

**Proposed  
Draft**

**Serial ATA  
International Organization**

**Version 0  
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**Serial ATA Revision 3.2 ECN #083  
Title : Tx impedance balance cleanup**

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## **1 Introduction**

### **1.1 Problem Statement**

The common mode impedance is listed as 100 ohm while the differential impedance is listed as 25 ohm in the Tx impedance balance section 7.4.3.2.6.

### **1.2 Solution Summary**

Change the common mode impedance to 25 ohm. Change the differential impedance to 100 ohm.

### **1.3 Background (optional)**

A request for clarification was posted to the SATA-IO Logo reflector highlighting the issue. The issue was identified as an error. The requestor was offered a chance to submit an ECN but no response has been provided. This issue has existed since Serial ATA Revision 2.5.

## 2 Technical Specification Changes

### 2.1 <Title of section being changed>

[editor note: Existing text is black. New text is marked as underlined in blue color. Material to be deleted ~~is red with strikethrough markings.~~ ]

#### 2.1.1.1.1 < 7.4.3.2.6> Tx impedance balance (Gen2i, Gen2m, Gen3i)

Impedance balance is defined as the ratio (expressed in dB) of common mode incident power at a ~~25~~100 ohm impedance level to differential mode reflected power at a ~~25~~100 ohm impedance level. The impedance balance is a bound on the coupling between common and differential modes.