

Accredited Standards Committee*
X3, Information Technology

Doc. No.: X3T10.1/96a156R0

Date: August 21, 1996

Project:

Ref. Doc.:

Reply to: Larry Lamers

To: Membership of X3T10.1
From: Lawrence J. Lamers, Chair X3T10.1
Subject: Minutes of X3T10.1 Working Group
August 26-28, 1996 --- Ithaca, NY

Agenda

1. Opening Remarks
2. Attendance and Membership, Introductions
3. Approval of Agenda
4. Approval of Minutes
5. Document Distribution
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 - 7.1 Review of S3P working draft () [Scheible]
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 - 7.3 SSA-S3P support for CA and ACA (95a150r1) [Scheible]
 - 7.4 SSA-S3P changes for SMS validation (96a159r0) [Scheible]
 - 7.5 AER reporting between layers (96a161r0) [Scheible]
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8. SSA-TL2 (1147D)
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 - 8.2 Interlocked Election of Master Process (95a210r3) [DeWilde]
 - 8.3 Third Party Data Transfers (96-134r1) [Hawes]
 - 8.4 TL2 Configurator Table Management Support (96a145r0) [DeWilde]
 - 8.5 Clarification of Absolute and Total Reset Use (96a154r0) [DeWilde]
 - 8.6 READ modify Write Support (96a150xxr0) [Hawes]
 - 8.7 Limited SMS handling for Switches proposal (96a160r0) [Scheible]
 - 8.8 SPC Vital Product Data page device identifier x (96axxxr0) []
 - ~~8.9 x (96axxxr0) []~~
 - ~~8.10 x (96axxxr0) []~~
9. SSA-PH2 (1146D)
 - 9.1 Review of PH2 working draft () [Scheible]
 - 9.2 Analysis of Termination (96a153r0) [Murfet]
 - 9.3 Device Services Interface (96a127r1) [Judd]
 - 9.4 Jitter Nulling (96a149r0) [Instone]
 - 9.5 Optical converter () [Melendy]

9.6 SSA-PH2 changes proposal (96a142r3) [Scheible]

~~9.7 x (96axxxr0)~~ ☐

~~9.8 x (96axxxr0)~~ ☐

~~9.9 x (96axxxr0)~~ ☐

~~9.10 x (96axxxr0)~~ ☐

10. New Business

10.1 SSA tape issues/requirements (96a162xxxr0) [George Krembs]

~~10.2 x (96axxxr0)~~ ☐

~~10.3 x (96axxxr0)~~ ☐

11. Call for Patents

12. Action Items

13. Meeting Schedule

14. Adjournment

1. Opening Remarks

Larry Lamers convened the meeting at 9:00 am. He thanked Mark DeWilde of Pathlight for hosting the meeting.

As is customary, the people attending introduced themselves. A copy of the attendance list was circulated for attendance and corrections.

It was stated that the meeting had been authorized by X3T10.1 and would be conducted under the X3 rules. Ad hoc meetings take no final actions, but prepare recommendations for approval by the X3T10.1 task group. The voting rules for the meeting are those of the parent committee, X3T10. For the ad hoc, other than straw votes, the voting rules are: one vote per participating company.

The minutes of this meeting will be posted to the X3T10 BBS and the SSA Reflector and will be included in the next X3T10.1 committee mailing.

Larry stated that the X3T10.1 mailings are part of the X3T10 mailings. Persons that want to receive documents should subscribe to the X3T10 mailings by sending their request to the secretariat. An electronic option is available.

2. Attendance and Membership, Introductions

Attendance at working group meetings does not count toward minimum attendance requirements for X3T10.1 membership. Working group meetings are open to any person or company to attend and to express their opinion on the subjects being discussed.

The following people attended the meeting.

