Accredited Standards Committee*
InterNational Committee for Information Technology Standards (INCITS)

Doc. No.:	T10/03-179r1
Date:	May 29, 2003
Reply to:	John Lohmeyer

To: T10 Membership
From: Ralph Weber / John Lohmeyer
Subject: Minutes of T10 Plenary Meeting #55 -- May 8, 2003
            Nashua, NH

Agenda

1. Opening Remarks
2. Approval of Agenda
3. Attendance and Membership
4. Approval of Minutes - March 2003 Meeting - Dallas, TX (T10/03-124r1)
5. Document Distribution
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7. Review of Old Action Items
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    8.1   Project Status Summary and INCITS Liaison [Lohmeyer]
        8.1.1   INCITS Antitrust Guidelines
    8.2   SCSI Fibre Channel Protocol - 2 (FCP-2) {Project 1144-D} [Peterson]
    8.3   SCSI Architecture Model - 2 (SAM-2) {Project 1157-D} [Weber]
    8.4   Object-based Storage Devices Commands (OSD) {Project 1355-D} [Weber]
    8.5   SCSI Medium Changer Commands - 2 (SMC-2) {Project 1383-D} [Oetting]
    8.6   SCSI Primary Commands - 3 (SPC-3) {Project 1416-D} [Weber]
    8.7   SCSI Block Commands - 2 (SBC-2) {Project 1417-D} [Elliott]
    8.8   SCSI Stream Commands - 2 (SSC-2) {Project 1434-D} [Peterson]
    8.9   SCSI Passive Interconnect Performance (PIP) {Project 1439-D} [Daggett]
    8.10 SCSI Serial Bus Protocol -3 (SBP-3) {Project 1467-D} [Johansson]
    8.11 SCSI Signal Modeling - 2 (SSM-2) {Project 1514-D} [Aloisi/Manildi]
    8.12 SCSI RDMA Protocol - 2 (SRP-2) {Project 1524-D} [Simpson]
    8.13 SCSI Parallel Interface - 5 (SPI-5) {Project 1525-D} [Penokie]
    8.14 SCSI Management Server Commands (MSC) {Project 1528-D} [Penokie/Elliott]
    8.15 MultiMedia Command Set - 4 (MMC-4) {Project 1545-D} [McFerrin]
    8.16 Automation/Drive Interface - Transport Protocol (ADT) {Project 1557-D} [Entzel]
    8.17 Automation/Drive Interface - Commands (ADC) {Project 1558-D} [Entzel/Wideman]
    8.18 SCSI Enclosure Services - 2 (SES-2) {Project 1559-D} [Elliott]
    8.19 Fibre Channel Protocol - 3 (FCP-3) {Project 1560-D} [Peterson]
    8.20 SCSI Architecture Model - 3 (SAM-3) {Project 1561-D} [Weber]
    8.21 Serial Attached SCSI (SAS) {Project 1562-D} [Elliott]
    8.22 Serial Attached SCSI - 1.1 (SAS-1.1) {Project 1601-D} [Elliott]
    8.23 SCSI Stream Commands - 3 (SSC-3) {Project 1611-D} [Peterson]
9. Old Business
    9.1   ANSI INCITS 330-2000 Defect Report (03-021) (RBC-A) [Atkinson, Roberts]
10. New Business
    10.1 Actions on Parallel SCSI Working Group Recommendations
    10.2 Actions on SAS Working Group Recommendations

Results of Meeting

1.   Opening Remarks

John Lohmeyer, the T10 Chair, called the meeting to order at 9:00 a.m., Thursday May 8, 2003. He thanked Zane Daggett of Hitachi Cable Manchester for hosting the meeting.

John said that INCITS subgroup membership forms and the T10 document subscription forms are available on the meeting disk. He said that people should use these forms to ensure the INCITS Secretariat has the latest membership information. These forms should be mailed directly to the INCITS 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

No additions/changes were made to the draft agenda.

John Lohmeyer moved and Ralph Weber seconded that the agenda be approved. In the absence of any objections, the motion passed unanimously.

 No items were added/revised during the course of the meeting.

3.   Attendance and Membership

The membership requirements were reviewed. INCITS 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 member-

ship the second meeting via a letter to the Chair of T10. The individual may begin voting at the beginning of his/her second meeting.

