

Accredited Standards Committee\*  
**X3, Information Technology**

**Doc. No.:** X3T10/95-325r1

**Date:** September 28, 1995

**Project:**

**Ref. Doc.:**

**Reply to:** John Lohmeyer

To: Membership of X3T10

From: Ralph Weber, Secretary X3T10  
John Lohmeyer, Chair X3T10

Subject: Minutes of X3T10 Plenary Meeting #11  
Bedford, NH -- September 14, 1995

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**Agenda**

1. Opening Remarks
2. Approval of Agenda
3. Attendance and Membership
4. Approval of Minutes - July Meeting Colorado Springs, CO (X3T10/95-265r1)
5. Document Distribution
6. Call for Patents
7. Review of Old Action Items
8. Subgroup and/or Project Status Reports
  - 8.1 Project Status Summary and X3/OMC Liaison [Lohmeyer]
  - 8.2 X3T10.1 Task Group Report [Hallam]
  - 8.3 SCSI Common Access Method (CAM) {Project 792-D} [Dallas]
  - 8.4 ATA Extensions (ATA-2) Status {Project 948-D} [Finch]
  - 8.5 SCSI-3 Parallel Interface (SPI) Status {Project 855-D} [Lamers]
  - 8.6 SCSI-3 Interlocked Protocol (SIP) Status {Project 856-D} [Penokie]
  - 8.7 SCSI Common Access Method -3 (CAM-3) Status {Project 990-D} [Dallas]
  - 8.8 SCSI-3 Generic Packetized Protocol (GPP) Status {Project 991-DT} [Stephens]
  - 8.9 SCSI-3 Serial Bus Protocol (SBP) Status {Project 992-D} [Roberts]
  - 8.10 SCSI-3 Fiber Channel Protocol (FCP) Status {Project 993-D} [Snively]
  - 8.11 SCSI-3 Architecture Model (SAM) Status {Project 994-D} [Monia]
  - 8.12 SCSI-3 Primary Commands (SPC) Status {Project 995-D} [Weber]
  - 8.13 SCSI-3 Block Commands (SBC) Status {Project 996-D} [Tewell]
  - 8.14 SCSI-3 Stream Commands (SSC) Status {Project 997-D} [Lappin]
  - 8.15 SCSI-3 Graphics Commands (SGC) Status {Project 998-D} [Tewell]
  - 8.16 SCSI-3 Medium Changer Commands (SMC) Status {Project 999-D} [Oetting]
  - 8.17 SCSI-3 Controller Commands (SCC) Status {Project 1047-D} [Penokie]
  - 8.18 Multimedia Command Set (MMC) Status {Project 1048-D} [Roberts]
  - 8.19 SCSI-3 Fast-20 Parallel Interface (Fast-20) {Project 1071-D} [Lamers]
  - 8.20 AT Attachment-3 Interface (ATA-3) Status {Project 2008-D} [Milligan]
  - 8.21 ATA Packet Interface (ATAPI) Status {Project 1120-D} [Milligan]
  - 8.22 Systems Issues Study Group [Penman]
  - 8.23 SPI-2 Study Group [Ham/Aloisi]
  - 8.24 High Availability Study Group [Sicola]

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9. Old Business
    - 9.1 Clarification of international program fee [Allan]
    - 9.2 Addressability of TARGET RESET task management function (94-236r2) [Snively]
    - 9.3 Resolution of SCSI-3 SBP (0992-D) Public Review Comments
  10. New Business
    - 10.1 Resolution of Public Review Comments (if any) on Fast-20
    - 10.2 Resolution of Public Review Comments (if any) on ATA-2
    - 10.3 Forwarding of Serial Bus Protocol - 2 (SBP-2) Project Proposal
    - 10.4 Forwarding of PC Boot Considerations for Devices >8GB Technical Report Project Proposal [Penman]
    - 10.5 Should Prevent Allow Medium Removal be Placed in SPC? [Lappin]
    - 10.6 Log Page & Parameters for SSC (95-304r1) [Stone]
    - 10.7 Software Write Protect Bit Location in SSC (95-318r1) [Stone]
    - 10.8 Report Density Command (95-224r5) [Lappin]
    - 10.9 REPORT LUNs Command (95-253r3) [Weber]
    - 10.10 Disconnect/Reconnect Mode Page (95-208r3) [Gardner]
    - 10.11 Informational Exceptions Control Mode Page (95-323r1) [Houlder]
  11. ISO Report [Milligan]
    - 11.1 X3T10 Recommendation Regarding Continuation of the International ESDI Project [Milligan]
    - 11.2 ISO NWIs for ATA, ATAPI, and CAM [Milligan]
  12. Liaison Reports
    - 12.1 X3T11 Liaison Report [Cummings]
    - 12.2 SFF Industry Group [Allan]
    - 12.3 IEEE P1394 [Marazas]
    - 12.4 IEEE P1285 Status [Pak]
    - 12.5 PCMCIA Report [McLean]
  13. Review of Action Items
  14. Meeting Schedule
    - 14.1 Authorization of Working Group Meetings
    - 14.2 RAB Letter
  15. Adjournment
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## Results of Meeting

### 1. Opening Remarks

John Lohmeyer, the X3T10 Chair, called the meeting to order at 1:05 p.m., Thursday September 14, 1995. He thanked Charles Monia of Digital Equipment Corp. for hosting the meeting.

John said that X3 Subgroup Membership forms and the X3T10 Mailing Subscription form were available on the document table. He said that people should use the X3 forms to insure the X3 Secretariat has the latest membership information. These forms should be mailed directly to the X3 Secretariat.

As is customary, the people attending introduced themselves and a copy of the attendance list was circulated. Copies of the draft agenda and general information on X3T10 were made available to those attending.

## **2. Approval of Agenda**

The draft agenda was approved as with the following additions:

- 10.4 Forwarding of PC Boot Considerations for Devices >8GB Technical Report Project Proposal [Penman]
- 10.5 Should Prevent Allow Medium Removal be Placed in SPC? [Lappin]
- 10.6 Log Page & Parameters for SSC (95-304r1) [Stone]
- 10.7 Software Write Protect Bit Location in SSC (95-318r1) [Stone]
- 10.8 Report Density Command (95-224r5) [Lappin]
- 10.9 REPORT LUNs Command (95-253r3) [Weber]
- 10.10 Disconnect/Reconnect Mode Page (95-208r3) [Gardner]
- 10.11 Informational Exceptions Control Mode Page (95-323r1) [Houlder]

## **3. Attendance and Membership**

The membership requirements were reviewed. X3 rules permit one vote per organization. An individual from a new organization must attend two out of three consecutive plenary meetings. He/she may apply for voting membership the second meeting via a letter to the Chair of X3T10. The individual may vote at the second plenary meeting. Working group meetings do not count toward attendance requirements.

Organizations must also pay the X3 Service Fee (\$300) to maintain membership. The International Program Fee (\$300) is billed separately directly from ANSI.

The Chair said he had sent letters to 4 people from 3 organizations informing them that their membership was in jeopardy due to non-attendance (see 95-028r0) and that their membership would be terminated if they did not attend this meeting. All organizations were represented at this meeting except:

Sequoia Advanced Tech., Inc.  
Zadian Technologies

These organizations were 'terminated' (that is, the principals were changed to observers, first alternates, if any, were dropped, and any additional alternates were changed to observers). No organizations joined X3T10 at the meeting.

John reported that, since the last meeting, Future Domain has been purchased by Adaptec. As a result, all members from Future Domain have had their status changed to observers from Adaptec.

The X3T10 membership is now at 53 organizations down from 56 organizations last time. Enclosure (1) is the list of the people present at the meeting and enclosure (2) is the current X3T10 membership list.

## **4. Approval of Minutes - July Meeting Colorado Springs, CO (X3T10/95-265r1)**

The minutes were approved as written.

## **5. Document Distribution**

Members who have any problems with their mailing subscription should deal directly with Katrina Gray (kgray@itic.nw.dc.us) or Dan Arnold (darnold@itic.nw.dc.us) at (202) 626-5741.

Larry Lamers requested that all documents for the next mailing be in his hands by noon on Thursday September 28, 1995. Documents received after this date will go into a subsequent mailing.

Larry Lamers reminded the committee of the requirements for document submission to be included in the committee mailing. Since X3T10 meets its document archiving requirements by including the X3 Secretariat on the mailing list, documents included in the mailing must be suitable for archiving. This means that high-quality, single-sided originals with adequate margins and proper identification must be submitted. Document X3T10/95-147 contains the list of requirements for submissions.

In keeping with the X3T10 committee's new efforts for electronic document filing and distribution, Larry requested that electronic copies of all documents be made available to him. The electronic copies can be sent directly to Larry. Or, the electronic document can be placed on the SCSI BBS. Symbios maintains a World Wide Web page on behalf of X3T10 at <http://www.symbios.com/x3t10>.

As usual, minutes are also available on the SCSI BBS (719-574-0424) and will be distributed to the ATA and SCSI Reflectors. To be added to the ATA Reflector, send an email to [majordomo@dt.wdc.com](mailto:majordomo@dt.wdc.com) with the line 'subscribe ata' in the message body. To subscribe to the SCSI Reflector, send an electronic message to: [scsi-request@symbios.com](mailto:scsi-request@symbios.com) and include your mailing address in the message body. The X3 Secretariat maintains a World Wide Web page at <http://www.x3.org>.

The current document register is enclosure (3).

Larry Lamers moved that, starting in January 1996, X3T10 will require that documents be presented to the document distribution person in an electronic format. Tom Hanan seconded the motion.

Larry requested that the native format files be provided.

Joe Chen moved to amend Larry's motion to require Microsoft Word format. Tom Hanan seconded the motion to amend. After a brief discussion, the motion failed 10:23.

The main motion passed 36:1. Peter Johansson stated that his no vote was based on the failure to amend the motion to place the requirement solely on X3T10 members.

## 6. Call for Patents

This is a regular agenda item to identify any potential patent issues with developing standards.

John reported that Micropolis and Compaq have not responded to the letters he sent following the March and May meetings, respectively.

A document is available from ANSI, "Procedures for the Development and Coordination of American National Standards", at no charge. Annex I contains the ANSI patent policy.

