

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

**Doc. No.:** X3T10/95-343r0

**Date:** November 12, 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 #12  
Palm Springs, CA -- November 9, 1995

---

**Agenda**

1. Opening Remarks
2. Approval of Agenda
3. Attendance and Membership
4. Approval of Minutes - September Meeting Bedford, NH (X3T10/95-325r1)
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 SPI-2 Study Group [Ham/Aloisi]
  - 8.23 High Availability Study Group [Sicola]

\*Operating under the procedures of The American National Standards Institute.

**X3 Secretariat, Information Technology Industry Council (ITI)**

1250 Eye Street NW, Suite 200, Washington, DC 20005-3922

Email: x3sec@itic.nw.dc.us Telephone: 202-737-8888 FAX: 202-638-4922

- 8.24 Boot Considerations Project [Penman]
- 8.25 EPI Study Group [Ham]

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 and Forwarding to 2PR

10. New Business

- 10.1 Resolution of 2PR comments (if any) on FCP
- 10.2 Resolution of 2PR comments (if any) on SAM
- 10.3 Resolution of 2PR comments (if any) on SCC
- 10.4 Actions on Working Group Recommendations
- 10.5 Recommendation to X3 regarding management of an IEEE Organizational Unique Identifier [Johansson]
- 10.6 SAM-2 Project Proposal (95-333) [Monia]

11. ISO

- 11.1 ISO Report [Milligan]
- 11.2 ISO New Business

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]
- 12.6 Report on SCSI Industry Association Meeting

13. Review of Action Items

14. Meeting Schedule

- 14.1 Authorization of Working Group Meetings

15. Adjournment

---

**Results of Meeting**

**1. Opening Remarks**

John Lohmeyer, the X3T10 Chair, called the meeting to order at 1:03 p.m., Thursday November 9, 1995. He thanked Jeff Stai of Western Digital 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 with the following additions and changes:

- 8.24 Boot Considerations Project [Penman]
- 8.25 EPI Study Group [Ham]
- 10.6 SAM-2 Project Proposal (95-333) [Monia]
- 11. ISO
- 11.1 ISO Report [Milligan]
- 11.2 ISO New Business

## 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 12 people from 6 organizations informing them that their membership was in jeopardy due to non-attendance (see 95-039r0) and that their membership would be terminated if they did not attend this meeting. All organizations were represented at this meeting except: Burr-Brown Corp.

This organization was 'terminated' (that is, the principal was changed to observer and the first alternate was dropped). No organizations joined X3T10 at the meeting.

John announced that the X3 Secretariat has instructed him to remove 22 people including the following 9 people that were in his attendance database from X3T10 based on failure to pay the international program fee:

Dal Allan	ENDL
Bill Galloway	Compaq
Ray Kaillio	Harbor Electronics
Gerald Marazas	IBM
Christian Mollard	Bull S.A.
Robbie Shergill	National Semiconductor
Scott Smyers	Sony
Dave Weber	Cirrus Logic
Mark Woithe	Adaptec (Future Domain)

John announced that while several of these people are P or A members, someone from each of the affected organizations had paid the international program fee. Therefore, no organizations were removed entirely from the voting rolls.

The X3T10 membership is now at 52 (\*) organizations down from 53 organizations last time. Enclosure (1) is the list of the people present at the meeting and enclosure (2) is the current X3T10 membership list.

(\*) No one was present from Thomas & Betts at this point in the meeting. A new representative was present later in the meeting (discovered from the sign-in sheet). This meant that for most of the meeting, the total membership was assumed to be 51 organizations.

Gary Stephens made the following motion:

The members of this committee demand that X3 investigate and respond to concerns expressed over the levying of the IPF (International Program Fee). Until such time as such action is taken, the members of this committee shall oppose the removal of the nine people listed above as members for a number of reasons:

- Correspondence on this subject has been continuing for two years with no response from ANSI or X3.
- Only X3 levies the IPF on the basis of participation in American Standards activities and this is an international fee.
- X3T10, X3T11, X3T12 (and pending X3T13) committee members participate in only one international activity.
- Documentation indicating that other standards secretariats levy the fee on the basis of individual participation, not committee participation.

It was further moved that the removal of the nine people listed above as the members of X3T10 be suspended until the listed concerns are addressed.

Skip Jones seconded the motion.

The motion was discussed at length. Very little was said favoring the current fee structure. Claims were made that IEEE collects the fee only on a individual participation basis and then only using an honor system. This lead to charges that X3 is financing IEEE international activities. John suggested that such claims were speculative, at best. Ed Gardner suggested that very little benefit is derived from international participation. Skip Jones suggested that X3T10 end its international participation and thus end payment of the fee.

John noted that he will not honor the requirement of the motion to reinstate the members. He stated that the SD-2 (X3 rules) give him no leeway regarding terminations for non-payment of fees. Despite this, the demands for John to ignore the X3 Secretariat were repeated several times.

The motion passed 39:0:0:12=51.

#### **4. Approval of Minutes - September Meeting Bedford, NH (X3T10/95-325r1)**

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.

John announced that the 1996 Mailing Subscription Fees (for paper mailings) will go up \$60 to \$470 U.S. and \$900 international.

Larry Lamers requested that all documents for the next mailing be in his hands by 10:30 a.m. on Thursday November 16, 1995. Documents received after this time 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. Document X3T10/95-361r0 contains instructions for expeditious delivery of documents to Larry.

In keeping with the X3T10 committee's new efforts for electronic document filing and distribution, Larry requested that electronic copies of all documents, in their native format, be made available to him. The electronic copies can be emailed directly to Larry (at ljlamers@corp.adapttec.com), placed on the SCSI BBS (719-574-0424), or they can be ftp'd to ftp.symbios.com and placed in the /pub/standards/io/incoming directory.

In the latter two cases, please also send an email to Larry (at ljlammers@aol.com) informing him of the exact file name and location of the file.

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 with the line 'subscribe ata' in the message body. To subscribe to the SCSI Reflector, send an electronic message to: 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>. Symbios Logic maintains a World Wide Web page on behalf of X3T10 at <http://www.symbios.com/x3t10>.

The current document register is enclosure (3).

## 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.

Gene Milligan reported the receipt of a draft document from the Compaq attorney regarding the Compaq patent policy. Gene noted that the document is marked attorney-client confidential, so he simply reviewed the contents of the document. Gene described two issues that he is negotiating regarding the Compaq correspondence. One issue was lack of coverage for the security features patents. Also, another clause might be subject to misinterpretation.

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. *Dropped*
- 97) Alan Olsen will review the REPORT DENSITY proposal with QIC. *Dropped*
- 116) Rick Tewell will document the usage of the ODh mode page code in SBC as per the wishes of X3T10 expressed in item 10.6 of the meeting #10 minutes. *Carryover*
- 118) Charles Monia will draft a SAM-2 project proposal. *Complete*
- 119) John Lohmeyer will forward the SBP-2 project proposal to X3 for further consideration. *Complete*
- 120) John Lohmeyer will forward the revised PC Boot Considerations project proposal to X3 for further consideration. *Complete*
- 121) John Lohmeyer will add a working group agenda item to discuss how the SPC document can be brought expeditiously to public review. *Complete*
- 122) Peter Johansson will obtain an IEEE organizationally unique identifier for use in SBP conforming devices. *Complete*

## 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. He noted that the status of several projects changed on Monday of this week and announced the new project numbers assigned.

The recommendation to establish a new Technical Committee for ATA passed 23:0:0:4. The organizational meeting for X3T13 will probably occur in January; a press release will be issued.

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

Ken Hallam reported that the following X3T10.1 meetings were held since the last X3T10 Plenary: September 25, 1995 Denver, CO - Electrical WG; Oct. 30 thru Nov. 1, 1995 Hampshire, UK - General WG; Nov. 1, 1995 Hampshire, UK - Plenary. X3T10.1 has 25 Principle Members, 14 of whom attended Plenary in UK.

X3T10.1 work has been devoted to PH1, TL1, S2P. X3T10.1 received 23 new proposals: 2 PH1 proposals, 14 TL1 proposals, and 7 S2P proposals. Seven proposals were deferred to second generation documents. Ken reported the following change activities: new designs, more initiator participation, incremental experience, and clarification. No votes were taken to forward drafts to letter ballot because of need to: update drafts with proposals for member review, incorporate changes and look for "ripple effect", and prepare updated drafts slated for 11/15 mailing.

Ken announced that planned draft reviews and votes are scheduled for the December meeting. Letter ballots could close in January 96. Letter ballot comments would then be processed at the February meeting. Ken announced that the following second generation (40 MB links, speed negotiation) work has begun: PH2 and TL2.

Ken announced the following long term meeting schedule:

Week	Location	Host
12/11/95	Milpitas, CA	VLSI
2/26/96	Lake Tahoe, CA	Samsung
4/29/96	Burlington, VT	IBM
6/24/96	St. Petersburg Beach, FL	AMP
8/26/96	Ft. Collins, CO	Symbios Logic
10/30/96	San Jose, CA	Adaptec *
12/9/96	Hawaii	IBM *

\* = Tentative locations.

Ken announced the following X3T10.1 approved WG Meetings:

X3T10.1 SSA Working Group - December 11-13, 1995 in Milpitas, CA.

X3T10.1 SSA2 Working Group - January 17-18, 1996 in Havant, UK.

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

John reported that the letter ballot for approval of CAM closes November 17th. Bill Dallas reported that he has received no other communications on CAM.

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

Gene Milligan gave a report on the meeting of the ATA Working Group:

<<< insert Gene's electronic report when received.>>>

Gene Milligan moved that X3T10 accept the recommendations of the ATA Ad Hoc. Larry Lamers seconded the motion. The motion passed unanimously. Larry Lamers took an action item to conduct a letter ballot for forwarding ATA-3 to first public review.

Pete McLean moved that X3T10 authorize the expenditure of up to \$1,200 for inclusion of the ANSI edits for ATA-2 revision 3 (producing ATA-2 revision 3a). Steve Finch seconded the motion. The vote passed 26:0:0:25=51.

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

John reported that SPI is in the process of being published at ANSI. Since the last meeting, the Larry and John have been notified of three errors in SPI. John described the errors in general terms. John described the process by which an amendment correcting SPI will be developed and approved.

Gary Stephens moved that the SPI editor be authorized to prepare an amendment to SPI to correct the errors identified in document X3T10/95-356 to be distributed for letter ballot and that the corrections be forward to the SPI-2 technical editor for incorporation therein. Peter Johansson seconded the motion. The motion passed 26:0:0:25=51.

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

George Penokie moved that X3T10 authorize a letter ballot for forwarding of SIP revision 8 to first public review. Skip Jones seconded the motion. George stated that SIP has been relatively stable for a couple of revisions. There were no dissenting options expressed.

The motion passed 26:0:0:25=51.

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

Bill reported on the results of the CAM-3 Working Group meeting. Minutes of the meeting can be found in document 95-354.

### **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 will close on November 14th. 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 no one attended the SBP comments review meeting, so he assumes that there are no comments on the proposed resolutions for the SBP public review comments.

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

John reported that the second public review on FCP closes on November 28th. John is not aware of any comments received against FCP. Gary Stephens stated that he plans to submit a public review comment.