To maintain membership, organizations must pay the INCITS Service Fee ($800).

John briefly discussed the mailing fees. Complete pricing information is contained in the 2003 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 6 people from 2 organizations informing them that their membership was in jeopardy due to non-attendance (see 03-139r0) and that their membership would be terminated if they did not attend this meeting. The following organizations were in attendance jeopardy:

General Dynamics
Madison Cable Corp.

All these organizations were present at the meeting.

No organizations joined the committee at this meeting.

The T10 membership during the meeting was 42 organizations unchanged from the 42 member organizations prior to the meeting. Enclosure (1) is the list of the people present at the meeting and enclosure (2) is the current T10 membership list.

John Lohmeyer reminded members that failure to vote on two out of the last three letter ballots also would result in membership jeopardy and then reported on the status of companies that have not voted on recent letter ballots:

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T10 Letter Ballot Jeopardy Report -- 2003/04/30

                              Ballot:  03-006r0      03-075r0      03-144r0
                              Report:  03-007r0      03-076r0      03-145r0
                              Acronym: SAS           SPC-2 NWIP    SBP-3
Organization
-------------------------------- ------------  ------------  ------------
Adaptec, Inc.                         Yes           Yes           DNV
Amphenol Interconnect                 Yes           DNV           Yes
Cisco Systems, Inc.                   Yes           Yes           DNV
Emulex                                DNV           Yes           Abs
Fujitsu                               Yes           Yes           DNV
Honda Connectors                      Yes           Yes           DNV
Philips Electronics                   Yes           DNV           Yes

Key:
Yes     Organization voted Yes
No      Organization voted No
Abs     Organization voted Abstain
DNV     Organization failed to return letter ballot
--      Organization was not a voting member for the letter ballot
(*)     Organization is in letter ballot jeopardy
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4.   Approval of Minutes - March 2003 Meeting - Dallas, TX (T10/03-124r1)

John Lohmeyer moved and Ralph Weber seconded that the minutes be approved. In the absence of any objections, the motion passed unanimously.

5.   Document Distribution

Members who have any problems with their mailing subscription should deal directly with Parthenia Purnell (ppurnell@itic.org) (202) 626-5741. A subscription form is included on the meeting disk.

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 15, 2003. 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.

People can obtain T10 document numbers and revised T10 document numbers by filling out a web form at http://www.t10.org/members/. The assigned T10 document number will be sent to the requestor by e-mail. The requestor may then reply to this email, including the document to be posted as an attachment. The document will be automatically posted on the T10 web site.

T10 members can complete this entire process using their personal T10 password. John explained that members who do not know their password should surf to the above URL and click on the "forgot password" link to have their password sent to them via e-mail.

John noted that non-members can also use the above document number process, but their requests will require approval by an administrator.

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 e-mail to majordomo@t10.org with the line 'subscribe t10' in the message body.

The INCITS Secretariat maintains a World Wide Web page at:

   http://www.incits.org/.

LSI Logic maintains a web site on behalf of T10 on a server donated by the SCSI Trade Association at:

   http://www.t10.org/

There is also a mirror site at:

   http://www.t11.org/t10/

The T10 document register is 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.incits.org/help/ansi_sdo.html. Section 1.2.11 contains the ANSI patent policy. Amy Marasco manages patent issues for ANSI and can be contacted at amarasco@ansi.org or 212-642-4954. Gene Milligan prepared a useful "Handy dandy Technical Committee's Patents Guide", which is available at ftp://ftp.t10.org/t10/document.99/99-291r0.pdf.

John Lohmeyer presented a summary of the ANSI patent policy prepared by Gary Robinson. The summary is also included on the Rules and Procedures (plus Patent Information) page on the T10 web site.

Cris Simpson reminded the committee that a statement of the Intel patent policy can be found in T10/01-041r0.

John asked that anyone who knows of other applicable patents to contact him.

There were no responses to the call for patents.