## 7. Review of Old Action Items

- 84) George Penokie will prepare a document (probably a technical report) describing the SPI fairness algorithm. *Carryover*
- 96) Gene Milligan will provide a letter describing the Seagate patent policy. *Complete*
- 97) Alan Olsen will review the REPORT DENSITY proposal with QIC. *Carryover*
- 98) John Lohmeyer will forward SCC rev 6 to X3 for further processing (second public review). *Complete*
- 99) John Lohmeyer will forward FCP rev 12 to X3 for further processing (second public review). *Complete*
- 100) Charles Monia will prepare SAM rev 18 for forwarding to second public review. *Complete*
- 101) John Lohmeyer will forward SAM rev 18 to X3 for further processing (second public review). *Complete*
- 102) John Lohmeyer will forward the ATA TC comments resolutions document (95-282), roll-call vote results, and reasons for no votes to X3 OMC for their consideration. *Complete*
- 103) John Lohmeyer will forward the revised project proposals for SSA-PH1, SSA-PH2, SSA-TL1, SSA-TL2, SSA-S2P, and SSA-S3P to X3 for further processing. *Complete*
- 104) John Lohmeyer will forward the revised project proposal for FCP-2 to X3 for further processing. *Complete*

- 105) John Lohmeyer will forward the revised project proposals for SPI-2 and EPI to X3 for further processing. *Complete*
- 106) John Lohmeyer will forward the revised project proposal for ATA+PI to X3 for further processing. *Complete*
- 107) Gene Milligan will draft a letter to X3 describing the problems with current ANSI patent policies with respect to Technical Reports. *Complete*
- 108) John Lohmeyer will add an agenda item to determine the X3T10 recommendation regarding continuation of the international ESDI project. *Complete*
- 109) Larry Lamers will prepare a printed copy of the SPI revision 15a for the IR to forward to SC25 for CD ballot. *Complete*
- 110) Charles Monia will prepare a printed copy of the SAM revision 18 for the IR to forward to SC25 for CD ballot. *Complete*
- 111) Larry Lamers will prepare a printed copy of FAST-20 revision 6 for the IR to forward to SC25 for CD ballot. *Complete*
- 112) George Penokie will prepare a printed copy of the SCC revision 6 for the IR to forward to SC25 for CD ballot. *Complete*
- 113) Bob Snively will prepare a printed copy of the FCP revision 12 for the IR to forward to SC25 for CD ballot. *Complete*
- 114) John Lohmeyer will add an agenda item covering possible generation of new ISO work items concerning ATA and ATAPI. *Complete*
- 115) John Lohmeyer will add an agenda item covering possible submission of CAM to ISO. *Complete*
- 116) Rick Tewell will document the usage of the 0Dh mode page code in SBC as per the wishes of X3T10 expressed in item 10.6 of the meeting #10 minutes. *Carryover*
- 117) X3T10.1 will produce a recommendation of how to represent the SSA roadmap in the SCSI-3 roadmap. *Overtaken by events -- John Lohmeyer provided a representation.*

## **8. Subgroup and/or Project Status Reports**

### **8.1 Project Status Summary and X3/OMC Liaison [Lohmeyer]**

John said that the current X3T10 project status summary was included on the backs of the meeting agendas and will be included in the mailing as usual. X3T10 had a large number of items on the OMC agenda for its September 12-14 meeting in Nashua, NH. John attended part of their meeting Wednesday morning to get the latest information. Things that changed since John printed the X3T10 project status summary are:

CAM passed its management review and will now go to X3 letter ballot.

The first (and apparently only) public review on the GPP technical report is September 15 -- November 14. It will be designated X3/TR-16-199x.

The second public review on FCP is September 29 -- November 28. The second public reviews on SAM and SCC are October 13 -- December 12.

The project proposals on FCP-2, SPI-2, EPI, SSA-PH1, SSA-TL1, SSA-PH2, SSA-PH2, SSA-S2P, and SSA-S3P were all accepted with no changes and are now going to X3 letter ballot.

The project proposal on ATA+PI was deferred until the November OMC meeting. It was deferred because OMC did not want to deal with conditional liaison statements. By the November meeting, X3 should have decided whether or not to create X3T13.

The proposal to create a new ATA Technical Committee was the most controversial X3T10 item on the OMC agenda. John reported that OMC was reluctant at first to authorize another TC because of concerns the large number of negative votes at X3T10, X3 budget issues, and concerns over further dividing I/O interface work. Eventually, OMC voted 8:1:2:? to issue an X3 letter ballot for a new TC, which would be called "I/O Interfaces - AT Attachment, X3T13". The letter ballot will be timed to close after the October X3 meeting, but before the November OMC meeting.

## **8.2 X3T10.1 Task Group Report [Hallam]**

In the absence of Ken Hallam, Larry Lamers presented the X3T10.1 report, as follows:

X3T10.1 Report  
August 26-29, 1995 Ithaca, NY

Met Sunday thru Wednesday in Ithaca, NY  
3 full days of W.G. meetings, 1/2 day Plenary

27 P-Members Jeopardy = Cypress, EMC, Quantum, SSI, Western Digital

### Project Activity

Reviewed all 3 drafts and many new proposals. No major technical changes.  
Plan is to approve all 3 drafts as ready for X3T10 Letter Ballot in October

### Physical - PH1

Draft revision 5a reviewed  
Editorial corrections  
Adopted a 150 ohm impedance (+/-15) termination value  
Considering more detailed termination spec. (capacitance)  
Molex and ITT-Cannon to clean up connector dwgs.  
Update to Revision 6 approved

### TL1

Added lots of editorial comments from John Scheible.  
New SAT clarification, (revised entire section but no technical changes)  
Clarified Wrap Mode operation  
Changed Query Port Reply to allow speed negotiation parameters  
Changed SMS rules to have source zero fill and destination ignore extra bytes  
Update to revision 7 approved

### S2P

Lots of editorial work accomplished  
No technical changes  
Update to revision 4 approved

Need 3 X3T10 Letter Ballots for issue in November 95

## **8.3 SCSI Common Access Method (CAM) {Project 792-D} [Dallas]**

John reported that CAM is going to X3 letter ballot. He reported that forwarding to ANSI could be expected around the end of the year.

## **8.4 ATA Extensions (ATA-2) Status {Project 948-D} [Finch]**

John reported that ATA-2 passed its public review without any comments, except editorial comments from ANSI. John said the following schedule appears likely: X3T10 will vote on accepting the ANSI changes as non-substantive in November, OMC do its management review in January, and the X3 letter ballot will be processed after that.

**8.5 SCSI-3 Parallel Interface (SPI) Status {Project 855-D} [Lamers]**

John reported that SPI revision 15a is at the ANSI BSR for review. He was unaware if it has passed BSR review, yet.

**8.6 SCSI-3 Interlocked Protocol (SIP) Status {Project 856-D} [Penokie]**

George reported that SPI revision 6 was reviewed at the working group meeting earlier this week. He is working on revision 7. He anticipates a forwarding letter ballot in January (maybe November). He requested prompt delivery of promised written text for inclusion in revision 7.

**8.7 SCSI Common Access Method -3 (CAM-3) Status {Project 990-D} [Dallas]**

Bill reported that a first revision draft will be available in about a month. He will post that draft to the FTP site.

**8.8 SCSI-3 Generic Packetized Protocol (GPP) Status {Project 991-DT} [Stephens]**

John reported that the first (and apparently only) public review on the GPP technical report is September 15 -- November 14. It will be designated X3/TR-16-199x.

**8.9 SCSI-3 Serial Bus Protocol (SBP) Status {Project 992-D} [Roberts]**

Ron Roberts reported that SBP revision 20 will be in the next mailing. The new SBP contains a complete description of isochronous transfers. Ron encouraged all interested persons to read the new isochronous material in the new SBP draft. He anticipated a forwarding vote for second public review at the next plenary meeting.

**8.10 SCSI-3 Fiber Channel Protocol (FCP) Status {Project 993-D} [Snively]**

John reported that the second public review on FCP is September 29 -- November 28.

**8.11 SCSI-3 Architecture Model (SAM) Status {Project 994-D} [Monia]**

John reported that the second public review on SAM is October 13 -- December 12.

**8.12 SCSI-3 Primary Commands (SPC) Status {Project 995-D} [Weber]**

Ralph reported that no changes have been made in SPC since the July meeting. He anticipated substantial changes as a result of this plenary and generation of a revision 8 for the next mailing.

Concerns were raised about lack of a defined plan for getting the SPC in to public review.

**8.13 SCSI-3 Block Commands (SBC) Status {Project 996-D} [Tewell]**

John reported that no progress has been made on SBC. He described plans to review the situation with the current technical editor.

**8.14 SCSI-3 Stream Commands (SSC) Status {Project 997-D} [Lappin]**

Ted reported that the SSC/SMC working group discussed improvements on the REPORT DENSITY command. Ted said that SSC revision 4 is available at the meeting.

**8.15 SCSI-3 Graphics Commands (SGC) Status {Project 998-D} [Tewell]**

John reported that no progress has been made on SGC.

**8.16 SCSI-3 Medium Changer Commands (SMC) Status {Project 999-D} [Oetting]**

Erich reported that there will be some changes in the attached medium changer model.

**8.17 SCSI-3 Controller Commands (SCC) Status {Project 1047-D} [Penokie]**

George reported that SCC will be in public review from October 13 until December 12.

**8.18 Multimedia Command Set (MMC) Status {Project 1048-D} [Roberts]**

Ron Roberts reported that MMC revision 3.0 will be included in the next mailing. He anticipated a letter ballot to forward to first public review later this year.

**8.19 SCSI-3 Fast-20 Parallel Interface (Fast-20) {Project 1071-D} [Lamers]**

Duncan Penman moved that X3T10 recommend to X3 that Fast-20 revision 6a be approved as editorial (not substantive) changes. Charles Monia seconded the motion. The motion passed 28:0:0:25=53.

Larry Lamers moved that, upon receipt of the CD for Fast-20, X3T10 recommend that the CD be approved with addition of the editorial changes as represented in Fast-20 revision 6a. John Lohmeyer seconded the motion. In a roll call vote, the motion passed 34:0:0:19=53. The details of the roll call vote are as follows:

Organization	Stat	Name	Yes	No	Abs	NP
3M Company	A	Mr. Rick Heidick	1			
Adaptec, Inc.	P	Mr. Norm Harris	1			
Advanced Micro Devices						1
Amdahl Corp.	P	Mr. Edward Fong	1			
AMP, Inc.	P	Mr. Charles Brill	1			
Amphenol Interconnect						1
Ancot Corp.	P	Mr. Jan V. Dedek	1			
Apple Computer	A	Mr. Ron Roberts	1			
Burr-Brown Corp.						1
BusLogic						1
Ciprico Inc.	A	Mr. Raymond Gilson	1			
Circuit Assembly Corp.	P	Mr. Ian Morrell	1			
Cirrus Logic Inc.	P	Mr. Joe Chen	1			
CMD Technology						1
Congruent Software, Inc.	P	Mr. Peter Johansson	1			
Conner Peripherals						1
Dallas Semiconductor	P	Mr. Louis Grantham	1			
Digital Equipment Corp.	P	Mr. Charles Monia	1			
Eastman Kodak Co.	P	Mr. Robert Reisch	1			
ENDL Associate	A#	Mr. Ralph O. Weber	1			
Exabyte Corp.	P	Mr. Edward Lappin	1			
FSI Consulting Services	P	Mr. Gary R. Stephens	1			



Fujitsu Computer Prods Amer	A#	Mr. Andy Chen	1	
Hewlett Packard Co.	P	Mr. Stephen Holmstead	1	
Hitachi Micro Systems, Inc.				1
Honda Connectors				1
IBM Corp.	P	Mr. George Penokie	1	
IIX Consulting	P	Mr. Duncan Penman	1	
Iomega Corp.				1
Linfinity Micro	P	Mr. Dean Wallace	1	
Madison Cable Corp.				1
Maxtor Corp.	P	Mr. Pete McLean	1	
Methode Electronics, Inc.				1
Molex Inc.				1
NEC Technologies				1
Oak Technology, Inc.				1
Panasonic Technologies, Inc				1
QLogic Corp.	P	Mr. Skip Jones	1	
Quantum Corp.	A	Mr. Edward A. Gardner	1	
Seagate Technology	A	Mr. Gerald Houlder	1	
Silicon Systems, Inc.				1
Sony	A#	Mr. Dick Scheel	1	
Storage Technology Corp.	P	Mr. Erich Oetting	1	
Sun Microsystems Computer C				1
Symbios Logic Inc.	P	Mr. John Lohmeyer	1	
SyQuest Technology Corp.	A	Mr. Akram Atallah	1	
Tandem Computers	P	Mr. John Moy	1	
Thomas & Betts				1
Trimm Technologies	P	Mr. Gary M. Watson	1	
UNISYS Corporation	A	Mr. Arlan P. Stone	1	
Unitrode Integrated Circuit	P	Mr. Paul D. Aloisi	1	
Western Digital Corporation	A#	Mr. Tom Hanan	1	
Woven Electronics				1
			34	0 0 19 = 53

### 8.20 AT Attachment-3 Interface (ATA-3) Status {Project 2008-D} [Milligan]

Pete McLean reported on the ATA-3 meeting held two weeks ago. As a result of the meeting, there will be an ATA-3 revision 4 document posted on the FTP site within the next week.

