Accredited Standards Committee*
National Committee for Information Technology Standards (NCITS)

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Reply to:	John Lohmeyer

To: T10 Membership
From: Ralph Weber / John Lohmeyer
Subject: Minutes of T10 Plenary Meeting #37 -- May 18, 2000
           Nashua, NH

Agenda

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    8.15 SCSI Medium Changer Commands - 2 (SMC-2) {Project 1383-D} [Oetting]
    8.16 SCSI Signal Modeling (SSM) {Project 1414-DT} [Aloisi]
    8.17 SCSI VI Protocol (SVP) {Project 1415-D} [Gardner]
    8.18 SCSI Primary Commands - 3 (SPC-3) {Project 1416-D} [Weber]
    8.19 SCSI Block Commands - 2 (SBC-2) {Project 1417-D} [Milligan]
    8.20 Object-based Storage Devices Commands (OSD) {Project 1355-D} [Milligan]
9. Old Business
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    9.2   IEEE Usage of T10 Vendor ID List [Lohmeyer]
    9.3   T10 Style Guide and Templates Project Report [Evans]
10. New Business
    10.1 Actions on Working Group Recommendations
        10.1.1 SPI-4 training pattern DC signal strengths (00-231r0) [Elliott]
        10.1.2 Making data groups prohibited on pace data transfers [Penokie]
        10.1.3 Change weak driver level in SPI-4 to 60% - 78% [Aloisi]

Results of Meeting

1.   Opening Remarks

John Lohmeyer, the T10 Chair, called the meeting to order at 9:00 a.m., Thursday May 18, 2000. He thanked Zane Daggett of Hitachi Cable Manchester for hosting the meeting.

John said that NCITS Subgroup Membership forms and the T10 Mailing Subscription form were available from the head table. He said that people should use the NCITS forms to insure the NCITS Secretariat has the latest membership information. These forms should be mailed directly to the NCITS 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 T10 were made available to those attending.

2.   Approval of Agenda

The draft agenda was approved with the following additions/changes:

> 10.1.1   SPI-4 training pattern DC signal strengths (00-231r0) [Elliott]
> 10.1.2   Making data groups prohibited on pace data transfers [Penokie]
> 10.1.3   Change weak driver level in SPI-4 to 60% - 78% [Aloisi]
> 10.1.4   Change receiver threshold, driver asymmetry, and minimum drive level numbers to TBD in SPI-4 revision 0 [Aloisi]
> 10.1.5   Expander Topics (00-199r2) [Ham]
> 10.1.6   Flow Control (00-142r4) [Lamers]
> 10.1.7   Adding Read/Write Attribute commands to SPC-3 (99-148r7) [Jerman]
> 10.1.8   Access controls in SPC-3 (99-245r9) [Hafner]
> 10.1.9   Corrections to EXTENDED COPY (00-211r2) [Chambliss/Weber]
> 10.1.10 Beyond Beyond 2TB (00-212r1) [Weber]
> 10.5   PIP Project Proposal (00-238) [Ham]
> 12.7   IETF SCSI over IP [Monia]

The following agenda items were added/revised during the course of the meeting:

> 8.13   SCSI Domain Validation Technical Report (SDV) {Project 1378-DT} [Roberts]
> 9.2   IEEE Usage of T10 Vendor ID List [Lohmeyer]
> 9.3   T10 Style Guide and Templates Project Report [Evans]
> 10.6   Report on NCITS style changes [Lohmeyer]
> 10.7   SES defects [Elliott/Lohmeyer]
> 10.1.11 Fast-160 (99-295r5) [Milligan]
> 11.2.2   Instructions to the SC 25 working group 4 delegation [Milligan]
> 12.7   IETF SCSI over IP [Monia/Robinson]

3.   Attendance and Membership

The membership requirements were reviewed. NCITS 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 T10. The individual may apply for membership and begin voting at anytime following adjournment of the first meeting. Typically, the individual applies for membership and starts casting votes at the second plenary meeting. Working group and other ad hoc meetings do not count toward attendance requirements.

The option that allows a person attending their first meeting to become a voting member immediately following that meeting, provided their NCITS fees have been paid, permits a new member to vote on letter ballots issued between his/her first and second meetings. Unfortunately, this option also means that the new organization is immediately in attendance jeopardy.

To maintain membership, organizations must pay the NCITS Service Fee ($300). The ANSI International Program Fee (also $300) is billed at the same time.

John briefly discussed the mailing fees. Complete pricing information is contained in the 2000 membership form (available at ftp://ftp.t10.org/t10/mem_form.txt).

There are also minimum attendance requirements to maintain voting membership on T10. If a member organization fails to attend two of the last three T10 meetings, they are warned that failing to attend the next T10 meeting would result in their membership being terminated.

The Chair said he had sent letters to 16 people from 9 organizations informing them that their membership was in jeopardy due to non-attendance (see 00-008r0) and that their membership would be terminated if they did not attend this meeting. The following organizations were in attendance jeopardy:

Advansys
Amphenol Interconnect
Ancot Corp.
CMD Technology
Dell Computer
Hitachi Cable Manchester, Inc.
Linfinity Micro
UNISYS
Western Digital Corp.

All of these organizations were present except:

Advansys
Ancot Corp.
Linfinity Micro
UNISYS
Western Digital Corp.

The organizations in attendance jeopardy were terminated due to lack of attendance (i.e., the principal member was changed to observer status and the first alternate member, if any, was dropped; additional alternates, if any, were changed to observers).

The following organizations requested new (or reinstated) membership:

EMC
Woven Electronics

The T10 membership during the meeting was 38 organizations down from 41 organizations following the last meeting. Enclosure (1) is the list of the people present at the meeting and enclosure (2) is the current T10 membership list.

4.   Approval of Minutes - March '00 Meeting - Dallas, TX (T10/00-157r2)

The minutes were approved as written.

5.   Document Distribution

Members who have any problems with their mailing subscription should deal directly with Monica Vago (mvago@itic.org) (202) 626-5741.

John Lohmeyer requested that all documents for the next mailing be in his hands in electronic format by 10:30 a.m. on Thursday May 25, 2000. Documents received after this time may go into a subsequent mailing.

John reminded the committee of the requirements for document submission. Since T10 meets its document retention requirements by preparing mailings, documents included in the mailing must be suitable for archiving. This means that native-format and/or Portable Document Format (PDF) electronic originals with proper identification must be submitted.

The electronic copies can be sent directly to John by email (at lohmeyer@t10.org), or they can be transferred by ftp protocol to ftp.t10.org and placed in the /incoming directory. In the latter case, please also send email to John informing him of the file name and location of the file.

Minutes are available on the T10 World Wide Web page (see below), and are distributed to the T10 Reflector.

To be added to the T10 Reflector, send an email to majordomo@t10.org with the line 'subscribe t10' in the message body.

The NCITS Secretariat maintains a World Wide Web page at http://www.ncits.org/. LSI Logic maintains a World Wide Web page on behalf of T10 on a server provided by the SCSI Trade Association at:

   http://www.t10.org/

The current document register is enclosure (3). The T10 document register is also available at:

   ftp://ftp.t10.org/t10/dr.txt

6.   Call for Patents

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

A document is available from ANSI, "Procedures for the Development and Coordination of American National Standards", at no charge. This document is also on the WWW at http://www.ncits.org/help/ansi_sdo.html. Section1.2.11 contains the ANSI patent policy. Amy Marasco manages patent issues for ANSI and can be contacted at amarasco@ansi.org or 212-642-4954. Gene Milligan has prepared a useful "Handy dandy Technical Committee's Patents Guide", which is available at ftp://ftp.t10.org/t10/document.99/99-291r0.pdf.

John asked that anyone who knows of applicable patents contact him. There were no responses.

7.   Review of Old Action Items

362)   Ralph Weber will ensure that the policy of requiring a two-thirds vote to approve the scheduling of a plenary meeting outside the 48 contiguous United States gets recorded in a T10 policies document. *Complete*

363)   John Lohmeyer will contact Dave Deming to obtain the file containing the electronic image used in the SPI dedication for use in SPI-3. *Complete (Deming did not have the file or photo.)*

370)   Ralph Weber will create an SPC-2 version descriptors for SPI-3 revisions 13a. *Complete*

372)   Bob Snively will generate a correction proposal for FC-FS table 79 that currently contains incorrect definitions for the reason codes for LS_RJT.   *Complete*

373)   George Penokie will build a model that shows the impact of the times required for training on packetized performance. *Complete*

374)   John Lohmeyer will communicate to NCITS the T10 recommendation that BSR NCITS.333-200x (MMC-2) not be changed. *Complete*

375)   John Lohmeyer will initiate an investigation concerning why T10 was requested to prepare SPI-3 in a format that appears to conflict with the ISO/IEC JTC1 Style Guide (e.g., removal of the document title at the foot of each page) and report to the next meeting. *Complete*

376)   Dean Wallace will lead the SSM working group in preparation of a press release regarding the usage of the T10 web site that John Lohmeyer can forward to NCITS for distribution. *Carryover*

377) John Lohmeyer will forward the SSM press release to NCITS. *Carryover*
378) Zane Daggett will prepare a project proposal for the SCSI Passive Interconnect Performance technical report. *Complete*
379) John Lohmeyer will forward the OSD project proposal to NCITS within 72 hours. *Complete*
380) John Lohmeyer will thank Paul Suhler for his public review comment on SSC and inform Paul of the T10 action regarding the comment. *Complete*
381) John Lohmeyer will notify NCITS that T10 recommends withdrawing project 990-D (CAM-3). *Complete*
382) Bob Snively will discuss the use of the T10 vendor ID list by IEEE p1244 and report to T10 at the May meeting. *Complete*
383) Gene Milligan will submit a NWI proposal and request for simultaneous CD letter ballot for both SSC revision 22 (or latest revision) and SPI-3 revision 13b. *Complete*
384) Gene Milligan will notify the JTC 1 TAG of the T10 recommendation to withdraw MMC from ISO/IEC processing. *Complete*
385) John Lohmeyer will make the source files for SSC revision 22 (or latest revision) and SPI-3 revision 13b available to Gene Milligan. *Complete*
386) Ralph Weber will add OSD to the device types and version descriptors in SPC-2. *Complete*
387) John Lohmeyer will send letters to Ron Roberts and Don Tolmie thanking them for bidding on the conversion RBC to ISO/IEC and informing them that T10 has decided not to pursue the project. *Complete*

8. Project Status Reports

8.1 Project Status Summary and NCITS Liaison [Lohmeyer]

John Lohmeyer said that the current T10 project status summary was included in the T10 Information Packages distributed prior to the meeting and will be included in the mailing as usual.

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

John Lohmeyer reported that NCITS has been notified of the T10 recommendation to withdraw project 990-D, CAM-3. No report was available concerning whether NCITS had acted to withdraw the project.

8.3 SCSI-3 Stream Commands (SSC) Status {Project 997-D} [Peterson]

John Lohmeyer reported that SSC has been approved by BSR and is in the process of being published.

