

**Proposed
Draft**

**Serial ATA
International Organization**

**Version 3
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**SATA31_ECN_D151_20120213_V03
Title: Hardware Feature Control Correction**

Proposed correction to Serial ATA Revision 3.1

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Document History

Version	Date	Comments
0	01/18/2012	Initial draft
1	02/10/2012	Added an intro sentence to match the style of other set features subcommands
2	02/13/2012	Removed the 'disable' text, because this function cannot be disabled by command. Restored the requirement to disable at power on reset (inadvertantly removed)
3	02/13/2012	Updated copyright date in the page footers

1 Introduction

On the SATA-IO Digital WG reflector on Dec. 15, 2011, it was reported that SATA Revision 3.1 has an error regarding the SET FEATURES Hardware Feature Control command.

2 Summary of the problem

2.1 SET FEATURES

Problem:

SATA Revision 3.1 incorrectly states that Count(7:0) is reserved. Count(7:0) is actually used to specify the Feature Identification Values (e.g. SATA sub-subcommand) for the SET FEATURES subcommand.

SATA Revision 3.1 says:

13.3.8 Enable Hardware Feature Control

See 13.19 for additional information about Hardware Feature Control.

This function enables Hardware Feature Control. Hardware Feature Control shall be disabled by power-on reset.

Count(7:0) is reserved.

LBA(15:0) contains a function identifier (seeTable 89).

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3 Proposed corrections

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

3.1 SET FEATURES Enable Hardware Feature Control

Recommendation:

Change SATA Revision 3.1:

13.3.8 Enable Hardware Feature Control

A Count (7:0) value of 08h is used by the host to enable Hardware Feature Control. See 13.19 for additional information about Hardware Feature Control.

~~This function enables Hardware Feature Control.~~ Hardware Feature Control shall be disabled by power-on reset.

~~Count(7:0) is reserved.~~

LBA(15:0) contains a function identifier (seeTable 89).

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