

Accredited Standards Committee*

InterNational Committee for Information Technology Standards (INCITS)

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Date: May 12, 2005

Reply to: John Lohmeyer

To: T10 Membership
From: Ralph Weber / John Lohmeyer
Subject: Minutes of T10 Plenary Meeting #67 -- May 5, 2005
Oklahoma City, OK

Agenda

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

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Results of Meeting

1. Opening Remarks

John Lohmeyer, the T10 Chair, called the meeting to order at 9:00 a.m., Thursday May 5, 2005. He thanked Mike Fitzpatrick of Fujitsu 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 http://www.t10.org/ftp/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 emails to 10 people from 5 organizations informing them that their membership was in jeopardy due to non-attendance (see 05-123r0) and that their membership would be terminated if they did not attend this meeting. The following organization was in attendance jeopardy:

Cisco Systems, Inc.
Crossroads Systems, Inc. (*)
General Dynamics
Hitachi Cable Manchester
Toshiba

(*) On April 29th, John Tyndall requested that Crossroads Systems be changed to Advisory status.

The following organization was not present, so their status should have been changed to Advisory (non-voting):

Hitachi Cable Manchester

Mike Fitzpatrick moved that, in consideration of the unforeseen circumstances that prevented the Hitachi Cable Manchester representative from attending, the Hitachi Cable Manchester membership be retained in spite of their lack of attendance. Jay Neer seconded the motion. The motion passed 34:0:1:10=45.

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

No organizations asked to join the committee at this meeting.

The Chair said that INCITS had terminated the Solution Technology advisory membership for non-payment of fees and that the Nvidia and Sonic Solutions memberships have been sent their final notices.

The T10 membership during the meeting was 45 organizations, unchanged from the 45 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:

T10 Letter Ballot Jeopardy Report -- 2005/04/29

Ballot:	04-326r0	05-125r0	05-134r0
Report:	04-327r0	05-126r0	05-135r0
Acronym:	SPC-3	SAS-1.1	FCP-3

Organization

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Agilent Technologies	DNV	Yes	Yes
Crossroads Systems, Inc. (*)	Yes	DNV	DNV
QLogic Corp.	DNV	Yes	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 (and has voluntarily changed to Advisory status)

4. Approval of Minutes - March 2005 - Dana Point, CA (T10/05-097r0)

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 May 12, 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.

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 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

- 599 Ralph Weber will prepare SPC-3 r22. *Complete.*
- 600 John Lohmeyer will forward SPC-3 r22 to INCITS for further processing towards first public review. *Complete.*
- 601 John Lohmeyer will forward 05-060r0 to INCITS for further processing as a new project proposal for SAS-2. *Complete.*
- 602 John Lohmeyer will notify INCITS of T10's recommendation to reaffirm SSC, MMC-2, RBC, and RBC AM1 as well as T10's recommendation to withdraw SPI-3. *Complete.*
- 603 Gary Robinson will notify INCITS that T10 recommends T10/04-1216r0 as a JTC1/SC25 NWIP for 14776-151: IT - Small Computer System Interface (SCSI) - 1.1. -Part 151: Serial Attached SCSI (SAS-1.1), answering the 6 questions 'Yes' and naming Gary S. Robinson as the project editor. *Carry over.*

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

John Lohmeyer reported that at the request of the FCP working group, a single ASC/ASCQ had been added to SPC-3 Rev 22a. The INCITS Secretariat felt that such a change cannot be deemed editorial and requested that T10 approve changing the SPC-3 public review draft from Rev 22 to Rev 22a.

Subsequently, several other changes were requested. The CAP working group reviewed and updated the letter ballot comment resolution document (04-355) to reflect all the changes.

Ralph Weber moved and Kevin Marks seconded that T10 approve changing the SPC-3 dpANS from revision 22 to revision 23 and that SPC-3 Rev 23 be forwarded to INCITS for first public review. The roll call motion passed 37:0:0:8=45. Details of the roll call vote were as follows:

Organization	Voter	Vote
Adaptec, Inc.	Tim Symons	Yes
Agilent Technologies	Pat Thaler	Yes
Amphenol Interconnect	Michael Wingard	Yes
Broadcom Corp.	Ron Roberts	Yes
Brocade	Robert Snively	Yes
Cisco Systems, Inc.	Claudio DeSanti	Yes
CNT		(not present)
Dallas Semiconductor		(not present)
Dell, Inc.	Kevin Marks	Yes
EMC Corp.	Gary S. Robinson	Yes
Emulex	Robert H. Nixon	Yes
ENDL	Ralph O. Weber	Yes
FCI	Douglas Wagner	Yes
Foxconn Electronics	Elwood Parsons	Yes
Fujitsu	Mike Fitzpatrick	Yes
General Dynamics	Tim Mackley	Yes
Hewlett Packard Co.	Rob Elliott	Yes
Hitachi Cable Manchester		(not present)
Hitachi Global Storage Tech.	Dan Colegrove	Yes
IBM Corp.	George O. Penokie	Yes
Intel Corp.	Robert Sheffield	Yes
Iomega Corp.	David Hawks	Yes
Lexar Media, Inc.	Martin Furuhjelm	Yes
LSI Logic Corp.	John Lohmeyer	Yes
Maxtor Corp.	Mark Evans	Yes
Microsoft Corp.	Jeff Mastro	Yes
Molex Inc.	Jay Neer	Yes
Nvidia Corp.	Mark Overby	Yes
Panasonic Technologies, Inc	Terence J. Nelson	Yes
Philips Electronics		(not present)
Pivot3, Inc.		(not present)
PMC-Sierra	Bill Lye	Yes
QLogic Corp.		(not present)
Quantum Corp.	Paul Entzel	Yes
Seagate Technology	Gerald Houlder	Yes
Sierra Logic, Inc.	William Martin	Yes
Storage Technology Corp.		(not present)
Sun Microsystems, Inc.	Vit Novak	Yes
Texas Instruments	Robert Kando	Yes
Toshiba	Yutaka Arakawa	Yes
TycoElectronics	Ashlie Fan	Yes
Veritas Software		(not present)
Vitesse Semiconductor	David Allen	Yes
Western Digital	Curtis Stevens	Yes
Xiotech Corp.	Jeff Williams	Yes

