Accredited Standards Committee*

National Committee for Information Technology Standards (NCITS)

Doc. No.: T10/99-310r1

Date: November 19, 1999 **Reply to:** John Lohmeyer

To: T10 Membership

From: Ralph Weber / John Lohmeyer

Subject: Minutes of T10 Plenary Meeting #34 -- November 4, 1999

Monterey, CA

Agenda

- 1. Opening Remarks
- 2. Approval of Agenda
- 3. Attendance and Membership
 - 3.1 Voting procedures
- 4. Approval of Minutes September '99 Meeting Huntington Beach, CA (T10/99-269r1)
- 5. Document Distribution
- 6. Call for Patents
- 7. Review of Old Action Items
- 8. Project Status Reports
 - 8.1 Project Status Summary and NCITS Liaison [Lohmeyer]
 - 8.2 SCSI Common Access Method 3 (CAM-3) Status {Project 990-D} [Dallas]
 - 8.3 SCSI-3 Stream Commands (SSC) Status (Project 997-D) [Peterson]
 - 8.4 SCSI Fibre Channel Protocol 2 (FCP-2) {Project 1144-D} [Snively]
 - 8.5 SCSI Architecture Model 2 (SAM-2) {Project 1157-D} [Weber]
 - 8.6 Multimedia Command Set 2 (MMC-2) Status (Project 1228-D) [Roberts]
 - 8.7 SCSI Primary Commands 2 (SPC-2) Status {Project 1236-D} [Weber]
 - 8.8 Reduced Block Commands (RBC) {Project 1240-D} [McLean]
 - 8.9 SCSI Parallel Interface 3 (SPI-3) {Project 1302-D} [Penokie]
 - 8.10 MultiMedia Command Set 3 (MMC-3) {Project 1363-D} [Roberts]
 - 8.11 Reduced MultiMedia Command Set (RMC) {Project 1364-D} [McFerrin]
 - 8.12 SCSI Parallel Interface 4 (SPI-4) {Project 1365-D} [Penokie]
 - 8.13 SCSI Domain Validation Technical Report (SDV) {Project 1378-DT} [Lamers]
 - 8.14 SCSI on Scheduled Transfer (SST) {Project 1380-D} [Woelz]
 - 8.15 SCSI Medium Changer Commands 2 (SMC-2) {Project 1383-D} [Oetting]
- 9. Old Business
 - 9.1 Resolution of SSC letter ballot comments (99-011r2) [Peterson]
 - 9.2 Project Proposal for SCSI Signal Modeling TR (99-243r1) [Ham/Wallace]
 - 9.3 Project Proposal for SCSI VI Protocol (SVP) (99-246r1) [Gardner]
- 10. New Business
 - 10.1 Report on T10 Procedures Study Group Meeting [Lohmeyer]
 - 10.2 Actions on Working Group Recommendations
 - 10.2.1 Project proposal for object-based storage devices command set (OSD) (99-312r0) [Houlder]
 - 10.2.2 Project Proposal for SCSI Architecture Model 3 (SAM-3) (99-293r1) [Weber]
 - 10.2.3 Project Proposal for SCSI Primary Commands 3 (SPC-3) (99-294r1) [Weber]
 - 10.2.4 Project Proposal for SCSI Block Commands 2 (SBC-2) (99-292r1) [Weber]
 - 10.2.5 MRIE behavior with TEST bit asserted (99-208r2) [Elliott]

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

NCITS Secretariat, Information Technology Industry Council (ITI)

1250 Eye Street NW, Suite 200, Washington, DC 20005-3922

Email: ncits@itic.org Telephone: 202-737-8888 FAX: 202-638-4922

- 10.2.6 List lengths that exceed maximum allocation length (99-258r2) [Penokie]
- 10.2.7 Description Lengths for 5D ASC/ASCQs (99-266r2) [Weber]
- 10.2.8 Fixed Block Length (99-325) [Snively]
- 10.2.9 The MAMA bit (99-263r1) [Oetting]
- 10.3 READ/WRITE BUFFER Behavior During Domain Validation (99-306) [Lamers]
- 11. ISO
 - 11.1 ISO Report [Milligan]
 - 11.2 ISO Business [Milligan]
 - 11.2.1 Editing RBC for ISO (99-284r0) [Roberts]
- 12. Liaison Reports
 - 12.1 T11 Liaison Report [Wanamaker]
 - 12.2 T13 Liaison Report [Milligan]
 - 12.3 SFF Industry Group [Allan]
 - 12.4 IEEE 1394 [Johansson]
 - 12.5 IEEE P1285 Status
 - 12.6 SCSI Trade Association (STA) [Jones/Aloisi]
- 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 November 4, 1999. He thanked Larry Lamers of Adaptec for hosting the meeting.

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

As is customary, the people attending introduced themselves and a copy of the attendance list was circulated. Copies of the draft agenda and general information on T10 were made available to those attending.

2. Approval of Agenda

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

- 10.2.1 Project proposal for object-oriented disk command set (OSD) (99-312r0) [Houlder]
- 10.2.2 Project Proposal for SCSI Architecture Model 3 (SAM-3) (99-293r1) [Weber]
- 10.2.3 Project Proposal for SCSI Primary Commands 3 (SPC-3) (99-294r1) [Weber]
- 10.2.4 Project Proposal for SCSI Block Commands 2 (SBC-2) (99-292r1) [Weber]
- 10.2.5 MRIE behavior with TEST bit asserted (99-208r2) [Elliott]
- 10.2.6 List lengths that exceed maximum allocation length (99-258r2) [Penokie]
- 10.2.7 Description Lengths for 5D ASC/ASCQs (99-266r2) [Weber]
- 10.2.8 Fixed Block Length (99-325) [Snively]
- 10.2.9 The MAMA bit (99-263r1) [Oetting]
- 10.3 READ/WRITE BUFFER Behavior During Domain Validation (99-306) [Lamers]

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

11.2.1 Editing RBC for ISO (99-284r0) [Roberts]

3. Attendance and Membership

The membership requirements were reviewed. NCITS rules permit one vote per organization. An individual from a new organization must attend two out of three consecutive plenary meetings. He/she may apply for voting membership the second meeting via a letter to the Chair of T10. The individual may apply for membership and begin voting at anytime following adjournment of the first meeting. Typically, the individual applies for membership and start casting votes at the second plenary meeting. Working group and other ad hoc meetings do not count toward attendance requirements.

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

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

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

There are also minimum attendance requirements to maintain voting membership on T10. If a member organization fails to attend two of the last three T10 meetings, they are warned that failing to attend the next T10 meeting would result in their membership being terminated. The Chair said he had sent letters to 14 people from 7 organizations informing them that their membership was in jeopardy due to non-attendance (see 99-014r0) and that their membership would be terminated if they did not attend this meeting. The following organizations were in attendance jeopardy:

AMP, Inc.
Apple Computer
General Dynamics
Hewlett Packard Co.
Hitachi Storage Products
Honda Connectors
Iomega Corp.

All of the organizations were present except:

Apple Computer

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

Mylex was removed from the T10 membership role since the company was purchased by T10 member IBM. The T10 members from Mylex were made alternate members for IBM. Unitrode was removed from the T10 membership role since the company was purchased by T10 member Texas Instruments. The T10 members from Unitrode were made alternate members for Texas Instruments.