7.   Review of Old Action Items

519   Ralph Weber will notify Gary Robinson that the SAM-2 ISO revision can be found at ftp://ftp.t10.org/t10/drafts/sam2/sam2i25.pdf. *Carryover*

520   John Lohmeyer will notify INCITS that T10 recommends the reaffirmation of SBC, SMC, SPI-2, SBC-2, SES, the SES amendment, and SSC-2. *Complete*

521   John Lohmeyer will notify INCITS that T10 has voted to change its name to 'SCSI storage interfaces'. *Complete.*

522   Gary Robinson will notify INCITS of the T10 recommendation on 25N842Av. *Complete*

523   Gary Robinson will submit 03-083r0 as a NWIP for SSM-2. *Complete*

524   Gary Robinson will submit 03-084r0 as a NWIP for PIP. *Complete*

525   Gary Robinson will submit 03-132r0 as a NWIP for SAM-2. *Complete*

526   John Lohmeyer will inform Jennifer Garner that T10 recommends that JTC 1 TAG nominate Gary S. Robinson as the US candidate for Convener of JTC 1/SC 25/WG 4. *Complete*

8.   Project Status Reports

8.1   Project Status Summary and INCITS Liaison [Lohmeyer]

John Lohmeyer said that the current T10 project status summary was included on the meeting disk and will be included in the mailing as usual.

Bob Davis reported that INCITS is working on policy changes to make INCITS friendly to the electronic age.

John Lohmeyer noted that the INCITS rules document has been changed from the SD-2 to the RD-2. He noted that minor changes have been made in the rules as part of the merging of INCITS and JTC 25.

John Lohmeyer reported that INCITS had received one volunteer to chair T10. The INCITS letter ballot on appointing the T10 Chair closes May 14th.

8.1.1   INCITS Antitrust Guidelines

All T10 members should be aware of the INCITS antitrust guidelines available at http://www.incits.org/natrust.htm.

John reminded committee members that all persons present at a T10 meeting is responsible for identifying potential violations of the antitrust guidelines and reporting them to the chair. Discussions of the following topics are considered sensitive:

   * Any company's prices or pricing policies;
   * Specific R&D, sales and marketing plans;
   * Any company's confidential product, product development or production strategies;
   * Whether certain suppliers or customers will be served;
   * Prices paid to input sources; or
   * Complaints about individual firms or other actions that might tend to hinder a competitor in any market.

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

John Lohmeyer reported that FCP-2 has been published as ANSI NCITS.350:2003. He congratulated Dave Peterson and Bob Snively for their hard work on this standard.

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

John Lohmeyer reported that SAM-2 has been published as ANSI INCITS.366:2003. He congratulated Ralph Weber his hard work on this standard.

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

Ralph Weber reported that SNIA OSD group is having trouble reaching consensus on the security requirements and objecting naming mechanisms to be introduced in the next OSD revision.

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

In the absence of Erich Oetting, no report was made on the status of SMC-2.

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

Ralph Weber reported that revision 13 of SPC-3 will be available in time for the mailing and will contain all the proposals approved by this meeting as well as the results of the SPC-3 editing meetings held this week.

Ralph Weber reminded the committee that the target letter ballot date for SPC-3 is November 2003. He noted that, based on this letter ballot date, editing review meetings are in progress to ready SPC-3 for letter ballot. He thanked the SAS working group for relinquishing a half day this week to the editing review and announced that the review will continue following this meeting.

The topic to be discussed this month is:

   Access Controls

Additional editorial review meetings held during subsequent meeting weeks will cover the following topics:

   Asymmetric logical unit behavior
   Protocol specific data
   Persistent Reservations Model
   Persistent Reservations Commands

Control mode page

8.7 SCSI Block Commands - 2 (SBC-2) {Project 1417-D} [Elliott]

Rob Elliott reported that SBC-2 revision 9 will be uploaded before the next meeting but not in time for the mailing and will include the power conditions proposal. In response to a question from Gerry Houlder, Rob reported that no target date has been set for starting the SBC-2 Letter Ballot.

8.8 SCSI Stream Commands - 2 (SSC-2) {Project 1434-D} [Peterson]

Paul Entzel reported that SSC-2 revision 8g has been posted and will be in the next mailing. He noted that resolution of the SSC-2 Letter Ballot comments is nearing completion.

8.9 SCSI Passive Interconnect Performance (PIP) {Project 1439-D} [Daggett]

John Lohmeyer reported that PIP had been approved by INCITS. PIP is on the agenda for approval by the ANSI Board of Standards Review.

