

# Proposal to Reserve for Vendor Unique on DCO and Set Feature Commands

To: T13 Technical committee  
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Date: February 7, 2005

## 1 Introduction

There is a need to reserve small portion of DCO words for Vendor Unique (VU) purposes. Currently DCO uses 10 work-words out of 256. Samsung would like to propose a reserved part-portion of the DCO words for VU usage.

There is also a need to reserve some Feature Code in the Set Feature command. Current specification states that any used-Feature Code not shown in Table 41 is reserved. Samsung proposes to reserve part of this is-usedthe unused Feature Codes for VU purposes.

## 2 Proposal

A proposal is submitted herein to reserve DCO words D0h to FEh208-254 for Vendor Unique purpose, and to reserve D0h to DCh of the Feature Code for Vendor Unique purposes. To this end the changes to portions of the text in *Information Technology – AT Attachment – 8 ATA/ATAPI Command Set (ATA8-ACS)*, Revision 1b, 14 October 2004, page 74, paragraph 7.10.3.1 and page page 186, paragraph 7.49.1 be changed as follows:

7.31.2 Inputs

Table 1 - Device Configuration Identify data structure

Word	Content
0	Data structure revision
1	Multiword DMA modes supported 15:3 Reserved 2 1 = Reporting support for Multiword DMA mode 2 and below is allowed 1 1 = Reporting support for Multiword DMA mode 1 and below is allowed 0 1 = Reporting support for Multiword DMA mode 0 is allowed
2	Ultra DMA modes supported 15:7 Reserved 6 1 = Reporting support for Ultra DMA mode 6 and below is allowed 5 1 = Reporting support for Ultra DMA mode 5 and below is allowed 4 1 = Reporting support for Ultra DMA mode 4 and below is allowed 3 1 = Reporting support for Ultra DMA mode 3 and below is allowed 2 1 = Reporting support for Ultra DMA mode 2 and below is allowed 1 1 = Reporting support for Ultra DMA mode 1 and below is allowed 0 1 = Reporting support for Ultra DMA mode 0 is allowed
3-6	Maximum LBA
7	Command set/feature set supported 15:14 Reserved 13 1 = Reporting support for SMART Conveyance self-test is allowed 12 1 = Reporting support for SMART Selective self-test is allowed 11 1 = Reporting support for Forced Unit Access is allowed 10 Reserved 9 1 = Reporting support for Streaming feature set is allowed 8 1 = Reporting support for 48-bit Addressing feature set is allowed 7 1 = Reporting support for Host Protected Area feature set is allowed 6 1 = Reporting support for Automatic acoustic management is allowed 5 1 = Reporting support for READ/WRITE DMA QUEUED commands is allowed 4 1 = Reporting support for Power-up in Standby feature set is allowed 3 1 = Reporting support for Security feature set is allowed 2 1 = Reporting support for SMART error log is allowed 1 1 = Reporting support for SMART self-test is allowed 0 1 = Reporting support for SMART feature set is allowed
8-9	Reserved for serial ATA
<del>10-207</del>	<del>Reserved</del>
<del>208-40-254</del>	Reserved for VU
255	Integrity word 15:8 Checksum 7:0 Signature

Table 2 - SET FEATURES register definitions

Value (See note)	
01h	Enable 8-bit PIO transfer mode (CFA feature set only)
02h	Enable write cache
03h	Set transfer mode based on value in Sector Count register. <b>Error! Reference source not found.</b> defines values.
04h	Obsolete
05h	Enable advanced power management
06h	Enable Power-Up In Standby feature set.
07h	Power-Up In Standby feature set device spin-up.
09h	Reserved for Address offset reserved area boot method technical report <b>[Editors Note: This actually has a function in CFA]</b>
0Ah	Enable CFA power mode 1
10h	Reserved for Serial ATA
20h	-Reserved for technical report
21h	Reserved for technical report-
31h	Disable Media Status Notification
33h	Obsolete
42h	Enable Automatic Acoustic Management feature set
43h	Set Maximum Host Interface Sector Times
44h	Obsolete
54h	Obsolete
55h	Disable read look-ahead feature
5Dh	Enable release interrupt
5Eh	Enable SERVICE interrupt
66h	Disable reverting to power-on defaults
69h	<b>[Editors Note: CFA 2.1 defines this as a NOP for ?backwards compatability?]</b>
77h	Obsolete
81h	Disable 8-bit PIO transfer mode (CFA feature set only)
82h	Disable write cache
84h	Obsolete
85h	Disable advanced power management
86h	Disable Power-Up In Standby feature set.
88h	Obsolete
89h	Reserved for Address offset reserved area boot method technical report. <b>[Editors Note: This actually has a function in CFA]</b>
8Ah	Disable CFA power mode 1
90h	Reserved for Serial ATA
95h	Enable Media Status Notification
99h	Obsolete
9Ah	Obsolete
Aah	Enable read look-ahead feature
Abh	Obsolete
BBh	Obsolete
C2h	Disable Automatic Acoustic Management feature set
CCh	Enable reverting to power-on defaults
<b>D0h-DCCh</b>	<b>Reserved for VU</b>
DDh	Disable release interrupt
Deh	Disable SERVICE interrupt
E0h	Obsolete <b>[Editors Note: This popped up in ATA/ATAPI-7 with no previous definition. I do not think this meets the definition of obsolete. We should put a pointer to where it is defined]</b>

F0h-FFh	Reserved for assignment by the CompactFlash™ Association
NOTE – All values not shown are reserved for future definition.	