No organizations requested new (or reinstated) membership.

The T10 membership during the meeting was 42 organizations down from 45 organizations following the last meeting. Enclosure (1) is the list of the people present at the meeting and enclosure (2) is the current T10 membership list.

3.1 Voting procedures

John Lohmeyer reported that NCITS has approved changes to two week rule and abstentions. John noted that he had been unable to review the details of the changes and would follow the new procedures to the best of his ability.

For the two-week rule, the two-week period is measured to the start of the relevant meeting. Also, documents revised at a meeting are not subject to the two-week rule provided the document being modified met the two-week rule. John stated that he will follow to, the best of his ability, the new rule, allowing documents that were available two-weeks prior to the meeting to be processed even if the document is revised during a working group meeting earlier in the week.

The rule about not allowing abstentions on technical issues is has been revised to permit abstentions provided a reason is stated. Such abstentions are not considered in calculating whether the motion met the 50% or 2/3rds voting requirements. John stated that he will be allowing abstentions as per the new rule.

4. Approval of Minutes - September '99 Meeting - Huntington Beach, CA (T10/99-269r1)

The minutes were approved as written.

5. Document Distribution

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

John Lohmeyer requested that all documents for the next mailing be in his hands in electronic format by 10:30 a.m. on Thursday November 11, 1999. Documents received after this time will go into a subsequent mailing.

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

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

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

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

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

http://www.t10.org/

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

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

Roger Cummings reported on the mirror of the T10 web being hosted by DPT at http://www.t11.org/t10 (see 99-346r0).

6. Call for Patents

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

A document is available from ANSI, "Procedures for the Development and Coordination of American National Standards", at no charge. This document is also on the WWW at http://www.ncits.org/help/ansi_sdo.html. Section 1.2.11 contains the ANSI patent policy. Amy Marasco manages patent issues for ANSI and can be contacted at amarasco@ansi.org or 212-642-4954.

A call for patents was made. There were no responses.

7. Review of Old Action Items

- 319) Gene Milligan will submit a NWIP and a CD contribution for RBC to ISO/IEC for consideration. Carryover
- 328) John Lohmeyer and Larry Lamers will provide the SPI-3 editor with the electronic information used to include the dedication in SPI. *Carryover*
- 334) Gene Milligan will initiate fast track processing of NCITS:325:1998 (SBP-2). Carryover
- 335) Gene Milligan will create an NWIP and CD contribution for MMC-2 revision 11a. Carryover
- 336) Ron Roberts (or John Lohmeyer) will give RBC revision 10a to the IR in source and PDF format. Carryover
- Ron Roberts (or John Lohmeyer) will give MMC-2 revision 11a to the IR in source and PDF format. *Carryover*
- 338) Larry Lamers will request minutes for the June CAM-3 review meeting from Bill Dallas. Carryover
- 341) Ralph Weber will create a version descriptor entry for SPI-3 revision 10 in SPC-2. Complete
- 342) Ralph Weber will add MMC-3 (project 1363-D) to the version descriptors list in SPC-2. Complete
- 343) Ralph Weber will add RMC (project 1364-D) to the version descriptors list in SPC-2. Complete
- 344) Ralph Weber will add SPI-4 (project 1365-D) to the version descriptors list in SPC-2. Complete
- John Lohmeyer will forward 99-239r1 to NCITS for processing as a new project request for a SCSI on Scheduled Transfer (SST) standard. *Complete*
- 346) Erich Oetting will provide 99-218r2, a revised new project request for the SCSI Medium Changer Commands -2 (SMC-2), to John Lohmeyer. *Complete*
- John Lohmeyer will forward 99-218r2 to NCITS for processing as a new project request for a SCSI Medium Changer Commands -2 (SMC-2) standard. *Complete*

8. Project Status Reports

8.1 Project Status Summary and NCITS Liaison [Lohmeyer]

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

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

In the absence of Bill Dallas, no report was presented.

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

Erich Oetting reported on the SSC activities at the T11 Joint Working Group (report in 99-342 and minutes in 99-348).

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

Bob Snively reported on the FCP-2 activities in the T11 Joint Working Group (report in 99-342 and minutes in 99-348).

Bob noted that the current revision of FCP-2 is 3 and that revision 4 is in development. Document 99-235 describes the changes in FCP-2 for revision 4. Bob Snively asked that a letter ballot be conducted after revision 4 is ready.

Bob Snively took an action item to prepare FCP-2 revision 4. John Lohmeyer took an action item to conduct a letter ballot on FCP-2 revision 4.

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

Ralph Weber reported that he has been unable to develop the proposals for specific additional changes to SAM-2 regarding multi-port devices. He noted that a new revision of SAM-2 will not be generated at this time, due to the small number of proposals and the minimal content of the change requests.

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

Ron Roberts reported that he has received changes from the ANSI editor (Harvey Rosenfeld). He reported that two comments have been received during public review (99-333). He stated that the recommendation of the working group is that both public review comments not be accepted. MMC-2 Rev 11b will include the editorial changes received from ANSI and will not contain any substantive changes.

Pete McLean moved that T10 forward the working group recommended response to the public review comments to NCITS and that T10 recommend to NCITS that MMC-2 be forwarded to ANSI publication. Bill McFerrin seconded the motion. The motion passed 31:0:0:11=42.

John Lohmeyer took an action item to write letters to the people who commented on MMC-2 thanking them for comments, to forward 99-333r0 to NCITS as the resolution for the public review comments on MMC-2, and to ask NCITS to forward MMC-2 to ANSI for publication.

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

Ralph Weber reported that SPC-2 revision 12 has been available for nearly six weeks and contains all the committee-approved changes, including those approved at the September meeting. He stated that SPC-2 revision 14 will be generated following this meeting and will contain all changes approved at this meeting.

Ralph Weber moved that SPC-2 revision 12 be accepted as a committee draft for project 1236-D. Neil Wanamaker seconded the motion. The motion passed 28:2:0:12=42. Ralph Weber took an action item to create a SPC-2 version descriptor for SPC-2 revision 12.

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

John Lohmeyer reported that RBC is in second public review closing 7 November.

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

John Lohmeyer reported that the letter ballot on SPI-3 passed 34:7:1:3=45 (99-016). George Penokie started resolution of the approximately 400 comments at the Physical Working Group meeting (minutes in 99-308).

George reported that resolution has been reached for most of the technical issues. He asked the committee to review the fairness annex, which would be rewritten if one letter ballot comment is accepted. George stated that the comments resolution process will continue in private conversations and the meeting proposed for Rochester in December. George stated an intention to have a comments resolution document available for approval at the January meeting.

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

John Lohmeyer reported that MMC-3 revision 00a will be available on the web site in a few days. Ron Roberts reported that revision 1 will be available in time for the March meetings. Ron noted that the new streaming data material (from the Mt. Fuji working group) first appeared in revision 00a and will be corrected and enhanced in MMC-3 revision 1.

Ron Roberts stated that Bill McFerrin will be reporting for MMC-3 in the future.

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

Bill McFerrin reported that the revision 1 of RMC had been distributed. John Lohmeyer asked if the revision had been provided for the T10 web site and Bill agreed to provide it.