Pete also reported on issues that the AT working group is considering outside either ATA-3 or ATAPI. He noted that cabling-plant issues will continue to be handled at the X3T10 meeting week, because the right people are present here.

### 8.21 ATA Packet Interface (ATAPI) Status {Project 1120-D} [Milligan]

Tom Hanan reported that the ATAPI has been reviewed page-by-page. A new revision of ATAPI will be available in a few days. Tom noted that five technical issues need additional work to reach resolution.

### 8.22 Systems Issues Study Group [Penman]

Duncan reported that both the ATA and SCSI working groups have approved discontinuing regularly scheduled meetings for systems issues. The SCSI-related system issues will be dealt with in the general SCSI working group meetings.

**8.23 SPI-2 Study Group [Ham/Aloisi]**

Paul reported that a first pass at the SPI-2 document has been prepared. The draft document has attracted several negative comments at the working group meetings earlier this week. He reported that the low-voltage differential is progressing well, but a comparison review with the new EIA standard is necessary. Both the SPI-2 and low-voltage differential documents will be in the next mailing.

A SPI-2 LVDS meeting was scheduled for October 13th in Denver.

**8.24 High Availability Study Group [Sicola]**

Charles Monia reported that a controller failover proposal is ready for discussion in the November SCSI working group meeting. Also, Doug Hagerman is preparing a technical report covering a profile for high-availability for SCSI systems. A request has been made for another study group session to consider the proposed technical report.

**9. Old Business****9.1 Clarification of international program fee [Allan]**

Dal Allan was not present. John mentioned that Dal had told him that if the X3 Secretariat attempts to terminate ENDL's membership for nonpayment of the IPF, Dal will consider it discrimination against X3 members. Further consideration was deferred to the next plenary meeting.

**9.2 Addressability of TARGET RESET task management function (94-236r2) [Snively]**

Action on this item was deferred to the next plenary meeting.

**9.3 Resolution of SCSI-3 SBP (0992-D) Public Review Comments**

Ron Roberts stated that the public review comments for SBP have been resolved. However, he also noted that the revised SBP document is not ready for forwarding at this meeting.

**10. New Business****10.1 Resolution of Public Review Comments (if any) on Fast-20**

No action was required because Fast-20 received no public review comments.

**10.2 Resolution of Public Review Comments (if any) on ATA-2**

No action was required because ATA-2 received no public review comments.

**10.3 Forwarding of Serial Bus Protocol - 2 (SBP-2) Project Proposal**

Peter Johansson presented the project proposal for SBP-2 (95-311r0). He reviewed the planned work items for SBP-2. Peter moved that X3T10 forward the SBP-2 project proposal to X3 for further consideration. Charles Monia seconded the motion. The motion passed 33:0:0:20=53. John took an action item to forward the SBP-2 project proposal to X3 for further consideration.

**10.4 Forwarding of PC Boot Considerations for Devices >8GB Technical Report Project Proposal [Penman]**

John Lohmeyer described several corrections to the PC Boot Considerations project proposal (95-298r0) project proposal which resulted in rev 1,. He described the corrections as mostly editorial and intended to insure smooth passage through OMC and X3 approval. A couple additional editorial corrections were noted by those present.

Duncan Penman moved that X3T10 forward the PC Boot Considerations for Devices >8 GByte Technical Report project proposal, as revised, to X3 for further consideration. Peter Johansson seconded the motion. The motion passed 29:1:0:23=53. No reason was stated for the negative vote. John took an action item to forward the revised PC Boot Considerations project proposal to X3 for further consideration.

#### **10.5 Should Prevent Allow Medium Removal be Placed in SPC? [Lappin]**

Ted Lappin described a problem with the PREVENT ALLOW MEDIUM REMOVAL command. He felt that the command belongs in the SPC instead of the SBC. Ted moved that the PREVENT ALLOW MEDIUM REMOVAL command be placed solely in the SPC. Gary Stephens seconded the motion. The motion passed 26:0:0:27=53.

#### **10.6 Log Page & Parameters for SSC (95-304r1) [Stone]**

Arlan Stone reviewed working group changes in the proposal to add a sequential-access log page for cleaning and data compression ratio information. On behalf of the working group, Arlan moved that 95-304r1 be accepted for inclusion in the SSC. The motion passed 27:0:0:26=53.

#### **10.7 Software Write Protect Bit Location in SSC (95-318r1) [Stone]**

Arlan Stone presented a proposal that the software write protect bit be placed in the device configuration mode page. On behalf of the working group, Arlan moved that 95-318r1 be accepted for inclusion in the SSC. The motion passed 27:0:0:26=53.

#### **10.8 Report Density Command (95-224r5) [Lappin]**

Ted Lappin briefly reviewed 95-224r5. On behalf of the working group, Ted moved that 95-224r5 be accepted for inclusion in the SSC. The motion passed 27:0:0:26=53.

#### **10.9 REPORT LUNs Command (95-253r3) [Weber]**

Ralph Weber briefly reviewed 95-253r3. On behalf of the working group, Ralph moved that 95-253r3 be accepted for inclusion in the SPC. The motion passed 27:0:0:26=53.

#### **10.10 Disconnect/Reconnect Mode Page (95-208r3) [Gardner]**

Ed Gardner briefly reviewed 95-208r3. On behalf of the working group, Ed moved that 95-208r3 be accepted for inclusion in the SPC and SIP. The motion passed 28:0:0:25=53.

#### **10.11 Informational Exceptions Control Mode Page (95-323r1) [Houlder]**

Gerry Houlder briefly reviewed 95-323r1. On behalf of the working group, Gerry moved that 95-323r1 be accepted for inclusion in the SPC. The motion passed 22:0:0:31=53.

### **11. ISO Report [Milligan]**

Gene Milligan, the X3T10 International Representative, was unable to attend but provided the following written electronic report (parts of which were read by John Lohmeyer):

#### **ISO Report 14 September 1995**

The principal ISO items to report concern SCSI documents submitted and FDDI CDs issued.

IR 95010 8/21/95 submitted the final, final text (IEC 9482 and publishers comments) for ISO/IEC 9316:1995.

The following CD contributions were submitted:

IR 95011	8/21/95	SCC Revision 6
IR 95012	8/21/95	SPI Revision 15a
IR 95013	8/21/95	SCSI Fast-20 Revision 6

The SC 25 letter ballot SC 25 N238 has been issued for CD 9314-9 FDDI LCF-PMD Revision 2.2 with a SC 25 closing date of 10/15/95.

The SC 25 letter ballot SC 25 N246 has been issued for CD 9314-25 FDDI SMT-ATS with a SC 25 closing date of 1/31/96.

### **11.1 X3T10 Recommendation Regarding Continuation of the International ESDI Project [Milligan]**

Larry Lamers moved X3T10 instruct the IR to take the necessary actions to discontinue further processing of the ESDI project as an international standard. Erich Oetting seconded the motion. John Lohmeyer noted that only representatives of U.S. domiciled companies may vote on motions regarding international standards activities. The motion passed 30:0:0:23=53.

### **11.2 ISO NWIs for ATA, ATAPI, and CAM [Milligan]**

Larry Lamers moved that X3T10 instruct the IR to generate and submit NWIs for ATA, ATAPI, and CAM; and, upon receipt of the NWIs, he should forward the NWIs to X3 with a recommendation to vote favorably on each NWi. Charles Brill seconded the motion. John Lohmeyer noted that only representatives of U.S. domiciled companies may vote on motions regarding international standards activities. The motion passed 28:0:0:25=53.

## **12. Liaison Reports**

### **12.1 X3T11 Liaison Report [Cummings]**

Roger gave an oral report and provided the following written report.

X3T11 LIAISON REPORT to X3T10 & X3T12

X3T11 met on August 9, 1995 with 76 people in attendance. No member organizations were in jeopardy for failure to attend meetings, return letter ballots or pay fees. E-Systems were reinstated following the payment of fees, Vitesse and W.L.Gore were added as new member organizations. The membership of X3T11 is now 62 organizations.

The results of two X3T11 LBs were announced. The Letter Ballot on FC-AL (Rev 4.5) for an OMC review and a second Public Review if necessary passed with F43-O00-DNV16 (1 For ballot included comments). The Letter Ballot on the 10 bit Interface Technical Report for further processing including an OMC Compliance Review and a first Public Review passed with F43-O02-DNV16 (4 For ballots included comments). As a result, FC-AL Rev 4.5 was passed to the Secretariat, and the 10 bit Interface Technical Report will be further edited.

A decision is still awaited on the conversion of Project 1117-DT (HIPPI Serial) to 1117-D. It could not be determined if this item had been considered at the July OMC meeting. A Letter Ballot was authorized on HIPPI Serial, Revision 1.5, for further processing as a standard.

It was noted that HIPPI-FC has been assigned X3.283-199x.

X3T11 was unable to agree on a collective noun to represent all possible types of FC interconnection mechanism, and thus the term fabric will be retained for the present.

Dialog is continuing with IBM on release of the tools necessary to continue development of the FC Implementation Guide. A Technical Editor is still being solicited for this project.

A draft for the FC Link Encapsulation project (FC-LE, Rev 0.92) was reviewed in detail in an Ad Hoc meeting before the Plenary. A Letter Ballot was authorized in the event that some outstanding comments on the current draft can be resolved before the end of August.

A X3T11 Letter Ballot on a Project Proposal for an FC Private Loop Direct Attached Technical Report was authorized.

It was announced that the Single Byte Command Code Sets Connection (SBCON) project had finally be approved and assigned project number 1132-D.

X3T11 also voted to levy a meeting fee of \$25 per day for attendance at the December X3T11 meetings for those not registered in the ANSI/ENDL block at the Clarion Hotel in San Diego. The fee is necessary because of the exceptional circumstances involved in holding a co-located meeting with a major trade show (Supercomputing '95).

The next meeting of X3T11 is on October 4, 1995 at the Crowne Plaza Toronto Centre Hotel, Toronto, Ontario, Canada. The phone number for the hotel is (416) 597-1400. The cutoff date for reservations is September 2. Special interim Ad Hoc meetings were authorized for Seattle, WA on September 6 & 7 for FC Avionics Environment, and for Dallas, TX on September 15 for Jitter Study and further editing work on the 10 bit Interface TR.