This two-thirds roll call vote passed (37:0:0:8=45).

John Lohmeyer took an action item to forward SPC-3 Rev 23 to INCITS for first public review.

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

Terry Nelson reported that INCITS has approved SBC-2 for publication and is preparing to forward it to ANSI. Rob Elliott reported that the ISO draft has been forwarded.

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

Rob Elliott reported that no changes have been made in BCC.

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

John Lohmeyer reported that during the final edits of MMC-4, the ANSI Editor asked for a number of changes. Because some of these edits were not obviously editorial, the INCITS Secretariat asked T10 for review the edits (see 05-152) and to vote on whether or not the changes were substantive.

Terry Nelson moved that T10 has reviewed the MMC-4 (INCITS 401) edits documented in T10/05-152r0 and deems them non-substantive and that T10 recommends that INCITS continue processing MMC-4 including these edits. Dan Colegrove seconded the motion. The motion passed 33:0:2:10=45.

John Lohmeyer took an action item to report to INCITS that T10 has reviewed the MMC-4 (INCITS 401) edits documented in T10/05-152r0 and deems them non substantive and that T10 recommends that INCITS continue processing MMC-4 including these edits.

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

Terry Nelson reported that INCITS has approved ADT for publication and is preparing to forward it to ANSI.

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

John Lohmeyer reported that ADC has been approved and is at ANSI for publication.

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

Rob Elliott reported that SES-2 revision 12 will be posted following this meeting containing the proposals approved by this meeting. The new revision should be available in time for the mailing.

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

In the absence of Dave Peterson, Ralph Weber read a report on the activities of the FCP-3 working group (minutes in 05-184).

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

John Lohmeyer reported that SAM-3 has been published as ANSI INCITS 402-2005. He congratulated Ralph Weber, the SAM-3 Technical Editor.

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

Rob Elliott reported that SAS-1.1 is in letter ballot comment resolution with additional meetings this afternoon and Friday morning. There will be a SAS PHY conference call to review the mini-connector. Additional conference calls may be held to resolve letter ballot comments.

SAS-1.1 revision 9c will be prepared in time for the mailing.

The goal is to have a stable SAS-1.1 draft on the T10 web site about a month before the July meeting so that forwarding to public review can be accomplished during the July meeting week.

Minutes of the SAS-1.1 protocol working group are in 05-162 and the SAS-1.1 PHY working group are in 05-178.

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

In the absence of Dave Peterson, Ralph Weber presented a reported prepared by Dave summarizing the activities of the SSC-3 working group (minutes in 05-184).

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

In the absence of Bill McFerrin, George Penokie noted that the group plans to meet in Tokyo on May 19 and 20.

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

George Penokie reported that no new proposals have been approved for SAM-4 this week, meaning that no new revision of SAM-4 will be prepared before the July meeting week.

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

Bob Sheffield reviewed the recent SAT activities (minutes in 05-146 and 05-163). He stated that SAT revision 4 will be posted in time for the next meeting, but not in time for the mailing.

The current prospects for letter ballot are after the September meeting.

8.16 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.

8.17 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 05-182).

In response to a question from the floor, Michael stated that no inputs have been received from two backup applications vendors who were delinquent at the time of the last meeting.

He stated that the working group is continuing its standards development work based on the interests of those vendors who have provided the requested information.

8.18 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. A proposal for inclusion in OSD-2 is nearing completion in the SNIA OSD technical working group.

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

Rob Elliott reported that an SDI working group did not meet this week. The group will not meet during the July T10 week out of consideration for the SAS-1.1 work. It is anticipated that the SDI group will resume meeting during the September meeting week.

8.20 Automation/Drive Interface - Commands - 2 (ADC-2) Project 1741-D [Hawks]

Paul Suhler reported on the activities of the ADI working group (minutes in 05-176).

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

Paul Suhler reported on the activities of the ADI working group (minutes in 05-176).

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

Rob Elliott reported that the first SAS-2 discussions concerned a SAS Zoning feature (minutes in 05-162). He noted that a 6 Gbs kickoff meeting will be held in Houston on May 25 and 26.

9. Old Business

There was no old business.

10. New Business

10.1 Results of SAS-1.1 forwarding letter ballot (05-126) [Lohmeyer]

John Lohmeyer reported that the letter ballot on forwarding SAS-1.1 to first public review had passed 31:10:3:2=46 as documented in 05-126r1. Comments were received from 13 organizations.