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

George Penokie reported on the working group activities on SPI-4 (minutes in 99-308). He stated that the first draft of SPI-4 probably will not be available until March or April. He noted that significant effort is required on the part of many companies to get the SPI-4 proposals polished enough for a first SPI-4 draft.

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

Larry Lamers reported that the first draft of SDV will be available before February, maybe as early as December. He stated that the project is generating a lot of interest and that teleconferences may be used to work on some of the early issues.

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

Don Woelz reported that the entire SST document (99-276r0) was reviewed at a T11.1 working group meeting. Don requested authorization for review meetings held during the T11 meeting weeks in December and February (see item 14.1).

Ralph Weber took an action item to create an SPC-2 version descriptor for SST.

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

Erich Oetting reported that the first revision of SMC-2 should be available in January. He noted that the tape alert information will be the principle new content in the first SMC-2 revision.

Ralph Weber took an action item to create an SPC-2 version descriptor for SMC-2.

9. Old Business

9.1 Resolution of SSC letter ballot comments (99-011r2) [Peterson]

Erich Oetting moved that the SSC project editor be instructed to generate SSC revision 22 by incorporating into SSC revision 21 the changes approved under agenda items 10.2.8 and 10.2.9; and to accept 99-228r4 as resolving the SSC letter ballot comments; and to accept SSC revision 22 as resolving the letter ballot comments. The motion passed 29:0:2:11=42. George Penokie stated that his abstention was based on a concern that his comments may not have been fully resolved. Doug Wagner stated that his abstention was based on a lack of expertise in this specific project.

Based on the successful resolution of the letter ballot comments Stewart Watt asked that the HP no vote on the SSC letter ballot be changed to a yes vote. John Lohmeyer noted that SSC still will be forwarded to NCITS with two unresolved negative votes; from IBM and Sun Microsystems.

Dave Peterson took an action item to generate SSC revision 22. Ralph Weber took an action item to create an SPC-2 version descriptor for SSC revision 22. John Lohmeyer took an action item to forward SSC revision 22 to NCITS with the two unresolved negative votes for processing toward first public review.

9.2 Project Proposal for SCSI Signal Modeling TR (99-243r1) [Ham/Wallace]

Bill Ham moved that T10 approve 99-243r1 as a project proposal for the SCSI Signal Modeling Technical Report. Ed Gardner seconded the motion. The motion passed 33:0:0:9=42.

John Lohmeyer took an action item to forward 99-243r1 to NCITS as a T10 approved project proposal for the SCSI Signal Modeling Technical Report.

9.3 Project Proposal for SCSI VI Protocol (SVP) (99-246r1) [Gardner]

Ed Gardner moved that T10 approve 99-246r1 as a project proposal for the SCSI VI Protocol standard. Mark Evans seconded the motion. The motion passed 31:0:2:9=42. Larry Lamers and Roger Cummings stated that their abstentions were based on lack of expertise regarding the proposal.

John Lohmeyer took an action item to forward 99-246r1 to NCITS as a T10-approved project proposal for the SCSI VI Protocol standard.

10. New Business

10.1 Report on T10 Procedures Study Group Meeting [Lohmeyer]

John Lohmeyer reported that a procedures study group meeting was held on Monday of this week with 17 people present. He briefly described the topics discussed.

10.2 Actions on Working Group Recommendations

10.2.1 Project proposal for object-based storage devices command set (OSD) (99-312r0) [Houlder]

Gerry Houlder moved that T10 approve 99-312r0 as a project proposal for the Object-based Storage Devices command set (OSD) standard. Ed Gardner invoked the two-week rule and John Lohmeyer stated that the proposal will be on the agenda for the January T10 meeting.

10.2.2 Project Proposal for SCSI Architecture Model - 3 (SAM-3) (99-293r1) [Weber]

Ralph Weber moved that T10 approve 99-293r1 as a project proposal for the SCSI Architecture Model - 3 (SAM-3) standard. Paul Aloisi seconded the motion. Larry Lamers moved to table the consideration of the motion. Jeff Williams seconded the motion to table. The motion to table passed 19:4. Dal Allan stated that his no vote was based on the indeterminate state resulting from the motion to table.

10.2.3 Project Proposal for SCSI Primary Commands - 3 (SPC-3) (99-294r1) [Weber]

Ralph Weber moved that T10 approve 99-294r1 as a project proposal for the SCSI Primary Commands - 3 (SPC-3) standard. Paul Aloisi seconded the motion. The motion passed 28:0:0:14=42.

John Lohmeyer took an action item to forward 99-294r1 to NCITS as a T10-approved project proposal for the SCSI Primary Commands - 3 (SPC-3) standard.

10.2.4 Project Proposal for SCSI Block Commands - 2 (SBC-2) (99-292r1) [Weber]

George Penokie moved that T10 approve 99-292r1 as a project proposal for the SCSI Block Commands -2 (SBC-2) standard. Paul Aloisi seconded the motion. The motion passed 29:0:0:13=42.

John Lohmeyer took an action item to forward 99-292r1 to NCITS as a T10-approved project proposal for the SCSI Block Commands - 2 (SBC-2) standard.

10.2.5 MRIE behavior with TEST bit asserted (99-208r2) [Elliott]

Rob Elliott moved that 99-208r2 (MRIE behavior with TEST bit asserted) be approved for inclusion in SPC-2. Bill Galloway seconded the motion. The motion passed 28:0:1:13=42.

10.2.6 List lengths that exceed maximum allocation length (99-258r2) [Penokie]

George Penokie moved that 99-258r2 (List lengths that exceed maximum allocation length) be approved for inclusion in SPC-2 and SBC-2. Bill Galloway seconded the motion. The motion passed 28:0:0:14=42.

10.2.7 Description Lengths for 5D ASC/ASCQs (99-266r2) [Weber]

Ralph Weber moved that 99-266r2 (Description Lengths for 5D ASC/ASCQs) be approved for inclusion in SPC-2. Mark Evans seconded the motion. The motion passed 29:0:0:11=42.

10.2.8 Fixed Block Length (99-325) [Snively]

Bob Snively moved that for SSC a fixed block length be a multiple of 4 and for FCP-2 the starting Relative Offset for any FCP_DATA information unit be a multiple of 4. Neil Wanamaker seconded the motion. The motion passed 31:0:0:11=42.

10.2.9 The MAMA bit (99-263r1) [Oetting]

Erich Oetting moved that section 3.2 of 99-263r2 (r1 as revised) be approved for inclusion in SSC. Bill Galloway seconded the motion. The motion passed 23:0:1:18=42.

10.3 READ/WRITE BUFFER Behavior During Domain Validation (99-306) [Lamers]

Larry Lamers reviewed the changes made to create 99-306r1. Erich Oetting moved that consideration of 99-306r1 be remanded to the working group. Mark Evans seconded the motion. The motion passed 22:3:3:14=42.

11. ISO

11.1 ISO Report [Milligan]

Gene Milligan provided the following ISO report:

The responses to MMC and SBC CD letter ballot comments are on hold until the issue of canceling the Fast Track DIS ballot is resolved. See the September T10 minutes (99-269). The T10 recommendation to cancel Fast Track was approved by NCITS and forwarded to the JTC 1 Secretariat (ANSI). Action by ANSI is pending.