| | | | |
|---------------------|-------------------------|--------------------|-------------------------------------------------------|
| Lawrence Lamers | Adaptec | 408-957-7817 | ljlamers@aol.com |
| Arch Davis | Amadata, Inc. | 609-921-0611 | davisac@matn1.wtn.net |
| David MacRae | Amadata, Inc. | 609-683-8844 | 76116.1535@compuserve.com |
| Stephen Muccione | Amadata, Inc. | 201-584-1034 | 71204.2453@compuserve.com |
| Charles Brill | AMP, Inc | 717-592-6198 | cebrill@amp.com |
| Lisa A. Huff | AMP, Inc | 717-986-3143 | lisa.huff@amp.com |
| Bill Mable | Amphenol Interconnect | 607-786-4236 | |
| Bill Ham | Digital Equipment Corp. | 508-841-2629 | ham@subsys.enet.dec.com |
| Adge Hawes | IBM Corporation | 011-44-1705-486363 | adge@uk.ibm.com |
| George Krembs | IBM Corporation | 914-433-8449 | |
| Phil Murfet | IBM Corporation | 01705 486363 | pmurfet@vnet.ibm.com |
| Chris Parker | IBM Corporation | 912-892-2719 | parker@vnet.ibm.com |
| Richard Rolls | IBM Corporation | 408-256-3531 | rrolls@vnet.ibm.com |
| John Scheible | IBM Corporation | 512-823-8208 | scheible@vnet.ibm.com |
| Daniel Tsai | IBM Corporation | 408-256-5729 | tsaidaniel@vnet.ibm.com |
| William F. Washburn | IBM Corporation | 914-892-6300 | wfwashburn@vnet.tbm.com |
| Wolfgang Drichelt | ITT Cannon | 49-7151 699 233 | 101573.2601@compuserve.com |
| Chuck Grant | Madison Cable | 508-752-2884 x725 | charles_grant@madisonusa.ccmail.com compuserve.com |
| Mark DeWilde | Pathlight Technology | 607-266-4000 | mark@pathlight.com |
| Said Rahmani | Pathlight Technology | 607-226-4000 | saidr@pathlight.com |
| David Deming | Solution Technology | 408-338-4285 | ddeming@scruznet.com |
| Brad Kitson | VLSI Technology, Inc. | 408-434-7553 | brad.kitson@ustc.vlsi.com |
| Neil Edmunds | Xyratex | 011-44-1705-486363 | neiledmunds@uk.xyratex.com |
| David E. Instone | Xyratex | 01705 486363 | dinstone@uk.xyratex.com |
| Roger Nixon | Xyratex | 603-642-7808 | 71740.3316@compuserve.com |

3. Approval of Agenda

The agenda was approved.

4. Approval of Minutes

The minutes of the last Working Group meeting (see 96a147r1) were approved.

5. Document Distribution

Larry Lamers stated that the next mailing deadline is Wednesday, September 18, 1996. Documents are available on the BBS (714) 533-7950 in area 33 and at ftp.symbios.com in /pub/standards/io/x3t10.1

| | | |
|------------------|-----------------------------------------------------------|-------------|
| X3T10.1/96a154R0 | Clarification of absolute and total reset use and effects | M. DeWilde |
| X3T10.1/96a155R0 | Comments on TL2 and S3P | M. DeWilde |
| X3T10.1/96a156R0 | Minutes of Working Group Meeting - 8/96 | L. Lamers |
| X3T10.1/96a157R0 | Minutes of Plenary Meeting #17 | L. Lamers |
| X3T10.1/96a158R0 | Test Environment for Port Connection Segments | D. Instone |
| X3T10.1/96a159R0 | SSA-S3P changes for SSA validation | J. Scheible |
| X3T10.1/96a160R0 | Limited SMS handling for switches proposal | J. Scheible |
| X3T10.1/96a161R0 | AER reporting between ULP and TL2 layers | J. Scheible |
| X3T10.1/96a162R0 | Tape Requirements and Issues | G. Krembs |
| X3T10.1/96a163R0 | Change format of Configator Table | J. Scheible |

6. Review of Old Action Items

[None](#)

7. SSA-S3P (1051D)

7.1 Review of S3P working draft () [Scheible]

The technical editor reported that revision 1a was in the last mailing, revision 2 was posted to the ftp site after the mailing. It incorporated the agreed to proposals and editorial revisions to update it to the ANSI style.

7.2 Protocols for other ULPs () [DeWilde]

No business.

7.3 SSA-S3P support for CA and ACA (95a150r1) [Scheible]

John Scheible presented additions to SSA-S3P to support CA on serial interface systems by having the protocol layer emulate CA to the application client. This achieves SAM compliance and inter-operability with SCSI-2 applications. The S3P layer needs a mechanism to inform the application client of its behavior.

The working group recommended incorporating this change into the SSA-S3P working draft.

7.4 SSA-S3P changes for SMS validation (96a159r0) [Scheible]

John Scheible presented the changes needed in S3P for return path validation. The working group recommended incorporating this change into the SSA-S3P working draft.

7.5 AER reporting between layers (96a161r0) [Scheible]

John Scheible presented additions for reporting asynchronous events to the upper layer protocol. Modifications need to be made to SSA-S3P and SSA-TL2.

Add the definition - Local reset is equivalent to a total reset from within the node rather than the web.

The working group recommended incorporating this proposal as modified into the respective working drafts.

7.6 Comments on TL2 and S3P (96a155r0) [DeWilde]

See item 8.9x for TL2 portion.

The S3P comments begin on page 22 of 96a155r0. The tag requirements in 7, 7.5, and 8.3 need to be visited and clarified.

[The AER-ON field is renamed AEROFF for backwards compatibility.](#)

Need to define what disables AER - reset, QUIESCE SMS, etc.