10.2 Results of FCP-3 forwarding letter ballot (05-135) [Lohmeyer]

John Lohmeyer reported that the letter ballot on forwarding FCP-3 to first public review had passed 42:2:1:1=46 as documented in 05-135r0. Comments were received from 6 organizations.

10.3 Should we adopt ISO/IEC 14776-222:2005 (FCP-2) in place of ANSI INCITS 350-2003 (FCP-2)?

John Lohmeyer stated that he had recently received an email from the INCITS Secretariat asking three questions:

- Is the International Standard technically equivalent to INCITS 350:2003?
- Do you want this standard to be adopted?
- Do you want the standard to continue at the National level?

Ralph Weber moved that T10 recommends to INCITS that ANSI FCP-2 (INCITS 350:2003) be maintained without change regardless of the status of the ISO version. John Lohmeyer seconded the motion. The motion passed 27:0:2:16=45.

John Lohmeyer took an action item to notify INCITS that T10 recommends to INCITS that ANSI FCP-2 (INCITS 350:2003) be maintained without change regardless of the status of the ISO version.

10.4 Actions on SAS Protocol Working Group Recommendations

There were no recommendations made by the SAS protocol working group (minutes in 05-162).

10.5 Actions on SAS PHY Working Group Recommendations

There were no recommendations made by the SAS physical working group (minutes in 05-178).

10.6 Actions on CAP Working Group Recommendations

The recommendations from the CAP working group (minutes in 05-164) were presented to the committee.

George Penokie reviewed 05-101r1 (Validation of Protection Information) [Martin] a proposal recommended for SBC-3.

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

05-181r1 (Element Index Addition) [Fairchild]

05-180r0 (Bay Number Addition) [Fairchild]

Bill Martin moved that 05-101r1 be approved for SBC-3 and that 05-181r1 and 05-180r0 be approved for inclusion in SES-2. Rob Elliott seconded the motion. The motion passed on a vote of 33:0:2:10=45.

10.7 Actions on Other Working Group Recommendations

Bob Sheffield reviewed the following proposals recommended for inclusion in SAT (minutes in 05-163):

05-137r1 (Standard INQUIRY - PRODUCT REVISION LEVEL) [Bellamy]

05-109r0 (REQUEST SENSE Correction Proposal) [Overby]

Bob Sheffield moved that 05-137r1 and 05-109r0 be approved for inclusion in SAT. Mark Overby seconded the motion. The motion passed on a vote of 33:0:2:10=45.

11. ISO/IEC

11.1 ISO/IEC Report [Robinson]

Gary Robinson presented the ISO/IEC report (05-166).

11.2 ISO/IEC Business [Robinson]

Gary Robinson moved that T10 has reviewed the FCD, SBC-2, 14776-322, project 1.25.13.11.31, and recommends that the JTC1/SC25 TAG vote to approve said FCD. Gerry Houlder seconded the motion. The motion passed on a roll call vote of 37:0:0:8=45. Details of the roll call vote were as follows:

Organization	Voter	Vote
Adaptec, Inc.	Tim Symons	Yes
Agilent Technologies	Pat Thaler	Yes
Amphenol Interconnect	Michael Wingard	Yes
Broadcom Corp.	Ron Roberts	Yes
Brocade	Robert Snively	Yes
Cisco Systems, Inc.	Claudio DeSanti	Yes
CNT		(not present)
Dallas Semiconductor		(not present)
Dell, Inc.	Kevin Marks	Yes
EMC Corp.	Gary S. Robinson	Yes
Emulex	Robert H. Nixon	Yes
ENDL	Ralph O. Weber	Yes
FCI	Douglas Wagner	Yes
Foxconn Electronics	Elwood Parsons	Yes
Fujitsu	Mike Fitzpatrick	Yes
General Dynamics	Tim Mackley	Yes
Hewlett Packard Co.	Rob Elliott	Yes
Hitachi Cable Manchester		(not present)
Hitachi Global Storage Tech.	Dan Colegrove	Yes
IBM Corp.	George O. Penokie	Yes
Intel Corp.	Robert Sheffield	Yes
Iomega Corp.	David Hawks	Yes
Lexar Media, Inc.	Martin Furuhjelm	Yes
LSI Logic Corp.	John Lohmeyer	Yes
Maxtor Corp.	Mark Evans	Yes
Microsoft Corp.	Jeff Mastro	Yes
Molex Inc.	Jay Neer	Yes
Nvidia Corp.	Mark Overby	Yes
Panasonic Technologies, Inc	Terence J. Nelson	Yes
Philips Electronics		(not present)
Pivot3, Inc.		(not present)
PMC-Sierra	Bill Lye	Yes
QLogic Corp.		(not present)
Quantum Corp.	Paul Entzel	Yes
Seagate Technology	Gerald Houlder	Yes
Sierra Logic, Inc.	William Martin	Yes
Storage Technology Corp.		(not present)
Sun Microsystems, Inc.	Vit Novak	Yes
Texas Instruments	Robert Kando	Yes
Toshiba	Yutaka Arakawa	Yes
TycoElectronics	Ashlie Fan	Yes
Veritas Software		(not present)
Vitesse Semiconductor	David Allen	Yes
Western Digital	Curtis Stevens	Yes
Xiotech Corp.	Jeff Williams	Yes

This two-thirds roll call vote passed (37:0:0:8=45).

