To: ATA Membership   X3T10/95-154r1

From: Gene_Milligan@notes.seagate.com (Gene Milligan)

Subject: Version Identification in ATA

Here is an update of the proposal according to the recommendations of the Longmont working group. A complimentary ATAPI version of this proposal is implied:

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+------+---+-------------------------------------------+
| Word |F/V| Description                               |
+------+---+-------------------------------------------+
|  71  | F | Interface type                            |
|      |   | 15-8 Interface type                       |
|      |   |     00H     = not specified               |
|      |   |     01H     = ATA                         |
|      |   |     02H     = ATAPI                        |
|      |   |     03H-FFH = reserved for future use     |
|      |   | 7-0                                       |
|      |   |     00H-FFH = reserved for future use     |
+------+---+-------------------------------------------+
|  72  | F*| Major version number                      |
|      |   |0000H or FFFFH=device does not report version|
|      |   |  15  Reserved                             |
|      |   |  14  Reserved  for ATA-14                 |
|      |   |  13  Reserved  for ATA-13                 |
|      |   |  12  Reserved  for ATA-12                 |
|      |   |  11  Reserved  for ATA-11                 |
|      |   |  10  Reserved  for ATA-10                 |
|      |   |   9  Reserved  for ATA-9                  |
|      |   |   8  Reserved  for ATA-8                  |
|      |   |   7  Reserved  for ATA-7                  |
|      |   |   6  Reserved  for ATA-6                  |
|      |   |   5  Reserved  for ATA-5                  |
|      |   |   4  Reserved  for ATA-4                  |
|      |   |   3 IF 15-0 NOT 0000H ONE=SUPPORTS ATA-3  |
|      |   |   2 IF 15-0 NOT 0000H ONE=SUPPORTS ATA-2  |
|      |   |   1 IF 15-0 NOT 0000H ONE=SUPPORTS ATA-1  |
+------+---+-------------------------------------------+
|  73  | F*| Minor version number                      |
|      |   |0000H or FFFFH=device does not report version|
|      |   |    0001H - FFFEH = see section 8.10.??    |
+------+---+-------------------------------------------+
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 * Words 72 and 73 are allowed to change between the power on reset condition and the devices first access to vendor specific data stored on the media.

8.10.??.Word 71: Interface type

If not 0000H or FFFFH, the device claims compliance with the interface type and major version of that interface type.

At the time when this standard was developed the following types and versions can be indicated in this word:

     0100H = ATA device
     0200H = ATAPI device

8.10.??.Word 72: Major version number

If not 0000H or FFFFH, the device claims compliance with the major version(s) as indicated by bits 1 through 3 being equal to one. Values other than 0000H and FFFFH are bit significant. Since the ATA-3 and ATA-2 standards maintain downward compatibility with ATA-1 (published as ATA), it is allowed for an ATA-3 device to set all of bits 1 through 3 to one.

8.10.?? Word 73: Minor version number

If an implementor claims that the revision of the standard they used to guide their implementation does not need to be reported or if the implementation was based upon a standard prior to this revision of the standard, Word 73 shall be 0000H or FFFFH.

A revision of the standard which guided the implementation may optionally be reported in Word 73 as follows:

0001H = ATA (ATA-1) X3T9.2   781D prior to revision 4
0003H = ATA (ATA-1) X3T9.2   781D revision 4
0005H = ATA-2 X3T10 document 948D prior to revision 2k
0007H = ATA-2 X3T10 document 948D revision 2k
0009H = ATA-2 X3T10 document 948D revision 3
0008H = ATA-3 X3T10 document 2008D revision 0
0006H = ATA-3 X3T10 document 2008D revision 1
0002H, 0004H, and 000AH-FFFFH are reserved