To: T10 Membership  
From: Ralph Weber / John Lohmeyer  
Subject: Minutes of T10 Plenary Meeting #71 -- January 12, 2006  
Phoenix, AZ

Agenda

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15. Adjournment

Results of Meeting

1. Opening Remarks

John Lohmeyer, the T10 Chair, called the meeting to order at 9:00 a.m., Thursday January 12, 2006. He thanked
Bob Sheffield of Intel Corp. for hosting the meeting.

John said that INCITS subgroup membership forms and the T10 document subscription forms are available on
the meeting web site. 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. Attendance was taken electronically via the meeting
web site.

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.

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

   8.17 SCSI Block Commands - 3 (SBC-3) Project 1799-D [Penokie]

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).

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 emails to 11 people from 6 organizations informing them that their membership was in jeopardy due to non-attendance (see 05-442r0) and that their membership would be terminated if they did not attend this meeting. The following organizations were in attendance jeopardy:

Amphenol Interconnect  
Brocade Comm. Systems, Inc.  
Cisco Systems, Inc.  
General Dynamics  
Iomega Corp.  
Toshiba

All organizations in attendance jeopardy were present except:

Cisco Systems, Inc.  
Toshiba

The organizations that were not present had their representatives changed to Advisory (non-voting) status.

John Lohmeyer called for requests to join the committee. No organizations joined at this meeting.

The T10 membership during the meeting was 45 organizations, down from the 47 member organizations extant at the time the meeting was convened. 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. The current letter ballot jeopardy status is as shown:


<table>
<thead>
<tr>
<th>Ballot: 04-326r0</th>
<th>05-125r0</th>
<th>05-134r0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report: 04-327r0</td>
<td>05-126r0</td>
<td>05-135r0</td>
</tr>
<tr>
<td>Acronym: SPC-3</td>
<td>SAS-1.1</td>
<td>FCP-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organization</th>
<th>Acronym</th>
<th>Ballot 1</th>
<th>Ballot 2</th>
<th>Ballot 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agilent Technologies</td>
<td>DNV</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Crossroads Systems, Inc.</td>
<td>(*)</td>
<td>Yes</td>
<td>DNV</td>
<td>DNV</td>
</tr>
<tr>
<td>QLogic Corp.</td>
<td>DNV</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

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 (and has voluntarily changed to Advisory status)
4. **Approval of Minutes - November 2005 - Austin, TX (T10/05-420r0)**

John Lohmeyer moved and Ralph Weber seconded that the minutes be approved as written. 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 uploaded to the T10 web site by 10:30 a.m. on Thursday January 19, 2006. 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

John Lohmeyer explained that this is a regular agenda item to identify any potential patent issues with developing standards and technical reports.

For additional information on ANSI procedures and the ANSI patent policy, please see the INCITS web page at http://www.incits.org/call.htm. The contact for INCITS patent issues is Lynn Barra (lbarra at itic dot org) or (202) 626-5739. 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.

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

John Lohmeyer said that he had received a letter from Nero AG (T10/06-009r0) stating that they have applied for a patent on Timely Safe Recording (TSR) regarding the draft MMC-5 standard.

John Lohmeyer said that he had received a letter from Molex Inc. (T10/06-063r0) stating that they will license their patents on the miniSAS connector regarding the draft SAS-1.1 standard.

Rob Elliott noted that SAS-1.1 currently does not have the patent statement noting that patents have been identified. John Lohmeyer stated that he would find the appropriate way to deal with this issue.

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

There were no other responses to the call for patents other than those mentioned above.

7. Review of Old Action Items

615 John Lohmeyer will forward 05-382r0 to INCITS as a new project proposal for SBC-3. Complete.

616 Gary Robinson will prepare an NWIP for FCP-3. Complete.

617 Gary Robinson will forward 04-411r0 to the SC25 TAG as an NWIP contribution for SPC-3 as project 1.25.13.11.33, 14776-453, to mark YES on each of the 6 questions, define Gary S Robinson as Project Editor in question 4, and normal standard development track is proposed in question 7. Complete.

618 Gary Robinson will inform the SC25 TAG that T10 has reviewed the FDIS, 1.25.13.11.31 SBC-2 14776-322, and recommends that the JTC1 TAG vote to approve said FDIS. 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 web site and will be included in the mailing as usual.

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 Bridge Controller Commands (BCC) Project 1528-D [Elliott]

Rob Elliott reported that there has been no activity on BCC.

8.3 SCSI Enclosure Services - 2 (SES-2) Project 1559-D [Elliott]

Rob Elliott reported that a new SES-2 revision will be posted in time for the mailing incorporating the proposals approved by this meeting.