Gary Robinson took an action item to notify INCITS that T10 has reviewed the FCD, SBC-2, 14776-322, project 1.25.13.11.31, and recommends that the JTC1/SC25 TAG vote to approve said FCD.

Gary Robinson moved that T10 recommends the following list of delegates to the JTC1/SC25 and WG4 meeting September 2005 in Edinburgh, UK: Robert Snively (head of delegation), Roger Cummings, and Claudio DeSanti. Bob Nixon seconded the motion. The motion passed 34:0:1:10=45.

Gary Robinson took an action item to notify INCITS that T10 recommends the following list of delegates to the JTC1/SC25 and WG4 meeting September 2005 in Edinburgh, UK: Robert Snively (head of delegation), Roger Cummings, and Claudio DeSanti.

Gary Robinson moved that T10 has reviewed the following ISs and recommends that the JTC1 TAG vote to reaffirm them:

- 9316-2:2000 Information Technology -- Small Computer System Interface-2 (SCSI-2) -- Part 2: Common Access Method (CAM) Transport SCSI interface module;
- 14776-342:2000 Information Technology -- Small Computer System Interface (SCSI) -- Part 342: SCSI Controller Commands - 2 (SCC-2); and
- 14776-381:2000 Information Technology -- Small Computer System Interface (SCSI) -- Part 381: Optical Memory Card Device Commands (OMC).

Bob Nixon seconded the motion. The motion passed on a roll call vote of 37:0:0:8=45. Details of the roll call vote were as follows:

Organization	Voter	Vote
Adaptec, Inc.	Tim Symons	Yes
Agilent Technologies	Pat Thaler	Yes
Amphenol Interconnect	Michael Wingard	Yes
Broadcom Corp.	Ron Roberts	Yes
Brocade	Robert Snively	Yes
Cisco Systems, Inc.	Claudio DeSanti	Yes
CNT		(not present)
Dallas Semiconductor		(not present)
Dell, Inc.	Kevin Marks	Yes
EMC Corp.	Gary S. Robinson	Yes
Emulex	Robert H. Nixon	Yes
ENDL	Ralph O. Weber	Yes
FCI	Douglas Wagner	Yes
Foxconn Electronics	Elwood Parsons	Yes
Fujitsu	Mike Fitzpatrick	Yes
General Dynamics	Tim Mackley	Yes
Hewlett Packard Co.	Rob Elliott	Yes
Hitachi Cable Manchester		(not present)
Hitachi Global Storage Tech.	Dan Colegrove	Yes
IBM Corp.	George O. Penokie	Yes
Intel Corp.	Robert Sheffield	Yes
Iomega Corp.	David Hawks	Yes
Lexar Media, Inc.	Martin Furuhjelm	Yes
LSI Logic Corp.	John Lohmeyer	Yes
Maxtor Corp.	Mark Evans	Yes
Microsoft Corp.	Jeff Mastro	Yes
Molex Inc.	Jay Neer	Yes
Nvidia Corp.	Mark Overby	Yes
Panasonic Technologies, Inc	Terence J. Nelson	Yes
Philips Electronics		(not present)
Pivot3, Inc.		(not present)
PMC-Sierra	Bill Lye	Yes
QLogic Corp.		(not present)
Quantum Corp.	Paul Entzel	Yes
Seagate Technology	Gerald Houlder	Yes
Sierra Logic, Inc.	William Martin	Yes
Storage Technology Corp.		(not present)
Sun Microsystems, Inc.	Vit Novak	Yes
Texas Instruments	Robert Kando	Yes
Toshiba	Yutaka Arakawa	Yes
TycoElectronics	Ashlie Fan	Yes
Veritas Software		(not present)
Vitesse Semiconductor	David Allen	Yes
Western Digital	Curtis Stevens	Yes
Xiotech Corp.	Jeff Williams	Yes

This two-thirds roll call vote passed (37:0:0:8=45).

Gary Robinson took an action item to notify INCITS that T10 has reviewed the following ISs and recommends that the JTC1 TAG vote to reaffirm them: 9316-2:2000 Information Technology -- Small Computer System Interface-2 (SCSI-2) -- Part 2: Common Access Method (CAM) Transport SCSI interface module; 14776-342:2000 Information Technology -- Small Computer System Interface (SCSI) -- Part 342: SCSI Controller Commands - 2 (SCC-2); and 14776-381:2000 Information Technology -- Small Computer System Interface (SCSI) -- Part 381: Optical Memory Card Device Commands (OMC).

Gary Robinson moved that T10 has reviewed the following IS and recommends that the JTC1 TAG vote to withdraw it:

- 14776-341:2000 Information Technology -- Small Computer System Interface-3 (SCSI-3) -- Part 341: SCSI Controller Commands (SCC).

