

**Proposed  
Draft**

**Serial ATA  
International Organization**

**Version 2  
September 15, 2014**

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**Serial ATA Revision 3.2 ECN081  
Title : Missing bit in ID data log for Rebuild Assist**

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## Document History

Version	Date	Comments
0	June 24, 2014	Initial release.
1	July 28, 2014	Corrections based on comments received.
2	September 15, 2014	Member review. Changed ECN D187 to ECN081.

## 1 Introduction

### 1.1 Problem Statement

After ratification of  
ECN075r2\_SATA32\_Identify Device data log and Word correction

it was discovered that the IDENTIFY DEVICE data log has text describing an 'enabled' bit, but there is no bit assigned for it, and the IDENTIFY DEVICE command references the same text.

### 1.2 Solution Summary

Define a bit in the IDENTIFY DEVICE data log for  
Rebuild Assist feature enabled

## 2 Technical Specification Changes

### 2.1.1.1 Serial ATA settings (page 08h)

The Serial ATA log page (see Table 118) provides information about the Serial ATA Transport.

**Table 0 – Serial ATA (page 08h) (part 2 of 3)**

Offset	Type	Contents
16..23	Qword	Current SATA Settings
		Bit Meaning
		63 Shall be set to one.
		62:13 <del>12</del> Reserved
		<a href="#">12</a> <a href="#">REBUILD ASSIST ENABLED (see 13.7.9.3.11)</a>
		11 POWER DISABLE FEATURE ENABLED (see 13.7.9.3.14) Editor's note: TPR056 assigned bit 11 to POWER DISABLE FEATURE ENABLED
		10 DEVICE SLEEP ENABLED (see 13.7.9.3.9)
		9 AUTOMATIC PARTIAL TO SLUMBER TRANSITIONS ENABLED (see 13.7.9.3.8)
		8 SOFTWARE SETTINGS PRESERVATION ENABLED (see 13.7.9.3.7)
		7 HARDWARE FEATURE CONTROL ENABLED (see 13.7.9.3.6)
		6 IN-ORDER DATA DELIVERY ENABLED (see 13.7.9.3.5)
		5 DEVICE INITIATED POWER MANAGEMENT ENABLED (see 13.7.9.3.4)
		4 DMA SETUP AUTO-ACTIVATION ENABLED (see 13.7.9.3.3)
		3 NON-ZERO BUFFER OFFSETS ENABLED (see 13.7.9.3.2)
		2:0 CURRENT NEGOTIATED SERIAL ATA SIGNAL SPEED (see 13.7.9.3.1)

#### 13.7.9.3.11 REBUILD ASSIST ENABLED bit

If the REBUILD ASSIST ENABLED bit is set to one, then the Rebuild Assist feature (see 13.21) is enabled. This bit shall only be set to one if the device supports the Rebuild Assist feature (see 13.7.9.2.26) and the device supports NCQ (see 13.7.9.2.4).