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

John reported that the second public review on SAM closes on December 12th. John is not aware of any comments received against SAM.

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

Ralph reported that revision 8 was distributed in the last mailing.

Charles Monia moved that the status of SPC be changed from Working Draft to draft standard by entering the "Stabilized State" in accordance with Clause 2.5 of the **X3T10 Proposed Standards Development Policies and Procedures** with the specific proviso that the technical editor include on his list of Accepted Items X3T10/95-229 Persistent Reservations as amended by the working group, X3T10/95-344-345 ASC/ASCQs as amended by the working group, and X3T10/95-240 Device ID VPD when accepted, along with the minutes recording that the proposals X3T10/95-324 Cabinet Services and X3T10/95-349 SCSI Version Proposal are not on the list of Accepted Items. Skip Jones seconded the motion.

Peter Johansson moved that the motion be amended to move Persistent Reservations out of the list of Accepted Items for inclusion in SPC. Gary Stephens seconded the motion to amend. After a brief discussion, the motion to amend failed 2:24:0:25=51.

The original motion passed 27:1:0:24=51.

Speaking to his negative vote, Gene Milligan moved that, in light of the absence of plans for version reporting in the stabilized SPC, clause 1.2 be removed from the **X3T10 Proposed Standards Development Policies and Procedures**. The motion passed 26:2:0:24=51.

Speaking to their negative votes, Gene Milligan and Gary Stephens stated their support for the concept of version reporting.

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

John Lohmeyer reported that no progress has been made on SBC. He described the situation with the current technical editor and called for interested parties to volunteer for this position.

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

Ted Lappin reported that the SSC/SMC working group met earlier (held in the absence of the SMC editor). He noted that the location of the soft write-protect bit was discussed and the bit was left in its current mode page (see SSC revision 5). Several requests for clarifications were also discussed. Ted reported that his next task is SAMinizing the SSC. The minutes of the SSC/SMC meeting can be found in document 95-359.

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

John Lohmeyer reported that the status of SGC is much the same as SBC. He will entertain volunteers to pick up this work.

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

No report was available for the SMC.

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

George Penokie reported that SCC second public review will close on December 12th. George reported that a special joint SCC/RAB meeting will be held Tuesday morning of January X3T10 week to review proposed enhancements to SCC. These proposed enhancements are the outcome of work done in the High Availability Study Group. He encouraged attendance at that meeting by all interested parties.

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

Ron Roberts reported that working group reviewed all the HP write-process commands. The results of that review have been accepted for MMC revision 4.0. MMC revision 4.0 will be ready in December (not in time for the next X3T10 mailing).

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

John Lohmeyer reported that the management review for Fast-20 was held at the OMC meeting this week.



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

Gene Milligan reported on this subject earlier in the meeting (see 8.4).

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

Gene Milligan reported on this subject earlier in the meeting (see 8.4).

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

Paul Aloisi reported on several SPI-2 study group meetings. Minutes of the meetings are available in documents 95-337 and 95-340. The slides used in the status presentation can be found in document 95-362. SPI-2 will have a new draft in the next mailing.

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

Charles Monia reported that the high availability study group meeting was held earlier this week.

**8.24 Boot Considerations Project [Penman]**

Duncan Penman reported that the document is nearly complete and that all known technical comments have been processed. Duncan plans to have a document ready for consideration at the next meeting.

**8.25 EPI Study Group [Ham]**

Bill Ham reported that the EPI study group held its first real meeting on Tuesday. Many useful details were discussed. He expressed the belief that the document will be ready for review in about six months.

**9. Old Business**

**9.1 Clarification of international program fee [Allan]**

John noted that the issue was discussed extensively under the membership topic.

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

Bob Snively moved that X3T10 accept the working group's recommendation to accept 94-236r2. Charles Monia seconded the motion. The motion passed 24:0:0:27=51.

**9.3 Resolution of SCSI-3 SBP (0992-D) Public Review Comments and Forwarding to 2PR**

Ron Roberts and Peter Johansson reported on the OUI changes needed in SBP revision 21. Dick Scheel moved that SBP revision 22 be accepted as the resolution to comments received from first public review and be forward to X3 for further processing to second public review. Peter Johansson seconded the motion. The motion passed 29:0:0:22=51. John Lohmeyer took an action item to forward SBP revision 22 to X3 for processing toward second public review.

**10. New Business**

**10.1 Resolution of 2PR comments (if any) on FCP**

John Lohmeyer reported that no comments have been received from the FCP public review.

**10.2 Resolution of 2PR comments (if any) on SAM**

John Lohmeyer reported that no comments have been received from the SAM public review.

### **10.3 Resolution of 2PR comments (if any) on SCC**

John Lohmeyer reported that no comments have been received from the SCC public review.

### **10.4 Actions on Working Group Recommendations**

Charles Monia moved that X3T10 accept the working group's recommendation to approve 95-351r1 for inclusion in SIP. Peter Johansson seconded the motion. The motion passed 29:0:0:22=51.

George Penokie moved that X3T10 accept the working group's recommendation to approve 95-344 and 95-345 for inclusion in SPC. Charles Monia seconded the motion. The motion passed 31:0:0:20=51.

Bob Snively moved that X3T10 approve 95-229r3 (95-229r2 as revised based on working group comments) for inclusion in the SPC. Charles Monia seconded the motion. Bob presented a review of the changes made as a result of the working group discussion. The motion passed 29:0:0:22=51.

### **10.5 Recommendation to X3 regarding management of an IEEE Organizational Unique Identifier [Johansson]**

John Lohmeyer described the events leading to the need for an OUI for SBP and the IEEE RAC's assignment of one to X3. He had developed a proposal for X3 management of the 24-bit extension identifiers. John moved that X3T10 forward 95-360 to X3. Charles Monia seconded the motion. The motion passed 28:0:0:23=51. John took an action item to forward 95-360 to X3.

### **10.6 SAM-2 Project Proposal (95-333) [Monia]**

John Lohmeyer moved that X3T10 forward 95-333r1 (95-333r0 as revised) to X3 for further processing. Charles Monia seconded the motion. The motion passed 31:0:0:20=51. John took an action item to forward 95-333r1 (the SAM-2 Project Proposal as revised) to X3.

## **11. ISO**

### **11.1 ISO Report [Milligan]**

Gene Milligan, the X3T10 International Representative, gave a brief oral report and provided the following electronic report:

#### **ISO Report 11/95**

JTC 1 has issued twenty one NWI letter ballots concerning X3T10, 11, and 12. The ballots close 19 January. The ballots are:

ISO/IEC JTC 1 N 3693 Pathways & Space for Customer Premises Cabling and Equipment  
 ISO/IEC JTC 1 N 3694 FDDI SMT-2  
 ISO/IEC JTC 1 N 3695 FDDI TP-PMD  
 ISO/IEC JTC 1 N 3696 SPI  
 ISO/IEC JTC 1 N 3697 SBP  
 ISO/IEC JTC 1 N 3698 SAM  
 ISO/IEC JTC 1 N 3699 Fast-20  
 ISO/IEC JTC 1 N 3701 SCC  
 ISO/IEC JTC 1 N 3702 FCP  
 ISO/IEC JTC 1 N 3703 HPPI-SE  
 ISO/IEC JTC 1 N 3704 HPPI-ATM

ISO/IEC JTC 1 N 3705 FC-SW  
 ISO/IEC JTC 1 N 3706 FC-LE  
 ISO/IEC JTC 1 N 3707 FC-FG  
 ISO/IEC JTC 1 N 3708 FC-PH-2  
 ISO/IEC JTC 1 N 3709 FC-SB  
 ISO/IEC JTC 1 N 3710 FC-FP  
 ISO/IEC JTC 1 N 3711 FC-ATM  
 ISO/IEC JTC 1 N 3712 FC-PH-3  
 ISO/IEC JTC 1 N 3713 FC-GS  
 ISO/IEC JTC 1 N 3714 FC-AL

## 11.2 ISO New Business

On behalf of the United States of America and the country for which they stand, Gene Milligan moved that X3T10 recommend that the U.S. Member body vote affirmatively on the following six questions:

- 1) Do you accept the proposal in documents ISO/IEC JTC 1 N 3696 (SPI NWI); N 3697 (SBP NWI); N 3698 (SAM NWI); N 3699 (Fast-20 NWI); N 3701 (SCC NWI); and N3702 (FCP NWI)?
- 2) Do you support the addition to the new work item to the programme of work of the joint technical committee?
- 3) Do you commit yourself to participate in the development of this new work item?
- 4) Are you able to offer a project editor who will dedicate his efforts to the advancement and maintenance of this project?
- 5) Do you have a major contribution or a reference document ready for submittal?
- 6) Will you have such a contribution within ninety days?

Charles Monia seconded the motion. Larry Lamers reminded the committee that only representatives for U.S. domiciled organizations could vote on this and other international standards motions. The motion passed 31:0:0:20=51.

Gene Milligan (the IR) moved that X3T10 action members with operations in foreign countries to lobby France, United Kingdom, Brazil, Italy, Sweden, Denmark, and other JTC 1 countries for support of the new work item projects, in particular, that they will contribute to the development by answering "yes" to question 3. Peter Johansson seconded the motion. The motion passed 31:0:0:20=51.

## 12. Liaison Reports

### 12.1 X3T11 Liaison Report [Cummings]

Roger Cummings provided the following written report:

X3T11 met on October 4, 1995 with 78 people in attendance. Panasonic Technologies and TV/Com International were deleted for failure to attend meetings and/or return letter ballots. Texas Instruments was added as a new member organization. One X3T11 member reported receiving a notice from the Secretariat that he had lost membership because of non-payment of the International Program Fee, but as the Chair had not been informed of this the only action taken was to approve a motion demanding that the Secretariat investigate the situation. The membership of X3T11 is now 61 organizations.

The results of two X3T11 LBs were announced. The Letter Ballot on HIPPI Serial (Rev 1.5) for an OMC compliance review and a first Public Review passed with F45-O02-DNV15, however a new version of the draft will be produced to respond to the comments submitted with the Opposed ballots. The Letter Ballot on the FC Private Loop Direct Attach passed with F45-O00-DNV17 (1 For ballot included comments).

It was reported that the first Public Review of Project 979-D, HIPPI-FC (X3.283-199x), had closed with no comments, but that a few editorial comments had been received from the ANSI editor.

A number of motions were adopted which will change the definition of the optical physical variants in FC-PH-2. The result will be to remove variants which are duplicates of those in FC-PH, and those based on 980 nm VCSEL technology. Informative annexes will be included which contain recommendations of the physical variants to be used in future implementations, and which requests that transceiver manufacturers indicate if their parts are capable of acting as receivers for multiple variant definitions.

A motion to rescind the decision of the August X3T11 Plenary to delay a decision on a connector for FC-PH-3 Copper physical variants beyond October was defeated. It was also decided by consensus to have a single definition of link length, and to include test methods in a Normative Annex, in FC-PH-3.

Technical Editors were solicited for the FC-PH-3 and FC-ATM projects.