Bob Snively seconded the motion. The motion passed on a roll call vote of 37:0:0:8=45. Details of the roll call vote were as follows:

Organization	Voter	Vote
Adaptec, Inc.	Tim Symons	Yes
Agilent Technologies	Pat Thaler	Yes
Amphenol Interconnect	Michael Wingard	Yes
Broadcom Corp.	Ron Roberts	Yes
Brocade	Robert Snively	Yes
Cisco Systems, Inc.	Claudio DeSanti	Yes
CNT		(not present)
Dallas Semiconductor		(not present)
Dell, Inc.	Kevin Marks	Yes
EMC Corp.	Gary S. Robinson	Yes
Emulex	Robert H. Nixon	Yes
ENDL	Ralph O. Weber	Yes
FCI	Douglas Wagner	Yes
Foxconn Electronics	Elwood Parsons	Yes
Fujitsu	Mike Fitzpatrick	Yes
General Dynamics	Tim Mackley	Yes
Hewlett Packard Co.	Rob Elliott	Yes
Hitachi Cable Manchester		(not present)
Hitachi Global Storage Tech.	Dan Colegrove	Yes
IBM Corp.	George O. Penokie	Yes
Intel Corp.	Robert Sheffield	Yes
Iomega Corp.	David Hawks	Yes
Lexar Media, Inc.	Martin Furuhjelm	Yes
LSI Logic Corp.	John Lohmeyer	Yes
Maxtor Corp.	Mark Evans	Yes
Microsoft Corp.	Jeff Mastro	Yes
Molex Inc.	Jay Neer	Yes
Nvidia Corp.	Mark Overby	Yes
Panasonic Technologies, Inc	Terence J. Nelson	Yes
Philips Electronics		(not present)
Pivot3, Inc.		(not present)
PMC-Sierra	Bill Lye	Yes
QLogic Corp.		(not present)
Quantum Corp.	Paul Entzel	Yes
Seagate Technology	Gerald Houlder	Yes
Sierra Logic, Inc.	William Martin	Yes
Storage Technology Corp.		(not present)
Sun Microsystems, Inc.	Vit Novak	Yes
Texas Instruments	Robert Kando	Yes
Toshiba	Yutaka Arakawa	Yes
TycoElectronics	Ashlie Fan	Yes
Veritas Software		(not present)
Vitesse Semiconductor	David Allen	Yes
Western Digital	Curtis Stevens	Yes
Xiotech Corp.	Jeff Williams	Yes

This two-thirds roll call vote passed (37:0:0:8=45).

Gary Robinson took an action item to notify INCITS that T10 has reviewed the 14776-341:2000 Information Technology -- Small Computer System Interface-3 (SCSI-3) -- Part 341: SCSI Controller Commands (SCC) and recommends that the JTC1 TAG vote to withdraw it.

Gary Robinson moved that T10 has reviewed the following IS and recommends that the JTC1 TAG vote to reaffirm them:

- 13213:1994 Information Technology -- Microprocessor systems -- Control and Status Registers (CSR) Architecture for microcomputer buses;
- 15205:2000 Bus -- Chip and module interconnect bus SBus;
- 13961:2000 Information Technology -- Scalable Technologies -- Interface Coherent Interface (SCI);
- ISO 9314-1:1989 Information Processing Systems -- Distributed Data Interface (FDDI) -- Part 1: Token Ring Physical Layer (FDDI);
- ISO 9314-2:1989 Information Processing Systems -- Fibre Distributed Data Interface (FDDI) -- Part 2: Token Ring Media Access Control (FDDI) -- (MAC);
- 9314-9:2000 Information Technology -- Fibre Distributed Data Interface (FDDI) -- Part 9: Low-cost fibre physical layer medium dependent (LCF-PMD); and
- 9314-21:2000 Information Technology -- Interface Distributed Data Interface (FDDI) -- Part 21: Abstract test suite for FDDI physical layer protocol conformance testing (FDDI PHY ATS).

Curtis Stevens seconded the motion. The motion passed on a roll call vote of 37:0:0:8=45. Details of the roll call vote were as follows:

Organization	Voter	Vote
Adaptec, Inc.	Tim Symons	Yes
Agilent Technologies	Pat Thaler	Yes
Amphenol Interconnect	Michael Wingard	Yes
Broadcom Corp.	Ron Roberts	Yes
Brocade	Robert Snively	Yes
Cisco Systems, Inc.	Claudio DeSanti	Yes
CNT		(not present)
Dallas Semiconductor		(not present)
Dell, Inc.	Kevin Marks	Yes
EMC Corp.	Gary S. Robinson	Yes
Emulex	Robert H. Nixon	Yes
ENDL	Ralph O. Weber	Yes
FCI	Douglas Wagner	Yes
Foxconn Electronics	Elwood Parsons	Yes
Fujitsu	Mike Fitzpatrick	Yes
General Dynamics	Tim Mackley	Yes
Hewlett Packard Co.	Rob Elliott	Yes
Hitachi Cable Manchester		(not present)
Hitachi Global Storage Tech.	Dan Colegrove	Yes
IBM Corp.	George O. Penokie	Yes
Intel Corp.	Robert Sheffield	Yes
Iomega Corp.	David Hawks	Yes
Lexar Media, Inc.	Martin Furuhjelm	Yes
LSI Logic Corp.	John Lohmeyer	Yes
Maxtor Corp.	Mark Evans	Yes
Microsoft Corp.	Jeff Mastro	Yes
Molex Inc.	Jay Neer	Yes
Nvidia Corp.	Mark Overby	Yes
Panasonic Technologies, Inc	Terence J. Nelson	Yes
Philips Electronics		(not present)
Pivot3, Inc.		(not present)
PMC-Sierra	Bill Lye	Yes
QLogic Corp.		(not present)
Quantum Corp.	Paul Entzel	Yes
Seagate Technology	Gerald Houlder	Yes
Sierra Logic, Inc.	William Martin	Yes
Storage Technology Corp.		(not present)
Sun Microsystems, Inc.	Vit Novak	Yes
Texas Instruments	Robert Kando	Yes
Toshiba	Yutaka Arakawa	Yes
TycoElectronics	Ashlie Fan	Yes
Veritas Software		(not present)
Vitesse Semiconductor	David Allen	Yes
Western Digital	Curtis Stevens	Yes
Xiotech Corp.	Jeff Williams	Yes