Completion of editing for the ISO/IEC comments by the technical editor on SMC, SES, and FCP is still pending and long overdue.

11.2 ISO Business [Milligan]

11.2.1 Editing RBC for ISO (99-284r0) [Roberts]

John Lohmeyer reported that Ron Roberts sent a quote of \$10,000 for converting RBC from the ANSI format to the ISO format. The quote can be found in 99-284r0. John noted that the T10 editors' fund should be able to cover cost. The group discussed whether RBC should be an ISO standard, options for getting the RBC editing done, and how fast track handling of RBC might affect the editing requirements. Don Tolmie was recommended as a possible alternate choice to perform the conversion. Several issues could not be resolved without the presence of Gene Milligan so the topic was deferred to the next meeting.

John Lohmeyer took an action item to contact Don Tolmie for an alternate quotation for conversion of RBC to ISO format.

12. Liaison Reports

12.1 T11 Liaison Report [Wanamaker]

Neil Wanamaker made an oral report to the committee and provided an electronic report in 99-339r0.

12.2 T13 Liaison Report [Milligan]

Pete McLean reported that T13 has withdrawn ATA-1. Review of the Signal Integrity annex in ATA-5 is completed and ATA-5 should go to letter ballot after the December meeting. The project proposal for ATA-6 was approved and collection of work items has begun.

12.3 SFF Industry Group [Allan]

Dal Allan provided the following electronic report for the minutes:

SFF Committee Report November 1999

The revised SFF-8045, SFF-8430 MT-RJ, and SFF-8441 VHDCI were approved for Publication and a number of specifications were Expired at their annual review because they have been incorporated into standards.

INF-8038 for Intel's Bus Master specification would have been renewed for another year except that Pete McLean advised that the contents of the scatter/gather list have been changed and it would be misleading if it was left available. It will be Expired.

The backplane project will analyze the 100-pin SCA-2 to determine whether it can meet the characteristics required of dual port 10 Gbit performance, each of which requires four sets of parallel 2.5 Gbs transfer pairs. The principles of SFF-8410 will be followed in the evaluation.

The issues raised by Bill Ham on the SFF-8053 GBIC have been resolved, and will be incorporated in the next revision.

The resistive tip for SCA-2 applications will not be specified unless there is a resurgence of interest in its benefits for hot plugging.

The dimensions for current generation 5 1/4" CD ROMs provided by Pioneer will be used to update SFF-8551.

There are differences between High Speed Serial Testing for copper and optical and the first draft of SFF-8412 for the latter will be in the next mailing.

There are several SSWGs in the coming months:

11/16-17	SFF-8412 and SFF-8410 SSWG
1/25-26	SFF-8412 and SFF-8410 SSWG
2/ 9-10	INF-8090 SSWG
2/22-23	SFF-8412 and SFF-8410 SSWG

12.4 IEEE 1394 [Johansson]

No report.

12.5 IEEE P1285 Status

No report.

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

Paul Aloisi made an oral report to the committee and provided an electronic report in 99-344r0.

13. Review of Action Items

- 319) Gene Milligan will submit a NWIP and a CD contribution for RBC to ISO/IEC for consideration.
- 328) John Lohmeyer and Larry Lamers will provide the SPI-3 editor with the electronic information used to include the dedication in SPI.
- 334) Gene Milligan will initiate fast track processing of NCITS:325:1998 (SBP-2).
- 335) Gene Milligan will create an NWIP and CD contribution for MMC-2 revision 11a.
- 336) Ron Roberts (or John Lohmeyer) will give RBC revision 10a to the IR in source and PDF format.
- 337) Ron Roberts (or John Lohmeyer) will give MMC-2 revision 11a to the IR in source and PDF format.
- 338) Larry Lamers will request minutes for the June CAM-3 review meeting from Bill Dallas.
- 348) Ralph Weber will create a SPC-2 version descriptor for SPC-2 revision 12.
- 349) Ralph Weber will create a SPC-2 version descriptor for SST.
- 350) Ralph Weber will create a SPC-2 version descriptor for SMC-2.
- 351) Bob Snively will prepare FCP-2 revision 4 for letter ballot.
- 352) John Lohmeyer will conduct a letter ballot on FCP-2 revision 4.
- John Lohmeyer will write letters to the people who commented on MMC-2 thanking them for comments, will forward 99-333r0 to NCITS as the resolution for the public review comments on MMC-2, and will ask NCITS to forward MMC-2 to ANSI for publication.

- 354) Dave Peterson will generate SSC revision 22.
- 355) Ralph Weber will create an SPC-2 version descriptor for SSC revision 22.
- John Lohmeyer will forward SSC revision 22 to NCITS with the two unresolved negative votes for processing toward first public review.
- John Lohmeyer will forward 99-243r1 to NCITS as a T10 approved project proposal for the SCSI Signal Modeling Technical Report.
- John Lohmeyer will forward 99-246r1 to NCITS as a T10 approved project proposal for the SCSI VI Protocol standard.
- John Lohmeyer will forward 99-294r1 to NCITS as a T10 approved project proposal for the SCSI Primary Commands 3 (SPC-3) standard.
- John Lohmeyer will forward 99-292r1 to NCITS as a T10 approved project proposal for the SCSI Block Commands 2 (SBC-2) standard.
- John Lohmeyer will contact Don Tolmie for an alternate quotation or work time estimate for conversion of RBC to ISO format.
- Ralph Weber will ensure that the policy of requiring a two-thirds vote to approve the scheduling of a plenary meeting outside the 48 contiguous United States gets recorded in the revised T10 policies document.

14. Meeting Schedule

The next plenary meeting of T10 will be January 13, 2000 in Brisbane, Australia at the Surfer's Paradise Marriott Resort (+61-7-55-929-800), hosted by ENDL Pacific Technologies. The meeting will begin at 9:00 a.m. on Thursday.

The meeting list for the next plenary week is:

January '00 Meeting Map
 (11/04/99 Version)

Monday 1/10	9 10					3		5	6	7	8	9	
	+===== T10 +		. SG	İ	SCSI	Phys	sical	WG	Ì				(50)
	Mt.			WG									(20)
Tuesday 1/11	9 10			_	_	_	=	-	-	7	8	9	
		Phys	sical	L WG									(50)
	MMC	WG											(20)
Wednesday 1/12	9 10									7	8	9	
	+===== SCSI	:==== : WG	====		====	====	.====	====	====	Ì	J		(50)
	+===== MMC +=====	WG				SF	F WG	8	SFF	Ì			(40)
Thursday 1/13	9 10			_	_	3	-	•	6	7	8		
		Plena	ary	İ	Joint	T10)/T11	.3	Ì				(50)

(*) - Joint T10/T11.3 meeting begins 30 minutes
 after the T10 plenary meeting but not before 11:00 am

Friday 1/14 8 9 10 11 12 1 2 3 4 5

No Meetings are planned for Friday.

Meetings marked with == are T10-authorized meetings.

