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Title: Minutes of SBP-3 Working Group

ftp://ftp.t10.org/t10/document.03/03-070r0.pdf

## Minutes of the SBP-3 Working Group meeting, January 21-22, 2003

Outrigger Wailea Hotel, Hawaii

## Attendees:

Eric Anderson Apple ewa@apple.com

Andy Green Oxford Semiconductor andy.green@oxsemi.com
Peter Johansson Congruent Software Pjohansson@ACM.org
Bill Russell Canon bill.russell@cis.canon.com

The following agenda was presented by Johansson. In the minutes that follow, the start of discussion of items listed below is denoted by the index number listed within square brackets, such as [4.1]. Note that these references do not always appear in order, and may not signify the conclusion of discussion of a previous agenda item.

- 1. Introductions and procedures
- 1.1 T10 Membership and voting
- 1.2 Document naming conventions
- 1.3 Two-week rule
- 1.4 Meeting fees
- 1.5 Approval of prior minutes (02-480r0)
- 2. Call for patents
- 3. Informal liaison
- 3.1 IEEE P1394.1 [Johansson]
- 3.2 IEEE P1394.3 [Johansson]
- 3.3 PTP on SBP [Anderson]
- 4. Prior action items
- 4.1 Request Apple comment on 02-281r0 [Anderson]
- 4.2 Request Microsoft comment on 02-281r0 [Johansson]
- 4.3 Configuration ROM iPCR/oPCR proposal [Johansson]
- 5. Review of changes in working draft
- 6. Review reflector traffic
- 7. Old business
- 7.1 Editorial review of draft (page turner)
- 8. New business
- 8.1 Configuration ROM iPCR/oPCR proposal [Johansson]

- 8.2 Well-known LUNs for hybrid AV/C RBC disks [Green]
- 8.3 FAST\_START page tables for bi-directional ORBs
- 9. Meeting schedule
- 10. Review of action items
- 11. Adjournment
- [1] Johansson called the meeting to order and updated the agenda, as reflected above.
- [1.3] Johansson briefly reviewed the two-week rule, explaining that it did not prevent the discussion of documents posted less than two weeks before a meeting.
- [1.5] Anderson noted that he had previously distributed draft minutes from November 5-6 (Huntington Beach). The group approved the minutes from that meeting.

ftp://ftp.t10.org/t10/document.02/02-480r0.pdf

[1.1] [2] Johansson reviewed general T10 policies and procedures. In general, attendance and participation at T10 ad hoc meetings (such as this one) is open to both visitors and T10 members. When formal votes are taken, either in an ad hoc meeting or in the T10 plenary, one vote is permitted each organization, to be cast by its principal representative or designated alternative. A two-week rule is in effect: No matter may be voted on unless notice was given at least two weeks prior. Documents to be voted on must have been posted two weeks prior to the vote. The two-week rule can be waived if nobody objects. Announcements of new documents and meetings must be posted to the T10 email reflector; all other business can be conducted on the working group reflector.

The following paragraph about ANSI/T10 patent policy is copied from past T10 Plenary minutes:

A document is available from ANSI, "Procedures for the Development and Coordination of American National Standards", at no charge. This document is also on the web at http://www.ncits.org/help/ansi\_sdo.html. Section 1.2.11 contains the ANSI patent policy. Amy Marasco manages patent issues for ANSI and can be contacted at amarasco@ansi.org or 212-642-4954. Gene Milligan prepared a useful "Handy dandy Technical Committee's Patents Guide", which is available at ftp://ftp.t10.org/t10/document.99/99-291r0.pdf.

[3.1] Johansson reported that the IEEE 1394.1 BRC had no meetings since the previously reported meeting October 28-30 in New York, and no changes have been incorporated into the draft. The next BRC meeting is not yet scheduled.

- [3.2] Johansson noted that Alan Berkema, acting chair of IEEE 1394.3, had indicated that a recirculation ballot could be conducted soon.
- [3.3] Anderson reported that the 1394 Trade Association and the I3A had agreed to a joint work project to specify a transport for the Picture Transport Protocol (PTP) over SBP. Anderson noted he gave an update at the TA the previous week, and the work was ongoing, but not yet in the ballot process.
- [4.1] Anderson reported this action item was not complete.
- [4.2] Johansson reported that he had requested comment from Microsoft on 281-r0, but had not received any.
- [4.3] Johansson reported he had prepared a Configuration ROM iPCR/oPCR proposal for discussion as new business [8.1]
- [5] Johansson led a review of changes in SBP-3 draft "2c":

ftp://ftp.t10.org/t10/drafts/sbp3/sbp3r02c.pdf

Reviewing page 26, Johansson noted that isochronous transport could be used even when the isochronous bit was zero in each ORB, by using an isochronous command set, and said he would look for a suitable place to remind the reader of this.

On page 47, in the indented text, Anderson asked if the SPLIT\_TIMEOUT should start from the transmission of a 1394 acknowledgment, rather than the first response subaction. Johansson agreed to clean up the text here and in the related 1394 TA technical bulletin.