8.4 SCSI Fibre Channel Protocol - 2 (FCP-2) {Project 1144-D} [Snively]

Bob Snively reported that a complete pass has been made through all the technical comments from the FCP-2 forwarding letter ballot. He stated a another review of the comments and resolutions will be held at the June joint T10/T11.3 meeting. He asked for a further review to be held at the July meeting. It was requested that a second letter ballot be conducted on the revised FCP-2 document due to the magnitude of the changes.

8.5 SCSI Architecture Model - 2 (SAM-2) {Project 1157-D} [Weber]

Ralph Weber reported that the working group continues to grapple with the definitions for devices with multiple ports (minutes in 00-206). As no proposals are being brought to this meeting for consideration (except for ancillary effects from access controls), SAM-2 revision 13 will remain current until at least July.

8.6 Multimedia Command Set - 2 (MMC-2) Status {Project 1228-D} [McFerrin]

John reported that the T10 recommendation to not change MMC-2 in response to the negative comments from Panasonic and Hitachi had been communicated to NCITS. Gene Milligan asked if it is appropriate to withdrawn MMC and Bill McFerrin responded that it would not be appropriate.

Chair's Note: The day after the T10 plenary meeting, BSR approved MMC-2 (NCITS.333-2000).

8.7 SCSI Primary Commands - 2 (SPC-2) Status {Project 1236-D} [Weber]

Ralph Weber reported that SPC-2 revision 16 was prepared following the March meeting week but was too late to make the mailing. SPC-2 revision 17 was prepared shortly before this meeting and contains only editorial changes needed to satisfy ISO formatting issues (elimination of dangling paragraphs & use of ISO standards numbers wherever possible). Revision 18 will be prepared following this meeting. Ralph requested that SPC-2 revision 18 be considered for forwarding to first public review in a letter ballot commencing as soon after this meeting as possible.

Ralph Weber took an action item to prepare SPC-2 revision 18 for letter ballot vote. John Lohmeyer took an action item to conduct a letter ballot vote on forwarding SPC-2 revision 18 to first public review.

8.8 Reduced Block Commands (RBC) {Project 1240-D} [McLean]

Ron Roberts reported that he received a thank you message from ANSI regarding his editing work on RBC. John Lohmeyer reported that RBC has passed BSR review and should be published soon.

8.9 SCSI Parallel Interface - 3 (SPI-3) {Project 1302-D} [Penokie]

John Lohmeyer reported that T10 has received a public review comment on SPI-3. Action on the public review comment can be found in item 10.4.

8.10 MultiMedia Command Set - 3 (MMC-3) {Project 1363-D} [McFerrin]

Bill McFerrin reported on the activities of the MMC-3 working group (minutes in 00-243).

8.11 Reduced MultiMedia Command Set (RMC) {Project 1364-D} [McFerrin]

Bill McFerrin announced that work on RMC is being tabled until work on MMC-3 is completed. Bill asked that the proposed forwarding date for RMC be changed to November 2001.

8.12 SCSI Parallel Interface - 4 (SPI-4) {Project 1365-D} [Penokie]

George Penokie reported on the activities of the SPI-4 working group (minutes in 00-205). He noted that several key parametric numbers are marked TBD. He stated that the revision 0 draft document will be available for the next mailing.

8.13 SCSI Domain Validation Technical Report (SDV) {Project 1378-DT} [Roberts]

Ron Roberts reported that SDV revision 2 will be available for the next mailing. He requested time for a June meeting and John added the request to the meeting schedule.

8.14 SCSI on Scheduled Transfer (SST) {Project 1380-D} [Woelz]

Don Woelz reported that SST is progressing to completion. The document will be ready for forwarding after August or October meetings. Gene Milligan asked that T10 members consider inspecting an SST draft for consistency with T10 editing style.

8.15 SCSI Medium Changer Commands - 2 (SMC-2) {Project 1383-D} [Oetting]

Erich Oetting reported that SMC-2 revision 0 was prepared for the last mailing. He noted that incorporation of approved proposals will begin soon.

8.16 SCSI Signal Modeling (SSM) {Project 1414-DT} [Aloisi]

Paul Aloisi reported on the activities of the April signal modeling meeting (minutes in 00-218). Paul requested meetings in June, August, and October and John added the meetings to his schedule. Bill Ham noted that the Passive Interconnect Performance study group holds meetings co-located with the signal modeling group. Bill noted that a project proposal for PIP is on the agenda as item 10.5.

8.17 SCSI VI Protocol (SVP) {Project 1415-D} [Gardner]

Ed Gardner reported that revision 0 of SVP is available and will be in the next mailing. Ed stated that revision 1 will be ready for discussion at the July meetings.

8.18 SCSI Primary Commands - 3 (SPC-3) {Project 1416-D} [Weber]

Ralph Weber reported that the initial draft of SPC-3 will be a duplicate of the SPC-2 revision that contains all approved comments resolutions from the letter ballot vote. As soon after that as possible, SPC-3 revision 1 will be prepared incorporating all committee approved proposals. He noted that the proposals cutoff for SPC-3 is November 2001, that the SPC-3 stabilized draft will be completed by March 2002, and that the forwarding letter ballot is scheduled for May 2002 (see 00-222r0).

Ralph Weber moved that the SPC-3 schedule shown in 00-222r0 be approved. Gene Milligan seconded the motion. The motion passed on a vote of 23:1:0:14=38. Ed Gardner stated that his no vote was based on a belief this vote was a waste of time.

8.19 SCSI Block Commands - 2 (SBC-2) {Project 1417-D} [Milligan]

Gene Milligan reported that about 50% of the SBC pages have been converted to ISO/IEC style. Following the conversion, he plans to incorporate approved changes.

8.20 Object-based Storage Devices Commands (OSD) {Project 1355-D} [Milligan]

Gene Milligan reported that revision 1 of OSD is available as 99-315r1. Gene Milligan moved that 99-315r1 be accepted as the committee working draft for project 1355-D. Mark Evans seconded the motion. The motion passed on a vote of 19:0:1:18=38. Gene described the SNIA activities relating to OSD.

9. Old Business

9.1 Report on T10 Procedures Study Group Meeting [Lohmeyer]

John Lohmeyer reported that Monday procedures group reviewed the meeting procedures proposal 00-221r0 and requested changes. John noted that the group had not yet addressed the guest room fee cap.

9.2 IEEE Usage of T10 Vendor ID List [Lohmeyer]

John Lohmeyer reported on the history of the IEEE P1244 usage/reference of the T10 vendor ID list. Bob Snively reported that additional formalities (essentially guaranteeing that the list be maintained in perpetuity) have been requested by IEEE. John stated that the concept is to have NCITS be the responsible organization and that NCITS designates T10 (John) as the keeper of the list. Gary Robinson explained why IEEE demands the above require-ments from T10 and NCITS.

John Lohmeyer took an action item to contact NCITS regarding formalization of the responsibilities for maintaining the vendor ID list.

9.3 T10 Style Guide and Templates Project Report [Evans]

Mark Evans reported that the style guides have been distributed, but no work has been done on them. He hoped that the style guides could be reviewed before the next meeting.

10. New Business

10.1 Actions on Working Group Recommendations

10.1.1   SPI-4 training pattern DC signal strengths (00-231r0) [Elliott]

Rob Elliott moved that 00-231r0 be approved for inclusion in SPI-4 revision 0. Mark Evans seconded the motion. The motion passed on a vote of 19:3:2:14=38. Gene Milligan stated that his negative vote was based on the conflict between the motion on 99-295r5. The results of this motion supersede a portion of the motion approved in item 10.1.11.

10.1.2   Making data groups prohibited on pace data transfers [Penokie]

George Penokie moved that the SPI-4 editor be instructed to prohibit use of data group transfers in conjunction with paced data transfers. Mark Evans seconded the motion.

Gene Milligan stated that the proposal is inappropriate for a standard as it is a marketing decision and because it will impeded the development of Fast-160. Mark Evans stated that he supports the motion because it saves a test vector and has the potential to significantly improve performance. John Lohmeyer noted that compatibility between packetized implementations has not been fully verified and that limiting Fast-160 to packetized may produce industry-wide incompatibilities. Bill Galloway noted that no way has yet been devised to do data group transfers with the free running clock required by Fast-160. Gene Milligan countered that a way surely could be found to do data group transfers with a free running clock.

John Lohmeyer requested a roll call vote. The motion passed on a vote of 11:2:13:12=38. Details of the vote were as follows:

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Organization                Stat  Name                   Yes No Abs NP
Adaptec, Inc.               A     Mr. Ron Roberts                1
AMP / Tyco Electronics      P     Mr. Charles Brill       1
Amphenol Interconnect                                                 1
Berg Electronics            P     Mr. Douglas Wagner      1
BREA Technologies, Inc.     P     Mr. Bill Galloway       1
Circuit Assembly Corp.                                               1
CMD Technology              P     Mr. Edward Haske        1
Compaq Computer Corp.       P     Mr. Robert C. Elliott   1
Crossroads Systems, Inc.    P     Mr. Neil Wanamaker         1
Dallas Semiconductor        P     Mr. Charles Tashbook       1
Dell Computer                                                       1
EMC                         P     Mr. Gary S. Robinson       1
ENDL Texas                  A     Mr. Ralph O. Weber         1
Exabyte Corp.                                                1
Fujitsu                                                      1
General Dynamics                                             1
Hewlett Packard Co.         A.    Mr. Steve Jerman           1
Hitachi Cable Manchester,Inc P    Mr. Zane Daggett           1
Honda Connectors                                             1
IBM Corp.                   P     Mr. George O. Penokie   1
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Iomega Corp.                                                  1
KnowledgeTek, Inc.                                           1
LSI Logic Corp.              P     Mr. John Lohmeyer          1
Madison Cable Corp.         P     Ms. Jie Fan                       1
Maxtor Corp.                P     Mr. Pete McLean                   1
Molex Inc.                                                   1
NSTOR                                                        1
Ophidian Designs            P     Mr. Edward A. Gardner            1
Panasonic Technologies, Inc                                  1
Philips Electronics         P     Mr. William P. McFerrin          1
QLogic Corp.                P     Mr. Skip Jones          1
Quantum Corp.               P     Mr. Mark Evans          1
Seagate Technology          P     Mr. Gene Milligan          1
Storage Technology Corp.    P     Mr. Erich Oetting               1
Sun Microsystems, Inc.      P     Mr. Kenneth Moe         1
Texas Instruments           P     Mr. Paul D. Aloisi      1
Toshiba America Elec. Comp. P     Mr. Tasuku Kasebayashi  1
Woven Electronics           P     Mr. Doug Piper                  1

                                                11  2  13 12 = 38
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The results of this motion supersedes a portion of the motion approved in item 10.1.11.

10.1.3   Change weak driver level in SPI-4 to 60% - 78% [Aloisi]

Paul Aloisi moved that the weak driver level range in SPI-4 revision 0 be changed to 60% - 78%. Jie Fan seconded the motion. The motion passed on a vote of 14:0:6:18=38. The results of this motion supersedes a portion of the motion approved in item 10.1.11.

10.1.4   Change receiver threshold, driver asymmetry, and minimum drive level numbers to TBD in SPI-4 revision 0 [Aloisi]

Paul Aloisi moved that the receiver threshold, driver asymmetry, and minimum driver level values in SPI-4 revision 0 be changed to TBD. Mark Evans seconded the motion. The motion passed 18:2:3:15=38. The results of this motion supersedes some portion of the motion approved in item 10.1.11.

