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

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 Reply to:
 John Lohmeyer

To:T10 MembershipFrom:Ralph Weber / John LohmeyerSubject:Minutes of T10 Plenary Meeting #65 -- January 20, 2005<br/>Las Vegas, NV

# Agenda

- 1. Opening Remarks
- 2. Approval of Agenda
- 3. Attendance and Membership
- 4. Approval of Minutes November 2004 Meeting Austin, TX (T10/04-368r0)
- 5. Document Distribution
- 6. Call for Patents
- 7. Review of Old Action Items
- 8. Project Status Reports
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  - 8.2 Object-based Storage Devices Commands (OSD) Project 1355-D [Weber]
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  - 8.7 MultiMedia Command Set 4 (MMC-4) Project 1545-D [McFerrin]
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  - 8.9 Automation/Drive Interface Commands (ADC) Project 1558-D [Entzel/Wideman]
  - 8.10 SCSI Enclosure Services 2 (SES-2) Project 1559-D [Elliott]
  - 8.11 Fibre Channel Protocol 3 (FCP-3) Project 1560-D [Peterson]
  - 8.12 SCSI Architecture Model 3 (SAM-3) Project 1561-D [Weber]
  - 8.13 Serial Attached SCSI 1.1 (SAS-1.1) Project 1601-D [Elliott]
  - 8.14 SCSI Stream Commands 3 (SSC-3) Project 1611-D [Peterson]
  - 8.15 MultiMedia Command Set 5 (MMC-5) Project 1675-D [McFerrin]
  - 8.16 SCSI Architecture Model 4 (SAM-4) Project 1683-D [Penokie]
  - 8.17 SCSI / ATA Translation (SAT) Project 1711-D [Sheffield]
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- 9. Old Business
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  - 10.1 Actions on SAS Protocol Working Group Recommendations
  - 10.2 Actions on SAS PHY Working Group Recommendations
  - 10.3 Actions on CAP Working Group Recommendations

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- 10.4 Actions on Other Working Group Recommendations
- 11. ISO/IEC
  - 11.1 ISO/IEC Report [Robinson]
  - 11.2 ISO/IEC Business [Robinson]
    - 11.2.1 NWIP for SAS-1.1 (04-126) [Elliott]
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  - 12.2 T13 Liaison Report [Colegrove]
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  - 12.4 IEEE 1394 [Johansson]
  - 12.5 SCSI Trade Association (STA) [Czekalski]
  - 12.6 IETF SCSI over IP [Black/Robinson]
  - 12.7 SNIA [Cummings]
  - 12.8 Trusted Computing Group [Fitzpatrick]
- 13. Review of Action Items
- 14. Meeting Schedule
  - 14.1 Authorization of Working Group Meetings
- 15. Adjournment

# **Results of Meeting**

### 1. Opening Remarks

John Lohmeyer, the T10 Chair, called the meeting to order at 9:00 a.m., Thursday January 20, 2005. He thanked Dan Colegrove of Hitachi GST 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.

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 membership 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 2005 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 2 people from 1 organization informing them that their membership was in jeopardy due to non-attendance (see 04-402r0) and that their membership would be terminated if they did not attend this meeting. The following organization was in attendance jeopardy:

General Dynamics

All the organizations in attendance jeopardy were present so no organizations were changed to Advisory (non-voting) status.

Sierra Logic became a voting member of T10 on January 5, 2005.

Nvidia Corp. became a voting member of T10 at this meeting.

The T10 membership during the meeting was 42 organizations up from the 40 member organizations after the last 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 noted that no organizations are currently in letter ballot jeopardy. However, four organizations will be in letter ballot jeopardy if they do not vote on the next letter ballot:

T10 Letter Ballot Jeopardy Report -- 2004/10/25

Ballot: Report: Acronym:	04-109r0 04-110r0 ADT	04-241r0 04-242r0 SBC-2	04-326r0 04-327r0 SPC-3	
	Yes	No	DNV	
	Yes	DNV	Yes	
r	Yes	DNV	Yes	
	Yes	DNV	Yes	
	Yes	DNV	DNV	(*)
	Report:	Report: 04-110r0 Acronym: ADT Yes Yes r Yes Yes Yes	Report:04-110r004-242r0Acronym:ADTSBC-2YesNoYesDNVYesDNVYesDNVYesDNVYesDNV	Report:04-110r004-242r004-327r0Acronym:ADTSBC-2SPC-3YesNoDNVYesDNVYesrYesDNVYesYesDNVYesYesDNVYesYesDNVYes

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

### 4. Approval of Minutes - November 2004 Meeting - Austin, TX (T10/04-368r0)

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 uploaded to the T10 web site by 10:30 a.m. on Thursday January 27, 2005. 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.

