Accredited Standards Committee
NCITS, Information Technology

Doc.No. : T13/D97151R0
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Project: 1248D
Ref. Docs. : T13/D97006R0, T13/D97009R0
Reply to : Mr. Jonathan Hanmann
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To: T13 Membership
From: Jonathan Hanmann, 1394 to AT Attachment (Tailgate) editor
Subj: Response to letter ballot comments

The 1394 to AT Attachment (Tailgate) letter ballot, T13/D97006R0, project 1248D results were 17:1:0:8 . In addition, one yes vote included comments as presented in Summary of Letter Ballot Results in D97009R0.

The editor wishes to thank all of the members who took the time to review the 1394 to AT Attachment document and offer comments.

Responses to these comments follow. The comments are bolded, the responses are in normal text.

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The No vote from Hewlett Packard had the following comment:

1) This standard conflicts with other proposals that appear to have wider industry support. It will cause further confusion and incompatible product lines.

I don't believe any other standards exist for implementing bridge controllers. Other bridge controllers will likely exist, however, those will be compliant with standards for native 1394 devices.

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The Yes vote from Gene Milligan had the following comments:

1) Change the foreword from "This standard was developed by the ATA ad hoc working group of Accredited Standards Committee NCITS during 1996-97." to "This standard was developed by the ATA ad hoc working group of T13 a Technical Committee of Accredited Standards Committee NCITS during 1996-97." or to ""This standard was developed by T13 a Technical Committee of Accredited Standards Committee NCITS during 1996-97."

and from "Subcommittee T13 on ATA Interfaces, that reviewed this standard, had the following members:" to "Technical Committee T13 on AT Attachment, that reviewed this standard, had the following members":

and from "1394 to ATA/ATAPI ad hoc Working Group, that developed this standard, had the following additional participants:" to "1394 to ATA/ATAPI ad hoc working group of T13, that developed this standard, had the following additional participants:"

I agree to both changes and will modify the document as requested.

2) Referring to "The tailgate shall have the following limitations over those features and capabilities defined in the SBP-2 and ATA-3 standards:" are ATA-4 versions not allowed or just do not have restrictions? (Note implied conflict with Normative references.)

This conflict was primarily due to timing of both the tailgate and ATA-4 document which led to group to focus on the more familiar, at that time, ATA-3 standard. It is likely that ATA-4 versions are permissible in conjunction with tailgate devices. Behavior of tailgate device in conjunction with some ATA-4 features, primarily command queuing, not understood. Additional exceptions specific to ATA-4 could be added to the tailgate document to solve this issue.

3) Editors work is needed in clause 2.2.1 "(See Error! Reference source not found. **for the naming convention used for naming bits.) "**

The necessary work to correct the broken reference will be completed.

4) A check should be made to determine if the normative reference for "IEEE Std 1394 1995, Standard for a High Performance Serial Bus" which requires licenses of patents should result in a different patent statement. I think it should.

Insert response.

5) Change the note below table 6 from "NOTE - It should be noted that the Alternate Status and Device Control registers are not addressable by the initiator via the tailgate. The tailgate standard defines other mechanisms for generating the ATA SRST function provided in the Device Control Control Block register. Control of the interrupt enable is left to the tailgate which intercepts and processes device interrupts. There is no mechanism to poll the Alternate Status register provided via a tailgate." to "NOTE - The Alternate Status and Device Control registers are not addressable by the initiator via the tailgate. The tailgate standard defines other mechanisms for generating the ATA SRST function provided in the Device Control Control Block register. Control of the interrupt enable is left to the tailgate which intercepts and processes device interrupts. There is no mechanism to poll the Alternate Status register provided via a tailgate." and should "Device Control Control Block register" be "Device Control Block register"?

On the first point regarding the note in table 6 the requested change is accepted. On the second question regarding the duplicated word "Control" the change is rejected. The Device Control

register is one register in a set of registers referred to as the Control Block. Thus “Device Control Control Block register” is shorthand for “the Device Control register in the Control Block”.

6) The note in clause 4.3.1 and other notes contain several normative requirements. The notes should be edited to either make the normative requirements part of the body text or to delete the normative requirements.

I believe this note simply clarifies assumptions that are made in the document but the best answer is to make the note part of the document body.

7) If the normative requirements remain, is the standard definitive enough to allow a compliance check that “hung” device has been detected? (Is a “hung” equivalent to a “hang”?)

The “hung” vs. “hang” is a tense issue primarily. A possible solution to improve the clarity would be to eliminate the hang or hung terminology and use the terms “non-operational device” or something similar.

8) I have heard that Tailgate is intended to be a stop-gap method of connecting devices to 1394 until native 1394 devices are more widely available. If this is true, is it anticipated that the Tailgate standard would be withdrawn as the 1394 devices become widely available? Should Tailgate be a Technical Report rather than a standard?

Insert response.