The following X3T11 Letter Ballots were authorized:

- 1) Forwarding a Project Proposal for HIPPI Autoconfiguration (HIPPI-AC) to OMC for further processing.
- 2) Forwarding a working dpANS, for the Revised IPI-3 Disk project, for further processing including an OMC review and a first Public Review.
- 3) Forwarding a working dpANS, for the Revised IPI-3 Tape project, for further processing including an OMC review and a first Public Review.
- 4) Forwarding a working dpANS, for the FC-PH-2 project, for further processing including an OMC review and a first Public Review.
- 5) Increasing the minimum launch amplitude for the electrical physical variants in FC-PH-3 to 800 millivolts peak-to peak (from the 600 millivolts peak-to-peak level specified in FC-PH).
- 6) Including in FC-PH-2 that ac coupling shall be required as part of the receiver electrical cable interface specification.
- 7) Forwarding a working dpANS, for the FC-LE project, for further processing including an OMC review and a first Public Review.
- 8) Forwarding a working dpX3TR, for the 10 bit Interface project, for further processing including an OMC review and a first Public Review.

The next meeting of X3T11 is on December 6, 1995 at the Clarion Bay View Hotel, 660 K Street, San Diego, CA 92101. The phone number for the hotel is (800) 766-0234. The cutoff date for reservations is November 3. Note that a meeting fee of \$25 per day will be levied for attendance at the December X3T11 meetings on those not registered in the ANSI/ENDL block at the Clarion Hotel. The fee is necessary because of the exceptional circumstances involved in holding a co-located meeting with a major trade show (Supercomputing '95).

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

Dal Allan provided the following written report on SFF activities:

The VHDCI (Very High Density Cable Interconnects) selected the AMP-proposed design and met to discuss the backend configurations for which AMP had supplied an initial EIA draft. More configurations were added to the list and a number of editorial errors identified. The SCA-2 connector backend has also been documented in initial EIA draft form. A number of additions were made for both the device and host side.

Several suggestions were discussed on how to improve the cable plant for ATA systems, and new cable alternatives will be provided for testing by drive vendors. In another activity, a request for information is being made to all vendors for unitized connectors being developed and in use for the ATA and SCSI markets.

The SFF-8047 and SFF-8048 specifications which provided enhanced ESI capabilities over SFF-8045 and SFF-8046 for FC-AL and SCSI respectively have been withdrawn. The expanded functionality will be provided by SCSI agents as described in the SAF-TE specification and the X3T10 working group recommendations on direction.

Means to provide future attachment of high rpm drives which require higher than 12V for operation will be documented in two SFF Specifications as companions to SFF-8045 and SFF-8046. A mechanical interlock for hot plugging will prevent smoking 12V drives in 36V enclosures. An electrical interlock will prevent providing 36V to an enclosure which contains any 12V drives. Clear labeling on drives and enclosures will also be recommended.

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

Peter Johansson reported that P1394 approval work is almost complete. He also gave a brief description of the 1394 follow-on project (a.k.a. P1394-2).

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

No report was received from P1285. Gene Milligan reported receipt of email from Martin Freeman requesting an electronic comments of Gene's comments for consideration by the ballot resolution committee. Larry Lamers stated that he had received no correspondence regarding his P1285 comments.

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

Pete said that no noteworthy activities had occurred at PCMCIA.

### **12.6 Report on SCSI Industry Association Meeting**

John Lohmeyer reported that the minutes of the 16 October meeting were sent to the SCSI Reflector. A meeting is planned for December 14th hosted by Quantum in Milpitas, CA at the Holiday Inn. A co-located meeting is planned for January 1996. In a straw poll, the committee favored a Thursday morning meeting over a Friday morning meeting: 8:4.

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

- 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.
- 123) Larry Lamers will conduct a letter ballot for forwarding ATA-3 toward first public review.
- 124) John Lohmeyer will forward SBP revision 22 to X3 for processing toward second public review.
- 125) John Lohmeyer will forward 95-360 (the OUI management proposal) to X3.
- 126) John Lohmeyer will forward 95-333r1 (the SAM-2 Project Proposal as amended) to X3.
- 127) Larry Lamers will prepare an amendment for SPI for review by X3T10.
- 128) Larry Lamers will conduct a letter ballot for forwarding SIP revision 8 toward first public review.
- 129) John Lohmeyer will forward the revised X3T10 Policies and Procedures to X3.

## **14. Meeting Schedule**

The next plenary meeting of X3T10 will be January 11, 1996, in Dallas, TX, at the Doubletree Hotel at Park West (214-869-4300), hosted by Quantum Corp. The meeting will begin at 1:00 p.m. on Thursday.

The meeting list for the next plenary week is:

January '96 Meeting Map  
(11/9/95 Version)

Monday 1/8	9	10	11	12	1	2	3	4	5	6	7	8	9	
	+-----+													
	SPI-2 Working Group												(35)	
	+-----+													
	FCLC												(40)	
	+-----+													
	IEEE P1394												(20)	
	+-----+													
Tuesday 1/9	9	10	11	12	1	2	3	4	5	6	7	8		
	+-----+													
	EPI WG				SCSI-3 WG								(40)	
	+-----+													
	CAM-3 WG				MMC WG								(15)	
	+-----+													
	IEEE P1394												(20)	
	+-----+													
	SCC/RAB WG				RAB								(20)	
	+-----+													
Wednesday 1/10	9	10	11	12	1	2	3	4	5	6	7	8		
	+-----+													
	SCSI-3 WG												(40)	
	+-----+													
	MMC Working Group												(20)	
	+-----+													
	SFF Form Factor				SFF/VHDCI WG								(40)	
	+-----+													
	RAB												(??)	
	+-----+													
Thursday 1/11	9	10	11	12	1	2	3	4	5	6	7	8	9	
	+-----+													
	SFF				X3T10 Plenary								(40/70)	
	+-----+													
	SSC/SMC WG												(10)	
	+-----+													
	SCSI IA				???								(40)	
	+-----+													
Friday 1/12	8	9	10	11	12	1	2	3	4	5				
	+-----+													
	SCSI IA												???	(40)
	+-----+													

Meetings marked with == are X3T10-authorized meetings.  
 Meetings marked with -- are authorized by other groups and may change without notice.  
 ??? The SCSI IA meeting day is to be determined by that group.

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)

FCLC: Fibre Channel Loop Community (not an X3 activity)  
 I/F: Interface  
 High Avail.: High Availability  
 LB: Letter Ballot  
 MMC: SCSI-3 Multimedia Commands (CD-ROM)  
 Pl394: 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  
 SCSI IA: SCSI Industry Association (or whatever it will be called)  
 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 12/15	9 am	Milpitas, CA / McGrath
SPI-2 LVDS WG	Mo 2/5/96	9 am	Denver, CO / Lohmeyer
ATA Working Group	Tu 11/28-12/1	9 am	WD in Irvine, CA / Hanan
ATA WG / X3T13	Tu 1/23-26/96	9 am	San Jose, CA / McGrath
MMC Working Group	Tu/We 12/5-7	9 am	Sunnyvale, CA / Philips (*)

(\*) Two days starting on either 12/5 or 12/6, to be determined and announced to the MMC Reflector.

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
SBC and SGC	Thomas Tewell	(415) 459-7978 thomas.tewell@seqadvtech.com
SBP and MMC	Ron Roberts	(916) 677-5714 rkroberts@aol.com
SIP, SCC	George Penokie	(507) 253-5208 gop@rchvmp3.vnet.ibm.com
SMC	Erich Oetting	(303) 673-2178 Erich_Oetting@Stortek.com
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	Dallas, TX	Quantum
Mar 10-14, 1997	San Diego, CA	QLogic
May 5-9, 1997	Natick, MA (near Boston)	Digital
Jul 14-18, 1997	Colorado Springs, CO	Symbios Logic
Sep 8-12, 1997	Nashua, NH	Unitrode
Nov 3-7, 1997	Palm Springs, CA	Western Digital

Skip Jones moved and Paul Aloisi seconded that the 1997 meeting sites and hosts be approved as listed above. (The 1996 meetings and 1997 dates were previously approved.) The motion passed 24:4:1:22=51.

#### 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.



Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

Paul Aloisi moved that X3T10 authorize the X3T10-related meetings and events in the list above. Skip Jones

**15.**

The meeting was adjourned at 6:04 p.m. on Thursday November 9, 1995.

Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

Meeting Attendees -- Enclosure (1)

```

-----
Mr. Rick Heidick      A  3M Company                rdheidick@mmm.com

Mr. Lawrence J. Lamers A# Adaptec, Inc.           ljlamers@aol.com
Mr. Edward Fong       P  Amdahl Corp.              esf10@amail.amdahl.com

Mr. Michael Wingard   P  Amphenol Interconnect     mikwingard@aol.com
Mr. Ron Roberts       A  Apple Computer            rkroberts@aol.com

Jr.
Mr. Joe Chen          P  Cirrus Logic Inc.         chen@cirrus.com

Mr. Peter Johansson   P  Congruent Software, Inc.   pjohansson@aol.com
Mr. Marc A. Noblitt   A# Conner Peripherals       marc.noblitt@conner.com
Mr. Louis Grantham    P  Dallas Semiconductor       grantham@dalsemi.com
Mr. Greg McSorley     V  Data General Corp.         greg_mcsorley@dgc.ceo.dg.com

Mr. Charles Monia     P  Digital Equipment Corp.    monia@shr.dec.com
Mr. William Dallas    A# Digital Equipment Corp.   dallas@wasted.enet.dec.com
Mr. Robert Reisch     P  Eastman Kodak Co.          reisch@sector.kodak.com
Mr. I. Dal Allan      T  ENDL                       2501752@mcimail.com
Mr. Ralph O. Weber    P  ENDL Associate             roweber@acm.org
Mr. Edward Lappin     P  Exabyte Corp.              tedl@exabyte.com
Mr. Gary R. Stephens  P  FSI Consulting Services    6363897@mcimail.com
Mr. Andy Chen         A# Fujitsu Computer Prods    achen@fcpa.fujitsu.com
                        Amer

Mr. Stephen Holmstead P  Hewlett Packard Co.         stephen@mail.boi.hp.com
Mr. Wanli Tseng        V  Hewlett Packard Co.         wtseng@ppg01.sc.hp.com
Mr. Anthony Yang       A# Hitachi America Ltd.      yang_a@halsp.hitachi.com
Mr. Zane Daggett       A# Hitachi Cable             74354.2576@compuserve.com
                        Manchester, Inc

Mr. Thomas J. Kulesza A  Honda Connectors           gop@rchvmp3.vnet.ibm.com
Mr. George Penokie     P  IBM Corp.                   colegrove@vnet.ibm.com
Mr. Dan Colegrove      A# IBM Corp.                   penman@netcom.com
Mr. Duncan Penman      P  IIX Consulting              p.lavarre@ieee.org
Mr. Pat LaVarre        A# Iomega Corp.               ljsloan@llnl.gov
Mr. Lansing Sloan      V  Lawrence Livermore Nat'l    Lab

Mr. Dean Wallace       P  Linfinity Micro             75671.3443@compuserve.com
Mr. Pete McLean        P  Maxtor Corp.                pete_mclean@maxtor.com
Mr. Jay Neer           A  Molex Inc.                   jneer@molex.com
Mr. Jack Chen          A# Oak Technology, Inc.       jackc@oaktech.com
Mr. Edward A. Gardner  V  Ophidian Designs           gardner@acm.org
Mr. Skip Jones         P  QLogic Corp.                sk_jones@qlc.com
Mr. Mark Evans         A  Quantum Corp.               mevans@qntm.com
Mr. Gene Milligan     P  Seagate Technology          Gene_Milligan@notes.seagate.com

Mr. Stephen G. Finch   P  Silicon Systems, Inc.       steve.finch@tus.ssil.com
Mr. Dick Scheel        A# Sony                       dicks@lsi.sel.sony.com
Mr. Robert N. Snively  P  Sun Microsystems Computer    bob.snively@eng.sun.com
                        Co

Mr. John Lohmeyer      P  Symbios Logic Inc.          john.lohmeyer@symbios.com
Mr. Patrick Mercer     P  SyQuest Technology, Inc.     patrick.mercer@syquest.com
Mr. Steven Walker      P  Thomas & Betts              walkertnb@aol.com
Mr. Tokayuki Totani    O  Toshiba America             ttotani@ataisdpc.geis.com
Mr. Kenneth J. Hallam  P  UNISYS Corporation          ken.hallam@mv.unisys.com
Mr. Paul D. Aloisi     P  Unitrode Integrated         Aloisi@uicc.com
                        Circuits

Mr. Francesco Liburdi  O  Wearnsi Hollingsworth
Mr. Jeff Stai          P  Western Digital             stai@dt.wdc.com
                        Corporation