8.4 Fibre Channel Protocol - 3 (FCP-3) Project 1560-D [Peterson]

John Lohmeyer reported that due to a SNAFU at the INCITS Secretariat, the public review on FCP-3 ends 27 February 2006.

Dave Peterson reported that the FCP-4 study group met on January 10, 2006 (minutes in 06-067). The study group has prepared a project proposal (06-032), which will be addressed at the March T10 meeting.

8.5 Serial Attached SCSI - 1.1 (SAS-1.1) Project 1601-D [Elliott]

John Lohmeyer reported that due to a SNAFU at the INCITS Secretariat, the public review on SAS-1.1 ends 27 February 2006.

8.6 SCSI Stream Commands - 3 (SSC-3) Project 1611-D [Peterson]

Dave Peterson presented a report summarizing the activities of the SSC-3 working group (minutes in 06-066).

Conference calls have been scheduled on January 25, February 8, and February 20 from noon until 2 pm Pacific Time to discuss key management.

8.7 MultiMedia Command Set - 5 (MMC-5) Project 1675-D [McFerrin]

Bill McFerrin reported that the working group completed a review of MMC-5 draft (minutes in 06-071). A topic of interest to the group was the use of world-wide names by MMC devices. Based on consultations with the CAP working group a recommendation is in development for MMC-5.

The group expects to start a Letter Ballot on MMC-5 around the time of the March plenary.

Bill noted that an MMC-6 project proposal will be available for consideration at the March meeting.

8.8 SCSI Architecture Model - 4 (SAM-4) Project 1683-D [Penokie]

George Penokie reported that a new revision of SAM-4 will be generated incorporating all approved proposals, but may not be in time for the mailing.
8.9 SCSI / ATA Translation (SAT) Project 1711-D [Sheffield]

Bob Sheffield reviewed the recent SAT activities (minutes in 06-021 and 06-039). SAT r08 will be prepared in time for the next mailing to incorporate all approved proposals. The working group recommended that T10 conduct a forwarding letter ballot on SAT r08.

8.10 Object-Based Storage Devices - 2 (OSD-2) Project 1729-D [Weber]

Ralph Weber reported that the SNIA TWG is nearing resolution on the Exception Management and Snapshots topics. The chances of uploading a new revision before March were estimated to be slim.

8.11 SCSI Media Changer Command Set - 3 (SMC-3) Project 1730-D [Banther]

Michael Banther reported on the activities of the SMC-3 working group (minutes in 06-062) with an electronic report available in 06-073r0.

8.12 SCSI Primary Commands - 4 (SPC-4) Project 1731-D [Weber]

Ralph Weber reported that SPC-4 r03 will be posted before the mailing and will incorporate all proposals approved by the November meeting and this meeting. He apologized for not preparing a revision over the holidays.

8.13 Serial Attached SCSI Driver Interface (SDI) Project 1740-D [Elliott]

Rob Elliott noted that any changes to the SDI will be handled in the CAP working group and that no changes are currently proposed.

8.14 Automation/Drive Interface - Commands - 2 (ACD-2) Project 1741-D [Suhler]

Paul Suhler reported on the activities of the ADI working group (minutes in 06-031) with an electronic report available in 06-072r0. A new revision of ADC-2 will be posted in time for the mailing. A call for final technical proposals has been posted and technical input will close after the March meeting.

8.15 Automation/Drive Interface - Transport Protocol - 2 (ADT-2) Project 1742-D [Suhler]

Paul Suhler reported on the activities of the ADI working group (minutes in 06-031) with an electronic report available in 06-073r0.

8.16 Serial Attached SCSI - 2 (SAS-2) Project 1760-D [Elliott]

Rob Elliott reported that several SAS-2 protocol proposals have been recommended (minutes in 06-038). The SAS-2 physical working group (minutes in 06-068) made no recommendations. A SAS-2 revision will be posted containing all approved proposals in time for the mailing.

8.17 SCSI Block Commands - 3 (SBC-3) Project 1799-D [Penokie]

George Penokie reported SBC-3 r03 has been posed on the web site. A new revision will be prepared containing the proposals approved at this meeting, probably not in time for the mailing.

9. Old Business

There was no old business.
10. New Business

10.1 Project proposal for SCSI / ATA Translation - 2 (SAT-2) (05-444r1) [Overby]

John Lohmeyer led a review of the SAT-2 project proposal (05-444r1). Two volunteer editors have been identified.

John Lohmeyer moved that T10 approve 05-444r1 as a new project proposal for SCSI / ATA Translation - 2 (SAT-2). Curtis Stevens seconded the motion. The motion passed a two-thirds vote of 38:0:2:5=45.

John Lohmeyer took an action item to forward 05-444r1 to INCITS for further processing as a new project proposal for SAT-2.