10.1.5   Expander Topics (00-199r2) [Ham]

Bill Ham moved that 00-199r2 (r1 as modified) be approved for inclusion in SPI-4 revision 0. Bill Galloway seconded the motion. The motion passed on a vote of 19:0:2:17=38.

10.1.6   Flow Control (00-142r4) [Lamers]

Bill Galloway moved that 00-142r4 (r3 as modified) be approved for inclusion in SPI-4 revision 0. Bill Ham seconded the motion. The motion passed on a vote of 20:1:2:15=38.

10.1.7   Adding Read/Write Attribute commands to SPC-3 (99-148r7) [Jerman]

Steve Jerman moved that 99-148r7 be approved for inclusion in SPC-3, SMC-2, and SSC-2. Erich Oetting seconded the motion. The motion passed on a vote of 21:0:0:17=38.

10.1.8   Access controls in SPC-3 (99-245r9) [Hafner]

Jim Hafner moved that 99-245r9 (99-245r8 as modified) be approved for inclusion in SPC-3, SAM-2, FCP-2, SPI-4, SBC-2, MMC-3, and a future version of RBC. Rob Elliott seconded the motion. The motion passed on a vote of 20:0:0:18=38.

10.1.9   Corrections to EXTENDED COPY (00-211r2) [Chambliss/Weber]

Ralph Weber moved that 00-211r2 be approved for inclusion in SPC-2. Bill Galloway seconded the motion. The motion passed on a vote of 21:0:0:17=38.

10.1.10 Beyond Beyond 2TB (00-212r1) [Weber]

Ralph Weber moved that 00-212r1 (r0 as modified) be approved for inclusion in SPC-2. Bill Galloway seconded the motion. The motion passed on a vote of 21:0:0:17=38.

10.1.11 Fast-160 (99-295r5) [Milligan]

Gene Milligan moved that 99-295r5 be approved for incorporation in SPI-4 revision 0. Bill Galloway seconded the motion. The vote passed on a vote of 25:1:0:12=38. Paul Aloisi stated that his no vote was based on the fact that the document was not backed by supporting technical justifications. (Secretary's note: This agenda item was completed first in the 10.1.x group of agenda items since it resulted from the earliest working group.)

10.2 Identifying liaison for IETF SCSI over IP project [Robinson]

John Lohmeyer announced that Charles Monia of Adaptec has volunteered to act as liaison between the IETF SCSI over IP project and T10. Gary Robinson reported that IETF has created a project for SCSI over IP and asked to be a liaison in addition to Charles. The group accepted Gary's request.

10.3 Project proposal for SCSI Stream Commands - 2 (SSC-2) (00-173) [Peterson]

Erich Oetting moved that 00-173r1 (r0 as modified) be accepted as a project proposal for a standard and forwarded to NCITS for further processing. Neil Wanamaker seconded the motion. The motion passed on a vote of 20:0:0:18=38.

John Lohmeyer took an action item to forward 00-173r1 to NCITS as a project proposal for SSC-2 within 72 hours.

10.4 Response to public review comment #1 on NCITS.336-200x - SPI-3 [Penokie]

George Penokie moved that SPI-3 revision 14 be accepted as containing a substantive change in response to the public review comment #1 (00-219r0) from Ron Silletti (IBM) and that SPI-3 revision 14 be forwarded to NCITS for processing towards second public review. Bill Galloway seconded the motion. On a roll call vote, the motion passed on a vote of 26:0:0:12=38. Details of the vote were as follows:

Organization	Stat	Name	Yes	No	Abs	NP
Adaptec, Inc.	A.	Mr. Charles Monia	1			
AMP / Tyco Electronics						1
Amphenol Interconnect	P	Mr. Bill Mable	1			
Berg Electronics	P	Mr. Douglas Wagner	1			
BREA Technologies, Inc.	P	Mr. Bill Galloway	1			
Circuit Assembly Corp.						1
CMD Technology	P	Mr. Edward Haske	1			
Compaq Computer Corp.	P	Mr. Robert C. Elliott	1			
Crossroads Systems, Inc.	P	Mr. Neil Wanamaker	1			
Dallas Semiconductor	P	Mr. Charles Tashbook	1			

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Dell Computer              A    Mr. William Dawkins      1
EMC                        P    Mr. Gary S. Robinson     1
ENDL Texas                 A    Mr. Ralph O. Weber       1
Exabyte Corp.                                                    1
Fujitsu                    P    Mr. Eugene Lew           1
General Dynamics                                                 1
Hewlett Packard Co.                                              1
Hitachi Cable Manchester,Inc P  Mr. Zane Daggett         1
Honda Connectors                                                 1
IBM Corp.                  P    Mr. George O. Penokie    1
Iomega Corp.                                                     1
KnowledgeTek, Inc.                                              1
LSI Logic Corp.            P    Mr. John Lohmeyer        1
Madison Cable Corp.        P    Ms. Jie Fan              1
Maxtor Corp.               P    Mr. Pete McLean          1
Molex Inc.                                                       1
NSTOR                                                           1
Ophidian Designs           P    Mr. Edward A. Gardner    1
Panasonic Technologies, Inc                                     1
Philips Electronics                                             1
QLogic Corp.               P    Mr. Skip Jones           1
Quantum Corp.              P    Mr. Mark Evans           1
Seagate Technology         A    Mr. Gerald Houlder       1
Storage Technology Corp.   P    Mr. Erich Oetting        1
Sun Microsystems, Inc.     P    Mr. Kenneth Moe          1
Texas Instruments          P    Mr. Paul D. Aloisi       1
Toshiba America Elec. Comp. P    Mr. Tasuku Kasebayashi   1
Woven Electronics          P    Mr. Doug Piper           1

                                           26  0   0 12 = 38
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John Lohmeyer took an action item to send a letter to Ron Silletti thanking him for his public review comment. John Lohmeyer took an action item to forward SPI-3 revision 14 to NCITS for processing toward to second public review.

10.5 PIP Project Proposal (00-238) [Ham]

Bill Ham moved that 00-238r0 be accepted as a project proposal for a technical report and forwarded to NCITS for further processing. Paul Aloisi seconded the motion. The motion passed on a vote of 21:0:1:16=38. Steve Jerman stated that his abstention was based on a lack of expertise.

John Lohmeyer took an action item to forward 00-238r0 to NCITS as a project proposal for the PIP Technical Report.

10.6 Report on NCITS style changes [Lohmeyer]

John Lohmeyer reported that he discussed the document style agreements between T10 and NCITS. He noted that the agreement allows T10 to forward documents to NCITS in T10 style, but NCITS may convert the documents to the NCITS/ANSI style. There is no change from our previous agreement. The committee discussed how to proceed from here and agreed that completion of the T10 style guide (see item 9.3) is the next critical step.

10.7 SES defects [Elliott/Lohmeyer]

John Lohmeyer reported on committee activities related to preparation of an amendment for SES to correct technical defects discovered by Compaq and confirmed by the CAP working group. Rob Elliott volunteered to edit the amendment and noted that Bob Snively has volunteered to incorporate the corrections during ISO/IEC

processing of SES. Roger Cummings offered to provide amendment documents from his recent efforts to create an amendment for FC-PH.

11. ISO/IEC

11.1 ISO/IEC Report [Milligan]

Gene Milligan presented the ISO/IEC report; the electronic version follows.

Project	#	Description	Status	Months Pending	Editor
25.13.11.02	DIS9316-2	CAM	In Publication	Completed	Bill Dallas
25.13.11.13	IS 9316-1	SCSI-2	Published IS	Completed	Larry Lamers
25.13.11.05	CD 14776-111	SPI	Withdrawn		
25.13.11.08	IS 14776-411	SAM	Published IS	Completed	Charles Monia
25.13.11.14	CD 14776-121	Fast-20	Withdrawn		
25.13.11.15	IS 14776-341	SCC	Publishing	Completed	George Penokie
25.13.11.13	CD 14776-351	SMC	Awaiting DIS text with resolution of comments	16 Target 7/99	Erich Oetting
25.13.11.25	CD 14776-112	SPI-2	DIS text provided with resolution of comments	Current step Completed	George Penokie
25.13.11.22	CD 14776-371	SES	Awaiting DIS text with resolution of comments	16 Target 8/99	Bob Snively
25.13.11.23	DIS 14776-342	SCC-2	Publishing	Current step completed	George Penokie
25.13.13.02	CD 14776-221	FCP	Awaiting DIS text with resolution of comments	16 Target 8/99	Bob Snively
25.13.11.16	CD 14776-381	OMC	FDIS passed		Japan
25.13.11.17	CD 14776-361	MMC	Withdrawal requested		Ron Roberts
25.13.11.10	CD 14776-321	SBC	FDIS text with resolution of comments provided	Current step completed	Gene Milligan
25.13.11.20	DIS 14776-232	SBP-2	Fast Track DIS	closes 9/15/00	Peter Johansson
25.13.11.xx	CD 14776-326	RBC	NWIP & CD Contribution submitted		Ron Roberts
25.13.11.xx	CD 14776-362	MMC-2	NWIP & CD Contribution submitted		Ron Roberts
25.13.11.11	CD 14776-331	SSC	NWIP & CD Contribution submitted		Dave Peterson

Other than SMC, SES, and FCP overdue editorial work, all of the current T10 ISO/IEC actions are completed.

US TAG: NCITS/T10 SC: N JT/00-0149
Date Due to TAG Administrator: 07/24/00
Subject: For JTC 1 TAG Letter Ballot, ISO/IEC 14776-232: Information Technology - Small Computer System Interface - Part 232: Serial bus protocol (SBP-2) SC/JTC 1 Due Date: 09/15/00

SC25/WG4 meeting is 6/12 through 6/15 and SC25 6/16 in Tromsÿ.

11.2 ISO/IEC Business [Milligan]

11.2.1   Roll Call vote on ISO/IEC fast track processing of SBP-2 [Milligan]

On behalf of Peter Johansson, Gene Milligan moved T10 approve SBP-2 ISO/IEC 14776-232 as presented. Gary Robinson seconded the motion. The motion passed on a roll call vote of 20:1:1:16=38. Details of the roll call vote were as follows.