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

Other T10-authorized meetings:

Meeting	Date	Location / Contact
Access Control	11/18/99 Thu 8:00a	Teleconference / Elliott
Teleconference	(CST)	
Cable Perf. SG	11/30/99 Tue 9:00a	Rochester, MN / Fasig
SCSI Model SG	12/01/99 Wed 9:00a	Rochester, MN / Fasig
SPI-3/-4 WG	12/02/99 Thu 9:00a	Rochester, MN / Williams
	12/03/99 Fri 9:00a	Rochester, MN / Williams
Joint T10/T11	12/07/99 Tue	Reno, NV / T11
SST WG	12/08/99 Wed	Reno, NV / T11
Cable Perf. SG	02/07/00 Mon 1:00p	Huntington Beach, CA / Jones
SCSI Model SG	02/08/00 Tue 9:00a	Huntington Beach, CA / Jones
SPI-4	02/09/00 Wed 1:00p	Huntington Beach, CA / Jones
	02/10/00 Thu 9:00a	Huntington Beach, CA / Jones
Joint T10/T11	02/15/00 Tue	Huntington Beach, CA / T11
SST WG	02/16/00 Wed	Huntington Beach, CA / T11
Cable Perf. SG	02/29/00 Tue	Manchester, NH / Daggett
SCSI Model SG	03/01/00 Wed	Manchester, NH / Daggett

Meeting Map Abbreviation Key:

Amnd: Amendment Cable Perf.: Cable Performance Testing CAM: Common Access Method
CAM-3: Next generation CAM for SCSI-3
EPI: SCSI Enhanced Parallel Interface (Technical Report) Encl Profile Enclosure Profile Study Group Fast-20: Data Transfer at 20 Mega-transfers/second (a.k.a., Ultra)
Fast-40: Data Transfer at 40 Mega-transfers/second (a.k.a., Ultra) Data Transfer at 40 Mega-transfers/second (a.k.a., Ultra2) FC: Fibre Channel
FC-AL: Fibre Channel - Arbitrated Loop (a Tl1 project)
FCLC: Fibre Channel Loop Community (not an NCITS activity)
I/F: Interface
HAP: High Availability Profile (A.K.) Fast-80: Data Transfer at 80 Mega-transfers/second (a.k.a., Ultra3) Fibre Channel Loop Community (not an NCITS activity) LB: Letter Ballot MMC-2: Multimedia Commands - 2 (CD-ROM, DVD, etc.)
PH: Physical (Connectors, Cables, Transceivers, etc.) Plenary: Full Committee Meeting
RAID: Redundant Array of Independent Devices
RBC: Reduced Block Commands SCSI-3 Block Commands SBC: SBC: SCSI-3 Block Commands

SBP-2: Serial Bus Protocol for IEEE 1394 (2nd generation protocol)

SCC-2: SCSI Controller Commands - 2 (2nd generation RAID command set)

SCSI: Small Computer System Interface

SES: SCSI Enclosure Services SCSI Harbor: A STA project on defining a wrapper for SCSI devices SFF: SFF Industry Group (not an NCITS activity) SG: Study Group

SMC: SCSI-3 Medium Changer Commands

SPC-2: SCSI Primary Commands - 2 (2nd generation)

SPI-2: Second Generation SCSI Parallel Interface

SPI-3: Third Generation SCSI Parallel Interface

SSA: Serial Storage Interface

SSC: SCSI-3 Stream Commands (includes Tape) Study Group SSC: SCSI-3 Stream Commands (includes Tape)
SSWGs: Specific-Subject Working Groups
STA: SCSI Trade Association (not an NCITS activity) STA Tech: STA Technical Meeting (T10 members invited) T10: Lower Level Interfaces Technical Committee T10 Proc.: T10 Procedures Working Group (same as Ad Hoc Group) WG:

Ralph Weber moved that T10 adopt a policy of requiring a two-thirds vote to approve the scheduling of a plenary meeting outside the 48 contiguous United States. George Penokie seconded the motion. The motion passed 28:0:3:11=42. Ralph Weber took an action item to ensure that the policy gets recorded in the revised T10 policies document.

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

Activity	Contact	Telephone/Email
CAM-3	Bill Dallas	(603) 881-2508
		dallas@zk3.dec.com
EPI	Bill Ham	(508) 841-2629
		bill.ham@digital.com

FCP, FCP-2, SES	Robert Snively	(415) 336-5332
		Bob.Snively@eng.sun.com
GPP	Gary Stephens	(602) 321-1725
		grsfsi@aol.com
SBC	Gene Milligan	(405) 324-3070
		gene_milligan@notes.seagate.com
MMC, MMC-2, MMC-3, RMC	Bill McFerrin	(303) 651-5400
		BMcFerrin@aol.com
SBP-2 or RBC	Pete McLean	(303) 678-2149
		<pre>pete_mclean@maxtor.com</pre>
SBP-2	Peter Johansson	(510) 527-3926
		pjohansson@aol.com
SCC-2, SPI-2, SPI-3, SPI-4	George Penokie	(507) 253-5208
		gop@us.ibm.com
SMC	Erich Oetting	(303) 673-2178
		Erich_Oetting@Stortek.com
SPC, SPC-2, SAM-2	Ralph Weber	(972) 503-3205 x228
		roweber@acm.org
SSA-PH1,-PH2,-TL1,-TL2	Larry Lamers	(408) 957-7817
		ljlamers@ieee.org
SSA-S2P & -S3P	John Scheible	(512) 823-8208
		Scheible@vnet.ibm.com
SSC	Dave Peterson	(612) 391-1008
		dap@network.com
Other Activities	John Lohmeyer	(719) 533-7560
		lohmeyer@t10.org

The long-term T10 meeting week schedule is:

Date	Location	Host/Comments		
Jan 10-14, 2000	Brisbane, Australia	ENDL Pacific Technologies		
Mar 6-10, 2000	Dallas, TX	Texas Instruments		
May 15-19, 2000	Nashua, NH	Hitachi Cable / dates changed		
Jul 10-14, 2000	Colorado Springs, CO	LSI Logic		
Sep 11-15, 2000	Huntington Beach, CA	QLogic		
Oct 30-Nov 3, 2000	Monterey, CA	Adaptec / dates changed		
Jan 15-19, 2001	(open)			
Mar 5-9, 2001	Dallas, TX	Texas Instruments		
May 7-11, 2001	Manchester, NH	Hitachi Cable		
Jul 16-20, 2001	Colorado Springs, CO	LSI Logic		
Sep 10-14, 2001	Huntington Beach, CA	QLogic		
Nov 5-9, 2001	Monterey, CA	Adaptec		

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.

John Lohmeyer moved that T10 authorize the T10-related meetings and events in the list above that had not previously been approved. Mark Evans seconded the motion. The motion passed 19:1:0:22=42. John noted that Gene Milligan had submitted a written No vote on this motion opposing the SPI-4 dates in December, which are in conflict with a T13 meeting, and opposed to the proposed February 2000 dates. While the February dates were changed in a manner that accommodates Gene, the December dates were unchanged. John interpreted Gene's written vote would remain No unless both dates were changed.

15. Adjournment

The meeting was adjourned at 12:35 p.m. on Thursday November 4, 1999.