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. The contact for INCITS patent issues is Lynn Barra (Ibarra 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 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

- 591 John Lohmeyer will forward SBC-2 revision 16 to INCITS for further processing toward first Public Review. *Complete.*
- 592 John Lohmeyer will forward MMC-4 revision 5 to INCITS for further processing toward second Public Review. *Complete.*
- 593 John Lohmeyer will forward ADT revision 14 to INCITS for further processing toward first Public Review. *Complete.*
- 594 John Lohmeyer will forward 04-306r1 to INCITS for further processing as a new project proposal for ADC-2. *Complete.*
- 595 John Lohmeyer will forward 04-307r0 to INCITS for further processing as a new project proposal for ADT-2. *Complete.*
- 596 John Lohmeyer will forward 04-345r1 to INCITS for further processing as a new project proposal for SDI. *Complete.*
- 597 Gary Robinson will communicate to INCITS that T10 recommends that the JTC1/SC25 TAG vote to approve the project ISO/IEC FDIS SPC-2, 1.25.13.11.27, 14776-452 FDIS. *Carryover.*

### 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.

INCITS announced last week that Sally Smith has joined the INCITS/ITI team as the Associate Director, External Relations. The press release is available at: http://www.incits.org/press/2005/pr200502.pdf

#### 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 Object-based Storage Devices Commands (OSD) Project 1355-D [Weber]

John Lohmeyer reported that OSD has been approved and published by ANSI as INCITS 400-2004. He congratulated Ralph Weber, the OSD Technical Editor.

#### 8.3 SCSI Primary Commands - 3 (SPC-3) Project 1416-D [Weber]

Ralph Weber reported that approximately 150 SPC-3 letter ballot comments remain to be resolved. Letter ballot comment resolution will continue following this meeting. The next revision of the SPC-3 letter ballot comments resolution document (04-355r4) will be posted to the T10 web site sometime in February, not in time for the next mailing.

#### 8.4 SCSI Block Commands - 2 (SBC-2) Project 1417-D [Elliott]

Rob Elliott reported that the public review for SBC-2 closed January 17. John Lohmeyer stated that SBC-2 will be going to INCITS management review and approval.

#### 8.5 SCSI RDMA Protocol - 2 (SRP-2) Project 1524-D [open]

John Lohmeyer said that no one had volunteered to take over as the SRP-2 Technical Editor. John Lohmeyer moved that T10 recommend that INCITS close project 1524-D due to insufficient interest. Roger Cummings seconded the motion. The motion passed on a two-thirds vote of: 31:0:1:10=42.

John Lohmeyer took an action item to notify INCITS that T10 has recommended that project 1524-D (SRP-2) be closed due to insufficient interest.

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

Rob Elliott reported that no changes have been made in BCC. New work is awaiting completion of the SPC-3 letter ballot resolution.

#### 8.7 MultiMedia Command Set - 4 (MMC-4) Project 1545-D [McFerrin]

John Lohmeyer reported that the second public review for MMC-4 closed January 17. John stated that MMC-4 will be going to INCITS for management review and approval. More information will be available in March.

#### 8.8 Automation/Drive Interface - Transport Protocol (ADT) Project 1557-D [Entzel]

Paul Entzel reported that the first public review for ADT closed January 17. John Lohmeyer stated that ADT will be going to INCITS for management review and approval.

#### 8.9 Automation/Drive Interface - Commands (ADC) Project 1558-D [Entzel/Wideman]

John Lohmeyer reported that ADC should be on the agenda for INCITS approval. Since INCITS is meeting this week, the green light may be given very soon.