```

Mr. Tom Hanan	A# Western Digital Corporation	hanan_t@a1.wdc.com
Mr. Devon Worrell	A# Western Digital Corporation	worrell@dt.wdc.com
Mr. Tak Asami	A Western Digital Corporation	asami@dt.wdc.com
Mr. Doug Piper	P Woven Electronics	549.9900@mcimail.com
Mr. Arnold Limjoco	O Yamaichi Electronics	6371175@mcimail.com
Mr. Don Johnson	V Zitel Corporation	djohnson@zitel.com

57 People Present

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

## Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

X3T10/95-343r0

Nov 12, 1995 - X3T10 Attendance Database - Enclosure (2)

Mr. Alan R. Olson (P)  
3M Company  
Bldg. 236-GN-06  
3M Center  
St. Paul, MN 55144-1000  
Phone: (612) 736-4821  
FAX: (612) 737-2801  
Email: arolson@mmm.com

Mr. Rick Heidick (A)  
3M Company  
6801 River Place Blvd.  
Austin, TX 78726-9000  
Phone: (512) 984-6832  
FAX: (512) 984-2184  
Email: rdheidick@mmm.com

Mr. Norm Harris (P)  
Adaptec, Inc.  
691 S. Milpitas Blvd.  
Milpitas, CA 95035  
Phone: (408) 945-8600 x2230  
FAX: (408) 957-7145  
Email: nharris@eng.adaptec.com

Mr. Richard Kalish (A)  
Adaptec, Inc.  
691 S. Milpitas Blvd. MS50-4  
Milpitas, CA 95035  
Phone: (408) 957-7169  
FAX: (408) 957-7295  
Email: rkalish@aol.com

Mr. Lawrence J. Lamers (A#)  
Adaptec, Inc.  
691 S. Milpitas Blvd.  
Milpitas, CA 95035  
Phone: (408) 957-7817  
FAX: (408) 957-7193  
Email: ljlammers@aol.com

Mr. Kevin Calvert (O)  
Adaptec, Inc.  
2801 McGaw Ave.  
Irvine, CA 92714  
Phone: (714) 253-0522  
FAX: (714) 253-0913  
Email: kevinc@fdc.mhs.comuserve.com

Mr. Erik Falk (O)  
ADIC  
POB 2996  
Redmond, WA 98073-2996  
Phone: (206) 881-8004  
FAX: (206) 881-2296  
Email:

Mr. Ron Apt (P)  
Advanced Micro Devices  
One AMD Place MS 59  
P.O. Box 3453  
Sunnyvale, CA 94088-3453  
Phone: (408) 749-2578  
FAX: (408) 774-8449  
Email: Ronald.Apt@amd.com

Mr. Kevin James (A)  
Advanced Micro Devices  
One AMD Place, M/S 59  
P.O. Box 3453  
Sunnyvale, CA 94088-3453  
Phone: (408) 749-2523  
FAX: (408) 774-8449  
Email: Kevin\_James@amd.com

Mr. Fernando L. Podio (L)  
AIMM C21 Chair  
NIST  
Bldg. 225, Room A61  
Gaithersburg, MD 20899  
Phone: (301) 975-2947  
FAX: (301) 216-1369  
Email: fernando@pegasus.ncsl.nist.gov

Mr. Edward Fong (P)  
Amdahl Corp.  
1250 E. Arques Ave. MS 193  
Sunnyvale, CA 94088-3470  
Phone: (408) 944-3780  
FAX: (408) 943-6620  
Email: esf10@aol.com

Mr. Peter Haas (A)  
Amdahl Corp.  
1250 E Arques Avenue, MS 312  
Sunnyvale, CA 94088-3470  
Phone: (408) 944-5119  
FAX: (408) 733-2377  
Email:

Mr. Jerrie L. Allen (O)  
Amdahl Corp.  
1250 E Arques Ave. MS 312  
POB 3470  
Sunnyvale, CA 94088-3470  
Phone: (408) 944-3712  
FAX: (408) 943-6620  
Email: Jerrie.Allen@cccmvs.amdahl.com

Mr. Charles Brill (P)  
AMP, Inc.  
Mail Stop 210-20  
P. O. Box 3608  
Harrisburg, PA 17105  
Phone: (717) 558-6198  
FAX: (717) 558-6179  
Email: cebrill@amp.com

Mr. Bob Whiteman (A)  
AMP, Inc.  
P.O. Box 3608 M/S 26-17  
Harrisburg, PA 17105  
Phone: (717) 780-7481  
FAX: (717) 780-7375  
Email: whiteman@cup.portal.com

Mr. Bob Atkinson (O)  
AMP, Inc.  
PO Box 3608  
Harrisburg, PA 17105  
Phone: (717) 780-4274  
FAX: (717) 780-4113  
Email: rdatkins@amp.com

Mr. Geoff Zech (O)  
AMP, Inc.  
449 Eisenhower Blvd.  
Harrisburg, PA 17111  
Phone: (717) 780-6572  
FAX: (717) 780-4508  
Email: ghzech@amp.com

Mr. Michael Wingard (P)  
Amphenol Interconnect  
20 Valley St.  
Endicott, NY 13760  
Phone: (607) 786-4241  
FAX: (607) 786-4311  
Email: mikwingard@aol.com

Mr. Bill Mable (A)  
Amphenol Interconnect  
20 Valley St.  
Endicott, NY 13760  
Phone: (607) 786-4236  
FAX: (607) 786-4311  
Email:

Mr. Carl Booth (O)  
Amphenol/Spectra-Strip  
720 Sherman Ave.  
Hamden, CT 06514  
Phone: (203) 287-7455  
FAX: (203) 281-5872  
Email: 7480559@mcimail.com

Mr. Jan V. Dedek (P)  
Ancot Corp.  
115 Constitution Dr.  
Menlo Park, CA 94025  
Phone: (415) 322-5322  
FAX: (415) 322-0455  
Email: dedek@ancot.com

Mr. Gary Porter (A)  
Ancot Corp.  
115 Constitution Dr.  
Menlo Park, CA 94025  
Phone: (415) 322-5322  
FAX: (415) 322-0455  
Email: garyp@ancot.com

Mr. Dennis Pak (P)  
Apple Computer  
3535 Monroe St., MS 69-G  
Santa Clara, CA 95051  
Phone: (408) 974-4874  
FAX: (408) 974-2898  
Email: dennis.pak@applelink.apple.com

Mr. Mike Eneboe (A#)  
Apple Computer  
1 Infinite Loop, MS:60-IO  
Cupertino, CA 95014  
Phone: (408) 974-0615  
FAX: (408) 974-6615  
Email: Mike\_Eneboe@quickmail.apple.com

Mr. Ron Roberts (A)  
Apple Computer  
3535 Monroe St. MS:69-G  
Santa Clara, CA 95051  
Phone: (916) 677-5714  
FAX: (916) 677-1218  
Email: rkroberts@aol.com

Mr. Joe Lawlor (O)  
AT&T  
1100 E. Warrenville Rd.  
Rm 2A-429  
Naperville, IL 60566  
Phone: (708) 979-0133  
FAX: (708) 979-0291  
Email:

Mr. Douglas Wagner (O)  
Berg Electronics  
472 Delwood Ct.  
Newbury Park, CA 91320-4819  
Phone: (805) 498-0325  
FAX: (805) 498-0325  
Email:

Mr. Dennis R. Haynes (O)  
Burr-Brown Corp.  
Mail Stop #122  
P.O. Box 11400  
Tucson, AZ 85734  
Phone: (602) 746-7262  
FAX: (602) 746-7401  
Email: haynes\_dennis@bbrown.com

Mr. Clifford E. Strang Jr. (P)  
BusLogic  
4151 Burton Dr.  
Santa Clara, CA 95054  
Phone: (408) 565-6940  
FAX: (408) 970-0941  
Email: skip@buslogic.com

Mr. Steven Ramberg (A)  
BusLogic  
4151 Burton Dr.  
Santa Clara, CA 95054  
Phone: (408) 492-9090  
FAX: (408) 490-0941  
Email: stever@buslogic.com

Mr. Bob Gannon (O)

Mr. Richard Wagner (O)

Mr. Gerry Johnsen (P)

C&M Corp.  
PO Box 348  
51 South Walnut St.  
Wauregan, CT 06387  
Phone: (203) 774-4812  
FAX: (203) 774-7330  
Email: bobg848740@aol.com

Mr. Raymond Gilson (A)  
Ciprico Inc.  
2800 Campus Drive  
Suite 60  
Plymouth, MN 55441  
Phone: (612) 551-4047  
FAX: (612) 551-4002  
Email: rwg@ciprico.com

Mr. Joe Chen (P)  
Cirrus Logic Inc.  
3100 W. Warren Ave.  
Fremont, CA 94538  
Phone: (510) 226-2101  
FAX: (510) 226-2170  
Email: chen@cirrus.com

Mr. Florey Lin (A#)  
Cirrus Logic Inc.  
3100 W. Warren Ave.  
Fremont, CA 94538  
Phone: (510) 226-2100 x3774  
FAX: (510) 226-2370  
Email: florey@cirrus.com

Mr. George Su (A)  
CMD Technology  
1 Vanderbilt  
Irvine, CA 92718  
Phone: (714) 454-0800  
FAX: (714) 455-1656  
Email: gsu@cmd.com

Mr. Paul Entzel (O)  
Conner  
1650 Sunflower Ave.  
Costa Mesa, CA 92626  
Phone: (714) 966-2204  
FAX: (714) 966-5577  
Email: paul.entzel@conner.com

Mr. Marc A. Noblitt (A#)  
Conner Peripherals  
2400 Trade Centre  
Longmont, CO 80503  
Phone: (303) 682-8408  
FAX: (303) 682-8787  
Email: marc.noblitt@conner.com