Enclosure(1) -- Meeting Attendees

Name	S	Organization	Electronic Mail Address		
Mr. Lawrence J. Lamers	P	Adaptec, Inc.	ljlamers@ieee.org		
Mr. Robert Frey	P	Advansys	bobf@advansys.com		
Mr. Charles Brill	P	AMP, Inc.	cebrill@ix.netcom.com		
Mr. Bart Raudebaugh	Р	Ancot Corp.	bart@ancot.com		
Mr. Gregg Neely	Р	Andataco	greggn@andataco.com		
Mr. Douglas Wagner	Р	Berg Electronics	wagnerdl@bergelect.com		
Mr. Bill Galloway	P	BREA Technologies, Inc.	billg@breatech.com		
Mr. Dennis Lang	А	Circuit Assembly Corp.	dennisl@circuitassembly.		
_			com		
Mr. Robert C. Elliott	P	Compaq Computer Corp.	Robert.Elliott@compaq.com		
Dr. William Ham	Α	Compaq Computer Corp.	bill.ham@digital.com		
Mr. Neil Wanamaker	P	Crossroads Systems, Inc.	ntw@crossroads.com		
Mr. Charles Tashbook	P	Dallas Semiconductor	charles.tashbook@dalsemi.		
Mr. Keith W. Parker	V	Diogenes SCSI	diogenes@europa.com		
Mr. Roger Cummings	P	Distributed Processing Tech.	cummings_roger@dpt.com		
Mr. I. Dal Allan	P	ENDL	endlcom@ibm.net		
Mr. Mike Taylor	0	Exabyte Corp.	miketa@exabyte.com		
Mr. Eugene Lew	Р	Fujitsu	elew@fcpa.fujitsu.com		
Mr. Tim Mackley	A	General Dynamics	timothy.a.mackley@gd-is.		
Mr. Donald Woelz	V	Genroco, Inc.	don@genroco.com		
Mr. Stewart Wyatt	A#	Hewlett Packard Co.	stewart_wyatt@hp.com		
Mr. Anthony Yang	P	Hitachi Storage Products	anthony.yang@hal.hitachi.		
Mr. Thomas J. Kulesza	P	Honda Connectors	tkulesza@hondaconnectors.		
Mr. George O. Penokie	P	IBM Corp.	gop@us.ibm.com		
Dr. Jim Hafner	V	IBM Corp.	hafner@almaden.ibm.com		
Mr. Tim Bradshaw	P	Iomega Corp.	bradshat@iomega.com		
Mr. Dennis Moore	P	KnowledgeTek, Inc.	dmoore@ix.netcom.com		
Mr. John Lohmeyer	P	LSI Logic Corp.	lohmeyer@t10.org		
Mr. Ralph O. Weber	Α	LSI Logic Corp.	roweber@acm.org		
Mr. Michael Karg	Α	Madison Cable Corp.	mkarg@madisoncable.com		
Mr. Pete McLean	P	Maxtor Corp.	<pre>pete_mclean@maxtor.com</pre>		
Mr. Jay Neer	A	Molex Inc.	jneer@molex.com		
Mr. Edward A. Gardner	Ρ	Ophidian Designs	eag@ophidian.com		
Mr. Han Zou	Р	Panasonic Technologies,	hanzou@research.		
		Inc	panasonic.com		
Mr. William P. McFerrin	P	Philips Electronics	BMcFerrin@aol.com		
Mr. Keiji Katata	V	Pioneer Electronic Corp.	keiji_Katata@post. pioneer.co.jp		
Mr. Takeshi Kohda	V	Pioneer Electronics Corp.	takeshi_kohda@post. pioneer.co.jp		
Mr. Toshiro Tanikawa	V	Pioneer Electronics Corp.	tanikawa@post.pioneer.co. jp		
Mr. Skip Jones	Р	QLogic Corp.	sk_jones@qlc.com		
Mr. Mark Evans	P	Quantum Corp.	mark.evans@quantum.com		
Mr. Gerald Houlder	А	Seagate Technology	gerry_houlder@notes.		
			seagate.com		
Mr. Ron Roberts	V	Sierra-Pac Technology	rkroberts@aol.com		
Mr. Erich Oetting	P	Storage Technology	erich_oetting@stortek.com		
Mr. Robert N. Snively	P	Sun Microsystems	bob.snively@sun.com		

Computer	Cc
----------	----

			00
${\tt Mr.}$	Paul D. Aloisi	Р	Texas Instruments
Mr.	Donald R. Getty	A#	Texas Instruments
Mr.	Robert Morris	Α	Texas Instruments
${\tt Mr.}$	Paresh Sheth	A#	Texas Instruments
Mr.	Fred Hooper	0	Thomas & Betts
		_	_ 1 11 _ 1 _ 1

Mr. Tasuku Kasebayashi P Toshiba America Elec. Comp.

Mr. Jeffrey L. P Western Digital Williams Corporation Mr. Paul Anderson O Western Digital Corporation

Mr. Doug Piper O Woven Electronics

toshiba.com Jeffrey.L.Williams@wdc. paul.m.anderson@wdc.com

Paul_Aloisi@ti.com

bob.morris@ti.com paresh.sheth@ti.com fred_hooper@tnb.com

donald_getty@ti.com

task.kasebayashi@taec.

doug.piper@

wovenelectronics.com

52 People Present

Status Key: P - Principal

A,A# - Alternate O - Observer - Liaison - Visitor L

Enclosure(2) -- T10 Attendance Database

Generated on 1999/11/10 at 10:14:24

Mr. Lawrence J. Lamers (P) Phone: (408) 957-7817 Adaptec, Inc. Fax: (408) 957-7193 691 S. Milpitas Blvd. Email: ljlamers@ieee.org

Milpitas, CA 95035

Mr. Vincent Bastiani (A#) Phone: (408) 957-7153

Adaptec, Inc. Fax:

691 S. Milpitas Blvd. Email: bastiani@corp.adaptec.com

Milpitas, CA 95035

Mr. Wally Bridgewater (A#) Phone: (408) 945-8600

Adaptec, Inc. Fax:

691 S. Milpitas Blvd. Email: wally@eng.adaptec.com

Milpitas, CA 95035

Mr. Mark Delsman (A) Phone: (408) 957-5661

Adaptec, Inc. Fax:

691 S. Milpitas Blvd. Email: mdelsman@corp.adaptec.com

Milpitas, CA 95035

Mr. Tariq Abou-Jeyab (0) Phone: (408) 957-1511 Adaptec, Inc. Fax: (408) 945-6736

691 South Milpitas Blvd. Email: tajeyab@corp.adaptec.com

M/S 135

Milpitas, CA 95035

Mr. Robert Frey (P) Phone: (408) 383-5715 Advansys Fax: (408) 383-9612 1150 Ringwood Ct. Email: bobf@advansys.com

San Jose, CA 95131

Mr. Steven P. Ego (0) Phone: (512) 258-2303 Aeronics Inc. Fax: (512) 258-4392

Email: 12741 Research Blvd #500

Austin, TX 78759

Mr. Matt Wakeley (A) Phone: (916) 785-4259 Agilent Technologies Fax: (916) 785-1997

8000 Foothills Blvd. MS 5669 Email: matt_wakeley@agilent.com

Roseville, CA 95747-5669

Mr. Kent Manabe (O) Phone: (408) 441-9232
America Kotobuki Electronics Fax: (408) 441-9246
100 Century Center Ct. #310 Email: manabe@ix.netcom.com

San Jose, CA 95112

Mr. Charles Brill (P) Phone: (717) 533-1279 AMP, Inc. Fax: (717) 520-9090

Email: cebrill@ix.netcom.com 112 Harvey Rd.