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

Rob Elliott reported that a new SES-2 revision will be posted following this meeting containing the proposals approved by this meeting. The new revision will probably not be available in time for the mailing.

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

Dave Peterson reported on the activities of the FCP-3 working group (minutes in 05-045). Two proposals were recommended for approval by T10 (see agenda item 10.4). Dave stated that the goal for last technical input is March and the goal for T10 letter ballot is May.

#### 8.12 SCSI Architecture Model - 3 (SAM-3) Project 1561-D [Weber]

John Lohmeyer reported that SAM-3 passed first public review with no comments received and that it is now at INCITS for approval.

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

Rob Elliott reported that SAS-1.1 will not go to letter ballot after this meeting. It will go to letter ballot after the March meeting. If 3 Gbs support is ready by the March meeting, it will go into SAS-1.1; otherwise it will go into SAS-2.

Rob stated that a new revision of SAS-1.1 will be prepared to incorporate the proposals approved at this meeting. The new revision will be available in time for the next meeting but not in time for the next mailing.

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

Dave Peterson reported on the activities of the SSC-3 working group (minutes in 05-048).

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

Bill McFerrin reported that the target for last technical input may move to May based on the late arrival of several critical proposals. With regard to the interactions between MMC-5 and SAT, Bill reported that the MMC-5 group recommended use of the ATA COMMAND PASS THROUGH(16) for bridging to MMC devices.

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

George Penokie reported that revision 0 of SAM-4 has been posted to the T10 web site, containing the ANSI editorial comments made against SAM-3. He stated that a new revision will be prepared reflecting the proposals approved by this meeting. The new revision will not be ready in time for the mailing.

#### 8.17 SCSI / ATA Translation (SAT) Project 1711-D [Sheffield]

Bob Sheffield reviewed the recent SAT activities (minutes in 05-016 and 05-034). He stated that a new revision of SAT will be posted in time for the next meeting, but not in time for the mailing. He stated a goal of conducting a letter ballot around March or May of this year.

#### 8.18 SCSI Primary Commands - 4 (SPC-4) Project 1729-D [Weber]

Ralph Weber stated that r0 of SPC-4 will not be uploaded until the ANSI Editor's comments on SPC-3 are processed.

#### 8.19 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 05-047). The editor for SMC-3 is Noud Snelder.

#### 8.20 Object-Based Storage Devices - 2 (OSD-2) Project 1731-D [Weber]

Ralph Weber reported that OSD-2 r0 is available on the T10 web site and is OSD r10 plus the ANSI Editor's comments on OSD r10. There is no indication that another revision will be produced before the March meeting.

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

Rob Elliott reported that the first SDI working group meeting was held this week (minutes in 05-043). He stated that SDI revision 0 will be posted after the mailing.

#### 8.22 Automation/Drive Interface - Commands - 2 (ADC-2) Project 1741-D [Entzel]

Paul Entzel reported on the activities of the ADI working group (minutes in 05-030). A revision of ADC-2 will be posted to the T10 web site but not in time for the mailing.

#### 8.23 Automation/Drive Interface - Transport Protocol - 2 (ADT-2) Project 1742-D [Entzel]

Paul Entzel reported on the activities of the ADI working group (minutes in 05-030). A revision of ADT-2 will be posted to the T10 web site but not in time for the mailing.

#### 9. Old Business

There was no old business.

#### 10. New Business

#### **10.1 Actions on SAS Protocol Working Group Recommendations**

The recommendations from the SAS-1.1 working group (minutes in 05-033) were presented to the committee.

George Penokie, Rob Elliott and Ralph Weber reviewed the following proposals recommended for inclusion in SAS-1.1:

04-340r2 (OPEN\_REJECT BAD DESTINATION handling) [Elliott] 05-018r1 (Discover process disable unused entries) [Elliott] 05-024r2 (Credit-based starvation) [Elliott] 05-039r1 (ACK/NAK balance check) [Sheffield] 05-040r0 (Break Wait state insensitivity to other events) [Hoglund]

Rob Elliott moved that 04-340r2, 05-018r1, 05-024r2, 05-039r1, and 05-040r0 be approved for inclusion in SAS-1.1. Bob Sheffield seconded the motion. The motion passed on a vote of 27:0:3:12=42.