Organization	Stat	Name	Yes	No	Abs	NP
Adaptec, Inc.	A	Mr. Ron Roberts	1			
AMP / Tyco Electronics	P	Mr. Charles Brill			1	
Amphenol Interconnect						1
Berg Electronics						1
BREA Technologies, Inc.						1
Circuit Assembly Corp.						1
CMD Technology	P	Mr. Edward Haske	1			
Compaq Computer Corp.	P	Mr. Robert C. Elliott	1			
Crossroads Systems, Inc.	P	Mr. Neil Wanamaker	1			
Dallas Semiconductor	P	Mr. Charles Tashbook	1			
Dell Computer						1
EMC	P	Mr. Gary S. Robinson	1			
ENDL Texas	A	Mr. Ralph O. Weber	1			
Exabyte Corp.						1
Fujitsu	P	Mr. Eugene Lew	1			
General Dynamics						1
Hewlett Packard Co.	A.	Mr. Steve Jerman	1			
Hitachi Cable Manchester,Inc						1
Honda Connectors						1
IBM Corp.	P	Mr. George O. Penokie	1			
Iomega Corp.						1
KnowledgeTek, Inc.						1
LSI Logic Corp.	P	Mr. John Lohmeyer	1			
Madison Cable Corp.	P	Ms. Jie Fan	1			
Maxtor Corp.	P	Mr. Pete McLean	1			
Molex Inc.						1
NSTOR						1
Ophidian Designs	P	Mr. Edward A. Gardner		1		
Panasonic Technologies, Inc						1
Philips Electronics						1
QLogic Corp.						1
Quantum Corp.	A	Mr. Patrick McGarrah	1			
Seagate Technology	P	Mr. Gene Milligan	1			
Storage Technology Corp.	P	Mr. Erich Oetting	1			
Sun Microsystems, Inc.	P	Mr. Kenneth Moe	1			
Texas Instruments	P	Mr. Paul D. Aloisi	1			
Toshiba America Elec. Comp.	P	Mr. Tasuku Kasebayashi	1			
Woven Electronics	P	Mr. Doug Piper	1			
			20	1	1	16 = 38

Ed Gardner stated that his no vote was based on the belief that T10 should not be developing international standards. Chuck Brill stated that his abstention was based on concerns about the absence 1394b.

11.2.2 Instructions to the SC 25 working group 4 delegation [Milligan]

Gene Milligan moved that T10 instruct its delegation to promote the activities of T10 and NCITS at SC 25 working group 4. Ralph Weber seconded the motion. In the absence of any objections, the motion passed unanimously.

12. Liaison Reports

12.1 T11 Liaison Report [Wanamaker]

Neil Wanamaker reported on the activities of T11 and provided an electronic report that is available in 00-242r0.

12.2 T13 Liaison Report [Milligan]

Gene Milligan presented the T13 liaison report.

12.3 SFF Industry Group [Allan]

Dal Allan provided the following electronic report:

> The 100-pin SCA-2 investigation has reported interim results that indicate speeds beyond 4Gbs may be achievable.

> SFF-8551 will be revised to include thread size and depth.

> SFF-8067 (40-pin SCA-2 Connector w/Bidirectional ESI), SFF- 8072 (80-pin SCA-2 for Fibre Channel Tape), SFF-8410 (HSS Testing for Duplex Copper Links), and SFF-8420 (HSSDC-1 Shielded Connections) were approved for publication.

> SFF-8415 (High Performance Electrical Interconnect) and SFF-8452 (SCA-3) are new projects. SCA-3 will define a resistive tip which reduces electrical disturbance of the SCSI bus.

12.4 IEEE 1394 [Johansson]

Gary Robinson reported that 1394 and 1394a are on fast track at ISO/IEC JTC 1. 1394b is in IEEE ballot resolution.

Subsequent to the meeting, Peter Johansson provided the following electronic report:

> The Chair of the IEEE Microprocessor Standards Committee, Don Wright, has a letter in preparation to request the IEEE initiate the "fast track" process (the MSC is the sponsor for the IEEE 1394 standards).

> On a related topic, IEEE P1394.3, Peer to Peer Data Transport (PPDT), is in the process of ballot group formation. PPDT extends the usefulness of SBP-2 by specifying how it may be used in a more peer-to-peer fashion. That is, less importance is attached as to which device is the initiator and which the target. More information, including the draft standard, is available at http://www.pwg.org/p1394/index.html.

12.5 IEEE P1285 Status

Bob Snively reported that IEEE P1285 has had two renewals and waivers of its completion time with the most recent being in 1999. He noted that the document is not available on the web site. He agreed to continue efforts to determine if the project has been terminated. Gary Robinson noted that projects usually do not get a third waiver of their completion date.

12.6 SCSI Trade Association (STA) [Jones/Aloisi]

Paul Aloisi reported on the activities of STA and provided an electronic report that can be found in 00-244r0.

12.7 IETF SCSI over IP [Monia/Robinson]

Charles Monia presented the IETF liaison report and provided an electronic report that can be found in 00-234r0. The group discussed whether T10 should entertain a project proposal to develop a SCSI over IP protocol standard. Gary Robinson argued against such an action, noting that prior turf wars of this type between IETF and ISO had been very detrimental. The primary recommendation was that interested T10 members participate directly in the IETF activity.

13. Review of Action Items

376)   Dean Wallace will lead the SSM working group in preparation of a press release regarding the usage of the T10 web site that John Lohmeyer can forward to NCITS for distribution.
377)   John Lohmeyer will forward the SSM press release to NCITS.
388)   Ralph Weber will prepare SPC-2 revision 18 for letter ballot vote.
389)   John Lohmeyer will conduct a letter ballot vote on forwarding SPC-2 revision 18 to first public review.
390)   John Lohmeyer will contact NCITS regarding formalization of the responsibilities for maintaining the vendor ID list.
391)   John Lohmeyer will send a letter to Ron Silletti thanking him for his public review comment.
392)   John Lohmeyer will forward SPI-3 revision 14 to NCITS for processing toward to second public review.
393)   John Lohmeyer will forward 00-173r1 to NCITS as a project proposal for SSC-2 within 72 hours.
        Completed
394)   John Lohmeyer will forward 00-238r0 to NCITS as a project proposal for the PIP Technical Report.
        Completed

14. Meeting Schedule

The next plenary meeting of T10 will be July 13, 2000 in Colorado Springs, CO at the Antlers Adam's Mark Hotel (719-473-5600), hosted by LSI Logic. The meeting will begin at 9:00 a.m. on Thursday.

The meeting list for the next plenary week is:

```
                              July '00 Meeting Map
                               (5/24/00 Version)
Monday 7/10          9   10  11  12  1   2   3   4   5   6   7   8   9
                     +==============+==================+
                     |Joint T10/T11.3|SCSI CAP WG (FCP-2)|          (60)
                     +==============+==================+
                     | T10 Proc. SG. |                             (20)
                     +==============+

Tuesday 7/11    8    9   10  11  12  1   2   3   4   5   6   7   8   9
                     +=====================================+
                     | Parallel SCSI WG                    |        (60)
                     +=================================+=======+
                     | MMC WG                           |         (20)
                +---+=================================+
                |T11 ad hocs                          |           (40)
                +-------------------------------------+

Wednesday 7/12       9   10  11  12  1   2   3   4   5   6   7   8   9
                     +=================================+
                     | SCSI Commands, Arch., & Protocol WG  |      (60)
                     +===============================+=======+
                     | MMC WG                          |          (20)
                     +=================+==========+-------+
                                       | SFF WG   | SFF  |         (40)
                                       +----------+------+

Thursday 7/13        9   10  11  12  1   2   3   4   5   6   7   8
                     +===============+--------------------+
                     | T10 Plenary   / STA Tech (*)       |      (70/40)
                     +===============+====================+
                                     / OSD WG (*)          |        (15)
                     +-----+=========+===========+
                           | STA Marcom   |                         (15)
                           +--------------+
  (*) - Meetings after T10 plenary meeting begin 30 minutes
        after the T10 plenary meeting but not before 1:30 pm

Friday 7/14     8    9   10  11  12  1   2   3   4   5
                  +---------------------------+
                  | SCSI Trade Association (STA)|                   (30)
                  +---------------------------+
```

    Meetings marked with == are T10-authorized meetings.
    Meetings marked with -- are authorized by other groups and may change
    without notice.

Other T10-authorized meetings:

Meeting	Date	Location / Contact
Joint T11.3/T10	06/07/00 Wed 3:00p	Boise, ID / T11
SST WG	06/07/00 Wed 9:00a	Boise, ID / T11
PIP SG	06/12-13 Mon-Tue	Chicago, IL / Ogbuokiri
SSM WG	06/13-14 Tue-Wed	Chicago, IL / Ogbuokiri
SDV WG	06/15/00 Thu 9:00a	Chicago, IL / Ogbuokiri {tentative loc.}
SST WG	08/09/00 Wed 9:00a	Seattle, WA / T11
Joint T11.3/T10	08/__/00 ___ _:00	Seattle, WA / T11
PIP WG	8/14-15/00	Colo Spgs, CO / Barnes
SSM WG	8/15-16/00	Colo Spgs, CO / Barnes

Tentative:

```
PIP WG           10/11-12/00         Santa Cruz / Seagate
SSM WG           10/12-13/00         Santa Cruz / Seagate


 Meeting Map Abbreviation Key:
Amnd:         Amendment
Cable Perf.: Cable Performance Testing
CAM:          Common Access Method
CAM-3:        Next generation CAM for SCSI-3
CAP:          Commands, Architecture, and Protocols
EPI:          SCSI Enhanced Parallel Interface (Technical Report)
Fast-20:      Data Transfer at 20 Mega-transfers/second (a.k.a., Ultra)
Fast-40:      Data Transfer at 40 Mega-transfers/second (a.k.a., Ultra2)
Fast-80:      Data Transfer at 80 Mega-transfers/second (a.k.a., Ultra3, Ultra160)
Fast-160:     Data Transfer at 160 Mega-transfers/second (a.k.a., Ultra4, Ultra320)
FC:           Fibre Channel
FC-AL:        Fibre Channel - Arbitrated Loop (a T11 project)
FCLC:         Fibre Channel Loop Community (not an NCITS activity)
I/F:          Interface
HAP:          High Availability Profile (Technical Report)
LB:           Letter Ballot
MMC-2:        Multimedia Commands - 2 (CD-ROM, DVD, etc.)
OBD_T:        Object-Based Device Tutorial
Par.:         Parallel (e.g., SPI-n, Domain Validation)
PH:           Physical (Connectors, Cables, Transceivers, etc.)
Phys Test SG: Physical Test Planning Study Group
Plenary:      Full Committee Meeting
RAID:         Redundant Array of Independent Devices
RBC:          Reduced Block Commands
SBC:          SCSI-3 Block Commands
SBP-2:        Serial Bus Protocol for IEEE 1394 (2nd generation protocol)
SCC-2:        SCSI Controller Commands - 2 (2nd generation RAID command set)
SCSI:         Small Computer System Interface
SES:          SCSI Enclosure Services
SCSI Harbor: A STA project on defining a wrapper for SCSI devices
SFF:          SFF Industry Group (not an NCITS activity)
SG:           Study Group
SMC:          SCSI-3 Medium Changer Commands
SPC-2:        SCSI Primary Commands - 2 (2nd generation)
SPI-2:        Second Generation SCSI Parallel Interface
SPI-3:        Third Generation SCSI Parallel Interface
SPI-4:        Fourth Generation SCSI Parallel Interface
SSA:          Serial Storage Interface
SSC:          SCSI-3 Stream Commands (includes Tape)
SSWGs:        Specific-Subject Working Groups
STA:          SCSI Trade Association (not an NCITS activity)
STA Tech:     STA Technical Meeting (T10 members invited)
T10:          Lower Level Interfaces Technical Committee
T10 Proc.:    T10 Procedures
WG:           Working Group (same as Ad Hoc Group)
```