Text regarding secondary task sets was deleted from 10.5 as a continuation of cleanup from the previous meeting,

[6] Johansson led a brief review of SBP-3 reflector email traffic since July 17.

In response to an email question, the group agreed that section 7.7.9 could explain or refer to an explanation elsewhere that ORB allocation and fetching must always be based on the maximum OBR size expressed in the 1394 configuration ROM, which would account for any possible bidirectional ORBs.

A related question arose: Can the Initiator tell if bidirectional ORBs are supported? The maximum ORB size field indicates both the space for second data descriptor and for variable sized CDBs. Answer: No, you just have to know based on the command set, and if you use uni-directional ORBs when bidirectional ORBs are supported, you will have 12 extra bytes available for CDBs.

Johansson noted that if a command set supports bidirectional ORBs, but all such commands are optional, a target should reject any unsupported such optional command as an unsupported command, rather than on the grounds of not implementing bidirectional ORBs. Targets will be required to understand bidirectional ORBs well enough to allow the command to be declined by the command engine, even if the Target does not implement all the mechanisms required to execute a bidirectional ORB.

The group determined that Fast Start did adequately describe what to do with bidirectional ORBs, because it required a fixed-size ORB structure. However, the email question continued, asking [8.3] what to do with page tables in a fast start packet for a bidirectional ORB, and the group agreed that the draft did not clearly answer this.

Anderson suggested adding a short paragraph before the final paragraph of 6.5.7 to explain that if, and only if, the entire page table for buffer [0] of a bidirectional ORB was included in a fast start packet, then one or more page table entries for buffer [1] could optionally be appended to complete the fast start packet, subject to the packet size limitations stated elsewhere.

[8.1] Johansson presented a Configuration ROM iPCR/oPCR proposal for inclusion in the draft. The group agreed to incorporate the text with minor modification into the next draft of SBP. The group reviewed email from Fairman and elected not to make any changes to the proposal, feeling that ISO/IEC 6-1883 would provide ample guidance.

ftp://ftp.t10.org/t10/document.03/03-009r1.pdf

- [8.2] The group reviewed recent T-10 work on well known LUNs to see if it applied to SBP-3, but made no changes to the draft.
- [7.1] The group performed a "page turner" review of the draft "2c" document and made numerous small clarifications, starting in section 5.1.3. Significant changes are mentioned here.

Anderson suggested adding text just before 6.1 to explain that when a write to a register or field is specified to be ignored, that this means the write completes without error (e.g. 1394 ack\_complete or resp\_complete), but has no effect on the register or field. The suggestion came from the observation that a write to the doorbell in the dead state was required to be ignored, which could be interpreted as anything from no\_ack to ack\_type\_error to ack\_complete.

Green observed that the HEARTBEAT\_MONITOR should only exist in primary logins, not in secondary task sets.

Anderson asked if UNSOLICITED\_STATUS\_ENABLE should exist independently for secondary task sets, and suggested that it should, since the cost was low and there was no certainty it would not be needed. Johansson agreed to minor changes to clarify this point.

In section 7.1 the group discussed the five-second requirement to make the 1394 configuration ROM available after a power-on reset and discussed various strategies, but reached no conclusion.

Anderson observed that the SBP annexes document a connection between 1394 configuration ROM entries such as Vendor ID and an immediately-following text leaf with associated text such as the vendor name. Anderson could not cite any documentation outside of SBP that explained or formalized such a spatial relationship in 1394 configuration ROMs, and suggested that it be added in 1394r if Johansson was able to do so.

The group agreed that chapter 9 needed a new section to describe Interim Status.

- [9] The next scheduled meeting is March 11-12 in Dallas with T-10.
- [10] Johansson briefly reviewed the newly assigned action items.


General information and document index

The SBP-3 email reflector SBP3@isg.apple.com can be accessed as follows:

Subscribing:

[11] Meeting adjourned.

email requests@isg.apple.com w/subject "subscribe sbp3"

Help?:

email requests@isg.apple.com w/subject "help"

An automated system had been created for the allocation of T10 document numbers, and the subsequent submission of documents for posting:

http://www.t10.org/members/ad.htm

The following documents have been posted pertaining to SBP-3:

00-328	Eric Anderson Fast Start proposal (PowerPoint slides) ftp://ftp.t10.org/t10/document.00/00-328r0.pdf
00-371	Peter Johansson Minutes of SBP-3 Study Group September 19, 2000 ftp://ftp.t10.org/t10/document.00/00-371r0.pdf
00-388	Peter Johansson SBP-3 Project Proposal ftp://ftp.t10.org/t10/document.00/00-388r0.pdf
01-057	Eric Anderson Fast Start Proposal ftp://ftp.t10.org/t10/document.01/01-057r0.pdf
01-060	Eric Anderson Minutes of SBP-3 Working Group January 24-25, 2001 ftp://ftp.t10.org/t10/document.01/01-060r0.pdf
01-067	Lance Flake RBC Access For AV/C Data Interchange ftp://ftp.t10.org/t10/document.01/01-067r0.pdf ftp://ftp.t10.org/t10/document.01/01-067r1.pdf
01-069	Steve Powers Surprise Removal of 1394 Storage Devices ftp://ftp.t10.org/t10/document.01/01-069r0.pdf
01-070	Peter Johansson Bridge-aware targets and node handles ftp://ftp.t10.org/t10/document.01/01-070r0.pdf
01-101	Eric Anderson Minutes of SBP-3 Working Group March 6-7, 2001 ftp://ftp.t10.org/t10/document.01/01-101r0.pdf
01-102	Scott Smyers Proposal for modifications to SBP3 and RBC ftp://ftp.t10.org/t10/document.01/01-102r0.pdf
01-103	Firooz Farhoomand