This two-thirds roll call vote passed (37:0:0:8=45).

Gary Robinson took an action item to notify INCITS that T10 has reviewed the following ISs and recommends that the JTC1 TAG vote to reaffirm them: 13213:1994 Information Technology -- Microprocessor systems -- Control and Status Registers (CSR) Architecture for microcomputer buses; 15205:2000 Bus -- Chip and module interconnect bus SBus; 13961:2000 Information Technology -- Scalable Technologies -- Interface Coherent Interface (SCI); ISO 9314-1:1989 Information Processing Systems -- Distributed Data Interface (FDDI) -- Part 1: Token Ring Physical Layer (FDDI); ISO 9314-2:1989 Information Processing Systems -- Fibre Distributed Data Interface (FDDI) -- Part 2: Token Ring Media Access Control (FDDI) -- (MAC); 9314-9:2000 Information Technology -- Fibre Distributed Data Interface (FDDI) -- Part 9: Low-cost fibre physical layer medium dependent (LCF-PMD); 9314-21:2000 Infor-

mation Technology -- Interface Distributed Data Interface (FDDI) -- Part 21: Abstract test suite for FDDI physical layer protocol conformance testing (FDDI PHY ATS).

12. Liaison Reports

12.1 T11 Liaison Report [Snively]

Bob Snively presented the T11 liaison report contained in T10/05-174.

12.2 T13 Liaison Report [Colegrove]

Dan Colegrove provided an oral report to the committee on the activities of T13. 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 05-185r0.

George Penokie moved that '4x' be changed to '4e' in the SAS-1.1 connector definitions. Kevin Marks seconded the motion. The motion failed 9:11:9:16=45.

12.6 IETF SCSI over IP [Black/Robinson]

David Black reported that most of the iSCSI documents are published RFCs. The iSCSI extensions over RDMA, iSER, draft is about to go to WG Last Call. The discussion of iSER over Infiniband at the March meeting was inconclusive and the iSER draft was forwarded to Last Call absent Infiniband support. The Infiniband issues will be considered in a separate draft during the July-August meeting week in Paris.

12.7 SNIA [Cummings]

David Black reported that SNIA is in the process of trying to declare victory on SMI-S 1.1.

12.8 Trusted Computing Group [Fitzpatrick]

Mike Fitzpatrick reported the TCG work has been begun formally in the CAP WG.

13. Review of Action Items

- 603 Gary Robinson will notify INCITS that T10 recommends T10/04-1216r0 as a JTC1/SC25 NWIP for 14776-151: IT - Small Computer System Interface (SCSI) - 1.1. -Part 151: Serial Attached SCSI (SAS-1.1), answering the 6 questions 'Yes' and naming Gary S. Robinson as the project editor.
- 604 John Lohmeyer will forward SPC-3 Rev 23 to INCITS for first public review.

- 605 John Lohmeyer will report to INCITS that T10 has reviewed the MMC-4 (INCITS 401) edits documented in T10/05-152r0 and deems them non substantive and that T10 recommends that INCITS continue processing MMC-4 including these edits.
- 606 John Lohmeyer will notify INCITS that T10 recommends to INCITS that ANSI FCP-2 (INCITS 350:2003) be maintained without change regardless of the status of the ISO version.
- 607 Gary Robinson will notify the JTC1/SC25 TAG that T10 has reviewed FCD, SBC-2, 14776-322, project 1.25.13.11.31 and recommends a vote to approve it.
- 608 Gary Robinson will notify INCITS that T10 recommends the following list of delegates to the JTC1/SC25 and WG4 meeting September 2005 in Edinburgh, UK: Robert Snively (head of delegation), Roger Cummings, and Claudio DeSanti.
- 609 Gary Robinson will notify INCITS that T10 has reviewed the following ISs and recommends that the JTC1 TAG vote to reaffirm them: 9316-2:2000 Information Technology -- Small Computer System Interface-2 (SCSI-2) -- Part 2: Common Access Method (CAM) Transport SCSI interface module; 14776-342:2000 Information Technology -- Small Computer System Interface (SCSI) -- Part 342: SCSI Controller Commands - 2 (SCC-2); and 14776-381:2000 Information Technology -- Small Computer System Interface (SCSI) -- Part 381: Optical Memory Card Device Commands (OMC).
- 610 Gary Robinson will notify INCITS that T10 has reviewed the 14776-341:2000 Information Technology -- Small Computer System Interface-3 (SCSI-3) -- Part 341: SCSI Controller Commands (SCC) and recommends that the JTC1 TAG vote to withdraw it.
- 611 Gary Robinson will notify INCITS that T10 has reviewed the following ISs and recommends that the JTC1 TAG vote to reaffirm them: 13213:1994 Information Technology -- Microprocessor systems -- Control and Status Registers (CSR) Architecture for microcomputer buses; 15205:2000 Bus -- Chip and module interconnect bus SBus; 13961:2000 Information Technology -- Scalable Technologies -- Interface Coherent Interface (SCI); ISO 9314-1:1989 Information Processing Systems -- Distributed Data Interface (FDDI) -- Part 1: Token Ring Physical Layer (FDDI); ISO 9314-2:1989 Information Processing Systems -- Fibre Distributed Data Interface (FDDI) -- Part 2: Token Ring Media Access Control (FDDI) -- (MAC); 9314-9:2000 Information Technology -- Fibre Distributed Data Interface (FDDI) -- Part 9: Low-cost fibre physical layer medium dependent (LCF-PMD); 9314-21:2000 Information Technology -- Interface Distributed Data Interface (FDDI) -- Part 21: Abstract test suite for FDDI physical layer protocol conformance testing (FDDI PHY ATS).