8.10 SCSI Serial Bus Protocol -3 (SBP-3) {Project 1467-D} [Johansson]

Peter Johansson reported that the SBP-3 working group met this week, May 7, during the T10 meetings in Nashua, NH. The working group endorsed the proposed Letter Ballot comment resolutions and requested the Editor to prepare SBP-3 Revision 4.0 for submission to INCITS for first Public Review.

On behalf of the SBP-3 working group, Peter Johansson moved that 03-166r1 and SBP-3 Revision 3b be accepted as resolving the SBP-3 Letter Ballot comments and that the editor be instructed to prepare SBP-3 Revision 4, containing the resolution to the letter ballot comments, so that it may be forwarded to INCITS for processing toward first public review. The motion passed on a vote of 29:0:0:13=42.

In view of the successful resolution of the SBP-3 Letter Ballot comments, Peter Johansson requested that his No vote on the Letter Ballot be changed to a Yes.

Peter Johansson took an action item to prepare SBP-3 revision 4 for forwarding to first public review. John Lohmeyer took an action item to forward SBP-3 to INCITS for further processing towards first public review.

8.11 SCSI Signal Modeling - 2 (SSM-2) {Project 1514-D} [Aloisi/Manildi]

John Lohmeyer reported that SSM-2 had been approved by INCITS. SSM-2 is on the agenda for approval by the ANSI Board of Standards Review.

8.12 SCSI RDMA Protocol - 2 (SRP-2) {Project 1524-D} [Simpson]

Cris Simpson reported that no progress has been SRP-2 this month. Work will resume again in July.

8.13 SCSI Parallel Interface - 5 (SPI-5) {Project 1525-D} [Penokie]

John Lohmeyer reported that SPI-5 had been approved by INCITS. SPI-5 is on the agenda for approval by the ANSI Board of Standards Review. George Penokie reported that the SPI-5 ISO/IEC Letter Ballot began on April 23rd.

8.14 SCSI Management Server Commands (MSC) {Project 1528-D} [Penokie/Elliott]

George Penokie reported that no progress has been made on MSC. He suggested that consideration might be given to closing the project later this year.

8.15 MultiMedia Command Set - 4 (MMC-4) {Project 1545-D} [McFerrin]

In the absence of Bill McFerrin, no report was available. John Lohmeyer noted that the MMC working group will be meeting May 13-14, 2003 in Sunnyvale, CA.

8.16 Automation/Drive Interface - Transport Protocol (ADT) {Project 1557-D} [Entzel]

Paul Entzel reported on the activities of the ADI working group (minutes in 03-171). He noted that ADC may be ready for Letter Ballot after the July meeting and ADT after the September meeting.

John Lohmeyer reported that the INCITS letter ballot on closing the ADP project closed on April 14 and passed as expected.

8.17 Automation/Drive Interface - Commands (ADC) {Project 1558-D} [Entzel/Wideman]

This topic was covered in item 8.16.

8.18 SCSI Enclosure Services - 2 (SES-2) {Project 1559-D} [Elliott]

Rob Elliott reported that SES-2 revision 3 will be available for the next meeting but not in time for the mailing and will include all proposals approved at this meeting.

8.19 Fibre Channel Protocol - 3 (FCP-3) {Project 1560-D} [Peterson]

In the absence of Dave Peterson, no report was available.

8.20 SCSI Architecture Model - 3 (SAM-3) {Project 1561-D} [Weber]

Ralph Weber reported that revision 7 will be available in time for the mailing and will contain all the changes approved by this meeting.

8.21 Serial Attached SCSI (SAS) {Project 1562-D} [Elliott]

Rob Elliott reported on the activities of the SAS working group (minutes in 03-177). He noted that the working group unanimously recommended approving the SAS letter ballot comments resolution with a formal vote count of 16:0:0.

Rob Elliott moved that 03-055r7 be approved as resolving the letter ballot comments on SAS and that SAS Rev 04, which incorporates the letter ballot resolutions, be forwarded to INCITS for further processing toward first public review. John Lohmeyer seconded the motion. The motion passed 23:0:1:18=42.

The following people requested that their No votes be changed to Yes based on the successful resolution of the letter ballot comments:

> Ralph Weber, Rob Elliott, George Penokie, Cris Simpson, John Lohmeyer, Paul Entzel, and Gerry Houlder.