For more information about T10 activities, please contact the following people:

```
Activity                    Contact         Telephone/Email
--------------------------- --------------- ------------------------------
EPI                         Bill Ham        (508) 841-2629
                                            bill.ham@digital.com
```

```
FCP-2, SES                 Robert Snively  (408) 487-8135
                                           rsnively@brocade.com
SBC, SBC-2                 Gene Milligan   (405) 324-3070
                                           gene_milligan@notes.seagate.com
MMC-2, MMC-3, RMC          Bill McFerrin   (303) 651-5400
                                           BMcFerrin@aol.com
SBP-2 or RBC               Pete McLean     (303) 678-2149
                                           pete_mclean@maxtor.com
SBP-2                      Peter Johansson (510) 527-3926
                                           PJohansson@ACM.org
SCC-2, SPI-3, SPI-4        George Penokie  (507) 253-5208
                                           gop@us.ibm.com
SDV                        Larry Lamers    (408) 957-7817
                                           ljlamers@ieee.org
SMC, SMC-2                 Erich Oetting   (303) 673-2178
                                           Erich_Oetting@Stortek.com
SPC-2, SPC-3, SAM-2        Ralph Weber     (214) 912-1373
                                           roweber@acm.org
SSC, SSC-2                 Dave Peterson   (612) 391-1008
                                           dap@network.com
SSM                        Dean Wallace    (714) 668-5028
                                           d_wallace@qlc.com
SVP                        Ed Gardner      (719) 593-8866
                                           eag@ophidian.com
Other Activities           John Lohmeyer   (719) 533-7560
                                           lohmeyer@t10.org
```

The long-term T10 meeting week schedule is:

```
Date                  Location                  Host/Comments
------------------    ------------------------  -----------------------------
Jul 10-14, 2000       Colorado Springs, CO      LSI Logic
Sep 11-15, 2000       Huntington Beach, CA      QLogic
Oct 30-Nov 3, 2000    Monterey, CA              Adaptec / dates changed
Jan 15-19, 2001       Orlando, FL               Adaptec (DPT Div.)
Mar  5-9, 2001        Dallas, TX                Texas Instruments
May  7-11, 2001       Manchester, NH            Hitachi Cable
Jul 16-20, 2001       Colorado Springs, CO      LSI Logic
Sep 10-14, 2001       Huntington Beach, CA      QLogic
Nov  5-9, 2001        Monterey, CA              Adaptec
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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 T10 (that is, one vote per organization) and the results of a working group are not binding on the parent committee. Ad hoc groups should strive to achieve consensus prior to bringing issues to T10.

Erich Oetting moved that T10 authorize the T10-related meetings and events in the list above that had not previously been approved. Charles Brill seconded the motion. The motion passed on a vote of 13:1:1:23=38.

15. Adjournment

The meeting was adjourned at 1:00 p.m. on Thursday May 18, 2000.

Enclosure(1) -- Meeting Attendees

```
        Name            S      Organization        Electronic Mail Address
----------------------  --  ------------------------  ------------------------
Mr. Ron Roberts         A   Adaptec, Inc.           ljlamers@ieee.org
Mr. Charles Monia       A.  Adaptec, Inc.           cmonia@corp.adaptec.com
Mr. Charles Brill       P   AMP / Tyco Electronics  cebrill@ix.netcom.com
Mr. Bill Mable          P   Amphenol Interconnect   mableaipc@aol.com
Mr. Douglas Wagner      P   Berg Electronics        wagnerdl@bergelect.com
Mr. Bill Galloway       P   BREA Technologies, Inc. billg@breatech.com
Mr. Robert Snively      P   Brocade Communications  rsnively@brocade.com
Mr. Edward Haske        P   CMD Technology          haske@cmd.com
Mr. Robert C. Elliott   P   Compaq Computer Corp.   Rob_Elliott@compuserve.
                                                    com
Dr. William Ham         A   Compaq Computer Corp.   bill.ham@digital.com
Mr. Neil Wanamaker      P   Crossroads Systems, Inc. ntw20@netcom.com
Mr. John Tyndall        A   Crossroads Systems, Inc. jtyndall@crossroads.com
Mr. Charles Tashbook    P   Dallas Semiconductor    charles.tashbook@dalsemi.
                                                    com
Mr. William Dawkins     A   Dell Computer           bill_dawkins@dell.com
Mr. Gary S. Robinson    P   EMC                     robinson_gary@emc.com
Mr. Ralph O. Weber      A   ENDL Texas              roweber@acm.org
Mr. Eugene Lew          P   Fujitsu                 elew@fcpa.fujitsu.com
Mr. Donald Woelz        V   Genroco, Inc.           don@genroco.com
Mr. Steve Jerman        A.  Hewlett Packard Co.     steve_jerman@hp.com
Mr. Koichi Ono          V   Hitachi America Ltd.    koichi.ono@hal.hitachi.
                                                    com
Mr. Zane Daggett        P   Hitachi Cable Manchester, zdaggett@hcm.hitachi.com
                            Inc
Mr. Anthony Yang        O   Hitachi Storage Products anthony.yang@hal.hitachi.
                                                    com
Mr. George O. Penokie   P   IBM Corp.               gop@us.ibm.com
Dr. Jim Hafner          V   IBM Corp.               hafner@almaden.ibm.com
Mr. Paul Anderson       V   IBM Corp.               pman@us.ibm.com
Mr. David Chambliss     V   IBM Corp.               chamb@us.ibm.com
Mr. John Lohmeyer       P   LSI Logic Corp.         lohmeyer@t10.org
Ms. Jie Fan             P   Madison Cable Corp.     jfan@madisoncable.com
Mr. Pete McLean         P   Maxtor Corp.            pete_mclean@maxtor.com
Mr. Edward A. Gardner   P   Ophidian Designs        eag@ophidian.com
Mr. William P.          P   Philips Electronics     BMcFerrin@aol.com
McFerrin
Mr. Mark Evans          P   Quantum Corp.           mark.evans@quantum.com
Mr. Patrick McGarrah    A   Quantum Corp.           pat.mcgarrah@quantum.com
Mr. Gene Milligan       P   Seagate Technology      Gene_Milligan@notes.
                                                    seagate.com
Mr. Gerald Houlder      A   Seagate Technology      gerry_houlder@notes.
                                                    seagate.com
Mr. Erich Oetting       P   Storage Technology Corp. erich_oetting@stortek.com
Mr. Kenneth Moe         P   Sun Microsystems, Inc.  kenneth.moe@sun.com
Mr. Paul D. Aloisi      P   Texas Instruments       Paul_Aloisi@ti.com
Mr. Donald R. Getty     A#  Texas Instruments       donald_getty@ti.com
Mr. Tasuku Kasebayashi  P   Toshiba America Elec.   task.kasebayashi@taec.
                            Comp.                   toshiba.com
Mr. Roger Cummings      V   Veritas Software        roger.cummings@veritas.
                                                    com
Mr. Doug Piper          P   Woven Electronics       doug.piper@
                                                    wovenelectronics.com
```

42 People Present

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

Enclosure(2) -- T10 Attendance Database
                    Generated on 2000/05/24 at 14:35:33

```
Mr. Lawrence J. Lamers  (P)        Phone: (408) 957-7817
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691 S. Milpitas Blvd.              Email: ljlamers@ieee.org
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Mr. Steven P. Ego  (O)             Phone: (512) 258-2303
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Mr. Matt Wakeley  (O)              Phone: (916) 785-4259
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                                   Email: awfrantu@tycoelectronics.com



Ms. Bonnie Rose  (O)               Phone: (416) 291-4401 x2239
Amphenol Canada Corp.                Fax: (416) 292-0647
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20 Valley St.                      Email: mableaipc@aol.com
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Mr. Michael Wingard  (A)           Phone: (607) 786-4241
Amphenol Interconnect                Fax: (607) 786-4311
```

```
20 Valley St.                    Email: mikwingard@aol.com
Endicott, NY 13760


Mr. Bart Raudebaugh  (O)         Phone: (415) 322-5322
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Mr. Harlan Andrews  (O)          Phone: (408) 974-6430
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Mr. Douglas Wagner  (P)          Phone: (805) 498-0325
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472 Delwood Ct.                  Email: wagnerdl@bergelect.com
Newbury Park, CA 91320-4819


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Enclosure(3) -- T10 Document Database
                    Generated on 2000/05/24 at 14:35:14

T10/00-001R0 Date: 2000/01/21 Author: John Lohmeyer   Mailing: 2000_1
Agenda for T10 Meeting #36 (March '00)

T10/00-001R1 Date: 2000/02/17 Author: John Lohmeyer   Mailing:
Agenda for T10 Meeting #36 (March '00)

T10/00-002R0 Date: 2000/01/21 Author: John Lohmeyer   Mailing: 2000_1
T10 Project Summary – January '00

T10/00-003R0 Date: 2000/01/21 Author: John Lohmeyer   Mailing: 2000_1
Jeopardy Letter for March '00 meeting

T10/00-004R0 Date: 1999/12/30 Author: John Lohmeyer   Mailing: 2000_1
Letter Ballot on forwarding FCP-2 to first public review

T10/00-005R0 Date: 2000/02/03 Author: John Lohmeyer   Mailing: 2000_2
Results of letter ballot 00-004 on forwarding FCP-2

T10/00-006R0 Date: 2000/02/16 Author: John Lohmeyer   Mailing: 2000_2
Agenda for T10 Meeting #37 (May '00)

T10/00-006R1 Date: 2000/03/17 Author: John Lohmeyer   Mailing: 2000_2
Agenda for T10 Meeting #37 (May '00)

T10/00-006R2 Date: 2000/05/01 Author: John Lohmeyer   Mailing: 2000_3
Agenda for T10 Meeting #37 (May '00)

T10/00-007R0 Date: 2000/03/15 Author: John Lohmeyer   Mailing: 2000_2
T10 Project Summary – March '00

T10/00-008R0 Date: 2000/03/10 Author: John Lohmeyer   Mailing: 2000_2
Jeopardy Letter for May '00 meeting

T10/00-009R0 Date: 2000/02/16 Author: John Lohmeyer   Mailing: 2000_2
Letter Ballot on recommending US Yes vote on OMC FDIS

T10/00-010R0 Date: 2000/02/29 Author: John Lohmeyer   Mailing: 2000_2
Results of letter ballot 00-009 on recommending US Yes vote on OMC FDS

T10/00-011R0 Date: 2000/02/29 Author: John Lohmeyer   Mailing: 2000_2
Letter Ballot on including comments with recommendation on OMC FDIS

T10/00-012R0 Date: 2000/03/03 Author: John Lohmeyer   Mailing: 2000_2
Results of 00-011r0 letter ballot on recommendation on OMC FDIS

T10/00-013R0 Date: 2000/05/22 Author: John Lohmeyer   Mailing: Missing
Agenda for T10 Meeting #38 (Jul '00)

T10/00-014R0 Date: 2000/05/22 Author: John Lohmeyer   Mailing: Missing
T10 Project Summary – May '00

T10/00-015R0 Date: 2000/05/22 Author: John Lohmeyer   Mailing: Missing
Jeopardy Letter for July '00 meeting