Mr. Michael Smith (A)  
Dallas Semiconductor  
4401 S. Beltwood Pkwy  
Dallas, TX 75244  
Phone: (214) 450-0457  
FAX: (214) 450-3715  
Email: msmith@dalsemi.com

Mr. Douglas Hagerman (A#)  
Digital Equipment Corp.  
SHR3-2/W3  
334 South Street  
Shrewsbury, MA 01545  
Phone: (508) 841-2145  
FAX: (508) 841-6100  
Email: hagerman@starch.enet.dec.com

Mr. Dave Race (O)  
Distributed Processing Tech.  
140 Candace Dr.  
Maitland, FL 32751  
Phone: (407) 830-5522 x227  
FAX: (407) 260-5366  
Email: Race@dpt.com

Mr. Rick Bohn (A)

Cable Design Technologies  
28 Sword Street  
Auburn, MA 01501  
Phone: (508) 791-3161  
FAX: (508) 798-8353  
Email:

Mr. Ian Morrell (P)  
Circuit Assembly Corp.  
18 Thomas St.  
Irvine, CA 92718-2703  
Phone: (714) 855-7887  
FAX: (714) 855-4298  
Email: crctassmb@aol.com

Mr. Dhiru N. Desai (A#)  
Cirrus Logic Inc.  
3100 W. Warren Ave.  
Fremont, CA 94538  
Phone: (510) 226-2144  
FAX: (510) 226-2370  
Email: ddesai@cirrus.com

Mr. Nicos Syrimis (A#)  
Cirrus Logic Inc.  
3100 W. Fremont Ave.  
Fremont, CA 94538  
Phone: (510) 226-2153  
FAX: (510) 226-2170  
Email: nicos@cirrus.com

Mr. Roger Wang (A#)  
CMD Technology  
1 Vanderbilt  
Irvine, CA 92718  
Phone: (714) 454-0800  
FAX: (714) 455-1656  
Email:

Mr. Michael Bryan (P)  
Conner Peripherals  
2400 Trade Centre  
Longmont, CO 80503  
Phone: (303) 682-8407  
FAX: (303) 682-8787  
Email: Mike.Bryan@conner.com

Mr. Joseph Wach (A)  
Conner Peripherals  
2400 Trade Centre  
Longmont, CO 80503  
Phone: (303) 682-8387  
FAX: (303) 682-8787  
Email: Joe.Wach@conner.com

Mr. Charles Monia (P)  
Digital Equipment Corp.  
SHR3-2/W04  
334 South Street  
Shrewsbury, MA 01545  
Phone: (508) 841-6757  
FAX: (508) 841-6100  
Email: monia@shr.dec.com

Dr. William Ham (A#)  
Digital Equipment Corp.  
SHR3-2/W04  
334 South Street  
Shrewsbury, MA 01545  
Phone: (508) 841-2629  
FAX: (508) 841-5266  
Email: ham@subsys.enet.dec.com

Mr. Tom Treadway (O)  
Distributed Processing Tech.  
140 Candace Dr.  
Maitland, FL 32751  
Phone: (407) 830-5522  
FAX: (407) 260-5366  
Email: Treadway@dpt.com

Mr. James D. Converse (XO)

Ciprico Inc.  
2800 Campus Dr. Suite 60  
Plymouth, MN 55441  
Phone: (612) 551-4000  
FAX: (612) 551-4002  
Email: gerry@ciprico.com

Mr. Dennis Lang (A)  
Circuit Assembly Corp.  
18 Thomas St.  
Irvine, CA 92718-2703  
Phone: (714) 855-7887  
FAX: (714) 855-4298  
Email: crctassmb@aol.com

Mr. John Geldman (A)  
Cirrus Logic Inc.  
3100 W. Warren Ave.  
Fremont, CA 94538  
Phone: (510) 249-4953  
FAX: (510) 249-4940  
Email: johng@cirrus.com

Mr. Edward Haske (P)  
CMD Technology  
1 Vanderbilt  
Irvine, CA 92718  
Phone: (714) 454-0800  
FAX: (714) 455-1656  
Email:

Mr. Peter Johansson (P)  
Congruent Software, Inc.  
3998 Whittle Ave.  
Oakland, CA 94602  
Phone: (510) 531-5472  
FAX: (510) 531-2942  
Email: pjohansson@aol.com

Mr. Timothy Feldman (A#)  
Conner Peripherals  
2400 Trade Centre  
Longmont, CO 80503  
Phone: (303) 682-8329  
FAX: (303) 682-8787  
Email: Tim.Feldman@conner.com

Mr. Louis Grantham (P)  
Dallas Semiconductor  
4401 S. Beltwood Pkwy  
Dallas, TX 75244-3292  
Phone: (214) 450-8110  
FAX: (214) 450-3715  
Email: grantham@dalsemi.com

Mr. William Dallas (A#)  
Digital Equipment Corp.  
ZK03-3/T79  
110 Spit Brook Road  
Nashua, NH 03062-2698  
Phone: (603) 881-2508  
FAX: (603) 881-2257  
Email: dallas@wasted.enet.dec.com

Mr. Stephen J. Sicola (O)  
Digital Equipment Corp.  
301 Rockrimmon Blvd. So.  
Colorado Springs, CO 80132  
Phone: (719) 548-2268  
FAX: (719) 548-2541  
Email: sicola@peaks.dec.com

Mr. Robert Reisch (P)  
Eastman Kodak Co.  
460 Buffalo Road  
Rochester, NY 14652-3816  
Phone: (716) 588-0573  
FAX: (716) 588-2624  
Email: reisch@sector.kodak.com

Mr. Ralph O. Weber (P)

## Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

X3T10/95-343r0

Eastman Kodak Co.  
460 Buffalo Road  
Rochester, NY 14652-3816  
Phone: (716) 722-0997  
FAX: (716) 588-2624  
Email: bohn@sector.kodak.com

Mr. Edward Lappin (P)  
Exabyte Corp.  
Mail Stop 7W1  
1685 38th Street  
Boulder, CO 80301  
Phone: (303) 417-7718  
FAX: (303) 417-7793  
Email: tedl@exabyte.com

Mr. Mike Chenery (A#)  
Fujitsu  
2904 Orchard Pkwy.  
San Jose, CA 95134-2009  
Phone: (408) 894-3627  
FAX: (408) 894-3904  
Email: mchenery@fcpa.fujitsu.com

Mr. Kevin R. Pokorney (A)  
Fujitsu Computer Products, Am  
2402 Clover Basin Drive  
Longmont, CO 80503  
Phone: (303) 682-6649  
FAX: (303) 682-6401  
Email: pokorney@intellistor.com

Mr. Stephen Holmstead (P)  
Hewlett Packard Co.  
MS 470  
11413 Chinden Blvd.  
Boise, ID 83714  
Phone: (208) 396-4739  
FAX: (208) 396-6858  
Email: stephen@mail.boi.hp.com

Mr. Donald C. Loughry (XO)  
Hewlett Packard Co.  
M/S 43UC X3 Vice Chair  
19420 Homestead Rd.  
Cupertino, CA 95014  
Phone: (408) 447-2454  
FAX: (408) 447-2247  
Email: don\_loughry@hp6600.desk.hp.com

Mr. Ruben Yomtoubian (A#)  
Hitachi  
3101 Tasman  
Santa Clara, CA 95054  
Phone: (408) 986-9770 x467  
FAX: (408) 986-1821  
Email: r\_yomtoubian@hitachi.com

Mr. Paul Boulay (A#)  
Hitachi Computer Products  
3101 Tasman Drive  
Santa Clara, CA 95054  
Phone: (408) 986-9770 x205  
FAX: (408) 986-1821  
Email: p\_boulay@hitachi.com

Mr. Danny Yeung (A)  
Hitachi Micro Systems, Inc.  
179 East Tasman Dr.  
San Jose, CA 95134  
Phone: (408) 922-4144  
FAX: (408) 954-8507  
Email:

Mr. George Penokie (P)  
IBM Corp.  
2B7/114-2  
37st Highway 52 N.  
Rochester, MN 55901-7829  
Phone: (507) 253-5208  
FAX: (507) 253-2432  
Email: gop@rchvmp3.vnet.ibm.com

Mr. Michael A. Brewer (O)

Eastman Kodak Co.  
Corp. Standards X3 Chair  
343 State Street  
Rochester, NY 14650  
Phone: (716) 781-9091  
FAX: (716) 724-9023  
Email: jdc@kodak.com

Mr. David Andreatta (A)  
Exabyte Corp.  
Mail Stop 752  
1685 38th Street  
Boulder, CO 80301  
Phone: (303) 447-7966  
FAX: (303) 442-5146  
Email:

Mr. Andy Chen (A#)  
Fujitsu Computer Prods Amer  
2904 Orchard Pkwy.  
San Jose, CA 95134-2009  
Phone: (408) 894-3840  
FAX: (408) 894-3748  
Email: achen@fcpa.fujitsu.com

Mr. Tim Norman (A#)  
Fujitsu Microelectronics/ECD  
3545 North First Street  
San Jose, CA 95134-1804  
Phone: (408) 922-8928  
FAX: (408) 428-0640  
Email:

Mr. Kurt Chan (A)  
Hewlett Packard Co.  
8000 Foothills Blvd MS 5601  
Roseville, CA 95747-5601  
Phone: (916) 785-5621  
FAX: (916) 785-2875  
Email: kc@core.rose.hp.com

Mr. Pat Edsall (O)  
Hewlett Packard Co.  
11413 Chinden Blvd.  
Boise, ID 83714  
Phone: (208) 396-4804  
FAX: (208) 396-6858  
Email: edsall@hpdmd48.boi.hp.com

Mr. Anthony Yang (A#)  
Hitachi America Ltd.  
3101 Tasman Drive  
Santa Clara, CA 95054  
Phone: (408) 653-0315  
FAX: (408) 653-0376  
Email: yang\_a@halp.hitachi.com

Ms. Nancy Cheng (A#)  
Hitachi Computer Products  
3101 Tasman Dr.  
Santa Clara, CA 94054  
Phone: (408) 986-9770  
FAX:  
Email: n\_cheng@hitachi.com

Mr. David McFadden (P)  
Honda Connectors  
960 Corporate Woods Parkway  
Vernon Hills, IL 60061  
Phone: (708) 913-9566  
FAX: (708) 913-9587  
Email:

Mr. Dan Colegrove (A#)  
IBM Corp.  
Dept 805/012-2  
5600 Cottle Rd.  
San Jose, CA 95193  
Phone: (408) 256-1978  
FAX: (408) 256-1044  
Email: colegrove@vnet.ibm.com

Mr. Giles Frazier (O)

ENDL Associate  
13 Century Road  
Nashua, NH 03060-1187  
Phone: (603) 883-9274  
FAX: (603) 594-0647  
Email: roweber@acm.org

Mr. Gary R. Stephens (P)  
FSI Consulting Services  
1825 N. Norton  
Tucson, AZ 85719  
Phone: (520) 321-1725  
FAX: (520) 321-1725  
Email: 6363897@mcimail.com