Hershey, PA 17033

Mr. R. Scott Good (A) Phone: (717) 592-3469

AMP, Inc. Fax:

MS 258-30 Email: rsgood@amp.com

P.O. Box 3608

Harrisburg, PA 17105-3608

Phone: (416) 291-4401 x2239 Ms. Bonnie Rose (0)

Amphenol Canada Corp. Fax: (416) 292-0647

20 Melford Dr. Email: brose@cosmosgroup.com

Scarboraugh, Ontario

Canada M1B 2X6

Phone: (607) 786-4236 Mr. Bill Mable (P) Amphenol Interconnect Fax: (607) 786-4311 20 Valley St. Email: bmable@spectra.net

Endicott, NY 13760

Mr. Michael Wingard (A) Amphenol Interconnect Phone: (607) 786-4241 Fax: (607) 786-4311 20 Valley St. Email: mikwingard@aol.com

Endicott, NY 13760

Mr. Bart Raudebaugh (P) Phone: (415) 322-5322 Ancot Corp. Fax: (415) 322-0455

Email: bart@ancot.com 115 Constitution Dr.

Menlo Park, CA 94025

Mr. Gregg Neely (P) Phone: (619) 453-9696 Andataco Fax: (619) 453-9294

10140 Mesa Rim Rd. Email: greggn@andataco.com

San Diego, CA 92121

Mr. Harlan Andrews (0) Phone: (408) 974-6430 Apple Computer Fax: (408) 862-7577

6 Infinite Loop MS 306-2MS Email: hea@apple.com

Cupertino, CA. 95014

Mr. James R. Bergsten (O) Phone: (408) 260-5900 Ark Research Corp. Fax: (408) 260-5908

1190 Saratoga Ave. #110 Email: bergsten@arkres.com

San Jose, CA 95129-3433

Mr. Douglas Wagner (P) Phone: (805) 498-0325 Fax: (805) 498-0325 Berg Electronics

472 Delwood Ct. Email: wagnerdl@bergelect.com

Newbury Park, CA 91320-4819

Mr. Jim Koser (A) Phone: (717) 938-7679 Berg Electronics Fax: (717) 938-7991

825 Old Trail Road Email:

Etters, PA 17319

Mr. Bill Galloway (P) Phone: (281) 530-3063
BREA Technologies, Inc. Fax: (281) 988-0358
14902 Mesita Dr. Email: billg@breatech.com

Houston, TX 77083

Mr. Joseph Basista (O) Phone: (607) 687-1044 C&M Corp. Fax: (607) 687-7534 49 Middle Road Email: joebasista@aol.com

Owego, NY 13827

Mr. Gerry Johnsen (0) Phone: (612) 551-4000 Ciprico Inc. Fax: (612) 551-4002

2800 Campus Dr. Suite 60 Email: gerry@ciprico.com

Plymouth, MN 55441

Mr. Ian Morrell (P) Phone: (949) 598-1780 Circuit Assembly Corp. Fax: (949) 855-4298

18 Thomas St. Email: ianm@circuitassembly.com

Irvine, CA 92718-2703

Phone: (949) 855-7887 Fax: (949) 855-4200 Mr. Dennis Lang (A) Circuit Assembly Corp.

Email: dennisl@circuitassembly.com 18 Thomas St.

Irvine, CA 92718-2703

Mr. Ben Chang (0) Phone: (510) 226-2394

Cirrus Logic Inc. Fax:

3100 W. Warren Ave. Email: ben@corp.cirrus.com

Fremont, Ca 94538

Mr. Edward Haske (P) Phone: (949) 454-0800 CMD Technology Fax: (949) 455-1656 Email: haske@cmd.com 1 Vanderbilt

Irvine, CA 92718

Mr. Robert C. Elliott (P) Phone: (281) 518-5037 Fax: (281) 518-7135 Compaq Computer Corp.

MS 120810 Email: Robert.Elliott@compaq.com

PO Box 692000

Houston, TX 77269-2000

 Mr. William Dallas (A#)
 Phone: (603) 884-2508

 Compaq Computer Corp.
 Fax: (603) 884-2257

 ZK03-3/T79
 Email: dallas@zk3.dec.com

110 Spit Brook Road Nashua, NH 03062-2698 Mr. Douglas Hagerman (A#) Phone: (508) 841-2145 Compaq Computer Corp. Fax: (508) 841-6100

SHR3-2/W3 Email: douglas.hagerman@compaq.com

334 South Street Shrewsbury, MA 01545

Dr. William Ham (A) Phone: (508) 841-2629
Compaq Computer Corp. Fax: (508) 841-5266
SHR3-2/W04 Email: bill.ham@digital.com

334 South Street Shrewsbury, MA 01545

Mr. Mike Zandy (A#) Phone: (281) 518-7930

Compaq Computer Corp. Fax:

MS 640222 Email: Mike.Zandy@compaq.com

PO Box 692000

Houston, TX 77269-2000

Mr. Peter Johansson (0) Phone: (510) 527-3926 Congruent Software, Inc. Fax: (510) 531-2942 3998 Whittle Ave. Email: pjohansson@aol.com Oakland, CA 94602

Mr. Neil Wanamaker (P) Phone: (512) 794-2727
Crossroads Systems, Inc. Fax: (512) 349-0304
9390 Research Blvd. Email: ntw@crossroads.com

Suite II-300 Austin, TX 78759

Mr. Stephen K. Wilson (A) Phone: (512) 794-2716

Crossroads Systems, Inc. Fax:

9390 Research Blvd. Email: steve@crossroads.com

Suite II-300 Austin, TX 78759

Mr. Charles Tashbook (P) Phone: (972) 371-4110
Dallas Semiconductor Fax: (972) 371-3715

4401 S. Beltwood Pkwy. Email: charles.tashbook@dalsemi.com

Dallas, TX 75244-3292

Mr. Wayne Mendenhall (A) Phone: (972) 371-4485

Dallas Semiconductor Fax:

4401 S. Beltwood Pkwy. Email: wayne.mendenhall@dalsemi.com

Dallas, TX 75244

Mr. Dave Ford (0) Phone: (617) 926-1399

Data General / Clariion Fax:

Coslin Dr. Email: dford@orca.com

Southboro, MA 04772

Mr. Bill Anderson (O) Phone: (408) 980-8344
DDK Electronics Fax: (408) 980-9750

3001 Oakmead Village Dr. Email: bill_anderson@ddkconnectors.com

Santa Clara, CA 95051

Mr. Ricardo Dominguez (P) Phone: (512) 728-8996 Dell Computer Fax: (512) 728-3653

One Dell Way Email: ricardo_dominguez@dell.com

Round Rock, TX 78682

Mr. William Dawkins (0) Phone: (512) 723-4339 Dell Computer Fax: (512) 723-6657

One Dell Way Email: bill_dawkins@dell.com

Round Rock, TX 78682

Mr. James Benfer (0) Phone: (301) 498-0200

Digi-Data Corp. Fax: 8580 Dorsey Run Road Email: Jessup, MD 20794

Mr. Roger Cummings (P) Phone: (407) 830-5522 x348
Distributed Processing Tech. Fax: (407) 260-5366
140 Candace Dr. Email: cummings_roger@dpt.com

Maitland, FL 32751

Mr. Mike Gerwig (A)

Distributed Processing Tech.