10.2 Actions on SAS Protocol Working Group Recommendations

The recommendations from the SAS protocol working group (minutes in 06-038) were presented to the committee.

George Penokie reviewed the following proposals recommended for inclusion in SAS-2:

06-055r0 (More counters) [Elliott]
05-309r3 (Add device name to IDENTIFY address frame) [Elliott]
06-028r1 (Redundant Primitive Sequence Handling) [Gorshe]
06-054r1 (Expander Issues) [Elliott]

Rob Elliott moved that 05-309r3, 06-028r1, and 06-054r1 be approved for inclusion in SAS-2. Ron Roberts seconded the motion. The motion passed on a vote of 30:0:6:9=45.

Rob Elliott moved that 06-055r0 be approved for inclusion in SAS-2. Kevin Marks seconded the motion. The motion passed on a vote of 19:5:14:7=45.

10.3 Actions on SAS PHY Working Group Recommendations

There were no recommendations made by the SAS physical working group (minutes in 06-068).

10.4 Actions on SAT Working Group Recommendations

The recommendations from the SAT working group (minutes in 06-021 and -039) were presented to the committee.

Bob Sheffield reviewed the following proposals recommended for inclusion in SAT:

05-245r4 (SEND DIAGNOSTIC Command and Self Test Results) [Bellamy]
06-001r1 (L_T Nexus Loss) [Sheffield]
06-022r0 (Rewrite TEST UNIT READY) [Sheffield]
06-020r1 (Clarify error handling for PIO data-in commands) [Elliott/Weber]

Bob Sheffield moved that 05-245r4, 06-001r1, 06-022r0, and 06-020r1 be approved for inclusion in SAT. Ron Roberts seconded the motion. The motion passed on a vote of 31:0:7:7=45.

Bob Sheffield took an action item to prepare SAT r08. Based on the unanimous recommendation of the SAT working group, John Lohmeyer took an action item to conduct a letter ballot on forwarding SAT r08 to INCITS for first public review.
10.5 Actions on CAP Working Group Recommendations

The recommendations from the CAP working group (minutes in 06-040) were presented to the committee.

George Penokie reviewed the following proposals recommended for inclusion in SAM-4:

- 06-003r1 (LUN representation format) [Elliott]
- 06-025r1 (More initiator port to I_T nexus changes) [Elliott]

Rob Elliott moved that 06-003r1 and 06-025r1 be approved for inclusion in SAM-4. Bob Nixon seconded the motion. The motion passed on a vote of 32:0:5:8=45.

George Penokie reviewed the following proposals recommended for inclusion in SPC-4:

- 06-018r0 (Update SPC-4 version field) [Weber]
- 05-157r9 (Security Commands proposal) [Houlder]
- 05-252r2 (Create well known LUN for security commands) [Houlder]

Gerry Houlder moved that 06-018r0, 05-157r9, and 05-252r2 be approved for inclusion in SPC-4. Roger Cummings seconded the motion. The motion passed on a vote of 32:0:7:6=45.

George Penokie reviewed the following proposals recommended for SPC-4 and SBC-3:

- 05-383r3 (Deferred microcode downloads) [Penokie]
- 05-340r3 (Background scan additions) [Elliott]

George Penokie moved that 05-383r3 be approved for SPC-4 and SBC-3. Bill Martin seconded the motion. The motion passed on a vote of 32:0:7:6=45.

Rob Elliott moved that 05-340r3 be approved for SPC-4 and SBC-3. Gerry Houlder seconded the motion. The motion passed on a vote of 23:2:12:8=45.

George Penokie reviewed 05-368r2 (Allow more commands through Write Exclusive reservations) [Elliott] a proposal recommended for inclusion in SPC-4, SBC-3, and SMC-3. George Penokie reviewed 06-036r1 (More Additional Element Status descriptors) [Elliott] a proposal recommended for inclusion in SES-2. George Penokie reviewed 06-002r2 (IEEE OUI/company_id tutorial for SCSI) [Elliott] a proposal recommended for forwarding to IEEE.

Rob Elliott moved that 05-368r2 be approved for inclusion in SPC-4, SBC-3, and SMC-3; that 06-036r1 be approved for inclusion in SES-2; and that 06-002r2 be approved for forwarding to IEEE. Ron Roberts seconded the motion. The motion passed on a vote of 34:0:4:7=45.

John Lohmeyer took an action item to forward 06-002r2 to the IEEE for posting as an OUI tutorial for SCSI.

George Penokie reviewed 05-085r9 (Style Guide) [Penokie] a proposal recommended for posting as the T10 Style Guide.