## **12.2 SFF Industry Group [Allan]**

No report.

## **12.3 IEEE P1394 [Marazas]**

Peter Johansson reported that IEEE P1394 is going to a second letter ballot review. He anticipated that the ballot will close before the end of the year.

Peter noted that there appears to be a need for an X3T10 organization ID to indicate "ownership" of the SBP protocol. He was given an action item to investigate obtaining one.

## **12.4 IEEE P1285 Status [Pak]**

Larry Lamers described the current status of the P1285 ballot review.

## **12.5 PCMCIA Report [McLean]**

Pete McLean reported that the PC card meeting had a single agenda item, feedback from the HDA-3 group. He noted that there is almost no activity in the SCSI-PCMCIA group. Pete suggested that interested parties should be showing-up with a willingness to work, or the project will see no further progress.

## **13. Review of Action Items**

- 84) George Penokie will prepare a document (probably a technical report) describing the SPI fairness algorithm.
- 97) Alan Olsen will review the REPORT DENSITY proposal with QIC.
- 116) Rick Tewell will document the usage of the 0Dh mode page code in SBC as per the wishes of X3T10 expressed in item 10.6 of the meeting #10 minutes.
- 118) Charles Monia will draft a SAM-2 project proposal.
- 119) John Lohmeyer will forward the SBP-2 project proposal to X3 for further consideration.
- 120) John Lohmeyer will forward the revised PC Boot Considerations project proposal to X3 for further consideration.
- 121) John Lohmeyer will add a working group agenda item to discuss how the SPC document can be brought expeditiously to public review.

- 122) Peter Johansson will obtain an IEEE organizationally unique identifier for use in SBP conforming devices.

**14. Meeting Schedule**

The next plenary meeting of X3T10 will be November 9, 1995, in Palm Springs, CA, at the Hyatt Regency Suites (619-322-9000), hosted by Western Digital Corp. The meeting will begin at 1:00 p.m. on Thursday.

The meeting list for the next plenary week is:

November '95 Meeting Map

Day	9	10	11	12	1	2	3	4	5	6	7	8	9	
<b>Monday 11/6</b>														
	=====+													
	SPI-2 Study Group												(35)	
	=====+													
						High Avail. SG								(10)
	=====+													
<b>Tuesday 11/7</b>														
	=====+													
	EPI SG   SCSI-3 WG												(40)	
	=====+													
	CAM-3 WG   SBP WG												(10)	
	=====+													
<b>Wednesday 11/8</b>														
	=====+													
	SCSI-3 WG												(40)	
	=====+													
						MMC Working Group								(20)
	=====+													
	SFF Form Factor   SFF/VHDCI WG												(40)	
	=====+													
<b>Thursday 11/9</b>														
	-----+=====+													
	SFF   X3T10 Plenary												(40/70)	
	=====+													
	SSC/SMC WG												(10)	
	=====+													
<b>Friday 11/10</b>	8	9	10	11	12									
	(No meetings planned for Friday)													

Meetings marked with == are X3T10-authorized meetings.  
 Meetings marked with -- are authorized by other groups and may change without notice.

**Meeting Map Abbreviation Key:**  
 1394TA: 1394 Trade Association  
 ATA: AT Attachment (a. k. a. IDE)  
 ATA-2: ATA Extensions

**ATA-3:** Third Generation ATA  
**ATAPI:** ATA Packet Interface  
**CAM:** Common Access Method  
**CAM-3:** Next generation CAM for SCSI-3 (was called CAM-2)  
**EPI:** SCSI Enhanced Parallel Interface (Technical Report)  
**Fast-20:** Synchronous Data Transfer at 20 Megatransfers/second  
**FC-AL:** Fibre Channel - Arbitrated Loop (an X3T11 project)  
**I/F:** Interface  
**High Avail.:** High Availability  
**LB:** Letter Ballot  
**MMC:** SCSI-3 Multimedia Commands (CD-ROM)  
**P1394:** IEEE Project on High Performance Serial Bus (not an X3 activity)  
**PH:** Physical (Connectors, Cables, Transceivers, etc.)  
**Plenary:** Full Committee Meeting  
**RAB:** RAID Advisory Board (not an X3 activity)  
**RAID:** Redundant Array of Independent Devices  
**SBP:** SCSI-3 Serial Bus Protocol  
**SCC:** SCSI-3 Controller Commands (RAID)  
**SCSI:** Small Computer System Interface  
**SFF:** SFF Industry Group (not an X3 activity)  
**SG:** Study Group  
**SMC:** SCSI-3 Medium Changer Commands  
**SPI-2:** Second Generation SCSI-3 Parallel Interface  
**SSA:** Serial Storage Interface  
**SSC:** SCSI-3 Stream Commands (includes Tape)  
**Stor:** Storage  
**UIG:** User Interest Group (not an X3 activity)  
**VHDCI** Very High Density Cabled Interconnect  
**WG:** Working Group (same as Ad Hoc Group)  
**X3T10:** Lower Level Interfaces Technical Committee (was X3T9.2)  
**X3T10.1:** SSA Task Group of X3T10 (was X3T9.7)

Several other X3T10 events are also planned:

Event	Day/Date	Time	Location/contact
SPI-2 LVDS WG	Fr 10/13	9 am	Denver, Stouffer's / Lohmeyer
SPI-2 LVDS WG	Fr 12/15	9 am	San Jose / McGrath
MMC Working Group	We 10/4-5	9 am	San Jose / Roberts
ATA Working Group	Tu 9/19-22	9 am	Crown Sterling Suites Milpitas/McGrath
ATA Working Group	Tu 10/17-20	9 am	Phoenix in Irvine, CA / Stevens
ATA Working Group	Tu 11/28-12/1	9 am	WD in Irvine, CA / Hanan

For more information about X3T10 activities, please contact the following people:

Activity	Contact	Telephone/Email
ATA-2	Steve Finch	(714) 573-6808 steve.finch@tus.ssil.com
ATA-3 & ATAPI	Gene Milligan	(405) 324-3070 Gene_Milligan@notes.seagate.com
CAM & CAM-3	Bill Dallas	(603) 881-2508 dallas@wasted.enet.dec.com
FCP	Robert Snively	(415) 336-5332 Bob.Snively@eng.sun.com
GPP	Gary Stephens	(602) 321-1725 6363897@mcimail.com
SAM	Charles Monia	(508) 841-6757 monia@starch.enet.dec.com
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SPC	Ralph Weber	(603) 881-1497 roweber@acm.org
SPI, Fast-20, & SSA-xxx	Larry Lamers	(408) 957-7817 ljlammers@aol.com
SSA-S2P & -S3P	John Scheible	(512) 823-8208 Scheible@vnet.ibm.com
SSC	Edward Lappin	(303) 447-7718 tedl@exabyte.com
System Issues	Duncan Penman	(408) 730-2565 penman@netcom.com
Other Activities	John Lohmeyer	(719) 573-3362 john.lohmeyer@symbios.com

The long-term X3T10 meeting week schedule is:

Date	Location	Host/Comments
Jan 8-12, 1996	Dallas, TX	Quantum
Mar 11-15, 1996	Newport Beach, CA	QLogic
May 6-10, 1996	Ft. Lauderdale, FL	Adaptec
Jul 15-19, 1996	Colorado Springs, CO	Symbios Logic
Sep 9-13, 1996	Natick, MA (near Boston)	Digital
Nov 4-8, 1996	Palm Springs, CA	Western Digital
Jan 6-10, 1997		Approved Date
Mar 10-14, 1997		Approved Date
May 5-9, 1997		Approved Date
Jul 14-18, 1997		Approved Date
Sep 8-12, 1997		Approved Date
Nov 3-7, 1997		Approved Date

John Lohmeyer moved that the 1997 dates listed above be accepted as the X3T10 meeting week and plenary dates for 1997. Norm Harris seconded the motion. The motion passed 30:0:0:23=53.

John asked that volunteers to host 1997 meeting contact him with their proposed venues and months. He will schedule a vote for the November plenary meeting.

#### 14.1 Authorization of Working Group Meetings



John noted that the working group meetings are required to operate under the same voting procedures as does X3T10 (that is, one vote per organization) and the results of a working group are not binding on the parent committee. This later requirement is why we have traditionally only used non-binding straw polls in working group meetings. Any issue where the voting rules would make a difference should be deferred to the plenary group. Nonetheless, task groups and ad hoc groups should strive to achieve consensus prior to bringing issues to X3T10.

In the absence of any objection, X3T10 authorized the X3T10-related meetings and events in the list above.

#### **14.2 RAB Letter**

John reported that he had received another letter from the RAB. John noted that he had responded to the letter and offered RAB the opportunity to attend this meeting and discuss their issues. No one from the RAB was in attendance.

#### **15. Adjournment**

The meeting was adjourned at 5:13 p.m. on Thursday September 14, 1995, the earliest hour of adjournment in X3T10 history.

## Meeting Attendees -- Enclosure (1)

Name	S	Organization	Electronic Mail Address
Mr. Rick Heidick	A	3M Company	rdheidick@mmm.com
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Mr. Douglas Wagner	O	Berg Electronics	
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54 People Present

Status Key: P - Principal  
 A, A# - Alternate  
 O - Observer  
 L - Liaison  
 V - Visitor

## Minutes of X3T10 Plenary Meeting #11 in Bedford, NH

X3T10/95-325r1

Sep 20, 1995 - X3T10 Attendance Database - Enclosure (2)

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Minutes of X3T10 Plenary Meeting #11 in Bedford, NH

X3T10/95-325r1

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Minutes of X3T10 Plenary Meeting #11 in Bedford, NH

X3T10/95-325r1

Sep 20, 1995 - X3T10 Document Register - Enclosure (3)

X3T10/95-001R0 Date: 1/20/95 Author: J. Lohmeyer [SY-95-01]  
 Desc: X3T10 Project Summary

X3T10/95-001R1 Date: 3/20/95 Author: J. Lohmeyer [SY-95-02]  
 Desc: X3T10 Project Summary

X3T10/95-002R0 Date: 1/20/95 Author: J. Lohmeyer [SY-95-01]  
 Desc: X3T10 Draft Agenda for Meeting #8

X3T10/95-003R0 Date: 1/20/95 Author: J. Lohmeyer [SY-95-01]  
 Desc: Jeopardy Letter for Mar '95 Meeting

X3T10/95-004R0 Date: 1/20/95 Author: J. Lohmeyer [SY-95-01]  
 Desc: Letter Ballot on Forwarding ATA-2 to IPR

X3T10/95-005R0 Date: 1/26/95 Author: J. Lohmeyer [SY-95-01]  
 Desc: Letter requesting that Project 964-D (DADI) be withdrawn

X3T10/95-006R0 Date: 1/27/95 Author: J. Lohmeyer [SY-95-01]  
 Desc: Transmittal letter on SCC Rev 4 to first public review

X3T10/95-007R0 Date: 2/2/95 Author: J. Lohmeyer [SY-95-02]  
 Desc: Transmittal letter on SCSI-2 TIBs #1 and #2