14. Meeting Schedule

The next plenary meeting of T10 will be Thursday July 14, 2005 in Colorado Springs, CO at the Antlers Hilton Hotel (719-955-5600), hosted by LSI Logic. The meeting will begin at 9:00 a.m. on Thursday.

The meeting list for the next plenary week is:

July 2005 Meeting Map
(2005/05/05 Version)

Monday 7/11	9	10	11	12	1	2	3	4	5	6	7	8	
	+=====+												
	ADI-2 WG							SMC-3 WG					(10)
	+=====+												
	SAS Prot WG												(40)
	+=====+												
Tuesday 7/12	8	9	10	11	12	1	2	3	4	5	6	7	8
	+=====+												
	SAS Physical WG												(25)
	+=====+												
	SCSI/ATA Trans WG												(40)
	+=====+												
	FCP-3 WG							STA Marcom *					(20)
	+=====+												
	MMC WG												(25)
	+=====+												
Wednesday 7/13	9	10	11	12	1	2	3	4	5	6	7	8	
	+=====+												
	CAP WG												(40)
	+=====+												
	MMC WG												
	+=====+												
	SSC-3 WG							SFF					(30)
	+=====+												
	STA Plenary * / TCC*												(20)
	+=====+												
Thursday 7/14	8	9	10	11	12	1	2	3	4	5	6	7	8
	+=====+												
	T10 Plenary							T10 Editor's Meeting					(45/10)
	+=====+												
Friday 7/15	8	9	10	11	12	1	2	3	4	5	6	7	8
	No meetings 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-authorized meetings:

Meeting	Date	Location / Contact
SAS PHY Calls		TBA via T10 reflector / Cox
SAS Prot Calls		TBA via T10 reflector / Elliott
SAS PHY Call	May 9 1p CDT	TBA via T10 reflector / Cox
SAS Zoning	May 13 1p PDT tent	TBA via T10 reflector / Heng Liao
SAT Call	May 19 noon-3p PDT	TBA via T10 reflector / Sheffield
SAS 6gb PHY	May 25-26	Houston / Elliott
SAT WG	Jun 20	Irvine, CA (T13) / Stevens

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
 SDI: Serial Attached SCSI Driver 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)

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, 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
SAM-4	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@cnt.com
Other Activities	John Lohmeyer	(719) 533-7560 lohmeier@t10.org

The long-term T10 meeting week schedule is:

Date	Location	Host/Comments
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	TBD	SCSI Trade Association
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	Las Vegas, NV	Hitachi GST
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 avoid conflicts with the 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

Curtis Stevens moved that the Tuesday afternoon meeting time slot be changed from CAP to SAT. Mark Overby seconded the motion. The motion passed 13:4:9:19=45.

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.

Curtis Stevens moved that T10 authorize the T10-related meetings and events in the list above that had not previously been approved through the end of June 2005. Bill Martin seconded the motion. The motion passed 27:2:0:16=45.

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 11:35 a.m. on Thursday May 5, 2005.