Bob Sheffield moved that 05-085r9 be approved for posting as the T10 Style Guide. Bob Nixon seconded the motion. The motion passed on a vote of 32:2:5:6=45.

10.6 Actions on Other Working Group Recommendations

No recommendations were brought to the committee from other working groups.
10.7 Project Proposal for Fibre Channel Protocol for SCSI - 4 (FCP-4) (06-032r1) [Peterson]

The FCP-4 study group prepared a project proposal for an FCP-4 project. However, the request to add this project proposal to the T10 agenda was not received two weeks prior to the T10 meeting, so T10 is not allowed to take action at this meeting. This is the only action for which the INCITS rules automatically invoke the two-week rule. This agenda item will be placed under old business for the March T10 meeting.

11. ISO/IEC

11.1 ISO/IEC Report [Robinson]

Gary Robinson presented the ISO/IEC report (06-035r2).

Rob Elliott moved that the IR be instructed to start the process of removing SSM-2 from the SC25 program of work. Gerry Houlder seconded the motion. The motion passed 26:0:12:7=45.

Gary Robinson took an action item to start the process of removing SSM-2 from the SC25 program of work.

11.2 ISO/IEC Business [Robinson]

11.2.1 NWIP for FCP-3 (06-045) [Robinson]

Gary Robinson moved that T10 recommends that the SC25 TAG contribute an NWIP (06-045r0) to SC25 for FCP-3 as project 1.25.13.11.33, 14776-223, to mark YES on each of the 6 questions, define Gary S Robinson as Project Editor in question 4, normal standard development track is proposed in question 7, and when the NWIP ballot is available; to vote Approve. Curtis Stevens seconded the motion. The motion passed on roll call vote of 33:0:8:4=45, the details of which were as follows:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Voter</th>
<th>Vote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptec, Inc.</td>
<td>William Lynn</td>
<td>Abstain</td>
</tr>
<tr>
<td>AvagoTechnologies</td>
<td></td>
<td>(not present)</td>
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<tr>
<td>AMCC</td>
<td>Paul von Stamwitz</td>
<td>Yes</td>
</tr>
<tr>
<td>Amphenol Interconnect</td>
<td>Michael Wingard</td>
<td>Abstain</td>
</tr>
<tr>
<td>Broadcom Corp.</td>
<td>Ron Roberts</td>
<td>Yes</td>
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<td>Brocade</td>
<td>Steven Wilson</td>
<td>Yes</td>
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<tr>
<td>Dallas Semiconductor</td>
<td>Steve Robalino</td>
<td>Abstain</td>
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<td>Dell, Inc.</td>
<td>Kevin Marks</td>
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<td>EMC Corp.</td>
<td>Gary S. Robinson</td>
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<td>Emulex</td>
<td>Robert H. Nixon</td>
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<td>ENDL</td>
<td>Ralph O. Weber</td>
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<td>FCI</td>
<td>Douglas Wagner</td>
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<td>Foxconn Electronics</td>
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<td>Fujitsu</td>
<td>Mike Fitzpatrick</td>
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<td>General Dynamics</td>
<td>Nathan Hastad</td>
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<td>Hewlett Packard Co.</td>
<td>Rob Elliott</td>
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<td>IBM Corp.</td>
<td>George O. Penokie</td>
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<td>Intel Corp.</td>
<td>Robert Sheffield</td>
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<td>Iomega Corp.</td>
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<td>Lexar Media, Inc.</td>
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<td>LSI Logic Corp.</td>
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<tr>
<td>M-Systems</td>
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<td>(not present)</td>
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<tr>
<td>Maxtor Corp.</td>
<td>Mark Evans</td>
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<td>Microsoft Corp.</td>
<td>Emily Hill</td>
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</tbody>
</table>
Molex Inc.                   Jay Neer                      Yes  
Nvidia Corp.                                               (not present)  
Oracle                       James Williams                Yes  
Panasonic Technologies, Inc  Terence J. Nelson             Yes  
Philips Electronics          William P. McFerrin           Yes  
Pivot3, Inc.                                               (not present)  
PMC-Sierra                   Tim Symons                    Yes  
QLogic Corp.                 Craig W. Carlson              Yes  
Quantum Corp.                Paul Entzel                    Yes  
Seagate Technology           Gerald Houlder                 Yes  
Sierra Logic, Inc.           William Martin                Yes  
Sun Microsystems, Inc.       Vit Novak                      Yes  
Symantec                     Roger Cummings                 Yes  
Texas Instruments            Robert Kando                   Yes  
TycoElectronics              Ashlie Fan                     Yes  
Vitesse Semiconductor        David Allen                   Yes  
Western Digital              Curtis Stevens                 Yes  
Xiotech Corp.                Jeff Williams                 Yes  
Xyratex                      Rich Ramos                    Yes

This two-thirds roll call vote passed (33:0:8:4=45).

