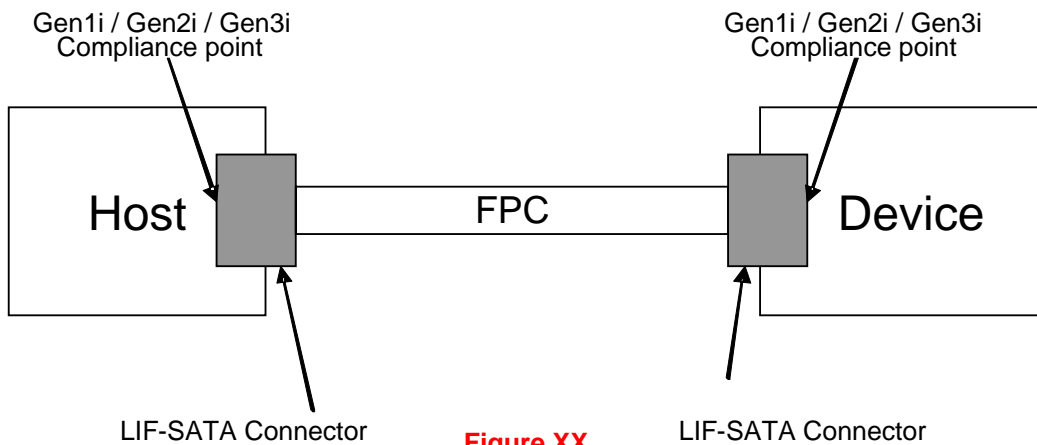


Figure XX

~~Applications and compliance points for LIF-SATA Serial ATA devices in the embedded applications are not defined in this document. Flexible printed circuit (FPC) cables for the embedded application shall comply with applicable requirements in this specification. Since LIF-SATA devices do not have standard compliance points, Interoperability Workshop testing is optional for LIF-SATA devices and systems. The LIF-SATA interfaces shall comply with Gen1i and Gen2i specifications. The LIF-SATA host and device shall comply with the SATA 3.0 this standard and is equivalent to the Mobile Applications usage model.~~

In this application, the device is connected to a host controller via a flexible printed circuit cable (FPC). The FPC interfaces shall comply with Gen1i electrical requirements listed in Table 18.

The compliance points are shown listed in Figure XX above. Gen2i or Gen3i compliance is a feature specific, but if implemented, shall also comply with the electrical requirements listed in Table 18.

(To be added to Table 2 in the 2.6 SATA spec – Usage Model Descriptions)

Characteristic	LIF-SATA
Use model section number	5.2.10
Cable and/or backplane type	P
Cable length	P
Cable Electrical	Table 18
Attenuation at 4.5GHz	-6dB
Host-side connector	6.4.3
Device-side connector	6.4.2
Gen 1i 1.5Gbps	R
Gen 1m 1.5Gbps	NS
Gen 2i 3.0Gbps	FS
Gen 2m 3.0Gbps	NS
Gen1x 1.5Gbps	NS
Gen 2x 3.0Gbps	NS
Gen 3i 6.0Gbps	FS
Hot plug support	NS