Mr. Robert Liu (P)  
Fujitsu Computer Products, Am  
2904 Orchard Pkwy.  
San Jose, CA 95134  
Phone: (408) 894-3790  
FAX: (408) 894-3748  
Email: rliu@fcpa.fujitsu.com

Mr. Steve Caron (O)  
Furukawa Electric  
200 Westpark Dr. Suite 190  
Peachtree City, GA 30269  
Phone: (404) 487-1234  
FAX: (404) 487-9910  
Email:

Mr. J. R. Sims (A#)  
Hewlett Packard Co.  
800 S. Taft Ave.  
Loveland, CO 80537  
Phone: (970) 635-6774  
FAX: (970) 635-6610  
Email: robsims@depeche.lvid.hp.com

Mr. Bill Hutchison (O)  
Hewlett Packard Co.  
P.O. Box 15  
Boise, ID 83707-0015  
Phone: (208) 396-3369  
FAX: (208) 396-5117  
Email: hutch@boi.hp.com

Mr. Zane Daggett (A#)  
Hitachi Cable Manchester, Inc  
900 Holt Ave.  
Manchester, NH 03109  
Phone: (603) 669-4347 x236  
FAX: (603) 669-9621  
Email: 74354.2576@compuserve.com

Mr. S. Nadershahi (P)  
Hitachi Micro Systems, Inc.  
179 Tasman Dr.  
San Jose, CA 95134  
Phone: (408) 456-2006  
FAX: (408) 433-0223  
Email: nnadersh@hitachi.com

Mr. Thomas J. Kulesza (A)  
Honda Connectors  
960 Corporate Woods Parkway  
Vernon Hill, IL 60061  
Phone: (708) 913-9566  
FAX: (708) 913-9587  
Email:

Mr. John P. Scheible (A)  
IBM Corp.  
Bldg 815 MS 4051  
11400 Burnett Rd.  
Austin, TX 78758  
Phone: (512) 823-8208  
FAX: (512) 823-0758  
Email: Scheible@vnet.ibm.com

Mr. Duncan Penman (P)

Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

X3T10/95-343r0

IBM Corp.  
74m/031-1  
9000 S. Rita Rd.  
Tucson, AZ 85744  
Phone: (520) 799-6984  
FAX:  
Email: mabrewer@vnet.ibm.com

IBM Corp.  
11400 Burnet Rd.  
Austin, TX 78758  
Phone: (512) 838-1802  
FAX: (512) 838-1852  
Email: gfrazier@ausvm6.vnet.ibm.com

IIX Consulting  
1045 Rubis Dr.  
Sunnyvale, CA 94087  
Phone: (408) 730-2565  
FAX: (408) 730-5527  
Email: penman@netcom.com

Mr. David Lawson (O)  
Interphase Corp.  
13800 Senlac  
Dallas, TX 75234-8823  
Phone: (214) 919-9000  
FAX: (214) 919-9200  
Email: lawson@iphase.com

Mr. Geoffrey Barton (P)  
Iomega Corp.  
1821 West 4000 South  
Roy, UT 84067  
Phone: (801) 778-3655  
FAX: (801) 778-4667  
Email: glbarton@iomega.com

Mr. Paul Jackson (A)  
Iomega Corp.  
1821 W. Iomega Way  
Roy, Utah 84067  
Phone: (801) 778-3674  
FAX: (801) 778-4667  
Email:

Mr. Pat LaVarre (A#)  
Iomega Corp.  
1821 West Iomega Way  
Roy, UT 84067  
Phone: (801) 778-4402  
FAX: (801) 778-4667  
Email: p.lavarre@ieee.org

Ms. Katrina Gray (L)  
ITI (X3 Secretariat)  
1250 Eye St. NW  
Suite 200  
Washington, DC 20005-3922  
Phone: (202) 626-5741  
FAX: (202) 638-4922  
Email: kgray@itic.nw.dc.us

Mr. David H. Shaff (O)  
JAE  
2857 NE 26 Street  
Ft. Lauderdale, FL 33305  
Phone: (305) 563-3484  
FAX: (305) 563-3507  
Email:

Mr. David J. Fox (O)  
JAE Electronics  
142 Technology Dr. #100  
Irvine, CA 92718-2401  
Phone: (714) 753-2600  
FAX: (714) 753-2699  
Email:

Mr. Richard Frobose (O)  
Lawrence Livermore Nat'l Lab  
7000 East Ave. MS:L-60  
Livermore, CA 94550-9900  
Phone:  
FAX:  
Email:

Mr. Dean Wallace (P)  
Linfinity Micro  
11861 Western Ave.  
Garden Grove, CA 92641  
Phone: (714) 898-8121  
FAX: (714) 893-2570  
Email: 75671.3443@compuserve.com

Mr. Shufan Chan (A)  
Linfinity Micro  
11861 Western Ave.  
Garden Grove, CA 92641  
Phone: (714) 898-8121  
FAX: (714) 893-2570  
Email:

Mr. Robert Bellino (P)  
Madison Cable Corp.  
125 Goddard Memorial Dr.  
Worcester, MA 01603  
Phone: (508) 752-7320  
FAX: (508) 752-4230  
Email:

Mr. Chuck Grant (A)  
Madison Cable Corp.  
125 Goddard Memorial Drive  
Worcester, MA 01603  
Phone: (508) 752-2884  
FAX: (508) 752-4230  
Email:

charles\_grant@madisonusa.ccmil.comcompuserve.com

Mr. Ron Crouch (O)  
Madison Cable Corp.  
125 Goddard Memorial Drive  
Worcester, MA 01603  
Phone: (508) 752-2884  
FAX: (508) 752-4230  
Email:

Ms. Donna Pope (O)  
Maxoptix Corp.  
2520 Junction Ave.  
San Jose, CA 95134  
Phone: (408) 954-9700 x315  
FAX: (408) 954-9711  
Email: 6471084@mcimail.com

Mr. Pete McLean (P)  
Maxtor Corp.  
2190 Miller Dr.  
Longmont, CO 80501  
Phone: (303) 678-2149  
FAX: (303) 678-2165  
Email: pete\_mclean@maxtor.com

Mr. LeRoy Leach (O)  
Maxtor Corp.  
2190 Miller Dr.  
Longmont, CO 80501-6744  
Phone: (303) 678-2828  
FAX: (303) 678-2308  
Email: leroy\_leach@maxtor.com

Mr. Bob Masterson (P)  
Methode Electronics, Inc.  
11595A Decatur St.  
Westminster, CO 80234  
Phone: (303) 465-3940  
FAX: (303) 465-3604  
Email: rwmast@aol.com

Mr. John Cannon (A)  
Methode Electronics, Inc.  
7444 West Wilson Ave  
Chicago, IL 60656  
Phone: (303) 465-3940  
FAX: (303) 465-3604  
Email:

Mr. Chris Nieves (O)  
Micropolis Corp.  
21211 Nordhoff St.  
Chatsworth, CA 91311  
Phone: (818) 718-5163  
FAX: (818) 718-5352  
Email: Chris\_Nieves@microp.com

Mr. Michael Aarons (O)  
Mitsumi (Alpha Peripherals)  
16842 Von Karman Ave.  
Suite 100  
Irvine, CA 92714  
Phone: (714) 263-6414  
FAX: (714) 263-6416  
Email: m\_aarons@cerf.net

Mr. Joe Dambach (P)  
Molex Inc.  
2222 Wellington Court  
Lisle, IL 60532  
Phone: (708) 527-4546  
FAX: (708) 969-1352  
Email: jdbambach@molex.com

Mr. Jay Neer (A)  
Molex Inc.  
399 W. Camino Gardens Blvd.  
Suite 103  
Boca Raton, FL 33432  
Phone: (407) 447-2907  
FAX: (407) 447-2908  
Email: jneer@molex.com

Mr. Chris D'Iorio (P)  
NEC Technologies  
1255 Michael Dr.  
Wood Dale, IL 60191  
Phone: (708) 238-7799  
FAX: (708) 860-7794  
Email: CD-iorio@nectech.com

Mr. Peter Gossler (O)  
NSM Jukebox GmbH  
1M Tiergarten 20-30  
Bingen 55411 Germany  
Phone: +49 6721 964-394  
FAX: +49 6721 407-414  
Email: 73503.3467@compuserve.com

Mr. Dennis Van Dalsen (P)  
Oak Technology, Inc.  
139 Kifer Ct.  
Sunnyvale, CA 94086  
Phone: (408) 737-0888  
FAX: (408) 737-3838  
Email: dennis@oaktech.com

Mr. Wayne Baldwin (A#)  
Oak Technology, Inc.  
139 Kifer Ct.  
Sunnyvale, CA 94086  
Phone: (408) 737-0888  
FAX: (408) 774-5352  
Email: wayneb@corp.oaktech.com

Mr. Jack Chen (A#)  
Oak Technology, Inc.  
139 Kifer Court  
Sunnyvale, CA 94086  
Phone: (408) 523-6665  
FAX:  
Email: jackc@oaktech.com

## Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

X3T10/95-343r0

Mr. Mike Hetzel (A)  
Oak Technology, Inc.  
139 Kifer Ct.  
Sunnyvale, CA 94086  
Phone: (408) 737-0888 x257  
FAX: (408) 737-3838  
Email: mikeh@corp.oaktech.com

Mr. Stephen F. Heil (P)  
Panasonic Technologies, Inc  
2 Research Way, 3rd Floor  
Princeton, New Jersey 08540  
Phone: (609) 987-3948  
FAX: (609) 987-0483  
Email: sfh@research.panasonic.com

Mr. Sunil Nethisinghe (O)  
Philips Semiconductors MS 52  
811 E. Argues Ave.  
Sunnyvale, CA 94088  
Phone: (408) 991-4540  
FAX: (408) 991-4500  
Email: nethisin@scs.philips.com

Mr. Skip Jones (P)  
QLogic Corp.  
3545 Harbor Blvd.  
Costa Mesa, CA 92626  
Phone: (714) 668-5058  
FAX: (714) 688-5008  
Email: sk\_jones@qlc.com

Mr. Mark Evans (A)  
Quantum Corp.  
500 McCarthy Blvd.  
Milpitas, CA 95035  
Phone: (408) 894-4019  
FAX: (408) 894-4990  
Email: mevans@qntm.com

Mr. S. Jauher Zaidi (O)  
Samsung Semiconductor  
3655 N. First Street MS/E3  
San Jose, CA 95134-1713  
Phone: (408) 954-7005  
FAX: (408) 954-7150  
Email: syed@sam.com

Mr. Gerald Houlder (A)  
Seagate Technology  
MPS043  
8001 E. Bloomington Freeway  
Bloomington, MN 55420-1094  
Phone: (612) 844-5869  
FAX: (612) 844-5708  
Email: Gerry\_Houlder@notes.seagate.com

Mr. Edward Hoskins (O)  
Seagate Technology  
2655 Park Center Dr.  
Simi Valley, CA 93065  
Phone: (805) 582-3821  
FAX: (805) 583-1493  
Email: ed\_hoskins@notes.seagate.com