Gary Robinson took an action item to forward 06-045r0 to the SC25 TAG as an NWIP contribution for SPC-3 as project 1.25.13.11.33, 14776-223, to mark YES on each of the 6 questions, define Gary S Robinson as Project Editor in question 4, and normal standard development track is proposed in question 7.

12. Liaison Reports

12.1 T11 Liaison Report [Snively]

Although he could not attend, Bob Snively provided an electronic liaison report in T10/06-033 that was presented by Craig Carlson.

12.2 T13 Liaison Report [Colegrove]

Dan Colegrove provided an oral report to the committee on the activities of T13. The ATA-8 Architecture is in Letter Ballot comment resolution. Coordination with T10 regarding the TCG commands is in progress. A project to better describe how to emulate parallel interfaces for serial drives was approved as HBA-2. For details regarding T13 activities see www.t13.org.

12.3 SFF Industry Group [Allan]

In the absence of Dal Allan, no report was available.

12.4 IEEE 1394 [Johansson]

In the absence of Peter Johansson, no report was available.

12.5 SCSI Trade Association (STA) [Czekalski]

Marty Czekalski presented an electronic report (06-069) on the activities of the SCSI Trade Association.
12.6 IETF SCSI over IP [Black/Robinson]

David Black reported that the SCSI MIB is in IETF Last Call. The Implementors' Guide is in progress. One topic being covered is the restriction that only the requested amount of data can be transferred by a REPORT LUNS command. Apparently, many iSCSI developers are not reading all the relevant standards carefully.

12.7 SNIA [open]

Roger Cummings noted that he is no longer acting as the SNIA liaison. Steve Wilson reported to the committee and provided an electronic report in 06-074r0.

12.8 Trusted Computing Group [Fitzpatrick]

Mike Fitzpatrick report that the storage working group has published a white paper on usage models. The storage working group has doubled their efforts to develop their core, locking, and credentials specifications.

13. Review of Action Items

619 Bob Sheffield will prepare SAT r08.
620 John Lohmeyer will conduct a letter ballot on forwarding SAT r08 to INCITS for first public review.
621 John Lohmeyer will forward 05-444r1 to INCITS for further processing as a new project proposal for SAT-2.
622 John Lohmeyer will forward 06-002r2 to the IEEE for posting as an OUI tutorial for SCSI.
623 Gary Robinson will forward 06-045r0 to the SC25 TAG as an NWIP contribution for SPC-3 as project 1.25.13.11.33, 14776-223, to mark YES on each of the 6 questions, define Gary S Robinson as Project Editor in question 4, and normal standard development track is proposed in question 7.
624 Gary Robinson will start the process of removing SSM-2 from the SC25 program of work.

14. Meeting Schedule

The next plenary meeting of T10 will be Thursday March 9, 2006 in Hilton Head Island, SC at the Hilton Ocean Front Resort (Reservations: 1-800-Hiltons) hosted by the SCSI Trade Association. The meeting will begin at 9:00 a.m. on Thursday.

The meeting list for the next plenary week is:
March 2006 Meeting Map
(2006/01/12 Version)

Monday 3/06

9  10  11  12  1  2  3  4  5  6  7  8
+===============================================
| ADI-2 WG / SMC-3 WG |  (10) |
+===============================================
| SAS Prot WG |  (40) |
+===============================================

Tuesday 3/07

9  10  11  12  1  2  3  4  5  6  7  8
+===============================================
| SAS Physical WG |  (45) |
+===============================================
| SAT WG |  (40) |
+===============================================
| STA Marcom * |  (35) |
+===============================================
| FCP-4 SG/ SSC-3 WG |  (25) |
+===============================================
| MMC WG |  (25) |
+===============================================

Wednesday 3/08

9  10  11  12  1  2  3  4  5  6  7  8
+===============================================
| CAP WG |  (40) |
+===============================================
| MMC WG |  (25) |
+===============================================
| SFF |  (30) |
+===============================================
| STA Plenary * / TCC* |  (20) |
+===============================================

Thursday 3/09

9  10  11  12  1  2  3  4  5  6  7  8
+===============================================
| T10 Plenary | SAT WG |  (50/20) |
+===============================================

Friday 3/10

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

NOTES: The Thursday Key Mgmt SG was merged into the SSC-3 WG. The Thursday Lock SG was merged into the CAP WG.