George Penokie complimented Rob Elliott on the expeditious completion of SAS, noting the size of the working draft, the over 2,700 letter ballot comments, and 23 revisions prepared in less than a year. The committee applauded Rob's efforts.

Rob Elliott took an action item to prepare SAS revision 4 for forwarding to first public review. John Lohmeyer took an action item to contact Microsoft Corporation regarding the disposition of their No vote on the SAS letter ballot. John Lohmeyer took an action item to forward SAS revision 4 to INCITS for processing toward first public review.

8.22 Serial Attached SCSI - 1.1 (SAS-1.1) {Project 1601-D} [Elliott]

Rob Elliott reported that some initial work on SAS-1.1 was done at the SAS Protocol working group (minutes in 03-177).

8.23 SCSI Stream Commands - 3 (SSC-3) {Project 1611-D} [Peterson]

In the absence of Dave Peterson, no report was available.

9. Old Business

9.1 ANSI INCITS 330-2000 Defect Report (03-021) (RBC-A) [Atkinson, Roberts]

John Lohmeyer reported that a letter ballot on the RBC amendment will begin Friday morning.

10. New Business

10.1 Actions on Parallel SCSI Working Group Recommendations

Because the Parallel SCSI working group did not meet this week, no recommendations required consideration at this meeting.

10.2 Actions on SAS Working Group Recommendations

10.2.1 SAS PHY recommendations

Because the SAS PHY working group did not meet this week, no recommendations required consideration at this meeting.

10.2.2 SAS Protocol recommendations

George Penokie noted that the only recommendation from the SAS Protocol working group concerned the SAS letter ballot comments resolution processed under item 8.21.

10.3 Actions on CAP Working Group Recommendations

George Penokie reviewed the content of proposal 02-464r3 (SAM-3, SPC-3, and SBC power conditions proposal) recommended for inclusion in SAM-3, SPC-3, and SBC-2.

Mark Evans moved that 02-464r3 (SAM-3, SPC-3, and SBC power conditions proposal) be approved for inclusion in SAM-3, SPC-3, and SBC-2. Bill Galloway seconded the motion. In the absence of objections, the motion passed unanimously.

George Penokie reviewed the following proposals recommended for inclusion in SAM-3:

    03-003r2 Remove ULP and LLP from SAM-3 [Weber]
    03-108r2 Calls and Arguments in SAM-3 [Weber]
    03-173r0 Task Management Incorrect Logical Unit Selection [Weber]
    03-184r1 SAM-3 Hard reset generates I_T nexus loss [Elliott]

Ralph Weber moved that 03-003r2, 03-108r2, 03-173r0, and 03-184r1 be approved for inclusion in SAM-3. Mark Evans seconded the motion. The motion passed on a vote of 26:0:0:16=42.

George Penokie reviewed the following proposals recommended for inclusion in SPC-3:

    03-094r3 Yet More Persistent Reservation Fixes [Penokie]
    03-127r1 SPC-3 MSB and LSB labels [Elliott]
    03-172r1 QErr=01b & CHECK CONDITIION Initiator [Weber]
    03-169r1 SPC-3: Un-hiding S.M.A.R.T. [Lohmeyer]

Mark Evans moved that 03-094r3, 03-127r1, 03-172r1, and 03-169r1 be approved for inclusion in SPC-3. Bill Galloway seconded the motion. The motion passed on a vote of 25:0:1:16=42.

George Penokie reviewed the content of proposal 03-059r1 (SES-2 Enclosure/Array Control Device Element for device activity) recommended for inclusion in SES-2.

Mark Evans moved that 03-059r1 (SES-2 Enclosure/Array Control Device Element for device activity) be approved for inclusion in SES-2, SPC-3, and SBC-2. Bill Galloway seconded the motion. The motion passed on a vote of 24:0:2:16=42.

Ralph Weber moved that SAM-3 revision 7 be accepted as a committee draft. Mark Evans seconded the motion. The motion passed 26:0:0:16=42.

10.4 Actions on Other Working Group Recommendations

No recommendations from other working groups were brought to this meeting.

11. ISO/IEC

11.1 ISO/IEC Report (03-182) [Robinson]

Gary Robinson provided an electronic report in 03-182r1.