T10/00-016R0 Date: 2000/05/22 Author: John Lohmeyer   Mailing: 2000_3
Letter Ballot on forwarding SPC-2 to first public review

T10/00-101R0 Date: 1999/11/19 Author: Rob Elliott   Mailing: 2000_1
Minutes of Access Controls teleconference - 11/18/99

T10/00-102R0 Date: 1999/12/03 Author: John Lohmeyer   Mailing: 2000_1
Minutes of SPI-3/-4 Working Group - 12/2-3/99

T10/00-103R0 Date: 1999/11/30 Author: Richard Uber   Mailing: 2000_1
Ultra-320 SCSI Implementing 1.8x Transmit Pre-compensation

T10/00-103R1 Date: 1999/12/02 Author: Richard Uber   Mailing: 2000_1
Ultra-320 SCSI Implementing 1.8x Transmit Pre-compensation

T10/00-103R2 Date: 2000/02/09 Author: Richard Uber   Mailing: 2000_2
Issues with Implementing Transmitter Pre-Compensation

T10/00-104R0 Date: 1999/11/30 Author: Andrew Bishop   Mailing: 2000_1
Ultra-320 SCSI Compensation Techniques

T10/00-105R0 Date: 1999/11/30 Author: Russ Brown   Mailing: 2000_1
Ultra-320 SCSI Calibration Strategy

T10/00-105R1 Date: 1999/12/01 Author: Russ Brown   Mailing: 2000_1
Ultra320 SCSI Calibration Strategy

T10/00-106R0 Date: 1999/12/02 Author: Pat McGarrah   Mailing: 2000_1
Ultra 320 SCSI Summary and Recommendations

T10/00-106R1 Date: 2000/02/09 Author: Mark Evans   Mailing: 2000_2
Ultra320 SCSI Summary and Recommendations

T10/00-107R0 Date: 1999/12/01 Author: John Lohmeyer   Mailing: 2000_1
Response to NCITS 333 (MMC-2) 1PR comment #1 from Frank Rutherford

T10/00-108R0 Date: 1999/12/01 Author: John Lohmeyer   Mailing: 2000_1
Response to NCITS 333 (MMC-2) 1PR comment #2 from Paul Suhler

T10/00-109R0 Date: 2000/01/04 Author: Larry Lamers   Mailing: 2000_1
SPC-3 Echo Buffer Size

T10/00-109R1 Date: 2000/01/04 Author: Larry Lamers   Mailing: 2000_2
SPC-3 Echo Buffer Size

T10/00-109R2 Date: 2000/02/15 Author: Larry Lamers   Mailing: 2000_2
SPC-3 Echo Buffer Size

T10/00-109R3 Date: 2000/03/08 Author: Larry Lamers   Mailing: 2000_2
SPC-3 Echo Buffer Size

T10/00-110R0 Date: 1999/11/30 Author: Bill Ham   Mailing: 2000_1
Minutes of the SCSI Cable Media Performance WG (draft) - 11/30/99

T10/00-110R1 Date: 2000/02/10 Author: Bill Ham   Mailing: 2000_2
Minutes of the SCSI Cable Media Performance WG (aprvd) - 11/30/99

T10/00-111R0 Date: 1999/12/01 Author: Bill Ham   Mailing: 2000_1
Minutes of SCSI signal modeling WG (draft) - 12/01/99

T10/00-111R1 Date: 2000/02/10 Author: Bill Ham   Mailing: 2000_2

Minutes of SCSI signal modeling WG (aprvd) - 12/01/99

T10/00-112R0 Date: 1999/12/01 Author: Jonathan Fasig   Mailing: 2000_1
Electrical Model Requirements of SCSI Interconnect Components

T10/00-113R0 Date: 1999/12/01 Author: Dima Smolyansky   Mailing: 2000_1
SCSI Connector and Cable Modeling from TDR Measurements

T10/00-114R0 Date: 1999/12/21 Author: George Penokie   Mailing: 2000_1
Unit Attention fixes in Persistent Reservation

T10/00-115R0 Date: 1999/12/07 Author: Stewart Wyatt   Mailing: 2000_1
Minutes of Joint T10/T11.3 Joint Ad Hoc -- 12/7/1999

T10/00-116R0 Date: 1999/12/13 Author: Skip Jones   Mailing: 2000_1
Meeting Notice -- Working Group Meetings -- Feb 7-11, 2000

T10/00-117R0 Date: Author: Mailing: Missing
not used

T10/00-118R0 Date: 1999/12/15 Author: Gene Milligan   Mailing: 2000_1
Comment Resolution

T10/00-119R0 Date: 1999/12/21 Author: George Penokie   Mailing: 2000_1
WDTR/SDTR/PPR Interactions

T10/00-119R1 Date: 2000/01/10 Author: George Penokie   Mailing: 2000_2
WDTR/SDTR/PPR Interactions

T10/00-120R0 Date: 2000/01/19 Author: Weber & Lohmeyer Mailing: 2000_1
Minutes of SCSI Physical Working Group - Jan 10-11, 2000

T10/00-120R1 Date: 2000/02/22 Author: Weber & Lohmeyer Mailing: 2000_2
Minutes of SCSI Physical Working Group - Jan 10-11, 2000

T10/00-121R0 Date: 2000/01/19 Author: Weber & Lohmeyer Mailing: 2000_1
Minutes of SCSI Protocol Working Group - Jan 12, 2000

T10/00-121R1 Date: 2000/01/26 Author: Weber & Lohmeyer Mailing: 2000_1
Minutes of SCSI Protocol Working Group - Jan 12, 2000

T10/00-121R2 Date: 2000/02/22 Author: Weber & Lohmeyer Mailing: 2000_2
Minutes of SCSI Protocol Working Group - Jan 12, 2000

T10/00-122R0 Date: 2000/01/20 Author: Weber & Lohmeyer Mailing: 2000_1
Minutes of T10 Plenary Meeting #35 - Jan 13, 2000

T10/00-122R1 Date: 2000/02/23 Author: Weber & Lohmeyer Mailing: 2000_2
Minutes of T10 Plenary Meeting #35 - Jan 13, 2000

T10/00-123R0 Date: 2000/01/06 Author: Ralph Weber   Mailing: 2000_1
Access Controls, an alternate approach

T10/00-124R0 Date: 2000/01/04 Author: Dale LaFollette   Mailing: 2000_1
Draft Agenda - Joint T10/T11.3 Activity WG - Jan 13, 2000

T10/00-125R0 Date: 2000/01/05 Author: Gerry Houlder   Mailing: 2000_1
Large LBA addressing using variable length CDB structure

T10/00-126R0 Date: 2000/01/10 Author: Vince Bastiani   Mailing: 2000_1
U320 Timing Specification

T10/00-126R1 Date: 2000/02/10 Author: Vince Bastiani   Mailing: 2000_2
Fast-160 Timing Specification

T10/00-127R0 Date: 1999/12/31 Author: Rob Elliott   Mailing: 2000_1
Target-controlled congestion relief

T10/00-127R1 Date: 2000/05/05 Author: Rob Elliott   Mailing: 2000_3
Target-controlled congestion relief

T10/00-128R0 Date: 2000/01/10 Author: Neil Wanamaker   Mailing: 2000_1
T11 Liaison Report - January 2000

T10/00-129R0 Date: 2000/01/31 Author: Gene Milligan   Mailing: 2000_2
SPC Support for Partial Loading & Unloading (Summary of 99-347r3)

T10/00-130R0 Date: 2000/01/25 Author: Robert Snively/   Mailing: 2000_1
                                         Ralph Weber
Minutes of T10/T11.3 Joint Ad Hoc -- 1/13/2000

T10/00-131R0 Date: 2000/01/20 Author: Bill McFerrin   Mailing: 2000_1
Minutes of MMC Working Group - 1/11/2000

T10/00-132R0 Date: 2000/02/09 Author: Mark Evans and   Mailing: 2000_2
                                         Bruce Leshay
Proposal for training pattern protocol to be included in SPI-4

T10/00-132R1 Date: 2000/03/07 Author: Mark Evans and   Mailing: 2000_2
                                         Bruce Leshay
Proposal for training pattern protocol to be included in SPI-4

T10/00-133R0 Date: 2000/02/09 Author: Bruce Leshay   Mailing: 2000_2
Ultra320 SCSI Calibration Protocol

T10/00-133R1 Date: 2000/03/07 Author: Bruce Leshay   Mailing: 2000_2
Ultra320 SCSI Calibration Protocol

T10/00-133R2 Date: 2000/03/27 Author: Bruce Leshay   Mailing: 2000_3
Ultra320 SCSI Calibration Protocol

T10/00-133R3 Date: 2000/04/26 Author: Bruce Leshay   Mailing: 2000_3
Ultra320 SCSI Calibration and Clock Protocol

T10/00-134R0 Date: 2000/02/17 Author: John Lohmeyer   Mailing: 2000_2
Minutes of SCSI Physical Working Group - Feb 9-10, 2000

T10/00-135R0 Date: 2000/02/08 Author: Paul Suhler   Mailing: 2000_2
Support for Large Block Addresses in SSC

T10/00-135R1 Date: 2000/02/29 Author: Paul Suhler   Mailing: 2000_2
Support for Large Block Addresses in SSC-2

T10/00-135R2 Date: 2000/03/06 Author: Paul Suhler   Mailing: 2000_2
Support for Large Block Addresses in SSC-2

T10/00-136R0 Date: 2000/01/28 Author: Carl Zeitler   Mailing: 2000_2
Comments on FCP-2 Rev 04

T10/00-137R0 Date: 2000/01/28 Author: Carl Zeitler   Mailing: 2000_2
Ladder Diagrams for Error Recovery for FCP-2 Rev 04 Out-Of-Order Delivery -
Annex D

T10/00-137R1 Date: 2000/02/23 Author: Carl Zeitler   Mailing: 2000_2
Ladder Diagrams for Error Recovery for FCP-2 Rev 04 Out-Of-Order Delivery -
Annex D

T10/00-137R2 Date: 2000/03/28 Author: Carl Zeitler   Mailing: 2000_3
Ladder Diagrams for Error Recovery for FCP-2 Rev 04 Out-Of-Order Delivery -
Annex D

T10/00-137R3 Date: 2000/04/24 Author: Carl Zeitler   Mailing: 2000_3
Ladder Diagrams for Error Recovery for FCP-2 Rev 04 Out-Of-Order Delivery -
Annex D

T10/00-138R0 Date: 2000/02/01 Author: George Penokie   Mailing: 2000_2
Comments on FCP-2 Letter Ballot

T10/00-139R0 Date: 2000/02/02 Author: Bob Snively   Mailing: 2000_2
Comments on FCP-2 Letter Ballot

T10/00-140R0 Date: 2000/02/28 Author: Ralph Weber   Mailing: 2000_2
Bug in SAM-2 Task Identifier definition

T10/00-140R1 Date: 2000/04/19 Author: Ralph Weber   Mailing: 2000_3
SAM-2 Task Identifier Readability Enhancements and Addition of Nexus to SAM-2

T10/00-141R0 Date: 2000/02/03 Author: Gene Milligan   Mailing: 2000_2
Comments on FCP-2 Letter Ballot

