

**Proposed
Draft**

**Serial ATA
International Organization**

**Version 2
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**Serial ATA Revision 3.2 Technical Proposal 065
Title : Modernize Aux Field in NCQ NON-DATA
Command**

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Introduction

By approving Technical Proposal 064 revision 3, implicit sanction was granted for all bytes in the NCQ NON-DATA command's AUXILIARY field to be used in subcommand-specific ways. This proposal instantiates that grant in an updated format for the NCQ NON-DATA command registers.

The author believes that every NCQ NON-DATA subcommand defined in SATA (including the ZERO EXT subcommand defined in Technical Proposal 064v3) already is specified as if all bytes in the AUXILIARY field are subcommand specific. Therefore, only one change is needed.

Text removals are shown as ~~red strikeout~~. Text additions are show as blue underline.

1 Technical Specification Changes

1.1 13.6.6 NCQ NON-DATA

...

Field	7	6	5	4	3	2	1	0
Features(7:0)	Subcommand Specific				Subcommand			
Features(15:8)	Subcommand Specific							
Count(7:0)	TAG				Reserved			
Count(15:8)	Subcommand Specific							
LBA(7:0)	Subcommand Specific							
LBA(15:8)	Subcommand Specific							
LBA(23:16)	Subcommand Specific							
LBA(31:24)	Subcommand Specific							
LBA(39:32)	Subcommand Specific							
LBA(47:40)	Subcommand Specific							
ICC(7:0)	Reserved							
Auxiliary(7:0)	Reserved Subcommand Specific							
Auxiliary(15:8)	Reserved Subcommand Specific							
Auxiliary(23:16)	Subcommand Specific							
Auxiliary(31:24)	Reserved Subcommand Specific							
Device(7:0)	Res	1	Res	0	Reserved			
Command(7:0)	63h							

Figure 345 – NCQ NON-DATA - command definition