Mark is concerned with how initiators respond to resets. His desire is to have TOTAL RESET affect the transport layer and notify the ULP that it has occurred. The conclusion was that TOTAL RESET will be equivalent to a hard reset.

Added requirement for host to keep the tag and pointer for 10 seconds to allow the target time for notification in the event that the status is lost.

Need a method to clean up a data path so command can be redirected or restarted. A time-out or purge is needed. On restart, which occurs on loss of a path ping the end of string; on a redirect ping the node. An additional warning code will be added.

A tele-conference will be done to plug this holes.

8. SSA-TL2 (1147D)

8.1 Review of TL2 working draft () [Scheible]

The technical editor reported that revision 2 was in the last mailing. It incorporated the agreed to proposals and editorial revisions to update it to the ANSI style.

8.2 Interlocked Election of Master Process (95a210r3) [DeWilde]

Deferred.

8.3 Third Party Data Transfers (96-134r1) [Hawes]

Deferred.

8.4 TL2 Configutor Table Management Support (96a145r~~2~~4) [DeWilde]

Document 96a145r2 was recommended for incorporation into the working draft.

8.5 Clarification of Absolute and Total Reset Use (96a154r0) [DeWilde]

A modified version of 96a154 was approved for incorporation with refined wording up the technical editor.

8.6 READ modify Write Support (96a~~150xxx~~r0) [Hawes]

Deferred.

8.7 Limited SMS handling for Switches proposal (96a160r0) [Scheible]

John Scheible presented a proposal that would offer a simpler switch implementation. There were a number of questions on backward compatibility. Until there is a market need the group felt that it was not useful to complicate the current working drafts. However, several of the clarifications will be included in the working draft.

8.8 SPC Vital Product Data page device identifier x (96axxxr0) []

There was some email on this topic regarding the contents of the field; however this identifier is for logical units so it is a non-issue.

8.9 Comments on TL2 and S3P (96a155r0) [DeWilde]

Defer how to handle speed negotiation with extended option.

Cut-through will not be replaced with store and forward, as cut-through can store and forward in some cases.

The frame buffers equation is wrong (9.1.1) and the correction is deferred.

In the 9.6.4 section, the timeouts were increased from 105 and 5 ms to 125 ms.

The FRAME DATA field in the MASTER ALERT SMS is the max (9 bytes).

A tele-conference will be done to plug these holes.

8.10 Configuration Table (96a163r0) [Scheible]

The technical editor developed a proposal to restructure the table to remove the array elements. Since this table is an example, the wording referencing it needs to be improved.

9. SSA-PH2 (1146D)

9.1 Review of PH2 working draft () [Scheible]

The technical editor reported that revision 2 was in the last mailing. It incorporated the agreed to proposals and editorial revisions to update it to the ANSI style.

9.2 SSA-PH2 changes proposal (96a142r3) [Scheible]

John Scheible generated revision 4 to capture the agreements reached. The open issues are: 1) the capacitor value for AC testing; 2) the eye diagram parameters; 3) an annex on using optical devices.

The working group recommended 96a142r4 be incorporated into the working draft.

A working group meeting has been scheduled for 9/24-25/96 in the Boston area to address the open issues and work on a document review. Contact Daniel Tsai for information (tsaidaniel@vnet.ibm.com) 408-256-5729. An announcement will be posted to the reflector.

10. New Business

10.1 SSA tape issues/requirements (96a162xxxr0) [George Krembs]

George Krembs, of IBM made a presentation on issues and requirements for tape devices. The conclusion is that the current working drafts support all the needs for tape devices.

11. Call for Patents

Larry Lamers requested that anyone aware of any patents required for the proposals be disclosed in accordance with the ANSI patent policy. Refer to the minutes of prior meetings for items already identified.

12. Action Items

None13)

13. Meeting Schedule

The next working group meeting of X3T10.1 will be October 28-30, 1996, in Lahaina, HI at the Maui Marriott on Kaanapali Beach, hosted by IBM. The meeting will begin at 9:00 a.m.

Attendees should contact Mark Cunningham for reservations at:

Tel: 808-667-8215
Fax: 808-667-8181

The long-term SSA week of meetings are scheduled as follows:

Week of February 24, 1997 in Austin, TX hosted by IBM.

Week of June 23, 1997 in Monterey, CA hosted by _____.

Week of September 29, 1997 in Stuttgart, Germany hosted by ITT Cannon.

Week of February 23, 1998 *.

* = Tentative locations

Please note that changes to this schedule may occur. All changes to meeting dates, locations, and agendas will be posted to the X3T10-SSA reflector.

14. Adjournment

The meeting adjourned at 2:59 p.m. on Wednesday.