Dr. Colin Whitby-Strevens (O)  
SGS-Thomson/INMOS  
1000, Aztec West  
Almondsbury,  
Bristol, BS12 4SQ UK  
Phone: +44 454 611 500  
FAX: +44 454 619 796  
Email: colinws@isnet.inmos.co.uk

Mr. James Ryland (XO)  
Social Security Admin  
NCC Room 5110 OMC liaison  
6201 Security Blvd.  
Baltimore, MD 21234-0001  
Phone: (410) 965-2166  
FAX: (410) 966-1893  
Email: JRYLAND@SSA.SSW.DHHS.GOV

Mr. Mike Yokoyama (P)  
Sony Electronics, Inc.  
3300 Zanker Rd. MS# SJ-3A7

Mr. Dan Davies (O)  
Overland Data Inc.  
8975 Balboa Ave.  
San Diego, CA 92123-1599  
Phone: (619) 571-5555 x213  
FAX: (619) 571-3664  
Email: ddavies@ctsnet.cts.com

Dr. Akira James Miura (A)  
Panasonic Technologies, Inc  
1072 East Meadow Circle  
Palo Alto, CA 94303-4270  
Phone: (415) 858-1000  
FAX: (415) 493-1930  
Email: miura@tadw.research.panasonic.com

Mr. Param Panesar (O)  
Pioneer Research  
1745 Berkeley St.  
Santa Monica, CA 90404  
Phone: (310) 829-6751  
FAX: (310) 453-3929  
Email:

Mr. Ting Li Chan (A)  
QLogic Corp.  
3545 Harbor Blvd.  
P.O. Box 6725  
Costa Mesa, CA 92626  
Phone: (714) 668-5058  
FAX: (714) 688-5008  
Email:

Mr. John F. Fobel (O)  
Rancho Technology, Inc.  
10783 Bell Court  
Rancho Cucamonga, CA 91730  
Phone: (909) 987-3966  
FAX: (909) 989-2365  
Email:

Mr. Gene Milligan (P)  
Seagate Technology  
MS OKM 251  
P. O. Box 12313  
Oklahoma City, OK 73157  
Phone: (405) 324-3070  
FAX: (405) 324-3794  
Email: Gene\_Milligan@notes.seagate.com

Mr. Brian Johnson (A#)  
Seagate Technology  
2655 Park Center Dr.  
Simi Valley, CA 93065  
Phone: (805) 582-3808  
FAX: (805) 583-8709  
Email:

Mr. Ron Werbow (O)  
Seagate Technology  
2655 Park Center Dr.  
Simi Valley, CA 93065  
Phone: (805) 582-3815  
FAX: (805) 583-1493  
Email: ron\_werbow@notes.seagate.com

Mr. Stephen G. Finch (P)  
Silicon Systems, Inc.  
14351 Myford Road  
Tustin, CA 92680-7022  
Phone: (714) 573-6808  
FAX: (714) 573-6916  
Email: steve.finch@tus.ssil.com

Mr. David Deming (O)  
Solution Technology  
P.O. Box 104  
Boulder Creek, CA 95006  
Phone: (408) 338-4285  
FAX: (408) 338-4374  
Email:

Mr. Erich Oetting (P)  
Storage Technology Corp.  
2270 South 88th St.

Mr. Earl J. Perera (O)  
P. E. Logic Corp.  
22695 Old Canal Rd.  
Yorba Linda, CA 92687  
Phone: (714) 282-6188  
FAX: (714) 282-6199  
Email:

Mr. Bill McFerrin (O)  
Philips KMG  
4725 ArrowsWest Dr.  
Colorado Springs, CO 80907  
Phone: (719) 593-4564  
FAX: (719) 599-8713  
Email: bill\_mc@lms.com

Mr. Marco Antonio Scocco (O)  
Pirelli Cabos S/A  
Engenharia De Telecomunicacoes  
Av Pirelli 1100-Bairro Eden  
18103-000 Sorocaba SP Brazil  
Phone:  
FAX:  
Email:

Mr. James McGrath (P)  
Quantum Corp.  
500 McCarthy Blvd.  
Milpitas, CA 95035  
Phone: (408) 894-4504  
FAX: (408) 894-6375  
Email: JMCGRATH@QNTM.COM

Dr. Tetsuro Motoyama (O)  
Ricoh Corporation  
3001 Orchard Parkway  
San Jose, CA 95134-2088  
Phone: (408) 954-5445  
FAX: (408) 432-8398  
Email: motoyama@str.ricoh.com

Mr. Brian N. Davis (A#)  
Seagate Technology  
4585 Scotts Valley Dr.  
Scotts Valley, CA 95066-4544  
Phone: (408) 439-7150  
FAX: (408) 438-4846  
Email: brian\_davis@notes.seagate.com

Mr. John Masiewicz (A#)  
Seagate Technology  
915 Disc Drive  
Scotts Valley, CA 95066  
Phone: (408) 439-7119  
FAX: (408) 438-4846  
Email: Masiewicz@notes.seagate.com

Mr. Thomas 'Rick' Tewell (O)  
Sequoia Advanced Tech., Inc.  
55 Shaver Street, Suite 240  
San Rafael, CA 94901  
Phone: (415) 459-7978  
FAX: (415) 459-7988  
Email: thomas.tewell@seqadvtech.com

Mr. Dave Guss (A)  
Silicon Systems, Inc.  
14351 Myford Rd.  
Tustin, CA 92680  
Phone: (714) 573-6824  
FAX: (714) 573-6916  
Email: dave.guss@tus.ssil.com

Mr. Dick Scheel (A#)  
Sony  
3300 Zanker Rd. MS# SJ-3D3  
San Jose, CA 95134  
Phone: (408) 955-4295  
FAX: (408) 955-5180  
Email: dicks@lsi.sel.sony.com

Mr. Roger Cummings (A)  
Storage Technology Corp.  
2270 South 88th St.



Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

X3T10/95-343r0

San Jose, CA 95134  
 Phone: (408) 955-4344  
 FAX: (408) 955-5175  
 Email: masayuki@cpcc.sel.sony.com

Louisville, CO 80028-0268  
 Phone: (303) 673-2178  
 FAX: (303) 673-8196  
 Email: Erich\_Oetting@Stortek.com

Louisville, CO 80028-0211  
 Phone: (303) 673-6357  
 FAX: (303) 673-8196  
 Email: Roger\_Cummings@Stortek.com

Mr. Robert N. Snively (P)  
 Sun Microsystems Computer Co  
 Mail Stop UMPK 12-204  
 2550 Garcia Avenue  
 Mountain View, CA 94043-1100  
 Phone: (415) 786-6694  
 FAX: (415) 786-6458  
 Email: bob.snively@eng.sun.com

Mr. Vit Novak (A)  
 Sun Microsystems, Inc.  
 Mail Stop 15-46  
 2550 Garcia Ave.  
 Mountain View, CA 94043-1100  
 Phone: (415) 336-2455  
 FAX: (415) 968-4873  
 Email: vit.novak@sun.com

Mr. John Lohmeyer (P)  
 Symbios Logic Inc.  
 1635 Aero Plaza Dr.  
 Colorado Springs, CO 80916  
 Phone: (719) 573-3362  
 FAX: (719) 573-3037  
 Email: john.lohmeyer@symbios.com

Mr. Greg Kapraun (A)  
 Symbios Logic Inc.  
 2001 Danfield Ct.  
 Fort Collins, CO 80525  
 Phone: (970) 225-4843  
 FAX: (970) 226-9686  
 Email: Greg.Kapraun@symbios.com

Mr. Akram Atallah (A)  
 SyQuest Technology Corp.  
 3005 Center Green Drive  
 Suite 100  
 Boulder, CO 80301  
 Phone: (303) 938-2925  
 FAX: (303) 938-2987  
 Email: akram.atallah@syquest.com

Mr. Patrick Mercer (P)  
 SyQuest Technology, Inc.  
 47071 Bayside Parkway  
 Fremont, CA 94538-6517  
 Phone: (510) 226-4215  
 FAX: (510) 226-4104  
 Email: patrick.mercer@syquest.com

Mr. John Moy (P)  
 Tandem Computers  
 Loc 100-03  
 10555 Ridgeview Ct.  
 Cupertino, CA 95014-0789  
 Phone: (408) 285-0463  
 FAX: (408) 285-9924  
 Email: moy\_john@tandem.com

Mr. Pete Tobias (A)  
 Tandem Computers  
 Loc 100-03  
 10555 Ridgeview Ct.  
 Cupertino, CA 95014-0789  
 Phone: (408) 285-9913  
 FAX: (408) 285-9924  
 Email: tobias\_pete@tandem.com

Mr. Bill Boyd (O)  
 Texas Instruments  
 MS 8218  
 8360 LBJ Freeway  
 Dallas, TX 75265  
 Phone: (214) 997-3673  
 FAX: (214) 997-5962  
 Email: bboy@mimi@magic.itg.ti.com

Mr. Steven Walker (P)  
 Thomas & Betts  
 1555 Lynnfield Rd.  
 Memphis, TN 38119  
 Phone: (901) 680-5992  
 FAX: (901) 537-8805  
 Email: walkertnb@aol.com

Mr. Tokayuki Totani (O)  
 Toshiba America  
 226 Airport Pkwy, Suite 310  
 San Jose, CA 95110  
 Phone: (408) 451-6960  
 FAX: (408) 451-9750  
 Email: ttotani@ataisdpd.geis.com

Mr. Gary M. Watson (P)  
 Trim Technologies  
 350 Pilot Rd.  
 Las Vegas, NV 89119  
 Phone: (800) 423-2024  
 FAX:  
 Email: trimm@netcom.com

Mr. Kenneth J. Hallam (P)  
 UNISYS Corporation  
 MV201  
 25725 Jeronimo Road  
 Mission Viejo, CA 92691  
 Phone: (714) 380-5115  
 FAX: (714) 380-5858  
 Email: ken.hallam@mv.unisys.com

Mr. Arlan P. Stone (A)  
 UNISYS Corporation  
 MS 201  
 25725 Jeronimo Rd.  
 Mission Viejo, CA 92691  
 Phone: (714) 380-5982  
 FAX: (714) 380-6099  
 Email: arlan.stone@mv.unisys.com

Mr. Paul D. Aloisi (P)  
 Unitrode Integrated Circuits  
 7 Continental Blvd  
 Merrimack, NH 03054  
 Phone: (603) 429-8687  
 FAX: (603) 424-3460  
 Email: Aloisi@uicc.com

Mr. Matt Thomas (A)  
 Unitrode Integrated Circuits  
 7 Continental Blvd  
 Merrimack, NH 03054-0399  
 Phone: (603) 429-8610  
 FAX: (603) 424-3460  
 Email: thomas@uicc.com

Mr. Michael G. Kaminski (O)  
 Volex Inc.  
 835 Sinclair Frontage Road  
 Milpitas, CA 95035  
 Phone: (408) 945-7766  
 FAX: (408) 945-4360  
 Email: Mike\_Kaminski@volex.com

Mr. Francesco Liburdi (O)  
 Wearnsl Hollingsworth  
 1425 Elmira St.  
 Endicott, NY 13760  
 Phone: (607) 786-3721  
 FAX: (607) 786-3806  
 Email:

