

Date: Fri, 10 Feb 1995 16:39:14 +0000
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 Subject: Version Identification in the Identify Device Data
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 Extracted-To: ATA_Reflector

>From Hale to ATA and ATAPI Reflector.

A Proposal for Version Identification
 in the ATA Identify Device Data.

This is the result of several conversations between myself and Gene Milligan. This was originally Gene's idea (but I get to take the "heat" by posting it).

This proposal adds two new words to the Identify Device data...

First, the Identify Device words...

Word	F/V	Description
71	F	Interface type and major version number 15-8 Interface type 00H = not specified 01H = ATA 02H = ATAPI 03H-FFH = reserved for future use 7-0 Major version number 00H = not specified 01H = version 1, such as ATA-1 02H = version 2, such as ATA-2 03-FFH = reserved for future use
72	F	Minor version number 0000H = not specified 0001H - FFFFH = see section 8.10.??

Second, the written descriptions of those words...

8.10.???.Word 71: Interface type and major version number

If not zero, the device is compliant 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:

0101H = ATA-1 device
 0102H = ATA-2 device

0201H = ATAPI (ATAPI-1) device

8.10.???.Word 72: Minor version number

If not zero, the device is compliant with the document draft as indicated by this table:

ATA-1

0001H = ATA (ATA-1) X3T9.2 781D prior to revision 4
 0002H = ATA (ATA-1) X3T9.2 781D revision 4

ATA-2

0001H = ATA-2 X3T10 document 948D prior to revision 2k
 0002H = ATA-2 X3T10 document 948D revision 2k

ATAPI

xxxxH = ???

Third, a comment or two about this...

- 1) While ATAPI uses a different command code for the Identify Device command, I assume that the ATAPI folks would adopt the same words with the same type of numbering scheme.
- 2) By accepting this proposal, the ATA (and ATAPI) committees are making a commitment to update the table for word 72 whenever a new draft document makes non-trivial changes, such as, new commands or protocols.
- 3) It is expected that most host software will only look at word 71.
- 4) The table in word 72 is one solution to the problem that our committees and document editors are free to chose their own version numbering schemes for draft and review documents.

And finally, I offer the following comment about word 72 for discussion purposes -- Gene said:

"The more I think about this the more I favor a Table in the specification. The table would be a sequential series of numbers (mostly reserved). The committee would have to make a decision each time the spec is revised whether the table should be revised. Perhaps for the first several revisions all values would be reserved. When the committee first thinks the revision is worthy of engineering unit implementation they would assign number one to that revision (e.g. Table TBD indicates rrr01h equals Revision 2.3 or 3k or whatever the rev is). If the next revision is purely editorial the committee would decide the Table TBD values now equates also to the new revision (e.g. rrr01h equals Revision 2.3 and 2.4). If the following introduces a technical change that needs further work the committee would decide to not change the Table (e.g. rrr01h still equals Revision 2.3 and 2.4). In this series of examples I will assume the committee thinks they have the technical change worked out in rev 2.6 and that there is a reason that the host needs to distinguish units with the new definition versus the prior. In this case they would add a new entry in Table TBD (e.g. rrr01h still equals Revision 2.3 and 2.4 and rrr02h equals Revision 2.6 [the official position is 2.5 should not be implemented])."

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