X3T10/95-008R0 Date: 3/20/95 Author: J. Lohmeyer [SY-95-02]  
 Desc: X3T10 Draft Agenda for Meeting #9

X3T10/95-009R0 Date: 3/20/95 Author: J. Lohmeyer [SY-95-02]  
 Desc: Jeopardy Letter for May '95 Meeting

X3T10/95-010R0 Date: 3/20/95 Author: J. Lohmeyer [SY-95-02]  
 Desc: I/O Interface Related Reflectors (mailing lists)

X3T10/95-011R0 Date: 3/20/95 Author: J. Lohmeyer [SY-95-02]  
 Desc: ltr to Stuart Mabon, Micropolis, re patent 5,191,584

X3T10/95-012R0 Date: 3/21/95 Author: J. Lohmeyer [SY-95-02]  
 Desc: X3T10 Annual Report (April 1994 -- March 1995)

X3T10/95-013R0 Date: 5/13/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: Cover Letter on May/June '95 Letter Ballots

X3T10/95-014R0 Date: 5/13/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: Letter Ballot on Recommending that an ATA TC be formed

X3T10/95-015R0 Date: 5/13/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: Letter Ballot on Forwarding ATA+PI Project Proposal

X3T10/95-016R0 Date: 5/13/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: Letter Ballot on Forwarding SPI-2 Project Proposal

X3T10/95-017R0 Date: 5/13/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: Letter Ballot on Forwarding ESPC Technical Report Project Proposal

X3T10/95-018R0 Date: 5/13/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: Letter Ballot on Forwarding FCP-2 Project Proposal

X3T10/95-019R0 Date: 5/13/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: Letter Ballot on Forwarding SSA-PH1 Project Proposal

X3T10/95-020R0 Date: 5/13/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: Letter Ballot on Forwarding SSA-PH2 Project Proposal

X3T10/95-021R0 Date: 5/13/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: Letter Ballot on Recommending Revised Scope and Name for Project 0989-D

X3T10/95-022R0 Date: 5/13/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: Letter Ballot on Forwarding SSA-TL2 Project Proposal

X3T10/95-023R0 Date: 5/13/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: Letter Ballot on Changing Project 1121-DT to a Standards Project

X3T10/95-024R0 Date: 5/13/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: Letter Ballot on Changing Name for Project 1051-D

X3T10/95-025R0 Date: 5/16/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: ltr to Ray Freeman re QIC request for Density Codes (ref 95-201)

X3T10/95-026R0 Date: 5/16/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: Draft Agenda for July '95 X3T10 Meeting

X3T10/95-027R0 Date: 5/16/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: X3T10 Project Summary (May '95)

X3T10/95-028R0 Date: 5/16/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: Jeopardy Letter for Jul '95 Meeting

X3T10/95-029R0 Date: 5/19/95 Author: J. Lohmeyer [SY-95-03]  
 Desc: ltr to Bill Galloway, Compaq Computer Corp., re patent 5,375,243

X3T10/95-030R0 Date: 7/20/95 Author: J. Lohmeyer [SY-95-04]  
 Desc: Agenda for X3T10 Meeting #11 (Sep '95)

X3T10/95-031R0 Date: 7/20/95 Author: J. Lohmeyer [SY-95-04]  
 Desc: X3T10 Project Summary - July '95

X3T10/95-032R0 Date: 7/20/95 Author: J. Lohmeyer [SY-95-04]  
 Desc: Jeopardy letter for Sep '95 meeting

# Minutes of X3T10 Plenary Meeting #11 in Bedford, NH

X3T10/95-325r1

X3T10/95-033R0 Date: 7/20/95 Author: J. Lohmeyer [SY-95-05]  
 Desc: Reserved for sy-95-05 mailing

X3T10/95-034R0 Date: 6/17/95 Author: J. Lohmeyer [SY-95-04]  
 Desc: Results of X3T10 Letter Ballots 95-014 through 95-024

X3T10/95-035R0 Date: 7/21/95 Author: J. Lohmeyer [SY-95-04]  
 Desc: Response to Public Review Comment #1 on SCC

X3T10/95-036R0 Date: 7/21/95 Author: J. Lohmeyer [SY-95-04]  
 Desc: Response to Public Review Comment #2 on SCC

X3T10/95-037R0 Date: 7/21/95 Author: J. Lohmeyer [SY-95-04]  
 Desc: Response to Public Review Comment #3 on SCC

X3T10/95-101R0 Date: 1/1/95 Author: Milligan/Lamers [SY-95-01]  
 Desc: Minutes of ATA-3 Working Group - 11/30/94

X3T10/95-102R0 Date: 1/11/95 Author: D. Worrell [SY-95-01]  
 Desc: Proposal for Enhanced IDE 95 Features

X3T10/95-103R0 Date: 1/16/95 Author: R. Weber [sy-95-01]  
 Desc: Attached Medium Changer Operation Codes

X3T10/95-103R2 Date: 1/16/95 Author: R. Weber [sy-95-02]  
 Desc: Attached Medium Changer Operation Codes

X3T10/95-104R0 Date: 1/16/95 Author: S. Snyers [SY-95-01]  
 Desc: CDR Command Proposal

X3T10/95-105R0 Date: 1/16/95 Author: G. Penokie [SY-95-01]  
 Desc: Fast-20 Letter ballot comments

X3T10/95-106R0 Date: 1/16/95 Author: G. Penokie [SY-95-01]  
 Desc: SPC comments

X3T10/95-107R0 Date: 1/16/95 Author: G. Penokie [SY-95-02]  
 Desc: Public Review Comment #1 on SAM (X3.270)

X3T10/95-108R0 Date: 1/16/95 Author: G. Penokie [SY-95-01]  
 Desc: XOR Commands comments

X3T10/95-109R1 Date: 1/16/95 Author: T. Asami [SY-95-01]  
 Desc: Fast-20 Definition

X3T10/95-110R0 Date: 1/16/95 Author: C. Monia [SY-95-01]  
 Desc: Comparison of CA & ACA

X3T10/95-111R0 Date: 1/16/95 Author: D. Colegrove [SY-95-02]  
 Desc: PFA for ATA

X3T10/95-111R0 Date: 1/16/95 Author: D. Colegrove [SY-95-01]  
 Desc: PFA for ATA

X3T10/95-111R1 Date: 1/16/95 Author: D. Colegrove [SY-95-02]  
 Desc: PFA for ATA

X3T10/95-112R1 Date: 1/16/95 Author: L. Sloan [SY-95-01]  
 Desc: Presentation on 3rd Party Operations

X3T10/95-113R0 Date: 1/16/95 Author: L. Sloan [SY-95-02]  
 Desc: Technical details on 3rd Party Proposal

X3T10/95-114R0 Date: 1/16/95 Author: J. Elrod [SY-95-01]  
 Desc: Minutes of XOR Study Group - Jan '95

X3T10/95-115R0 Date: 1/16/95 Author: J. Molina [SY-95-01]  
 Desc: Letter on hotel locations

X3T10/95-116R0 Date: 1/16/95 Author: G. Stephens [SY-95-01]  
 Desc: Response for GPP Letter Ballot

X3T10/95-117R0 Date: 1/16/95 Author: E. Lappin [SY-95-01]  
 Desc: Space past EOD

X3T10/95-118R0 Date: 1/16/95 Author: E. Lappin [SY-95-01]  
 Desc: READ POSITION

X3T10/95-118R1 Date: 1/16/95 Author: E. Lappin [SY-95-02]  
 Desc: READ POSITION

X3T10/95-119R0 Date: 1/16/95 Author: R. Roberts [SY-95-01]  
 Desc: Minutes of MMC Working Group - Jan '95

X3T10/95-120R0 Date: 1/16/95 Author: Lamers/Milligan [SY-95-01]  
 Desc: Minutes of ATA-3 Working Group - 1/11-12/95

X3T10/95-121R0 Date: 1/16/95 Author: S. Finch [SY-95-01]  
 Desc: ATA-2 Annex F Issues

X3T10/95-122R0 Date: 1/16/95 Author: J. Chen [SY-95-01]  
 Desc: ATA 22MB/sec Timing Proposal

X3T10/95-123R0 Date: 1/16/95 Author: J. Lohmeyer [SY-95-01]  
 Desc: Letter ballot results from mailing SY-9406

X3T10/95-124R0 Date: 1/16/95 Author: G. Penokie [SY-95-02]  
 Desc: Public Review Comment #1 on FCP (X3.269)

X3T10/95-125R0 Date: 1/16/95 Author: M. Chow [SY-95-01]  
 Desc: Dynamic Power Selection in ATA

# Minutes of X3T10 Plenary Meeting #11 in Bedford, NH

X3T10/95-325r1

X3T10/95-125R2 Date: 1/16/95 Author: M. Chow [SY-95-03]  
 Desc: Dynamic Power Selection in ATA

X3T10/95-126R0 Date: 1/16/95 Author: L. Leach [SY-95-01]  
 Desc: Cable Error Detection Proposal

X3T10/95-127R0 Date: 1/16/95 Author: D. Penman [SY-95-01]  
 Desc: Additional ATA-3 Topics

X3T10/95-128R0 Date: 1/16/95 Author: D. Pak [SY-95-01]  
 Desc: Liaison Report from 1285

X3T10/95-129R0 Date: 1/16/95 Author: R. Weber [SY-95-01]  
 Desc: Minutes of SCSI Working Group - Jan '95

X3T10/95-130R0 Date: 1/16/95 Author: R. Weber [SY-95-01]  
 Desc: Minutes of X3T10 Plenary Meeting #7

X3T10/95-131R0 Date: 1/16/95 Author: D. Penman [SY-95-01]  
 Desc: ATA Systems Issues

X3T10/95-132R0 Date: 1/16/95 Author: T. Lappin [SY-95-01]  
 Desc: Write without read block mode control

X3T10/95-132R1 Date: 1/16/95 Author: T. Lappin [SY-95-02]  
 Desc: Write without read block mode control

X3T10/95-133R0 Date: 1/16/95 Author: T. Lappin [SY-95-01]  
 Desc: Clearing ASC/ASCQ

X3T10/95-133R1 Date: 1/16/95 Author: T. Lappin [SY-95-02]  
 Desc: Clearing ASC/ASCQ

X3T10/95-134R0 Date: 1/16/95 Author: T. Lappin [SY-95-01]  
 Desc: Write protect control

X3T10/95-135R0 Date: 1/16/95 Author: R. Weber [SY-95-01]  
 Desc: Status of AIIM C21 M559 Standard at X3T10

X3T10/95-136R0 Date: 1/24/95 Author: B. Dallas [SY-95-01]  
 Desc: Minutes of CAM WG - 1/'95

X3T10/95-137R0 Date: 1/18/95 Author: K. Calvert [SY-95-01]  
 Desc: Letter re: Copyright Release for ATASPI

X3T10/95-138R0 Date: 1/26/95 Author: M. Alexenko [SY-95-01]  
 Desc: SCAM issues in SPI rev 15

X3T10/95-139R0 Date: 1/26/95 Author: J. Lohmeyer [SY-95-01]  
 Desc: Minimum Active Negation Current Issue

X3T10/95-139R1 Date: 2/1/95 Author: J. Lohmeyer []  
 Desc: Minimum Active Negation Current Issue