T10/00-142R0 Date: 2000/01/27 Author: Larry Lamers   Mailing: 2000_2
Flow Control & Read Streaming

T10/00-142R1 Date: 2000/04/20 Author: Larry Lamers   Mailing: 2000_3
Flow Control & Read Streaming

T10/00-142R3 Date: 2000/05/14 Author: Larry Lamers   Mailing: 2000_3
Flow Control & Read Streaming

T10/00-142R4 Date: 2000/05/16 Author: Larry Lamers   Mailing: Missing
Flow Control & Read Streaming

T10/00-143R0 Date: 2000/02/04 Author: Deborah Donovan   Mailing: 2000_2
Transmittal of NCITS No vote & comments on MMC-2 (BSR NCITS.333-20xx)

T10/00-143R1 Date: 2000/02/16 Author: Deborah Donovan   Mailing: 2000_2
Transmittal of NCITS No vote & comments on MMC-2 (BSR NCITS.333-20xx)

T10/00-144R0 Date: 2000/02/07 Author: Larry Lamers   Mailing: 2000_2
Meeting Announcement – SPI-4 WG Milpitas, CA – March 27-28, 2000

T10/00-145R0 Date: 2000/02/07 Author: Bill Ham   Mailing: 2000_2
Minutes of SCSI Passive Interconnect Performance WG (draft) – 2/7/00

T10/00-145R1 Date: 2000/02/29 Author: Bill Ham   Mailing: 2000_2
Minutes of SCSI Passive Interconnect Performance WG (aprvd) – 2/7/00

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T10/00-146R0  Date: 2000/02/08  Author:  Bill Ham        Mailing: 2000_2
Minutes of SCSI Signal Modeling WG (draft) - 2/8/00

T10/00-146R1  Date: 2000/03/01  Author:  Bill Ham        Mailing: 2000_2
Minutes of SCSI Signal Modeling WG (aprvd) - 2/8/00

T10/00-147R0  Date: 2000/02/09  Author:  Russ Brown      Mailing: 2000_2
Ultra320 SCSI vs. Ultra160 SCSI Eye Diagram Data

T10/00-147R1  Date: 2000/02/09  Author:  Russ Brown      Mailing: 2000_2
Ultra320 SCSI vs. Ultra160 SCSI Eye Diagram Data

T10/00-148R0  Date: 2000/02/09  Author:  Bill Ham        Mailing: 2000_2
SCSI History and Signal Integrity Strategies

T10/00-149R0  Date: 2000/02/10  Author:  Bill Ham        Mailing: 2000_2
Requirements for Measuring Receive Signals in SPI-4 and beyond

T10/00-150R0  Date: 2000/02/11  Author:  Bob Snively     Mailing: 2000_2
Resolution of FCP-2 letter ballot comments

T10/00-150R1  Date: 2000/03/04  Author:  Bob Snively     Mailing: 2000_2
Resolution of FCP-2 letter ballot comments

T10/00-150R2  Date: 2000/03/24  Author:  Bob Snively     Mailing: 2000_3
Resolution of FCP-2 letter ballot comments

T10/00-150R3  Date: 2000/05/10  Author:  Bob Snively     Mailing: 2000_3
Resolution of FCP-2 letter ballot comments

T10/00-151R0  Date: 2000/02/16  Author:  ISO/IEC         Mailing: 2000_2
FDIS on Optical Memory Card Device Commands (OMC)

T10/00-152R0  Date: 2000/02/23  Author:  Ralph Weber     Mailing: 2000_2
Review of 16-byte operation codes

T10/00-153R0  Date: 2000/03/07  Author:  Russ Brown      Mailing: 2000_2
Ultra320 SCSI with Receiver Equalization 25 m. into Backplane with 6 loads

T10/00-154R0  Date: 2000/03/07  Author:  Russ Brown      Mailing: 2000_2
Ultra640 SCSI with Receiver Equalization 25 m. into Backplane with 6 loads

T10/00-155R0  Date: 2000/03/13  Author:  Weber / Lohmeyer  Mailing: 2000_2
Minutes of Parallel SCSI WG - March 7, 2000

T10/00-155R1  Date: 2000/03/17  Author:  Weber / Lohmeyer  Mailing: 2000_2
Minutes of Parallel SCSI WG - March 7, 2000

T10/00-156R0  Date: 2000/03/13  Author:  Weber / Lohmeyer  Mailing: 2000_2
Minutes of SCSI Commands, Arch., & Protocol WG - Mar 6&8, 2000

T10/00-157R0  Date: 2000/03/14  Author:  Weber / Lohmeyer  Mailing: 2000_2
Minutes of T10 Plenary Meeting #36 -- March 9, 2000

T10/00-157R1  Date: 2000/03/17  Author:  Weber / Lohmeyer  Mailing: 2000_2
Minutes of T10 Plenary Meeting #36 -- March 9, 2000

T10/00-157R2  Date: 2000/04/26  Author:  Weber / Lohmeyer  Mailing: 2000_3
Minutes of T10 Plenary Meeting #36 -- March 9, 2000
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T10/00-158R0 Date: 2000/02/23 Author: Wally Bridgewater Mailing: Missing
Receiver Input Voltage Budget for Eye Patterns

T10/00-159R0 Date: 2000/02/29 Author: Paul Suhler   Mailing: 2000_2
Analysis of SSC Public Review Comment (SET CAPACITY)

T10/00-160R0 Date: 2000/02/29 Author: Zane Daggett   Mailing: Missing
SCSI passive interconnect performance requirements

T10/00-161R0 Date: 2000/02/29 Author: Paul Suhler   Mailing: 2000_2
SET CAPACITY Command

T10/00-161R1 Date: 2000/03/22 Author: Paul Suhler   Mailing: 2000_3
SET CAPACITY Command

T10/00-161R2 Date: 2000/04/05 Author: Paul Suhler   Mailing: 2000_3
SET CAPACITY Command

T10/00-162R0 Date: 1999/12/07 Author: Roger Ronald   Mailing: 2000_2
Minutes of T11.1 HIPPI Ad Hoc WG (includes SST in item 9.0)

T10/00-163R0 Date: 2000/02/29 Author: Bill Ham   Mailing: 2000_2
Minutes of SCSI Passive Interconnect Performance WG (draft) - 2/29/00

T10/00-163R1 Date: 2000/04/11 Author: Bill Ham   Mailing: 2000_3
Minutes of SCSI Passive Interconnect Performance WG (aprvd) - 2/29/00

T10/00-164R0 Date: 2000/03/01 Author: Bill Ham   Mailing: 2000_2
Minutes of SCSI Signal Modeling WG (draft) - 3/01/00

T10/00-164R1 Date: 2000/04/12 Author: Bill Ham   Mailing: 2000_3
Minutes of SCSI Signal Modeling WG (aprvd) - 3/01/00

T10/00-165R0 Date: 2000/03/02 Author: Ralph Weber   Mailing: 2000_2
Adding Reserved Bytes to EXTENDED COPY Parameter Data

T10/00-166R0 Date: 2000/03/02 Author: John Lohmeyer   Mailing: 2000_2
Meeting Notice - Parallel SCSI WG - April 26-27, 2000

T10/00-167R0 Date: 2000/03/07 Author: Frank Gasparik   Mailing: 2000_2
Pre-Emphasis Experimental Data

T10/00-168R0 Date: 2000/03/07 Author: Russ Brown   Mailing: 2000_2
Receive Equalizer used for Quantum Ultra320 Eye Diagram Data

T10/00-169R0 Date: 2000/03/07 Author: Russ Brown   Mailing: 2000_2
Effect of Varying Transmitter Amplitude on Ultra320 SCSI Receiver Equalization

T10/00-170R0 Date: 2000/02/09 Author: Mark Evans   Mailing: 2000_2
LVD maximum bus path length between terminators for Fast-160 to be included
in SPI-4

T10/00-170R1 Date: 2000/03/07 Author: Mark Evans   Mailing: 2000_2
LVD maximum bus path length between terminators for Fast-160 to be included
in SPI-4

T10/00-171R0 Date: 2000/03/05 Author: Ralph Weber   Mailing: 2000_2
EXTENDED COPY Works in Progress

T10/00-172R0 Date: 2000/03/08 Author: Ed Gardner   Mailing: 2000_2
SVP Issues

T10/00-173R0 Date: 2000/03/09 Author: Dave Peterson   Mailing: 2000_2
Project proposal for SCSI Stream Commands - 2 (SSC-2)

T10/00-173R1 Date: 2000/05/15 Author: Dave Peterson   Mailing: 2000_3
Project proposal for SCSI Stream Commands - 2 (SSC-2)

T10/00-174R0 Date: 2000/03/28 Author: Vince Bastiani   Mailing: 2000_3
Proposed training pattern for skew compensation

T10/00-175R0 Date: 2000/03/07 Author: Dan Smith   Mailing: 2000_2
Driver Precompensation with Receiver Filtering for Ultra4

T10/00-176R0 Date: 2000/03/08 Author: Neil Wanamaker   Mailing: 2000_2
T11 Liaison Report for March 2000

T10/00-177R0 Date: 2000/03/08 Author: Bill McFerrin   Mailing: 2000_2
Minutes on MMC Working Group Meeting - March 7, 2000

T10/00-178R0 Date: 2000/03/08 Author: Bill Ham   Mailing: 2000_2
Summary of Physical Test Activities

T10/00-179R0 Date: 2000/02/28 Author: Jennifer T.   Mailing: 2000_2
                                          Garner
Call for Volunteers - Chairman - NCITS /T10, I/O Interface - Lower Level

T10/00-180R0 Date: 2000/03/09 Author: Gene Milligan   Mailing: 2000_2
ISO/IEC Report - March 2000

T10/00-181R0 Date: 2000/02/16 Author: Stewart Wyatt   Mailing: 2000_2
Minutes of Joint T10/T11.3 Joint Ad Hoc -- 2/16/2000

T10/00-182R0 Date: 2000/03/06 Author: Stewart Wyatt   Mailing: 2000_2
Minutes of Joint T10/T11.3 Joint Ad Hoc -- 3/6/2000

T10/00-182R1 Date: 2000/04/05 Author: Stewart Wyatt   Mailing: 2000_3
Minutes of Joint T10/T11.3 Joint Ad Hoc -- 3/6/2000

T10/00-183R0 Date: 2000/03/09 Author: Paul Aloisi   Mailing: 2000_2
STA Liaison Report for March 2000

T10/00-184R0 Date: 2000/03/29 Author: John Lohmeyer   Mailing: 2000_3
Minutes of Parallel SCSI WG - March 27-28, 2000

T10/00-184R1 Date: 2000/03/31 Author: John Lohmeyer   Mailing: 2000_3
Minutes of Parallel SCSI WG - March 27-28, 2000

T10/00-185R0 Date: 2000/03/16 Author: Rob Elliott   Mailing: 2000_2
Minutes of Access Controls Teleconference - 3/15/2000

T10/00-186R0 Date: 2000/04/12 Author: Rob Elliott   Mailing: 2000_3
Minutes of Access Controls Teleconference - 4/12/2000

T10/00-187R0 Date: 2000/03/09 Author: Gene Milligan   Mailing: 2000_2
SBC-2 schedule