/ means the next meeting starts when the previous meeting concludes
Meetings marked with == are T10-authorized meetings.
Meetings marked with -- are other groups and may change without notice.
Meetings marked with (*) are closed meetings of other groups.
Other T10-authorized meetings:

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Date</th>
<th>Location / Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAS PHY Calls</td>
<td>Biweekly beginning</td>
<td>TBA via T10 reflector / Cox</td>
</tr>
<tr>
<td>January 26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAS Prot Calls</td>
<td></td>
<td>TBA via T10 reflector / Elliott</td>
</tr>
<tr>
<td>SAS Supervisor</td>
<td>Thursdays 9-11 PST</td>
<td>TBA via T10 reflector / Johnson</td>
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<tr>
<td>Calls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSC-3 Key Mgmt</td>
<td>Wed Jan 25</td>
<td>TBS via T10 reflector / Peterson</td>
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<tr>
<td>Call</td>
<td>noon - 2p PST</td>
<td></td>
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<tr>
<td>SSC-3 Key Mgmt</td>
<td>Wed Feb 8</td>
<td>TBS via T10 reflector / Peterson</td>
</tr>
<tr>
<td>Call</td>
<td>noon - 2p PST</td>
<td></td>
</tr>
<tr>
<td>SAS Supervisor</td>
<td>Feb 16</td>
<td>Tentative Denver / Johnson</td>
</tr>
<tr>
<td>Calls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSC-3 Key Mgmt</td>
<td>Wed Feb 20</td>
<td>TBS via T10 reflector / Peterson</td>
</tr>
<tr>
<td>Call</td>
<td>noon - 2p PST</td>
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<tr>
<td>SAT WG</td>
<td>Feb 28</td>
<td>Tentative Denver DIA / Overby</td>
</tr>
</tbody>
</table>

Map Abbreviation Key:

ad hoc:          a.k.a., working group
ADI:            Automation Drive Interface (tape library interface)
Amnd:            Amendment
CAP:            Commands, Architecture, and Protocols
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
Lock SG:        Study Group to examine need for Locking removable storage devices
MMC:            Multimedia Commands (CD-ROM, DVD, etc.)
OSD:            Object-based Storage Device
PH or PHY:      Physical (Connectors, Cables, Transceivers, etc.)
Prot:           Protocol
Plenary:        Full Committee Meeting
Res:            Resolution
SAS:            Serial Attached SCSI
SAT:            SCSI / ATA Translation
SBC-2:          SCSI Block Commands - 2
SCSI:           Small Computer System Interface
SDI:            Serial Attached SCSI Driver Interface
SES:            SCSI Enclosure Services
SFF:            SFF Industry Group (not an INCITS activity)
SG:             Study Group
SMC-3:          SCSI Medium Changer - 3 Commands
SPC-4:          SCSI Primary Commands - 4 (4th generation)
SSC-3:          SCSI Stream Commands - 2 (includes Tape)
STA:            SCSI Trade Association (Closed meeting -- not an INCITS activity)
STA Marcom:     STA Marketing Communications (Closed meeting -- not an INCITS activity)
STP:            Serial ATA Tunneled Protocol
T10:            SCSI Storage 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:
Activity                     Contact         Telephone/Email
---------------------------- --------------- ------------------------------
ADT, ADT-2                   Paul Entzel     (720) 406-5782
                                  paul.entzel@quantum.com
ADC, ADC-2                   Rod Wideman     (720) 249-5796
                                  rod.wideman@adic.com
SBC-2, SES-2, SAS-1.1, SAS-2,  Rob Elliott     (281) 518-5037
                                  Elliott@hp.com
BCC, SDI                      Bill McPerrin   (325) 423-1560
                                  billmc@tstar.net
MMC-4, MMC-5                 Bill McPerrin   (325) 423-1560
                                  billmc@tstar.net
SBP-3                        Peter Johansson (510) 527-3926
                                  PJohansson@ACM.org
SAM-4, SBC-3                 George Penokie (507) 253-5208
                                  gop@us.ibm.com
SAT                          Bob Sheffield   (480) 554-8597
                                  robert.l.sheffield@intel.com
SMC-2                        Erich Oetting   (303) 673-2178
                                  Erich.Oetting@Stortek.com
SMC-3                        Noud Snelder    +31408446108
                                  Noud.snelder@bdt.de
SPC-3, SAM-3, SPC-4, OSD-2   Ralph Weber     (214) 912-1373
                                  roweber@acm.org
SSC-3, FCP-3                 Dave Peterson   (763) 268-6139
                                  david.peterson@mcdata.com
Other Activities             John Lohmeyer   (719) 533-7560
                                  lohmeyer@t10.org

The long-term T10 meeting week schedule is:

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Host/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 6-10, 2006</td>
<td>Hilton Head, SC</td>
<td>SCSI Trade Association</td>
</tr>
<tr>
<td>May 8-12, 2006</td>
<td>Seattle, WA</td>
<td>Nvidia Corp.</td>
</tr>
<tr>
<td>Jul 10-14, 2006</td>
<td>Colorado Springs, CO</td>
<td>LSI Logic</td>
</tr>
<tr>
<td>Sep 11-15, 2006</td>
<td>Nashua, NH</td>
<td>Hitachi Cable Manchester</td>
</tr>
<tr>
<td>Nov 6-10, 2006</td>
<td>Las Vegas, NV</td>
<td>Hitachi GST</td>
</tr>
</tbody>
</table>

Approved dates for 2007:
- Jan 15-19, 2007 | Orlando, FL | Symantec
- Mar 12-16, 2007
- May 7-11, 2007
- Jul 9-13, 2007 | Colorado Springs, CO | LSI Logic
- Sep 17-21, 2007 | TBD | PMC-Sierra
- Nov 5-9, 2007

Proposed dates for 2008:
- Jan 14-18, 2008
- Mar 10-14, 2008
- May 5-9, 2008
- Jul 14-18, 2008
- Sep 8-12, 2008
- Nov 3-7, 2008

John Lohmeyer asked people interested hosting one of the above meetings to contact him.
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.

Kevin Marks moved that T10 authorize the T10-related meetings and events in the list above that had not previously been approved through the end of February 2006. Bill Martin 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 11:05 a.m. on Thursday January 12, 2006.
### Enclosure(1) -- Meeting Attendees