X3T10/95-139R2 Date: 2/8/95 Author: J. Lohmeyer [sy-95-02]  
 Desc: Minimum Active Negation Current Issue

X3T10/95-140R0 Date: 1/27/95 Author: F. Podia [SY-95-01]  
 Desc: Use of Log Pages Assigned by X3T10 to AIIM B21

X3T10/95-141R0 Date: 1/27/95 Author: K. Calvert [SY-95-01]  
 Desc: ATASPI Presentation

X3T10/95-142R0 Date: 1/27/95 Author: K. Calvert [SY-95-01]  
 Desc: ATASPI Specification

X3T10/95-143R0 Date: 1/27/95 Author: D. Worrell [SY-95-01]  
 Desc: ATA-3 Features Proposal

X3T10/95-144R0 Date: 2/8/95 Author: H. Landis [SY-95-02]  
 Desc: Identify DMA proposal

X3T10/95-145R0 Date: 2/8/95 Author: H. Landis [SY-95-02]  
 Desc: Device 1 Only proposal

X3T10/95-146R0 Date: 2/9/95 Author: Lamers/Lohmeyer [SY-95-02]  
 Desc: Electronic Notification Procedure

X3T10/95-147R0 Date: 2/9/95 Author: Lamers/Lohmeyer [SY-95-02]  
 Desc: Preparing Documents for Committee Mailings

X3T10/95-148R0 Date: 2/9/95 Author: Lamers/Lohmeyer [SY-95-02]  
 Desc: Procedure for Funding X3T10 Technical Editors

X3T10/95-149R0 Date: 2/12/95 Author: R. Roberts [SY-95-02]  
 Desc: Minutes of MMC Working Group - Feb 95

X3T10/95-150R0 Date: 2/15/95 Author: Lamers/Milligan [SY-95-02]  
 Desc: Minutes of ATA-3 Working Group - 1/26/95

X3T10/95-151R1 Date: 2/15/95 Author: Lamers/Milligan [SY-95-02]  
 Desc: Minutes of ATA-3 Working Group - 2/15-16/95

X3T10/95-152R0 Date: 2/15/95 Author: J. McGrath [SY-95-02]  
 Desc: Problems with System Implementation of Dual Ports

X3T10/95-153R0 Date: 2/15/95 Author: C. Stevens [SY-95-02]  
 Desc: Enhanced Disk Drive Specification

X3T10/95-154R0 Date: 2/15/95 Author: H. Landis [SY-95-02]

# Minutes of X3T10 Plenary Meeting #11 in Bedford, NH

X3T10/95-325r1

Desc: Version Identification in ATA

X3T10/95-154R1 Date: 2/15/95 Author: G. Milligan [SY-95-03]  
Desc: Version Identification in ATA

X3T10/95-155R0 Date: 2/15/95 Author: H. Landis [SY-95-02]  
Desc: Comment on clause 10.5 of ATA-2

X3T10/95-156R0 Date: 2/15/95 Author: H. Landis [SY-95-02]  
Desc: BIOS Types, CHS Translation, LBA and other Good Stuff

X3T10/95-157R0 Date: 2/28/95 Author: J. Lohmeyer [SY-95-02]  
Desc: Flowchart on X3T10 procedures

X3T10/95-158R0 Date: 3/2/95 Author: G. Penokie [SY-95-02]  
Desc: IBM Patent Policy for SCC

X3T10/95-159R0 Date: 3/8/95 Author: L. Sloan [SY-95-02]  
Desc: Distributed SCSI I/O: Status and New Issues

X3T10/95-160R0 Date: 3/8/95 Author: L. Sloan [SY-95-02]  
Desc: Public Review Comment #2 on SAM (X3.270)

X3T10/95-161R0 Date: 3/8/95 Author: G. Houlder [SY-95-02]  
Desc: Minutes of XOR Study Group

X3T10/95-162R1 Date: 3/8/95 Author: Lamers/Milligan [SY-95-02]  
Desc: Minutes of ATA Working Group - 3/8-9/95

X3T10/95-163R0 Date: 3/9/95 Author: J. Chen [SY-95-02]  
Desc: Comments on ATA-2

X3T10/95-164R0 Date: 3/9/95 Author: T. Pione [SY-95-02]  
Desc: Worldwide Industry Hardware Support

X3T10/95-165R0 Date: 3/9/95 Author: T. Pione [SY-95-02]  
Desc: ATAPI Test Program

X3T10/95-166R0 Date: 3/9/95 Author: J. Lohmeyer [SY-95-02]  
Desc: ATA-2 Forwarding Letter Ballot Results

X3T10/95-167R0 Date: 3/9/95 Author: C. Patton [SY-95-02]  
Desc: ATA Electrical Simulation Plots

X3T10/95-168R0 Date: 3/9/95 Author: J. McGrath [SY-95-02]  
Desc: ATA Electrical Issues with 2 Ports

X3T10/95-168R1 Date: 3/9/95 Author: J. McGrath [SY-95-03]  
Desc: ATA LIne Termination Issues

X3T10/95-168R2 Date: 7/10/95 Author: J. McGrath [SY-95-04]  
Desc: ATA Signal Integrity Issues

X3T10/95-169R0 Date: 3/9/95 Author: R. Roberts [SY-95-02]  
Desc: Minutes of MMC Working Group - 3/8/95

X3T10/95-170R0 Date: 3/9/95 Author: Weber/Lohmeyer [SY-95-02]  
Desc: SCSI Working Group Minutes - 3/95

X3T10/95-171R0 Date: 3/9/95 Author: Weber/Lohmeyer [SY-95-02]  
Desc: Minutes of X3T10 Plenary Meeting #8

X3T10/95-172R0 Date: 3/9/95 Author: Weber/Lohmeyer [SY-95-02]  
Desc: SPI Futures Working Group Minutes - 3/95

X3T10/95-173R0 Date: 3/9/95 Author: D. Pak [SY-95-02]  
Desc: P1285 Liaison Report - 3/95

X3T10/95-174R0 Date: 3/9/95 Author: B. Dallas [SY-95-02]  
Desc: Minutes of the CAM-3 Working Group - 3/95

X3T10/95-175R0 Date: 3/17/95 Author: P. Johansson [SY-95-02]  
Desc: Editorial Correction to SPI rev 15

X3T10/95-176R0 Date: 3/17/95 Author: L. Barra [SY-95-02]  
Desc: Public Review Comment on FCP (X3.269)

X3T10/95-177R0 Date: 3/17/95 Author: L. Barra [SY-95-02]  
Desc: Public Review Comment on SAM (X3.270)

X3T10/95-178R0 Date: 3/17/95 Author: K. Gingerich [SY-95-02]  
Desc: Comments on Fast-20

X3T10/95-179R0 Date: 3/17/95 Author: P. Aloisi [SY-95-02]  
Desc: 3.3 Volt SCSI Termpower

X3T10/95-180R0 Date: 3/17/95 Author: P. Aloisi [SY-95-02]  
Desc: SCSI-3 SPI Low Voltage

X3T10/95-181R0 Date: 3/17/95 Author: P. Aloisi [SY-95-02]  
Desc: Low Power SCSI

X3T10/95-182R0 Date: 3/17/95 Author: P. Aloisi [SY-95-02]  
Desc: proposed working draft SPI-LP

X3T10/95-183R0 Date: 3/17/95 Author: P. Aloisi [SY-95-02]  
Desc: Project Proposal for SPI-LV Standard

X3T10/95-184R0 Date: 3/17/95 Author: P. Aloisi [SY-95-02]  
Desc: SPI Hot Swapping/Plugging

# Minutes of X3T10 Plenary Meeting #11 in Bedford, NH

X3T10/95-325r1

X3T10/95-185R0 Date: 3/20/95 Author: T. Lappin [SY-95-02]  
Desc: Minutes of the SSC Meeting - 03/95

X3T10/95-186R0 Date: 3/25/95 Author: C. Monia [SY-95-02]  
Desc: Public Review Comment #1 on SBP (X3.268)

X3T10/95-187R0 Date: 3/25/95 Author: T. Wickland [SY-95-02]  
Desc: Public Review Comment #3 on SAM (X3.270)

X3T10/95-188R0 Date: 3/25/95 Author: G. Witalka [SY-95-02]  
Desc: Public Review Comment #2 on FCP (X3.269)

X3T10/95-189R0 Date: 3/25/95 Author: C. Monia [SY-95-02]  
Desc: Public Review Comment #3 on FCP (X3.269)

X3T10/95-190R0 Date: 3/25/95 Author: L. Sloan [SY-95-02]  
Desc: Public Review Comment #4 on FCP (X3.269)

X3T10/95-191R0 Date: 3/25/95 Author: G. Stephens [SY-95-02]  
Desc: Public Review Comment #5 on FCP (X3.269)

X3T10/95-192R0 Date: 3/25/95 Author: S. Smyers [SY-95-02]  
Desc: Public Review Comment #2 on SBP (X3.268)

X3T10/95-193R0 Date: 3/30/95 Author: L. Sloan [SY-95-03]  
Desc: Public Review Comment #n on CAM (X.232)

X3T10/95-194R0 Date: 4/4/95 Author: P. McLean []  
Desc: Overlap Proposal

X3T10/95-194R1 Date: 4/20/95 Author: P. McLean [SY-95-03]  
Desc: Overlap Proposal

X3T10/95-195R0 Date: 4/8/95 Author: R. Roberts [SY-95-03]  
Desc: Minutes of MMC Working Group - 3/29-30/95

X3T10/95-196R0 Date: 4/11/95 Author: Lamers/Lohmeyer [SY-95-03]  
Desc: Minutes of Server SCSI Working Group - 4/10/95

X3T10/95-197R0 Date: 4/11/95 Author: K. Gingerich [SY-95-03]  
Desc: Power Dissipation Analysis

X3T10/95-198R0 Date: 4/12/95 Author: Lamers/Milligan []  
Desc: Minutes of ATA Working Group - 4/11-13/95

X3T10/95-198R1 Date: 4/18/95 Author: Lamers/Milligan [SY-95-03]  
Desc: Minutes of ATA Working Group - 4/11-13/95

X3T10/95-199R0 Date: 4/12/95 Author: T. Hanan [SY-95-03]  
Desc: Driver Current for ATA-3

X3T10/95-200R0 Date: 4/13/95 Author: H. Landis [SY-95-04]  
Desc: Default Set Multiple Value

X3T10/95-201R0 Date: 3/21/95 Author: J. Lohmeyer [SY-95-03]  
Desc: Request for density codes and medium type codes for QIC

X3T10/95-202R1 Date: 4/25/95 Author: C. Monia [SY-95-03]  
Desc: Proposed Responses to SAM Public Review Comments

X3T10/95-203R0 Date: 4/26/95 Author: C. Binford [SY-95-03]  
Desc: Proposal to handle unconfirmed FCP\_RSP

X3T10/95-204R0 Date: 4/27/95 Author: R. Snively [SY-95-03]  
Desc: Response to Public Review Comments on FCP

X3T10/95-204R2 Date: 4/27/95 Author: R. Snively [SY-95-04]  
Desc: Response to Public Review Comments on FCP

X3T10/95-205R0 Date: 5/3/95 Author: P. McLean [SY-95-03]  
Desc: ATA-3 issues with ATAPI