George Penokie reviewed 04-374r2, (Define a SAS Expander element) [Elliott], a proposal recommended for inclusion in SES-2.

Rob Elliott moved that 04-374r2 be approved for inclusion in SES-2. Curtis Stevens seconded the motion. The motion passed on a vote of 26:0:2:14=42.

#### **10.2 Actions on SAS PHY Working Group Recommendations**

The recommendations from the SAS PHY working group (minutes in 05-046) were presented to the committee.

Alvin Cox reviewed the following proposals recommended for inclusion in SAS-1.1:

04-337r3 (TCTF Editorial Changes) [Olawsky] 04-370r3 (Merge IT and IR with XT and XR) [Elliott] 05-007r1 (external cable electrical specification) [Cox] 05-009r1 (OOB amplitude measurement method) [Bissonette] 05-023r1 (Connector figures) [Kachlic & Elliott] 05-029r1 (transmitter and receiver transients subsection) [Cox]

Alvin Cox moved that 04-337r3, 04-370r3, 05-007r1, 05-009r1, 05-023r1, and 05-029r1 be approved for inclusion in SAS-1.1. Bob Sheffield seconded the motion. The motion passed on a vote of 24:0:7:11=42.

#### **10.3 Actions on CAP Working Group Recommendations**

The recommendations from the CAP working group (minutes in 05-035) were presented to the committee.

George Penokie reviewed the following recommendations:

For inclusion in SAM-4, SPC-4, and SAS-2: 04-372r2 (I\_T NEXUS LOSS task management function) [Elliott]

For inclusion in SAM-4, FCP-3, and SAS-2: 04-297r2 (Retry Delay) [Penokie]

Rob Elliott moved that 04-372r2 be approved for inclusion in SAM-4, SPC-4, and SAS-2 and that 04-297r2 be approved for inclusion in SAM-4, FCP-3, and SAS-2. Bob Snively seconded the motion. The motion passed on a vote of 28:0:3:11=42.

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

04-374r3 (Define a SAS Expander element) [Elliott] 04-377r2 (Download Microcode diagnostic page) [Elliott] 04-382r1 (Subenclosure Nickname diagnostic page) [Elliott]

Rob Elliott moved that 04-374r3, 04-377r2, and 04-382r1 be approved for inclusion in SES-2. Curtis Stevens seconded the motion. The motion passed on a vote of 28:0:3:11=42.

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

Rob Elliott reviewed 04-218r8 (INQUIRY contents) [Elliott] a proposal recommended for inclusion in SAT.

Rob Elliott moved that 04-218r8 be approved for inclusion in SAT. Mark Overby seconded the motion. The motion passed on a vote of 27:0:4:11=42.

Dave Peterson reviewed the following proposals recommended for inclusion in FCP-3:

04-383r2 (Clarification to TPRLO) [Banther] 05-013r0 (PRLI Accept Clarification) [Hirata] Bob Nixon moved that 04-383r2 and 05-013r0 be approved for inclusion in FCP-3. Dave Peterson seconded the motion. The motion passed on a vote of 29:0:3:10=42.

### 11. ISO/IEC

#### 11.1 ISO/IEC Report [Robinson]

In the absence of Gary Robinson, John Lohmeyer presented the ISO/IEC report (05-027).

#### 11.2 ISO/IEC Business [Robinson]

#### 11.2.1 NWIP for SAS-1.1 (04-126) [Elliott]

John Lohmeyer requested that this agenda item be carried over until the March 2005 meeting since SAS-1.1 has not been sent to letter ballot.

### 12. Liaison Reports

#### 12.1 T11 Liaison Report [Snively]

Bob Snively presented the T11 liaison report contained in T10/05-031.

#### 12.2 T13 Liaison Report [Colegrove]

Dan Colegrove provided an oral report to the committee on the activities of T13. He noted that the principle activity of the committee is the ATA/ATAPI-8 project and that ATA/ATAPI-7 should be coming to T10 soon for ISO standard-ization. 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 on the activities of the SCSI Trade Association available in 05-051r0.