Mr. Jeff Stai (P)  
 Western Digital Corporation  
 8105 Irvine Ctr. Dr.  
 Irvine, CA 92718  
 Phone: (714) 932-7644  
 FAX: (714) 932-6496  
 Email: stai@dt.wdc.com

Mr. Tak Asami (A)  
 Western Digital Corporation  
 8105 Irvine Ctr. Dr.  
 Irvine, CA 92718  
 Phone: (714) 932-7621  
 FAX: (714) 932-6496  
 Email: asami@dt.wdc.com

Mr. Tom Hanan (A#)  
 Western Digital Corporation  
 8105 Irvine Ctr. Dr.  
 Irvine, CA 92718  
 Phone: (714) 932-7472  
 FAX: (714) 932-7312  
 Email: hanan\_t@al.wdc.com

Mr. Jeffrey L. Williams (A#)  
 Western Digital Corporation  
 1599 N. Broadway Ave.  
 Rochester, MN 55906  
 Phone: (507) 286-7589  
 FAX: (507) 286-7528  
 Email: williams\_jl@a1.wdc.com

Mr. Devon Worrell (A#)  
 Western Digital Corporation  
 8105 Irvine Ctr. Dr.  
 Irvine, CA 92718  
 Phone: (714) 932-7042  
 FAX: (714) 932-7796  
 Email: worrell@dt.wdc.com

Mr. Carl Bonke (O)  
 Western Digital Corporation  
 8105 Irvine Ctr. Dr.  
 Irvine, CA 92718  
 Phone: (714) 932-7622  
 FAX: (714) 932-7798  
 Email: bonke@dt.wdc.com

Mr. Jonathan L. Hanmann (O)  
 Western Digital Corporation  
 8105 Irvine Ctr. Dr.  
 Irvine, CA 92718  
 Phone: (714) 932-5189  
 FAX: (714) 932-7097  
 Email: hanmann\_j@a1.wdc.com

Mr. Doug Piper (P)  
 Woven Electronics  
 PO Box 189  
 Mauldin, SC 29662  
 Phone: (803) 967-1751  
 FAX: (803) 963-1761  
 Email: 549.9900@mcimail.com

Mr. E.J. Mondor (A)  
 Woven Electronics  
 PO Box 189  
 Mauldin, SC 29662  
 Phone: (803) 967-1739  
 FAX: (803) 963-1761  
 Email: 549.9900@mcimail.com

Mr. Arnold Limjoco (O)  
 Yamaichi Electronics  
 2235 Zanker Rd.

Mr. Dennis P. Moore (O)  
 Zadian Technologies  
 2305 Bering Drive

Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

X3T10/95-343r0

San Jose, CA 95131  
Phone: (408) 456-0797  
FAX: (408) 456-0799  
Email: 6371175@mcimail.com

San Jose, CA 95131  
Phone: (408) 894-0800 x34  
FAX: (408) 894-0880  
Email: dmoore@netcom.com

Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

X3T10/95-343r0

Nov 12, 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 1PR

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

# Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

X3T10/95-343r0

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

X3T10/95-033R0 Date: 9/20/95 Author: J. Lohmeyer [SY-95-05]  
 Desc: Agenda for X3T10 Meeting #12 (Nov '95)

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

X3T10/95-038R0 Date: 9/20/95 Author: J. Lohmeyer [SY-95-05]  
 Desc: X3T10 Project Summary - July '95

X3T10/95-039R0 Date: 9/20/95 Author: J. Lohmeyer [SY-95-05]  
 Desc: Jeopardy letter for Nov '95 meeting

X3T10/95-040R0 Date: 10/4/95 Author: J. Lohmeyer [SY-96-01]  
 Desc: Agenda for X3T10 Meeting #13 (Jan '96)

X3T10/95-041R0 Date: 10/4/95 Author: J. Lohmeyer [SY-96-01]  
 Desc: X3T10 Project Summary - November '95

X3T10/95-042R0 Date: 10/4/95 Author: J. Lohmeyer [SY-96-01]  
 Desc: Jeopardy letter for Jan '96 meeting

X3T10/95-043R0 Date: 10/4/95 Author: J. Lohmeyer [SY-96-01]  
 Desc: Letter to Gassan Salman (IEEE) requesting OUID for X3T10

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. Smyers [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-95-01]  
 Desc: PFA for ATA

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

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 reaad block mode control

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

# Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

X3T10/95-343r0

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]  
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

# Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

X3T10/95-343r0

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: PL285 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

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: Freeman [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

X3T10/95-208R2 Date: 5/8/95 Author: E. Gardner [SY-95-05]  
 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]



# Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

X3T10/95-343r0

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

X3T10/95-229R2 Date: 5/13/95 Author: R. Snively [SY-95-05]  
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]  
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

# Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

X3T10/95-343r0

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

X3T10/95-253R3 Date: 6/2/95 Author: R. Weber [SY-95-05]  
 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

X3T10/95-258R3 Date: 7/7/95 Author: P. McLean [SY-95-05]  
 Desc: ATA Overlap Proposal

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

X3T10/95-260R1 Date: 6/26/95 Author: G. Houlder [SY-95-05]  
 Desc: Set Capacity Proposal

X3T10/95-261R0 Date: 6/26/95 Author: []  
 Desc: not used

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

X3T10/95-269R5 Date: 7/10/95 Author: P. Aloisi [SY-95-05]  
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 PL285 - 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: []  
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 SPF - 7/95

X3T10/95-293R0 Date: 7/18/95 Author: Lamers/Milligan [SY-95-04]

## Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

X3T10/95-343r0

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]  
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-95-06]  
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

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

X3T10/95-319R1 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-95-06]  
Desc: Proposed working draft Enhanced Physical Interface Technical Report (EPI)

X3T10/95-321R1 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-95-06]  
Desc: Persistent Reserve Presentation

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

## Minutes of X3T10 Plenary Meeting #12 in Palm Springs, CA

X3T10/95-343r0

X3T10/95-324R1 Date: 9/19/95 Author: R. Snively [SY-95-05]  
Desc: Enclosure Services

X3T10/95-325R1 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

X3T10/95-328R1 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

X3T10/95-331R0 Date: 9/20/95 Author: P. Mercer [SY-95-05]  
Desc: MC & MCR Error Bit Descriptions in ATA-3

X3T10/95-332R0 Date: 9/21/95 Author: M. Yokoyama [SY-95-05]  
Desc: Device Capability Page for CD devices

X3T10/95-333R0 Date: 9/28/95 Author: C. Monia [SY-95-05]  
Desc: Project Proposal for SCSI-3 Architecture Model - 2 (SAM-2)

X3T10/95-333R1 Date: 9/28/95 Author: C. Monia [SY-95-06]  
Desc: Project Proposal for SCSI-3 Architecture Model - 2 (SAM-2)

X3T10/95-334R0 Date: 9/29/95 Author: P. Aloisi [SY-95-05]  
Desc: SPI-2 LVDS Driver Tests

X3T10/95-335R0 Date: 9/29/95 Author: B. Ham [SY-95-05]  
Desc: Fast 40/80 LVDS Performance Using SCSI Interconnect

X3T10/95-336R0 Date: 10/5/95 Author: T. Spitler [SY-95-06]  
Desc: Cross-talk testing

X3T10/95-337R0 Date: 10/14/95 Author: J. Lohmeyer [SY-95-06]  
Desc: Minutes of SPI-2 Working Group - 10/13/95

X3T10/95-338R0 Date: 10/17/95 Author: Lamers/Milligan [SY-95-06]  
Desc: Minutes of ATA Working Group - 10/17-19/95

X3T10/95-339R0 Date: 10/19/95 Author: Z. Daggett [SY-95-06]  
Desc: Annex D SPI errors

X3T10/95-340R0 Date: 11/7/95 Author: Weber/Lohmeyer [SY-95-06]  
Desc: Minutes of SPI-2 Study Group - 11/95

X3T10/95-341R0 Date: 11/7/95 Author: Weber/Lohmeyer [SY-95-06]  
Desc: Minutes of EPI Study Group - 11/95

X3T10/95-342R0 Date: 11/7/95 Author: Weber/Lohmeyer [SY-95-06]  
Desc: Minutes of SCSI Working Group - 11/95

X3T10/95-343R0 Date: 11/7/95 Author: Weber/Lohmeyer [SY-95-06]  
Desc: Minutes of X3T10 Plenary Meeting #12

X3T10/95-344R0 Date: 11/7/95 Author: G. Penokie [SY-95-06]  
Desc: Change to SCSI-3 ASC

X3T10/95-345R0 Date: 11/7/95 Author: G. Penokie [SY-95-06]  
Desc: Additional SCSI Qualifiers

X3T10/95-346R0 Date: 11/7/95 Author: F. Gasparik [SY-95-06]  
Desc: LVDS Common Mode Specifications

X3T10/95-347R0 Date: 11/7/95 Author: D. Wallace [SY-95-06]  
Desc: Differential IV Curve

X3T10/95-348R0 Date: 11/7/95 Author: E. Gardner [SY-95-06]  
Desc: FCP-2 Disconnect-Reconnect Page

X3T10/95-349R0 Date: 11/7/95 Author: G. Milligan [SY-95-06]  
Desc: Version Control in SCSI

X3T10/95-350R0 Date: 11/8/95 Author: R. Roberts [SY-95-06]  
Desc: Minutes of MMC Working Group - 11/95

X3T10/95-351R0 Date: 11/8/95 Author: C. Monia [SY-95-06]  
Desc: Aborting Untagged Tasks

X3T10/95-352R0 Date: 11/8/95 Author: C. Monia [SY-95-06]  
Desc: Out of Order Command Execution

X3T10/95-353R0 Date: 11/8/95 Author: L. Sloan [SY-95-06]  
Desc: Protected Persistent Reservation

X3T10/95-354R0           Date: 11/8/95   Author: B. Dallas   [SY-95-06]  
Desc: Minutes of CAM Working Group - 11/95

X3T10/95-355R0           Date: 11/8/95   Author: G. Houlder   [SY-95-06]  
Desc: Immediate Bit validation with FOV

X3T10/95-356R0           Date: 11/8/95   Author: L. Lamers   [SY-95-06]  
Desc: SPI Defects and Clarifications

X3T10/95-357R0           Date: 11/8/95   Author: S. Sicola   [SY-95-06]  
Desc: SCSI-3 Fault Tolerant Controller Configuration

X3T10/95-358R0           Date: 11/8/95   Author: S. Sicola   [SY-95-06]  
Desc: Presentation on Controller Failover Profile

X3T10/95-359R0           Date: 11/8/95   Author: T. Lappin   [SY-95-06]  
Desc: Minutes of SCC Working Group - 11/95

X3T10/95-360R0           Date: 11/8/95   Author: J. Lohmeyer   [SY-95-06]  
Desc: OUI Management Proposal

X3T10/95-361R0           Date: 11/9/95   Author: L. Lamers   [SY-95-06]  
Desc: Submitting Documents Electronically

X3T10/95-362R0           Date: 11/9/95   Author: P. Aloisi   [SY-95-06]  
Desc: SPI-2 Status Report

X3T10/95-363R0           Date: 11/10/95   Author: D. Uber   [SY-95-06]  
Desc: Terminator Mismatch Problem