X3T10/95-206R0 Date: 5/3/95 Author: B. Dallas [SY-95-03]  
Desc: Response to Public Review Comments on CAM

X3T10/95-207R0 Date: 5/8/95 Author: J. Lohmeyer [SY-95-03]  
Desc: Project Proposal for SPI-2 Standard

X3T10/95-207R1 Date: 5/8/95 Author: J. Lohmeyer [SY-95-04]  
Desc: Project Proposal for SPI-2 Standard

X3T10/95-208R0 Date: 5/8/95 Author: E. Gardner [SY-95-03]  
Desc: FCP or DDA Profile use of Disconnect-Reconnect Mode Page

X3T10/95-208R1 Date: 5/8/95 Author: E. Gardner [SY-95-04]  
Desc: FCP or DDA Profile use of Disconnect-Reconnect Mode Page

X3T10/95-209R0 Date: 5/8/95 Author: R. Weber [SY-95-03]  
Desc: Minutes of SPI Futures Study Group - 5/95

X3T10/95-210R0 Date: 5/8/95 Author: R. Weber [SY-95-03]  
Desc: Minutes of SCSI Working Group - 5/95

X3T10/95-210R0 Date: 5/8/95 Author: R. Weber [SY-95-03]  
Desc: Minutes of SCSI Working Group - 5/95

X3T10/95-211R0 Date: 5/8/95 Author: Weber/Lohmeyer [SY-95-03]  
Desc: Minutes of X3T10 Plenary Meeting #9

X3T10/95-212R0 Date: 5/9/95 Author: C. Binford [SY-95-03]  
Desc: Public Review Comment on SCC

X3T10/95-213R0 Date: 5/9/95 Author: B. Ham [SY-95-03]  
 Desc: Project Proposal for Expanded System Physical Configuration (ESPC) Technical Report

X3T10/95-213R1 Date: 5/9/95 Author: B. Ham [SY-95-04]  
 Desc: Project Proposal for Expanded System Physical Configuration (ESPC) Technical Report

X3T10/95-214R0 Date: 5/10/95 Author: Lamers/Milligan [SY-95-03]  
 Desc: Minutes of ATA Working Group - 5/10-11/95

X3T10/95-215R0 Date: 5/11/95 Author: R. Roberts [SY-95-03]  
 Desc: Minutes of MMC Working Group - 5/10/95

X3T10/95-216R0 Date: 5/11/95 Author: D. Allan [SY-95-03]  
 Desc: Report on SFF-8020 Ballot

X3T10/95-217R0 Date: 5/11/95 Author: S. Sicola [SY-95-03]  
 Desc: Fault tolerant configurations for SCSI

X3T10/95-218R0 Date: 5/11/95 Author: G. Frazier [SY-95-03]  
 Desc: New Error Notification Log Page

X3T10/95-219R0 Date: 5/11/95 Author: J. McGrath []  
 Desc: Project Proposal for ATA+PI Standard

X3T10/95-219R1 Date: 5/11/95 Author: J. McGrath [SY-95-03]  
 Desc: Project Proposal for ATA+PI Standard

X3T10/95-219R2 Date: 5/11/95 Author: J. McGrath [sy-95-04]  
 Desc: Project Proposal for ATA+PI Standard

X3T10/95-220R0 Date: 5/13/95 Author: G. Penokie [SY-95-03]  
 Desc: Response to public review comments on SCC

X3T10/95-221R0 Date: 5/13/95 Author: R. Weber [SY-95-03]  
 Desc: Vendor specific mode page codes for tape

X3T10/95-221R1 Date: 5/13/95 Author: R. Weber [SY-95-04]  
 Desc: Vendor specific mode page codes for tape

X3T10/95-222R0 Date: 5/13/95 Author: R. Weber [SY-95-03]  
 Desc: Power condition mode page code

X3T10/95-222R2 Date: 5/13/95 Author: R. Weber [SY-95-04]  
 Desc: Power condition mode page code

X3T10/95-223R0 Date: 5/13/95 Author: R. Roberts [SY-95-03]  
 Desc: MMC Functional Requirements

X3T10/95-224R0 Date: 5/13/95 Author: T. Lappin [SY-95-03]  
 Desc: Report Density Support

X3T10/95-224R5 Date: 7/25/95 Author: T. Lappin [SY-95-04]  
 Desc: Report Density Support

X3T10/95-225R0 Date: 5/13/95 Author: R. Cummings [SY-95-03]  
 Desc: X3T11 Change Control Procedure

X3T10/95-226R0 Date: 5/13/95 Author: E. Oetting [SY-95-03]  
 Desc: Minutes of SMC/SCC Working Group - 5/95

X3T10/95-227R0 Date: 5/13/95 Author: D. Penman [SY-95-04]  
 Desc: Minutes of System Issues Study Group - 5/95

X3T10/95-228R0 Date: 5/13/95 Author: R. Snively [SY-95-03]  
 Desc: Project Proposal for FCP-2 Standard

X3T10/95-228R1 Date: 5/13/95 Author: R. Snively [SY-95-04]  
 Desc: Project Proposal for FCP-2 Standard

X3T10/95-229R0 Date: 5/13/95 Author: R. Snively [SY-95-03]  
 Desc: Proposal for Persistent Reserve

X3T10/95-230R0 Date: 5/13/95 Author: G. Milligan [SY-95-03]  
 Desc: Memorandum of Understanding

X3T10/95-231R0 Date: 5/13/95 Author: G. Milligan [SY-95-03]  
 Desc: TAG Annual Report

X3T10/95-232R0 Date: 5/13/95 Author: J. Elrod [SY-95-03]  
 Desc: Minutes of XOR Study Group - 5/95

X3T10/95-233R0 Date: 5/13/95 Author: G. Scherer [SY-95-03]  
 Desc: Public Review Comment # on FCP (from Emulex)

X3T10/95-234R0 Date: 5/13/95 Author: Scheible/Lamers [SY-95-03]  
 Desc: Project Proposal for SSA-PH1 Standard

X3T10/95-234R1 Date: 5/13/95 Author: Scheible/Lamers [SY-95-04]  
 Desc: Project Proposal for SSA-PH1 Standard

X3T10/95-235R0 Date: 5/13/95 Author: Scheible/Lamers [SY-95-03]  
 Desc: Project Proposal for SSA-PH2 Standard

X3T10/95-235R1 Date: 5/13/95 Author: Scheible/Lamers [SY-95-04]  
 Desc: Project Proposal for SSA-PH2 Standard

X3T10/95-236R0 Date: 5/13/95 Author: Scheible/Lamers [SY-95-03]  
 Desc: Project Proposal for SSA-TL1 Standard

X3T10/95-236R1 Date: 5/13/95 Author: Scheible/Lamers [SY-95-04]

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X3T10/95-325r1

Desc: Project Proposal for SSA-TL1 Standard  
X3T10/95-237R0 Date: 5/13/95 Author: Scheible/Lamers [SY-95-03]  
Desc: Project Proposal for SSA-TL2 Standard  
  
X3T10/95-237R1 Date: 5/13/95 Author: Scheible/Lamers [SY-95-04]  
Desc: Project Proposal for SSA-TL2 Standard  
  
X3T10/95-238R0 Date: 5/13/95 Author: Scheible/Lamers [SY-95-03]  
Desc: Project Proposal for SSA-S2P Standard  
  
X3T10/95-238R1 Date: 5/13/95 Author: Scheible/Lamers [SY-95-04]  
Desc: Project Proposal for SSA-S2P Standard  
  
X3T10/95-239R0 Date: 5/13/95 Author: Scheible/Lamers [SY-95-03]  
Desc: Project Proposal for SSA-S3P Standard  
  
X3T10/95-239R1 Date: 5/13/95 Author: Scheible/Lamers [SY-95-04]  
Desc: Project Proposal for SSA-S3P Standard  
  
X3T10/95-240R0 Date: 5/22/95 Author: J. Lohmeyer [SY-95-03]  
Desc: SCAM Mode Page Proposal  
  
X3T10/95-241R0 Date: 5/22/95 Author: J. Urban [SY-95-03]  
Desc: Public Review Comment #1 on SCC  
  
X3T10/95-242R0 Date: 7/27/95 Author: T. Wicklund [SY-95-03]  
Desc: Public Review Comment #3 on SCC  
  
X3T10/95-243R0 Date: 6/2/95 Author: J. Lohmeyer [SY-95-04]  
Desc: Response to Public Review Comment #1 on CAM  
  
X3T10/95-244R0 Date: 6/2/95 Author: J. Lohmeyer [SY-95-04]  
Desc: Response to Public Review Comment #1 on SAM  
  
X3T10/95-245R0 Date: 6/2/95 Author: J. Lohmeyer [SY-95-04]  
Desc: Response to Public Review Comment #2 on SAM  
  
X3T10/95-246R0 Date: 6/2/95 Author: J. Lohmeyer [SY-95-04]  
Desc: Response to Public Review Comment #3 on SAM  
  
X3T10/95-247R0 Date: 6/2/95 Author: J. Lohmeyer [SY-95-04]  
Desc: Response to Public Review Comment #1 on FCP  
  
X3T10/95-248R0 Date: 6/2/95 Author: J. Lohmeyer [SY-95-04]  
Desc: Response to Public Review Comment #2 on FCP  
  
X3T10/95-249R0 Date: 6/2/95 Author: J. Lohmeyer [SY-95-04]  
Desc: Response to Public Review Comment #3 on FCP  
  
X3T10/95-250R0 Date: 6/2/95 Author: J. Lohmeyer [SY-95-04]  
Desc: Response to Public Review Comment #4 on FCP  
  
X3T10/95-251R0 Date: 6/2/95 Author: J. Lohmeyer [SY-95-04]  
Desc: Response to Public Review Comment #5 on FCP  
  
X3T10/95-252R0 Date: 6/2/95 Author: J. Lohmeyer [SY-95-04]  
Desc: Response to Public Review Comment #6 on FCP  
  
X3T10/95-253R1 Date: 6/2/95 Author: R. Weber [SY-95-04]  
Desc: Proposed REPORT LUNS command  
  
X3T10/95-254R0 Date: 6/2/95 Author: P. McLean [SY-95-04]  
Desc: Proposal for ATA+PI document  
  
X3T10/95-255R0 Date: 6/16/95 Author: R. Roberts [SY-95-04]  
Desc: Minutes of MMC meeting  
  
X3T10/95-256R0 Date: 6/22/95 Author: Lamers/Milligan [SY-95-04]  
Desc: Minutes of ATA Working Group - 6/22-23/95  
  
X3T10/95-257R0 Date: 6/22/95 Author: J. McGrath [SY-95-04]  
Desc: Comments on WD Overlap Proposal  
  
X3T10/95-258R0 Date: 6/22/95 Author: D. Worrell []  
Desc: Overlap Features  
  
X3T10/95-258R1 Date: 7/7/95 Author: P. McLean [SY-95-04]  
Desc: Overlap Features  
  
X3T10/95-259R0 Date: 6/22/95 Author: D. Worrell [SY-95-04]  
Desc: ATA Project Schedule  
  