11.2 ISO/IEC Business [Robinson]

11.2.1 Change SPC-2 ISO/IEC part number from 312 to 452 (03-146) [Weber]

Ralph Weber announced that he had published a 'score card' of ISO/IEC part numbers being used for T10 standards (see 03-146).

Since none of the SPC standards have actually been published at ISO/IEC so far, he is proposing that the SPC series of standards be moved to the 45x range of numbers, which fits better with the architectural nature of these standards. In particular, he has requested that SPC-2 be assigned 452 instead of 312.

Since the IR and the SC 25 Secretariat agreed that Ralph's proposed change in numbering is a good idea, they have agreed to implement Ralph's proposed change. The IR and the SC 25 Secretariat have also appointed Ralph as the 'keeper of the part numbers'.

12. Liaison Reports

12.1 T11 Liaison Report (03-187) [Snively]

In the absence of Bob Snively, Roger Cummings presented the T11 liaison report contained in T10/03-187r0.

12.2 T13 Liaison Report [Colegrove]

Dan Colegrove was unable to attend but provided an electronic report contained in T10/03-188r0.

12.3 SFF Industry Group [Allan]

In the absence of Dal Allan, Vit Novak reported that two SSWG meetings and a plenary meeting were held. One SSWG was on single voltage drives the other was on cable labeling.

12.4 IEEE 1394 [Johansson]

Peter Johansson reported IEEE 1394 activities and provided the following electronic report for the minutes.

> The Ballot Response Committee (BRC) for IEEE P1394.1, High Performance Serial Bus Bridges, has resolved, in principal, all of the comments received during Sponsor Ballot. The Editor is incorporating the agreed changes in anticipation of a recirculation ballot this year, with projected approval as an IEEE standard in 2003. Contact the Chair, Peter Johansson (PJohansson@ACM.org), for details.

> IEEE P1394.3, Peer to Peer Data Transport, a protocol built upon SBP-2, commenced a 10-day recirculation ballot May 10. The Vice Chair, Alan Berkema (Alan_Berkema@HP.com), anticipates its approval as an IEEE standard this summer.

> The IEEE S800BASE-T study group continues to investigate methods of running IEEE 1394 over up to 100 meters of UTP-5 by leveraging existing gigabit Ethernet PHY technology. They are pursuing a very aggressive schedule and plan to hand over the work to the IEEE P1394 revision working group for incorporation in the revised IEEE 1394 base standard. The STDS-1394@IEEE.org reflector is used for S800BASE-T discussions. Contact the study group Chair, Michael Teener (Teener@Apple.com), for details.

> The 1394 Trade Association Wireless working group is developing "protocol adaptation layers" (PALs) to enable IEEE 1394 applications to interoperate with like applications in both IEEE P802.11e and IEEE P802.15.3 devices. Some of the work is active in the IEEE P802.11e (quality of service) working group. The 802.15.3 PAL project is investigating the use of ultra-wide band (UWB) technologies for wireless 1394. Contact the working group Chair, John Fuller (JFuller@Computer.org) or the PAL Project Editors, Takashi Sato (T.Sato@Philips.com) and Peter Johansson (PJohansson@ACM.org), for details.

12.5 SCSI Trade Association (STA) [Czekalski]

Marty Czekalski provided an electronic report on the activities of the SCSI Trade Association that can be found in 03-191r0.

12.6 IETF SCSI over IP [Black/Robinson]

In the absence of David Black, no report was available.

12.7 SNIA [Cummings]

Roger Cummings reported on the activities of SNIA and provided an electronic report in T11/03-213v0.

12.8 SATA II [open]

John Lohmeyer reported that he had attended part of the SATA II Steering Committee meeting on April 29th. The group requested that T10 identify liaisons to the SATA II focus groups. The SATA II PHY group has several members who also participate on the SAS PHY working group. John Lohmeyer moved that Alvin Cox be named the T10 liaison to the SATA II PHY group. Mark Evans seconded the motion. The motion passed 26:0:0:16=42.

John Lohmeyer took an action item to notify SATA II that Alvin Cox will be the T10 liaison to the SATA II PHY group.