Enclosure(1) -- Meeting Attendees

Name	S	Organization
Mr. Tim Symons	P	Adaptec, Inc.
Ms. Pat Thaler	P	Agilent Technologies
Mr. Michael Wingard	P	Amphenol Interconnect
Mr. Ron Roberts	A	Broadcom Corp..
Mr. Robert Snively	P	Brocade Comm. Systems, Inc.
Dr. Claudio DeSanti	P	Cisco Systems, Inc.
Mr. Kevin Marks	P	Dell, Inc.
Mr. David Black	A	EMC Corp.
Mr. Gary S. Robinson	P	EMC Corp.
Mr. Robert H. Nixon	P	Emulex
Mr. Ralph O. Weber	P	ENDL Texas
Mr. Douglas Wagner	P	FCI
Mr. Elwood Parsons	P	Foxconn Electronics
Mr. Mike Fitzpatrick	P	Fujitsu
Mr. Tim Mackley	A	General Dynamics
Mr. Michael Banther	V	Hewlett Packard Co.
Mr. Rob Elliott	P	Hewlett Packard Co.
Mr. Dan Colegrove	P	Hitachi Global Storage Tech.
Mr. George O. Penokie	P	IBM / Tivoli Systems
Mr. Robert Sheffield	P	Intel Corp.
Mr. David Hawks	P	Iomega Corp.
Mr. Dennis Moore	AV	KnowledgeTek, Inc.
Mr. Martin Furuhjelm	A	Lexar Media, Inc.
Mr. John Lohmeyer	P	LSI Logic Corp.
Mr. Martin Czekalski	A	Maxtor Corp.
Mr. Mark Evans	P	Maxtor Corp.
Mr. Jeff Mastro	A	Microsoft Corp.
Mr. Jay Neer	P	Molex Inc.
Mr. Mark Overby	P	Nvidia Corp.
Dr. Terence J. Nelson	P	Panasonic Technologies, Inc
Mr. Bill Lye	A	PMC-Sierra
Mr. Paul Entzel	P	Quantum Corp.
Dr. Paul Suhler	A	Quantum Corp.
Mr. Alvin Cox	V	Seagate Technology
Mr. Gerald Houlder	P	Seagate Technology
Mr. William Martin	P	Sierra Logic, Inc.
Mr. Vit Novak	P	Sun Microsystems, Inc.
Mr. Robert Kando	A	Texas Instruments
Mr. Yutaka Arakawa	P	Toshiba
Ms. Ashlie Fan	P	TycoElectronics
Mr. Dan Gorenc	A	TycoElectronics
Mr. David Allen	A	Vitesse Semiconductor
Mr. Curtis Stevens	P	Western Digital
Mr. Jeff Williams	P	Xiotech Corp.
Mr. Rich Ramos	V	Xyratex

45 People Present

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

Enclosure(2) -- T10 Attendance Database

Generated on 2005/05/05 at 17:30:01

Mr. Tim Symons (P) Phone: (719) 884 8704
Adaptec, Inc. Fax:
5385 Mark Dabbling Blvd. Email: Timothy_Symons at adaptec dot com
Suite 100
Colorado Springs, CO 80918

Mr. Bernhard Laschinsky (AV) Phone: (610) 712-7937
Agere Systems Fax: (610) 712-4574
Room 12D-225B Email: blaschinsky at agere dot com
1110 American Parkway NE
Allentown, PA 18109-9138

Mr. Ken Paist (AV) Phone: (610) 712-3265
Agere Systems Fax:
Room 12D-225B Email: paist at agere dot com
1110 American Parkway NE
Allentown, PA 18109-9138

Ms. Pat Thaler (P) Phone: (916) 788-5662
Agilent Technologies Fax:
1101 Creekside Ridge Dr Email: pat_thaler at agilent dot com
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Roseville, CA 95678

Mr. Niels Reimers (A) Phone: (916) 788-5720
Agilent Technologies Fax: (916) 788-6136
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Roseville, CA 95678

Mr. Paul von Stamwitz (AV) Phone: 408.523.1085
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455 West Maude Avenue Email: pvstamwitz at amcc dot com
Sunnyvale, CA 95085

Mr. Michael Wingard (P) Phone: (607) 786-4241
Amphenol Interconnect Fax: (607) 786-4311
20 Valley St. Email: mike dot wingard at aipce dot com
Endicott, NY 13760

Mr. Brian Miller (A) Phone: (281) 340-6500 x130
Amphenol Interconnect Fax: (281) 340-6501
4850 Wright Road, Ste. 190 Email: bmiller at assembletech dot com
Stafford, TX 77477

Mr. Paul von Stamwitz (AV) Phone: (408) 523-1085
Applied Micro Circuits Corp. Fax: (408) 523-1001
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Sunnyvale, CA 94085-3517

Mr. Paul Griffith (P) Phone: 408-313-6643
Broadcom Corp. Fax:

2451 Mission College
Santa Clara, CA 95054

Email: griffith at broadcom dot com

Mr. Ron Roberts (A)
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5240 Stamped Lane
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Phone: (530) 677-5714
Fax: (530) 677-1218
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Mr. Robert Snively (P)
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Mr. Ian Morrell (AV)
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170 W. Tasman Dr.
San Jose, CA 95134

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Email: cds at cisco dot com

Mr. Fabio Maino (A)
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San Jose, CA 95134

Phone: (408) 853-7530
Fax: (408) 853-7530
Email: fmaino at cisco dot com

Mr. David Peterson (P)
CNT
6000 Nathan Lane North
Minneapolis, MN 55442

Phone: (763) 268-6139
Fax:
Email: david_peterson at cnt dot com

Mr. John Tyndall (AV)
Crossroads Systems, Inc.
8300 North Mopac Expressway
Austin, TX 78749

Phone: (512) 928-7282
Fax:
Email: jtyndall at crossroads dot com

Mr. James A. Lott, Jr. (P)

Phone: (972) 371-4939

Dallas Semiconductor
4401 S. Beltwood Pkwy.
Dallas, TX 75244-3292

Fax: (972) 371-4370
Email: jim dot lott at dalsemi dot com

Mr. Doug Cole (A)
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4401 South Beltwood Pkwy
Dallas, Texas
75244

Phone: 972-371-3887
Fax: 972-371-4370
Email: doug dot cole at dalsemi dot com

Mr. Kevin Marks (P)
Dell, Inc.
One Dell Way - MS 8540
Round Rock, TX 78682

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