X3T10/95-260R0 Date: 6/26/95 Author: G. Houlder [SY-95-04]  
Desc: Inadequacy of Number of Blocks in Mode  
Select/Sense  
X3T10/95-261R0 Date: 6/26/95 Author: M. Jander [SY-95-05]  
Desc: Fast-40 with Low Voltage Differential Drivers  
  
X3T10/95-262R0 Date: 7/8/95 Author: L. Sloan [SY-95-04]  
Desc: An Update on Distributed I/O at LLNL  
  
X3T10/95-263R0 Date: 7/10/95 Author: Weber/Lohmeyer [SY-95-04]  
Desc: Minutes of the SPI-2 & ESPC Study Group - 07/95  
  
X3T10/95-264R1 Date: 7/10/95 Author: Weber/Lohmeyer [SY-95-04]  
Desc: Minutes of SCSI Working Group - 07/95  
  
X3T10/95-265R1 Date: 7/10/95 Author: Weber/Lohmeyer [SY-95-04]  
Desc: Minutes of X3T10 Plenary #10



X3T10/95-266R0 Date: 7/10/95 Author: B. Ham [SY-95-04]  
 Desc: Low Voltage Low Power Differential Interface

X3T10/95-267R0 Date: 7/10/95 Author: B. Ham [SY-95-04]  
 Desc: SPI-2 Framework

X3T10/95-268R0 Date: 7/10/95 Author: EIA/TIA-644 [SY-95-04]  
 Desc: Electrical Characteristics of LVDS Signalling

X3T10/95-269R0 Date: 7/10/95 Author: P. Aloisi []  
 Desc: SCSI SPI-2 Low Voltage Differential

X3T10/95-269R1 Date: 7/10/95 Author: P. Aloisi [SY-95-04]  
 Desc: SCSI SPI-2 Low Voltage Differential

X3T10/95-270R0 Date: 7/10/95 Author: P. Aloisi [SY-95-04]  
 Desc: Presentation on SPI-2 LVDS Bus

X3T10/95-271R0 Date: 7/10/95 Author: P. Aloisi [SY-95-04]  
 Desc: Presentation on Skew and Margin for SPI-2

X3T10/95-272R0 Date: 7/13/95 Author: P. Aloisi [SY-95-04]  
 Desc: Power Distribution

X3T10/95-273R0 Date: 7/13/95 Author: S. Sicola [SY-95-05]  
 Desc: Presentation on Fault Tolerant Controller

X3T10/95-274R0 Date: 7/13/95 Author: S. Sicola [SY-95-04]  
 Desc: Minutes of the High Availability Study Group

X3T10/95-275R1 Date: 7/13/95 Author: R. Weber [SY-95-04]  
 Desc: Minutes of the CAM Working Group - 7/95

X3T10/95-276R0 Date: 7/13/95 Author: P. Walford [SY-95-04]  
 Desc: Fibre Channel Use of the IEEE Global Identifier

X3T10/95-277R0 Date: 7/13/95 Author: R. Roberts [SY-95-04]  
 Desc: Response to Public Review #1 comments on SBP

X3T10/95-278R0 Date: 7/13/95 Author: R. Snively [SY-95-04]  
 Desc: Response to Letter Ballot comments on FCP-2 project proposal

X3T10/95-279R0 Date: 7/13/95 Author: D. Pak [SY-95-04]  
 Desc: Liaison Report from P1285 - 7/95

X3T10/95-280R0 Date: 7/13/95 Author: J. Lohmeyer [SY-95-04]  
 Desc: Response to letter ballot comments on EPI and SPI-2 project proposals

X3T10/95-281R0 Date: 7/13/95 Author: G. Milligan [SY-95-04]  
 Desc: Response to letter ballot comments on ATA+PI project proposal

X3T10/95-282R0 Date: 7/13/95 Author: G. Milligan [SY-95-04]  
 Desc: Response to letter ballot comments on formation of a new TC for ATA

X3T10/95-283R0 Date: 7/13/95 Author: K. Hallam [SY-95-04]  
 Desc: Response to letter ballot comments on the SSA project proposals

X3T10/95-284R0 Date: 7/13/95 Author: E. Oetting [SY-95-04]  
 Desc: Minutes of SMC/SCC Working Group Meeting - 7/95

X3T10/95-285R0 Date: 7/13/95 Author: R. Roberts [SY-95-05]  
 Desc: not used

X3T10/95-286R0 Date: 7/13/95 Author: R. Roberts [SY-95-04]  
 Desc: Minutes of MMC Working Group Meeting - 7/95

X3T10/95-287R0 Date: 7/13/95 Author: P. Entzel [SY-95-04]  
 Desc: SSC Table 26 Density Codes

X3T10/95-288R0 Date: 7/13/95 Author: P. Entzel [SY-95-04]  
 Desc: Comments on SSC draft

X3T10/95-289R0 Date: 7/13/95 Author: R. Cummings [SY-95-04]  
 Desc: X3B5 Media Standards

X3T10/95-290R0 Date: 7/13/95 Author: G. Milligan [SY-95-04]  
 Desc: Letter regarding Seagate Patent Position

X3T10/95-291R0 Date: 7/13/95 Author: D. Penman [SY-95-04]  
 Desc: Minutes of Systems Issues Study Group - 7/95

X3T10/95-292R0 Date: 7/13/95 Author: D. Allan [SY-95-04]  
 Desc: Liaison Report from SFF - 7/95

X3T10/95-293R0 Date: 7/18/95 Author: Lamers/Milligan [SY-95-04]  
 Desc: Minutes of ATA Working Group - 7/18-20/95

X3T10/95-294R0 Date: 7/18/95 Author: J. Masiewicz [SY-95-04]  
 Desc: Proposed Set Feature Command Change

X3T10/95-295R0 Date: 7/20/95 Author: B. Ham [SY-95-04]  
 Desc: Active Negation Table

X3T10/95-296R0 Date: 7/20/95 Author: T. Hanan [SY-95-04]  
 Desc: Mode 3 Synchronous DMA Proposal

X3T10/95-297R0 Date: 7/24/95 Author: C. Stevens [SY-95-04]  
 Desc: Presentation on BIOS Boot Specification

X3T10/95-298R0 Date: 7/24/95 Author: D. Penman [SY-95-04]

## Minutes of X3T10 Plenary Meeting #11 in Bedford, NH

X3T10/95-325r1

Desc: Project Proposal for Boot Considerations for Devices Greater Than 8GB

X3T10/95-299R0 Date: 7/24/95 Author: P. Johansson [SY-95-04]  
Desc: Comment on ATA-3 Project Proposal

X3T10/95-300R0 Date: 7/24/95 Author: D. Penman [SY-95-04]  
Desc: Minutes of System Issues Study Group - 7/21/95

X3T10/95-301R0 Date: 7/27/95 Author: Hanan/Worrell [SY-95-04]  
Desc: Presentation on Overlap Operations in ATA

X3T10/95-302R0 Date: 7/27/95 Author: J. McGrath [SY-95-04]  
Desc: Presentation on Overlap Operations in IDE

X3T10/95-303R0 Date: 7/27/95 Author: D. Penman [SY-95-04]  
Desc: Minutes of System Issues Study Group - 3/95

X3T10/95-304R0 Date: 8/3/95 Author: A. Stone [SY-95-05]  
Desc: Log page and parameters for SCSI-3 SSC

X3T10/95-305R0 Date: 8/7/95 Author: R. Roberts [SY-95-05]  
Desc: Minutes of MMC Working Group - 8/2-3/95

X3T10/95-306R0 Date: 8/8/95 Author: P. McLean [SY-95-05]  
Desc: Proposed modifications to Security Mode

X3T10/95-307R0 Date: 8/15/95 Author: B. Ham [SY-95-05]  
Desc: Proposal for SPI-2 Electrical Interface

X3T10/95-308R0 Date: 8/15/95 Author: D. McCall [SY-95-05]  
Desc: Fast 40 Proposal

X3T10/95-309R0 Date: 8/15/95 Author: J. Lohmeyer [SY-95-05]  
Desc: Minutes of SPI-2 LVDS Study Group Meeting - 8/14/95

X3T10/95-310R0 Date: 8/25/95 Author: Lamers/Milligan [SY-95-05]  
Desc: Minutes of ATA Working Group - 8/22-25/95

X3T10/95-311R0 Date: 9/6/95 Author: P. Johansson [SY-95-05]  
Desc: Project Proposal for a New X3 Standard-SCSI-3 Serial Bus Protocol 2 (SBP-2)

X3T10/95-312R0 Date: 9/7/95 Author: S. Sicola [SY-95-05]  
Desc: Proposed Controller Failover Profile

X3T10/95-313R0 Date: 9/7/95 Author: S. Sicola [SY-95-05]  
Desc: High Availability Study Group Report for September, 1995

X3T10/95-314R0 Date: 9/8/95 Author: D. Hagerman [SY-95-05]  
Desc: SCSI-3 High Availability Device Profile (draft)

X3T10/95-315R0 Date: 9/11/95 Author: B. Ham [SY-95-05]  
Desc: Presentation on LVDS preliminary testing

X3T10/95-316R0 Date: 9/11/95 Author: Lamers/Lohmeyer [SY-95-05]  
Desc: Minutes of SPI-2 Working Group

X3T10/95-317R0 Date: 9/11/95 Author: D. McCall [SY-95-05]  
Desc: Fast-40 Proposal to Reduce Cable Impedance

X3T10/95-318R0 Date: 9/11/95 Author: A. Stone [SY-95-05]  
Desc: Proposal for Software Write Protect

X3T10/95-319R0 Date: 9/12/95 Author: Weber/Lohmeyer [SY-95-05]  
Desc: Minutes of SCSI Working Group - September '95

X3T10/95-320R0 Date: 9/12/95 Author: B. Ham [SY-95-05]  
Desc: Proposed working draft Enhanced Physical Interface Technical Report (EPI)

X3T10/95-321R0 Date: 9/13/95 Author: D. Penman [SY-95-05]  
Desc: PC Boot Considerations > 8 GB

X3T10/95-322R0 Date: 9/13/95 Author: R. Snively [SY-95-05]  
Desc: Persistent Reserver Presentation

X3T10/95-323R0 Date: 9/13/95 Author: G. Milligan [SY-95-05]  
Desc: Comments on Information Exceptions Control Page

X3T10/95-324R0 Date: 9/19/95 Author: R. Snively [SY-95-05]  
Desc: Enclosure Services

X3T10/95-325R0 Date: 9/20/95 Author: Weber/Lohmeyer [SY-95-05]  
Desc: Minutes of X3T10 Plenary #

X3T10/95-326R0 Date: 9/20/95 Author: E. Oetting [SY-95-05]  
Desc: Minutes of SSC/SMC Working Group - 9/95

X3T10/95-327R0 Date: 9/20/95 Author: R. Roberts [SY-95-05]  
Desc: Minutes of MMC Working Group - 9/95

X3T10/95-328R0 Date: 9/20/95 Author: Lamers/Milligan [SY-95-05]  
Desc: Minutes of ATA Working Group - 9/19-22/95

X3T10/95-329R0 Date: 9/20/95 Author: D. Colegrove [SY-95-05]  
Desc: ATA Security Command Implementation

X3T10/95-330R0 Date: 9/20/95 Author: P. McLean [SY-95-05]  
Desc: Flowcharts for ATA-3