John asked for volunteers to serve as T10 liaison to the SATA II Protocol group and for volunteers to serve as the SATA II liaison to T10.

13. Review of Action Items

519   Ralph Weber will notify Gary Robinson that the SAM-2 ISO revision can be found at
        ftp://ftp.t10.org/t10/drafts/sam2/sam2i25.pdf.
527   Peter Johansson will prepare SBP-3 revision 4 for forwarding to first public review.
528   John Lohmeyer will forward SBP-3 to INCITS for further processing towards first public review.
529   Rob Elliott will prepare SAS revision 4 for forwarding to first public review.
530   John Lohmeyer will contact Microsoft Corporation regarding the disposition of their No vote on the SAS letter ballot.
531   John Lohmeyer will forward SAS revision 4 to INCITS for processing toward first public review.
532   John Lohmeyer will notify SATA II that Alvin Cox will be the T10 liaison to the SATA II PHY group.

14. Meeting Schedule

The next plenary meeting of T10 will be Thursday July 10, 2003 in Colorado Springs, CO at the Wyndham Colorado Springs Hotel (719-260-1800), hosted by LSI Logic Corp. The meeting will begin at 9:00 a.m. on Thursday.

The meeting list for the next plenary week is:

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                         July 2003 Meeting Map
                          (2003/05/08 Version)
Monday 7/07            9  10  11  12  1   2   3   4   5   6   7   8
                       +==============+=====================+
                       | FCP-3 WG?    | SMC-2 / ADI WG      |           (15)
                       +==============+=+=====================+
                                       | SAS Protocol WG     |           (40)
                       +==============+=+=====================+
                       | SPC-3 Editing |                                (10)
                       +==============+

Tuesday 7/08    8      9  10  11  12  1   2   3   4   5   6   7   8
                       +================+===============+
                       | SAS Protocol WG | SCSI CAP WG   |              (40)
                       +================+=============+===+
                       | ADI WG                        |               (15)
                       +==============================+---+
                       | T11 Ad hocs                     |             (15)
                       +------------------+---------------+---+
                       | STA Plugfest Mtg | STA (closed mtg) |          (20)
                       +------------------+---------------+-+-----+
                                       LSI Reception -->   | Party |    (All)
                                                           +-------+

Wednesday 7/09         9   10  11  12  1   2   3   4   5   6   7   8   9
                       +=========================================+
                       | SCSI Commands, Arch., & Protocol WG      |     (35)
                       +==============================+==========+
                       | MMC WG                       |               (10)
                       +====================+=======+---------------+
                                            |SFF: SSWG / 8425        |   (20)
                       +----------------------+---+-------------------+
                       | STA (closed meeting)     |                    (20)
                       +--------------------------+

Thursday 7/10   8      9   10  11  12  1   2   3   4   5   6   7   8
                       +=================+
                       | T10 Plenary     |                            (45)
                       +===============+=================+
                                       | SPC-3 Editing   |             (10)
                       +---------------+=================+
                       | FCIA Board Meeting (closed mtg)  |            (10)
                       +---------------------------------+

Friday 7/11    8      9   10  11  12  1   2   3   4   5   6   7   8
                       no meetings planned for Friday


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


  Other T10-authorized meetings:
Meeting          Date               Location / Contact
--------------   ------------------ ------------------------------------
ADI Calls        Bi-weekly          To be announced via T10 reflector
SAS Prot Calls                      To be announced via T10 reflector
SAS PHY Calls                       To be announced via T10 reflector
```