T10/00-188R0 Date: 2000/03/16 Author: John Lohmeyer   Mailing: 2000_2
Unresolved negative from IBM on SSC Letter Ballot

T10/00-189R0 Date: 2000/03/16 Author: John Lohmeyer   Mailing: 2000_2
Unresolved negative from Sun Microsystems on SSC Letter Ballot

T10/00-190R0 Date: 2000/03/16 Author: John Lohmeyer   Mailing: 2000_2
T10 response to Public Review Comment #1 on NCITS.335 (SSC)

T10/00-191R0 Date: 2000/03/16 Author: John Lohmeyer   Mailing: 2000_2
T10 response re NCITS LB negatives on NCITS.333 (MMC-2)

T10/00-192R0 Date: 2000/03/16 Author: Paul Suhler   Mailing: 2000_2
Public Review Comment #1 on NCITS.335:20xx (SSC)

T10/00-193R0 Date: 2000/03/27 Author: George Penokie   Mailing: 2000_3
Training Timing Modeling Results

T10/00-194R0 Date: 2000/03/27 Author: Bruce Manildi   Mailing: 2000_2
Ultra 320 with Precompensation

T10/00-194R1 Date: 2000/03/27 Author: Bruce Manildi   Mailing: 2000_3
320 MB Eye Pattern Data with 15-25-33% Precomp and Crosstalk

T10/00-195R0 Date: 2000/03/28 Author: Russ Brown   Mailing: 2000_3
Ultra320 into fully populated 10-slot backplane

T10/00-196R0 Date: 2000/03/28 Author: Russ Brown   Mailing: 2000_3
Comments on adaptive filtering for Ultra320 SCSI

T10/00-197R0 Date: 2000/03/27 Author: Mark Evans   Mailing: Missing
Alternative scheme for LVD pre-comp drivers

T10/00-198R0 Date: 2000/03/28 Author: Paul Aloisi   Mailing: 2000_3
Fast-160 Driver and Receiver masks

T10/00-199R0 Date: 2000/03/27 Author: Bill Ham &   Mailing: 2000_3
                                         Robert Elliott
Proposal for expander requirements, domain validation basic integrity check,
and related target requirements

T10/00-199R1 Date: 2000/05/02 Author: Bill Ham &   Mailing: 2000_3
                                         Robert Elliott
Proposal for expander requirements, domain validation basic integrity check,
and related target requirements

T10/00-199R2 Date: 2000/05/15 Author: Bill Ham &   Mailing: 2000_3
                                         Robert Elliott
Proposal for expander requirements, domain validation basic integrity check,
and related target requirements

T10/00-200R0 Date: 2000/03/28 Author: Wally Bridgewater Mailing: 2000_3
Eye Window Amplitude

T10/00-201R0 Date: 2000/03/28 Author: Wally Bridgewater Mailing: 2000_3
The zero offset problem for receiver equalization

T10/00-202R0 Date: 2000/04/02 Author: Ralph Weber   Mailing: 2000_3
Assignments for Variable Length CDB Service Action Codes

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T10/00-203R0  Date: 2000/04/02  Author:  Ralph Weber      Mailing: 2000_3
Describing AEN in the Processor Device Model

T10/00-204R0  Date: 2000/04/27  Author:  Weber & Lohmeyer  Mailing: 2000_3
Minutes of Parallel SCSI WG - April 26-27, 2000

T10/00-205R0  Date: 2000/05/23  Author:  Weber & Lohmeyer  Mailing: 2000_3
Minutes of Parallel SCSI WG - May 16, 2000

T10/00-206R0  Date: 2000/05/23  Author:  Weber & Lohmeyer  Mailing: 2000_3
Minutes of SCSI Commands, Arch., & Protocol WG - May 15&17, 2000

T10/00-207R0  Date: 2000/04/04  Author:  Weber & Lohmeyer  Mailing: Missing
Minutes of T10 Plenary Meeting #37 -- May 18, 2000

T10/00-208R0  Date: 2000/04/28  Author:  John Lohmeyer     Mailing: 2000_3
ltr to Jennifer T. Garner re call for volunteers to chair T10

T10/00-209R0  Date: 2000/04/28  Author:  David Steele      Mailing: 2000_3
Statement of management support for John Lohmeyer as chair of T10

T10/00-210R0  Date: 2000/04/09  Author:  Martin Ogbuokiri  Mailing: 2000_3
Meeting Announcement - SPIP, SSM, and SPI-4 WGs - June 12-16, 2000

T10/00-211R0  Date: 2000/04/13  Author:  Ralph Weber &     Mailing: 2000_3
                                         David Chambliss
Corrections to EXTENDED COPY

T10/00-211R1  Date: 2000/04/22  Author:  Ralph Weber &     Mailing: 2000_3
                                         David Chambliss
Corrections to EXTENDED COPY

T10/00-211R2  Date: 2000/04/28  Author:  Ralph Weber &     Mailing: 2000_3
                                         David Chambliss
Corrections to EXTENDED COPY

T10/00-212R0  Date: 2000/04/18  Author:  Ralph Weber       Mailing: 2000_3
Beyond Beyond 2TB

T10/00-212R1  Date: 2000/05/18  Author:  Ralph Weber       Mailing: 2000_3
Beyond Beyond 2TB

T10/00-213R0  Date: 2000/04/18  Author:  Ralph Weber       Mailing: 2000_3
SAM-2 Byte Count That's Really Buffer Size

T10/00-214R0  Date: 2000/04/24  Author:  Mark Evans        Mailing: 2000_3
Details of test set-up used by Quantum for Ultra320 data

T10/00-215R0  Date: 2000/04/24  Author:  Mark Evans        Mailing: 2000_3
Quantum Ultra320 SCSI Test Configurations

T10/00-216R0  Date: 2000/04/05  Author:  Stewart Wyatt     Mailing: 2000_3
Minutes of Joint T10/T11.3 Joint Ad Hoc -- 4/5/2000

T10/00-217R0  Date: 2000/04/11  Author:  Bill Ham          Mailing: 2000_3
Minutes of the SPIP WG meeting (draft) - April 11, 2000

T10/00-218R0  Date: 2000/04/12  Author:  Bill Ham          Mailing: 2000_3
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Minutes of the SSM WG meeting (draft) - April 12, 2000

T10/00-219R0 Date: 2000/04/17 Author: Ron Silletti   Mailing: 2000_3
Public Review Comment #1 for NCITS 336 - SCSI Parallel Interface-3

T10/00-220R0 Date: 2000/04/19 Author: Ralph Weber   Mailing: 2000_3
Review of ISO comments on SPC

T10/00-220R1 Date: 2000/05/19 Author: Ralph Weber   Mailing: 2000_3
Review of ISO comments on SPC

T10/00-221R0 Date: 2000/05/11 Author: Ralph Weber   Mailing: 2000_3
Meeting schedule policy document

T10/00-222R0 Date: 2000/04/19 Author: Ralph Weber   Mailing: 2000_3
SPC-3 Schedule

T10/00-223R0 Date: 2000/04/26 Author: Richard Uber   Mailing: 2000_3
Specifying the signal at the receiver when using receiver equalization

T10/00-224R0 Date: 2000/04/26 Author: Richard Uber   Mailing: 2000_3
Validation of Quantum lab setup used for testing Ultra320

T10/00-225R0 Date: 2000/04/26 Author: Richard Uber   Mailing: 2000_3
Transmitter precompensation used with receiver equalization

T10/00-225R1 Date: 2000/05/16 Author: Richard Uber   Mailing: 2000_3
Transmitter precompensation used with receiver equalization

T10/00-226R0 Date: 2000/04/27 Author: Bill Ham   Mailing: Missing
Minimum receiver bandwidth requirements

T10/00-227R0 Date: 2000/04/27 Author: Paul Aloisi   Mailing: 2000_3
Calculated signal losses

T10/00-227R1 Date: 2000/05/16 Author: Paul Aloisi   Mailing: 2000_3
Calculated signal losses

T10/00-227R2 Date: 2000/05/16 Author: Paul Aloisi   Mailing: 2000_3
Calculated signal losses

T10/00-227R3 Date: 2000/05/18 Author: Paul Aloisi   Mailing: 2000_3
Calculated signal losses

T10/00-228R0 Date: 2000/04/28 Author: Rob Elliott   Mailing: 2000_3
Obsoleting QAS in SPI-4

T10/00-229R0 Date: 2000/05/03 Author: Charles Binford Mailing: 2000_3
Task Aborted - SAM changes

T10/00-230R0 Date: 2000/05/04 Author: Bob Snively   Mailing: 2000_3
FCP-2 items that need to be included in FC-FS

T10/00-230R1 Date: 2000/05/10 Author: Bob Snively   Mailing: 2000_3
FCP-2 items that need to be included in FC-FS

T10/00-231R0 Date: 2000/05/08 Author: Rob Elliott   Mailing: 2000_3
SPI-4 training pattern DC signal strengths

T10/00-232R0 Date: 2000/05/15 Author: Bob Snively   Mailing: 2000_3
Asymmetrical SCSI behavior

T10/00-233R0 Date: 2000/05/12 Author: Rob Elliott   Mailing: 2000_3
Minor SES issues

T10/00-233R1 Date: 2000/05/17 Author: Rob Elliott   Mailing: 2000_3
SES issues: PRODUCT REVISION LEVEL and DESCRIPTOR LENGTH

T10/00-234R0 Date: 2000/05/13 Author: Charles Monia   Mailing: 2000_3
IETF Liaison Report to T10

T10/00-235R0 Date: 2000/05/16 Author: Richard Uber   Mailing: 2000_3
Attenuation Data for Ultra320 SCSI

T10/00-236R0 Date: 2000/05/16 Author: Chas Gimarc   Mailing: 2000_3
Performance impacts of training and eliminating QAS

T10/00-237R0 Date: 2000/05/16 Author: George Penokie   Mailing: 2000_3
Training/QAS Performance Graphs

T10/00-238R0 Date: 2000/05/16 Author: Bill Ham   Mailing: 2000_3
Project Proposal for SCSI Passive Interconnect Performance Technical Report

T10/00-239R0 Date: 2000/05/17 Author: Paul Aloisi   Mailing: 2000_3
SPI-4 Driver - Receiver Assumptions

T10/00-240R0 Date: 2000/05/17 Author: Ed Gardner   Mailing: 2000_3
SVP SAM-2 Mapping

T10/00-241R0 Date: 2000/05/17 Author: David Chambliss   Mailing: 2000_3
Discussion of 00-211r2 Corrections to SCSI EXTENDED COPY

T10/00-242R0 Date: 2000/05/18 Author: Neil Wanamaker   Mailing: 2000_3
T11 Liaison Report for May 2000

T10/00-243R0 Date: 2000/05/18 Author: Bill McFerrin   Mailing: Missing
Minutes of MMC Working Group - May 16-17, 2000

T10/00-244R0 Date: 2000/05/18 Author: Paul Aloisi   Mailing: 2000_3
STA liaison report for May 2000

T10/00-245R0 Date: 2000/05/22 Author: Stewart Wyatt   Mailing: 2000_3
Minutes of Joint T10/T11.3 Joint Ad Hoc -- 5/15/2000