<table>
<thead>
<tr>
<th>Name</th>
<th>S</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. William Lynn</td>
<td>P</td>
<td>Adaptec, Inc.</td>
</tr>
<tr>
<td>Mr. Paul von Stamwitz</td>
<td>P</td>
<td>AMCC</td>
</tr>
<tr>
<td>Mr. Michael Wingard</td>
<td>P</td>
<td>Amphenol Interconnect</td>
</tr>
<tr>
<td>Mr. Ron Roberts</td>
<td>A</td>
<td>Broadcom Corp.</td>
</tr>
<tr>
<td>Mr. Steven Wilson</td>
<td>A</td>
<td>Brocade Comm. Systems, Inc.</td>
</tr>
<tr>
<td>Mr. Steve Robalino</td>
<td>A</td>
<td>Dallas Semiconductor</td>
</tr>
<tr>
<td>Mr. Kevin Marks</td>
<td>P</td>
<td>Dell, Inc.</td>
</tr>
<tr>
<td>Mr. David Black</td>
<td>A</td>
<td>EMC Corp.</td>
</tr>
<tr>
<td>Mr. Gary S. Robinson</td>
<td>P</td>
<td>EMC Corp.</td>
</tr>
<tr>
<td>Mr. Robert H. Nixon</td>
<td>P</td>
<td>Emulex</td>
</tr>
<tr>
<td>Mr. Ralph O. Weber</td>
<td>P</td>
<td>ENDL Texas</td>
</tr>
<tr>
<td>Mr. Douglas Wagner</td>
<td>P</td>
<td>FCI</td>
</tr>
<tr>
<td>Mr. Elwood Parsons</td>
<td>P</td>
<td>Foxconn Electronics</td>
</tr>
<tr>
<td>Mr. Mike Fitzpatrick</td>
<td>P</td>
<td>Fujitsu</td>
</tr>
<tr>
<td>Mr. Nathan Hastad</td>
<td>P</td>
<td>General Dynamics</td>
</tr>
<tr>
<td>Mr. Michael Banther</td>
<td>V</td>
<td>Hewlett Packard Co.</td>
</tr>
<tr>
<td>Mr. Rob Elliott</td>
<td>P</td>
<td>Hewlett Packard Co.</td>
</tr>
<tr>
<td>Mr. Mike Guzman</td>
<td>A</td>
<td>Hitachi Cable Manchester</td>
</tr>
<tr>
<td>Mr. Dan Colegrove</td>
<td>P</td>
<td>Hitachi Global Storage Tech.</td>
</tr>
<tr>
<td>Mr. James Rockrohr</td>
<td>V</td>
<td>IBM</td>
</tr>
<tr>
<td>Mr. George O. Penokie</td>
<td>P</td>
<td>IBM Corp.</td>
</tr>
<tr>
<td>Mr. Robert Sheffield</td>
<td>P</td>
<td>Intel Corp.</td>
</tr>
<tr>
<td>Mr. Robert Payne</td>
<td>P</td>
<td>Iomega Corp.</td>
</tr>
<tr>
<td>Mr. John Goldman</td>
<td>P</td>
<td>Lexar Media, Inc.</td>
</tr>
<tr>
<td>Mr. John Lohmeyer</td>
<td>P</td>
<td>LSI Logic Corp.</td>
</tr>
<tr>
<td>Mr. David Geddes</td>
<td>A</td>
<td>Marvell Semiconductor, Inc.</td>
</tr>
<tr>
<td>Mr. Martin Czekalski</td>
<td>A</td>
<td>Maxtor Corp.</td>
</tr>
<tr>
<td>Mr. Mark Evans</td>
<td>P</td>
<td>Maxtor Corp.</td>
</tr>
<tr>
<td>Mr. David Peterson</td>
<td>A</td>
<td>McA DATA</td>
</tr>
<tr>
<td>Ms. Emily Hill</td>
<td>P</td>
<td>Microsoft Corp.</td>
</tr>
<tr>
<td>Mr. Jay Neer</td>
<td>P</td>
<td>Molex Inc.</td>
</tr>
<tr>
<td>Mr. James Williams</td>
<td>P</td>
<td>Oracle</td>
</tr>
<tr>
<td>Dr. Terence J. Nelson</td>
<td>P</td>
<td>Panasonic Technologies, Inc</td>
</tr>
<tr>
<td>Mr. William P. McFerrin</td>
<td>P</td>
<td>Philips Electronics/CD Edge</td>
</tr>
<tr>
<td>Mr. Tim Symons</td>
<td>P</td>
<td>PMC-Sierra</td>
</tr>
<tr>
<td>Mr. Craig W. Carlson</td>
<td>A</td>
<td>QLogic Corp.</td>
</tr>
<tr>
<td>Mr. Paul Entzel</td>
<td>P</td>
<td>Quantum Corp.</td>
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<tr>
<td>Dr. Paul Suhler</td>
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<td>Quantum Corp.</td>
</tr>
<tr>
<td>Mr. Alvin Cox</td>
<td>V</td>
<td>Seagate Technology</td>
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<tr>
<td>Mr. Gerald Houlder</td>
<td>P</td>
<td>Seagate Technology</td>
</tr>
<tr>
<td>Mr. William Martin</td>
<td>P</td>
<td>Sierra Logic, Inc.</td>
</tr>
<tr>
<td>Mr. Vit Novak</td>
<td>P</td>
<td>Sun Microsystems, Inc.</td>
</tr>
<tr>
<td>Mr. Roger Cummings</td>
<td>P</td>
<td>Symantec</td>
</tr>
<tr>
<td>Mr. Robert Kando</td>
<td>A</td>
<td>Texas Instruments</td>
</tr>
<tr>
<td>Ms. Ashlie Fan</td>
<td>P</td>
<td>TycoElectronics</td>
</tr>
<tr>
<td>Mr. Dan Gorenc</td>
<td>A</td>
<td>TycoElectronics</td>
</tr>
<tr>
<td>Mr. Ron Mathews</td>
<td>A</td>
<td>UNISYS Corporation</td>
</tr>
<tr>
<td>Mr. David Allen</td>
<td>A</td>
<td>Vitesse Semiconductor</td>
</tr>
<tr>
<td>Mr. Curtis Stevens</td>
<td>P</td>
<td>Western Digital</td>
</tr>
<tr>
<td>Mr. Jeff Williams</td>
<td>P</td>
<td>Xiotech Corp.</td>
</tr>
<tr>
<td>Mr. Rich Ramos</td>
<td>P</td>
<td>Xyratex</td>
</tr>
</tbody>
</table>

51 People Present

Status Key: P - Principal
A.A# - Alternate
AV - Advisory Member
L - Liaison
V - Visitor
Enclosure(2) -- T10 Attendance Database
Generated on 2006/01/16 at 10:07:31

Mr. William Lynn  (P)             Phone: (303) 589-4655
Adaptec, Inc.                       Fax:
1951 South Fordham St.            Email: bill_lynn at adaptec dot com
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Fax: (507) 322-2413  
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Fax: 
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Fax: (507) 253-2880  
Email: gop at us dot ibm dot com

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Tucson, AZ 85744  
Phone: (520) 799-5280  
Fax: 
Email: kdbutt at us dot ibm dot com
LSI Logic Corp.                     Fax: (719) 533-7183
4420 ArrowsWest Dr.               Email: lohmeyer at t10 dot org
Colorado Springs, CO 80907

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M-Systems                          Fax: +97253466888
7 Atir Yeda Str                    Email: avraham dot shimor at m-systems dot com
Kfar Saba 44425                    Israel

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Kfar Saba, 44425                   Israel

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Sunnyvale CA 94089

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500 McCarthy Blvd.                Email: mark_evans at maxtor dot com
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Shrewsbury, MA 01545

Mr. David Peterson (AV)            Phone: (763) 268-6139
McDATA                              Fax:
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