```
 Map Abbreviation Key:
ADI:           Automation Drive Interface (tape library interface)
Amnd:          Amendment
CAP:           Commands, Architecture, and Protocols
Fast-80:       Data Transfer at 80 Mega-transfers/sec. (a.k.a., Ultra3,Ultra160)
Fast-160:      Data Transfer at 160 Mega-transfers/sec. (a.k.a., Ultra320)
FC:            Fibre Channel
I/F:           Interface
IETF:          Internet Engineering Task Force (the group that sets
               Internet standards)
iFC:           Internet Fibre Channel
IPS:           Internet Protocol SCSI
iSCSI:         Internet SCSI
LB:            Letter Ballot
MMC:           Multimedia Commands (CD-ROM, DVD, etc.)
OSD:           Object-based Storage Device
Par.:          Parallel (e.g., SPI-n)
PH or PHY:     Physical (Connectors, Cables, Transceivers, etc.)
PIP:           (SCSI) Passive Interconnect Performance
Plenary:       Full Committee Meeting
Res:           Resolution
SAS:           Serial Attached SCSI
SBC-2:         SCSI Block Commands - 2
SBP-3:         Serial Bus Protocol - 3
SCSI:          Small Computer System Interface
SES:           SCSI Enclosure Services
SFF:           SFF Industry Group (not an INCITS activity)
SG:            Study Group
SMC-2:         SCSI Medium Changer - 2 Commands
SPC-3:         SCSI Primary Commands - 2 (3rd generation)
SPI-4:         Fourth Generation SCSI Parallel Interface
SPI-5:         Fifth Generation SCSI Parallel Interface
SRP:           SCSI RDMA Protocol (was SVP)
SRP-2:         SCSI RDMA Protocol (2nd generation)
SSC-2:         SCSI Stream Commands - 2 (includes Tape)
SSM-2:         SCSI Signal Modeling (2nd generation)
SSWGs:         Specific-Subject Working Groups
STA:           SCSI Trade Association (Closed meeting -- not an INCITS activity)
STA Marcom:    STA Marketing Communications (Closed meeting -- not an INCITS activity)
STA Tech:      STA Technical Meeting (T10 members invited)
STP:           Serial ATA Tunneled Protocol
T10:           Lower Level Interfaces Technical Committee
T11:           Device Level Interfaces Technical Committee
WG:            Working Group (same as Ad Hoc Group)
```

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

```
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--------------------------- --------------- ------------------------------
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Other Activities            John Lohmeyer   (719) 533-7560
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```

The long-term T10 meeting week schedule is:

```
Date                Location                 Host/Comments
------------------- ------------------------ -----------------------------
Sep 8-12, 2003      Seattle, WA              Microsoft
Nov 3-7, 2003       Austin, TX               Crossroads
Jan 12-16, 2004     Chandler, AZ             Intel
Mar 8-12, 2004      Dana Point, CA           QLogic
May 3-7, 2004       Toronto, Montreal, or Ottawa Brocade
Jul 12-16, 2004     Colorado Springs, CO     LSI Logic
Sep 13-17, 2004     Nashua, NH               Hitachi Cable
Nov 8-12, 2004      Austin, TX               Crossroads
Approved 2005 dates:
Jan 17-21, 2005
Mar 7-11, 2005
May 2-6, 2005
Jul 11-15, 2005
Sep 12-16, 2005
Nov 7-11, 2005
```

John Lohmeyer moved that T10 authorize the March 2004 meeting week to be hosted by QLogic in Dana Point, CA and the September 2004 meeting week to be hosted by Hitachi Cable in Nashua, NH. Bill Galloway seconded the motion. In the absence of any objections, the motion passed unanimously.

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.

Peter Johansson moved that T10 authorize the T10-related meetings and events in the list above that had not previously been approved through the end of August 2003. Bill Galloway seconded the motion. In the absence of any objections, the motion passed unanimously.

15. Adjournment

John Lohmeyer moved and Ralph Weber seconded that the meeting be adjourned. In the absence of any objections, the motion passed unanimously. The meeting was adjourned at 10:45 a.m. on Thursday May 8, 2003.

Enclosure(1) -- Meeting Attendees

```
        Name            S       Organization        Electronic Mail Address
----------------------  --  ------------------------  ------------------------
Mr. Ron Roberts         P   Adaptec, Inc.             rkroberts@aol.com
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Dr. Claudio DeSanti     P   Andiamo Systems, Inc.     cds@andiamo.com
Mr. Peter Johansson     P   Congruent Software, Inc.  PJohansson@ACM.org
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Mr. John Lohmeyer       P   LSI Logic Corp.           lohmeyer@t10.org
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Mr. Kenneth Hirata      P   Vixel Corp.               Ken.Hirata@Vixel.com
```

34 People Present

```
Status Key:  P    -  Principal
             A,A# -  Alternate
             AV   -  Advisory Member
             L    -  Liaison
             V    -  Visitor
```

Enclosure(2) -- T10 Attendance Database
     Generated on 2003/05/08 at 12:56:53

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