	ftp://ftp.t10.org/t10/document.01/01-103r0.pdf
01-137	Peter Johansson Stream command block ORB ftp://ftp.t10.org/t10/document.01/01-137r0.pdf
01-138	Peter Johansson Bi-directional ORBs (PowerPoint slides) ftp://ftp.t10.org/t10/document.01/01-138r0.pdf
01-139	Eric Anderson Minutes of SBP-3 Working Group April 26-27, 2001 ftp://ftp.t10.org/t10/document.01/01-139r0.pdf
01-179	Andy Green Proposal to modify isochronous recording format ftp://ftp.t10.org/t10/document.01/01-179r0.pdf
01-180	Peter Johansson RBC-2 commands for extent management ftp://ftp.t10.org/t10/document.01/01-180r1.pdf
01-187	Eric Anderson Minutes of SBP-3 Working Group June 5-6, 2001 ftp://ftp.t10.org/t10/document.01/01-187r0.pdf
01-200	Peter Johansson Distributed Buffers ftp://ftp.t10.org/t10/document.01/01-200r0.pdf
01-222	Peter Johansson Simplified Isochronous ftp://ftp.t10.org/t10/document.01/01-222r0.pdf
01-223	Eric Anderson Minutes of SBP-3 Working Group July 17-18, 2001 ftp://ftp.t10.org/t10/document.01/01-223r0.pdf
01-248	Peter Johansson MP-friendly Fast-Start ftp://ftp.t10.org/t10/document.01/01-248r1.pdf

Using SBP-3 for DVD playback

01-265	Eric Anderson Minutes of SBP-3 Working Group August 22-23, 2001 ftp://ftp.t10.org/t10/document.01/01-265r0.pdf
01-287	Peter Johansson Bare-bones Isochronous ftp://ftp.t10.org/t10/document.01/01-287r1.pdf
01-304	John Fuller SBP3 Changes ftp://ftp.t10.org/t10/document.01/01-304r0.pdf
01-318	Rob Elliott Elimination of SCSI-2 from SAM-2 SPC-3 ftp://ftp.t10.org/t10/document.01/01-318r0.pdf
01-330	Peter Johansson Minutes of SBP-3 Working Group October 3-4, 2001 ftp://ftp.t10.org/t10/document.01/01-330r0.pdf
01-331	Eric Anderson Minutes of SBP-3 Working Group November 6-7, 2001 ftp://ftp.t10.org/t10/document.01/01-331r0.pdf
01-332	Scott Smyers Isochronous SBP-3 ftp://ftp.t10.org/t10/document.01/01-332r0.pdf
02-069	Peter Johansson Bridge-aware SBP-3 target operations ftp://ftp.t10.org/t10/document.02/02-069r2.pdf
02-075	Peter Johansson EUI-48 software interface ID VPD page ftp://ftp.t10.org/t10/document.02/02-075r1.pdf
02-206	Eric Anderson Minutes of SBP-3 Working Group January 21-22, 2002 ftp://ftp.t10.org/t10/document.02/02-206r0.pdf
02-207	Eric Anderson Minutes of SBP-3 Working Group March 12-13, 2002 ftp://ftp.t10.org/t10/document.02/02-207r0.pdf
02-208	Eric Anderson Minutes of SBP-3 Working Group May 29-30, 2002

	ftp://ftp.t10.org/t10/document.02/02-208r0.pdf
02-281	Peter Johansson Prototype AVD Commands ftp://ftp.t10.org/t10/document.02/02-281r1.pdf
02-282	Eric Anderson Minutes of SBP-3 Working Group July 16-17, 2002 ftp://ftp.t10.org/t10/document.02/02-282r0.pdf
02-480	Eric Anderson Minutes of SBP-3 Working Group November 5-6, 2002 ftp://ftp.t10.org/t10/document.02/02-480r0.pdf
03-009	Peter Johansson Configuration ROM iPCR/oPCR proposal ftp://ftp.t10.org/t10/document.03/03-009r0.pdf
03-070	Eric Anderson Minutes of SBP-3 Working Group January 21-22, 2003 ftp://ftp.t10.org/t10/document.03/03-070r0.pdf

Latest draft SBP-3 document:

ftp://ftp.t10.org/t10/drafts/sbp3/sbp3r02c.pdf

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