#### 12.6 IETF SCSI over IP [Black/Robinson]

In the absence of David Black no report was available.

#### 12.7 SNIA [Cummings]

Roger Cummings provided an electronic report on SNIA activities (05-050) and reviewed the report for the committee.

#### 12.8 Trusted Computing Group [Fitzpatrick]

Mike Fitzpatrick reported that there is no update on the status of the trusted computing group.

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

- 597 Gary Robinson will communicate to INCITS that T10 recommends that the JTC1/SC25 TAG vote to approve the project ISO/IEC FDIS SPC-2, 1.25.13.11.27, 14776-452 FDIS.
- 598 John Lohmeyer will notify INCITS that T10 has recommended that project 1524-D (SRP-2) be closed due to insufficient interest.

### 14. Meeting Schedule

The next plenary meeting of T10 will be Thursday March 10, 2005 in Dana Point, CA at the Laguna Cliffs Marriott Resort (949-661-5000), hosted by QLogic Corp. The meeting will begin at 9:00 a.m. on Thursday.

The meeting list for the next plenary week is:

March 2005 Meeting Map

		2 3 4 5 6 7 8		
	+=====================================	SMC-3 WG   (10)		
	SAS Prot WG  lı			
	Mt. Fuji	·=+======+   (30)		
-	T11 Ad hoc	(30)		
+==		. 2 3 4 5 6 7 8		
I	SAS Physical WG +=============	(25)		
	SCSI/ATA Trans W	JG   CAP WG   (40)		
	FCP-3 WG	STA Marcom *   (20)		
	Mt. Fuji /			
	9 10 11 12 1 +====================================	. 2 3 4 5 6 7 8		
	CAP WG	(40)		
	MMC WG	(25)		
	SSC-3	-====+=====+  SFF   (30)		
-	STA Plenary * /	+ (20)		
-	+	+		
		. 2 3 4 5 6 7 8		
	-	SPC-3 LB/SAS-1.1 Edit   (45/15)		
_	FCIA Board Meet	ing * (12)		
	9 10 11 12 1 (No meetings are	. 2 3 4 5 6 7 8 planned for Friday.)		
/ 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-authorize Meeting Date		Location / Contact		
	кту	TBA via T10 reflector / Cox		
SAS PHY Calls Weel SAT Call Feb	8 11a-2p CST	TBA via T10 reflector / Sheffield		
SAT Call Feb SAS Prot Call Feb	8 11a-2p CST 16 10a-1p CST 24-25	TBA via T10 reflector / Sheffield TBA via T10 reflector / Elliott Santa Clara, CA (T13) / Overby		

Map Abbrev	viation 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
iscsı:	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:	SCSI Storage Interfaces Technical Committee
T11:	Device Level Interfaces Technical Committee
WG:	Working Group (same as Ad Hoc Group)

#### Activity Contact Telephone/Email \_\_\_\_\_ \_\_\_\_ Paul Entzel (720) 406-5782 ADT, ADT-2 Rod Wideman (720) 249-5796 ADC, ADC-2 rod.wideman@adic.com SBC-2,SES-2,SAS-1.1,BCC,SDI Rob Elliott (281) 518-5037 Elliott@hp.com MMC-4, MMC-5 Bill McFerrin (325) 423-1560 billmc@tstar.net SBP-3 Peter Johansson (510) 527-3926 PJohansson@ACM.org George Penokie (507) 253-5208 SAM-4 gop@us.ibm.com Bob Sheffield (480) 554-8597 SAT 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 Dave Peterson (763) 268-6139 SSC-3, FCP-3 david\_peterson@cnt.com John Lohmeyer (719) 533-7560 Other Activities lohmeyer@t10.org

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

#### The long-term T10 meeting week schedule is:

Date	Location	Host/Comments
Jan 17-21, 2005	Las Vegas, NV	Hitachi GST
Mar 7-11, 2005		QLogic
May 2-6, 2005		Fujitsu
Jul 11-15, 2005	Colorado Springs, CO	LSI Logic
Sep 12-16, 2005	Vancouver, BC	PMC Sierra
Nov 7-11, 2005	Austin, TX	Dell Computer
Jan 9-13, 2006	Phoenix, AZ	Intel Corp.
Mar 6-10, 2006	Dana Point, CA	QLogic
May 8-12, 2006		
Jul 10-14, 2006	Colorado Springs, CO	LSI Logic
Sep 11-15, 2006	Nashua, NH	Hitachi Cable Manchester
Nov 6-10, 2006		
Approved dates for	2007:	
Jan 15-19, 2007		
Mar 12-16, 2007		
May 7-11, 2007		
Jul 9-13, 2007		
Sep 17-21, 2007 (to	o avoid conflicts with the	e Jewish High Holy Days)
Nov 5-9, 2007		

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.

Gerry Houlder 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 2005. Mark Overby 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 10:33 a.m. on Thursday January 20, 2005.

#### Enclosure(1) -- Meeting Attendees

Name	S	Organization
Mr. Bernhard Laschinsky	AV	Agere Systems
Ms. Pat Thaler	Ρ	Agilent Technologies
Mr. Paul Griffith	AV	Broadcom Corp.
Mr. Robert Snively	Ρ	Brocade Comm. Systems, Inc.
Dr. Claudio DeSanti	Ρ	Cisco Systems, Inc.
Mr. David Peterson	Ρ	CNT
Mr. Doug Cole	А	Dallas Semiconductor
Mr. Robert H. Nixon	Ρ	Emulex
Mr. Ralph O. Weber	Ρ	ENDL Texas
Mr. Douglas Wagner	Ρ	FCI
Mr. Mike Fitzpatrick	Ρ	Fujitsu
Mr. Nathan Hastad	Ρ	General Dynamics
Mr. Michael Banther	V	Hewlett Packard Co.
Mr. Rob Elliott	Ρ	Hewlett Packard Co.
Mr. Dan Colegrove	Ρ	Hitachi Global Storage Tech.
Mr. Werner Glinka	А	Hitachi Global Storage Tech.
Mr. George O. Penokie	Ρ	IBM / Tivoli Systems
Mr. Robert Sheffield	Ρ	Intel Corp.
Mr. David Hawks	Ρ	Iomega Corp.
Mr. Martin Furuhjelm	AV	Lexar Media, Inc.
Mr. John Lohmeyer	Ρ	LSI Logic Corp.
Ms. Dana Zelitzki	V	M-Systems
Mr. Martin Czekalski	А	Maxtor Corp.
Mr. Mark Evans	Ρ	Maxtor Corp.
Ms. Emily Hill	Ρ	Microsoft Corp.
Mr. Jay Neer	Ρ	Molex Inc.
Mr. Mark Overby	Ρ	Nvidia Corp.
Dr. Terence J. Nelson	Ρ	Panasonic Technologies, Inc
Mr. William P. McFerrin	Ρ	Philips Electronics/CD Edge
Mr. Bill Lye	А	PMC-Sierra
Ms. Rachelle Trent	Ρ	PMC-Sierra
Mr. Craig W. Carlson	А	QLogic Corp.
Mr. Paul Entzel	Ρ	Quantum Corp.
Mr. Alvin Cox	V	Seagate Technology
Mr. Gerald Houlder	Ρ	Seagate Technology
Mr. William Martin	Ρ	Sierra Logic, Inc.
Mr. Erich Oetting	Ρ	Storage Technology Corp.
Mr. Vit Novak	Ρ	Sun Microsystems, Inc.
Mr. Robert Kando	А	Texas Instruments
Mr. Dan Gorenc	А	TycoElectronics
Mr. Ron Mathews	AV	UNISYS Corporation
Mr. Roger Cummings	Ρ	Veritas Software
Mr. Greg Wheeless	Α	Veritas Software
Mr. David Allen	AV	Vitesse Semiconductor
Mr. Curtis Stevens	Ρ	Western Digital
Mr. Jeff Williams	AV	Xiotech Corp.
46 People Present		

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

#### Enclosure(2) -- T10 Attendance Database

Generated on 2005/01/24 at 12:35:54

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