Fax: (407) 260-5366

Email: gerwig@dpt.com Phone: (407) 830-5522 x380

Maitland, FL 32751

Mr. Ed Kavetsky (A#) Phone: (407) 830-5522 x344
Distributed Processing Tech. Fax: (407) 260-5366
140 Candace Dr. Email: kavetsky@dpt.com

Maitland, FL 32751

Mr. Robert Reisch (0) Phone: (716) 588-0573 Eastman Kodak Co. Fax: (716) 588-2624 460 Buffalo Road Email: reisch@kodak.com

Rochester, NY 14652-3816

Mr. Terry Maezawa (O) Phone: (404) 487-5815

Electronic&Ind. Enterprises Fax: Suite 216 Email:

21 Eastbrook Bend

Peachtree City, GA 30269

Phone: (408) 867-6630 Mr. I. Dal Allan (P) ENDL Fax: (408) 867-2115 14426 Black Walnut Ct. Email: endlcom@ibm.net

Saratoga, CA 95070

Mr. Mike Taylor (0) Phone: (303) 417-7235 Exabyte Corp. Fax: (303) 417-7829 1685 38th Street Email: miketa@exabyte.com Boulder, CO 80301

Mr. Julian Ferry (0) Phone: (717) 502-0784 Foxconn I/O Fax: (717) 502-1474 140 Coffeetown Rd. Email: julferry@aol.com

Dillsburg, PA 17019

Mr. Stephen Jarvis (0) Phone: (714) 890-8628 x230 Foxconn I/O Fax: (714) 892-8668 Email: s.jarvis@foxconn.com 6125 Phyllis Drive

Cypress, CA 90630

Mr. Don Soracco (O) Phone: (978) 649-9997 Foxconn I/O Fax: (978) 649-9797

Email: 60 Pond St.

Dunstable, MA 01827

Mr. Gary R. Stephens (A) Phone: (520) 321-1725 FSI Consulting Services Fax: (520) 321-1725 1825 N. Norton Email: grsfsi@aol.com Tucson, AZ 85719

Mr. Eugene Lew (P) Phone: (408) 894-3874

Fujitsu

2904 Orchard Pkwy Email: elew@fcpa.fujitsu.com

San Jose, CA 95134

Mr. Ben-Koon Lin (A) Phone: (408) 894-3979 Fujitsu Fax: (408) 894-3908

2904 Orchard Pkwy. Email: blin@fcpa.fujitsu.com

San Jose, CA 95134

Mr. Kazuo Nakashima (0)

Phone: (408) 894-3849

Fujitsu Computer Products,Am

Fax: (408) 894-3907

2904 Orchard Parkway

Email: knakashima@fcpa.fujitsu.com

San Jose, CA 95134

Mr. Bob Thornton (O) Phone: (408) 745-4932
Fujitsu Takamisawa America Fax: (408) 745-4971
250 E. Caribbean Dr. Email: bthornto@fta.fujitsu.com

Sunnyvale, CA 94089

Mr. Nathan Hastad (P) Phone: (612) 921-6635 General Dynamics Fax: (612) 921-6345

8800 Queen Ave. S. Email: nathan.j.hastad@gd-is.com Bloomington, MN 55431

Mr. Tim Mackley (A) Phone: (612) 921-6866

General Dynamics Fax:

8800 Queen Ave. S. Email: timothy.a.mackley@gd-is.com Bloomington, MN 55431

Mr. Pak Chan (0) Phone: (408) 481-3030
Gigalabs Inc. Fax: (408) 481-3045
290 Santa Ana Court Email: pchan@giglabs.com

Sunnyvale, CA 94086

Ms. Liza Hunt (XO) Phone:
Global Engineering Documents Fax:
15 Inverness Way East Email:

Englewood, CO 80112-5704

Mr. Rodger Burke (O) Phone: (847) 741-1500 x286 Harting, Inc. of N. America Fax: (847) 741-8257

1370 Bowes Road Email: Rodger.Burke@harting.com

Elgin, IL 60123

Mr. J. R. Sims (P) Phone: (970) 635-6774 Hewlett Packard Co. Fax: (970) 635-6610

800 S. Taft Ave. Email: robsims@hootie.lvld.hp.com

Loveland, CO 80537

Mr. Stewart Wyatt (A#) Phone: (208) 396-3594 Hewlett Packard Co. Fax: (208) 393-3319

PO Box 39 Email: stewart_wyatt@hp.com

Boise, ID 83707

Mr. Donald C. Loughry (XO) Phone: (408) 447-2454 Hewlett Packard Co. Fax: (408) 447-2247

M/S 43UC NCITS Vice Chair Email: don_loughry@hp6600.desk.hp.com

19420 Homestead Rd. Cupertino, CA 95014

Mr. Brad Culp (O) Phone: (970) 350-4592
Hewlett Packard Co. Fax: (970) 352-3524
700 71st. Ave. Email: brad-culp@hp.com

Greeley, CO 80631

Mr. Steve Krupa (0) Phone:
Hewlett Packard Co. Fax:
Filton Road Email:

Stoke Gifford

Bristol BS12 6QZ England

Ms. Jacqueline Sylvia (A) Phone: (603) 669-4347

Hitachi Cable Manchester Fax:

900 Holt Ave. Email: jsylvia@hcm.hitachi.com

Manchester, NH 03109

Mr. Zane Daggett (P) Phone: (603) 669-4347 x236 Hitachi Cable Manchester, Inc Fax: (603) 669-9621

900 Holt Ave. Email: zdaggett@hcm.hitachi.com

Manchester, NH 03109

Mr. Paul Boulay (0) Phone: (408) 986-9770 x205

Hitachi Computer Systems Div Fax: (408) 986-1821

3101 Tasman Drive Email: p_boulay@hitachi.com

Santa Clara, CA 95054

Mr. Hitoshi Ogawa (O) Phone: 1181-45881-1241

Hitachi Ltd. Fax: 1181-45860-1674 Email: hogawa@yokolab.sdl.hitachi.co.jp Systems Development Lab

292 Yoshida-Cho

Yokohama-Shi 244 Japan

Mr. Anthony Yang (P) Phone: (408) 941-7048 Hitachi Storage Products Fax: (408) 946-1062

Email: anthony.yang@hal.hitachi.com 1971 Milmont Drive

Milpitas, CA 95035

Mr. Quang Vuong (A) Phone: (408) 748-2806
Hitachi Storage Products Fax: (408) 235-8942
3101 Tasman Drive M/S 75 Email: vuong_q@halsp.hitachi.com

Santa Clara, CA 95054

Phone: (847) 913-9566 Mr. Thomas J. Kulesza (P) Honda Connectors Fax: (847) 913-9587

960 Corporate Woods Parkway Email: tkulesza@hondaconnectors.com

Vernon Hill, IL 60061

Phone: (847) 913-9566 Mr. Terry Enright (A)

Honda Connectors Fax: (847) 913-9587

960 Corporate Woods Parkway Email:

Vernon Hill, IL 60061

Mr. George O. Penokie (P) Phone: (507) 253-5208 Fax: (507) 253-2880 IBM Corp. 2B7/114-2 Email: gop@us.ibm.com

37st Highway 52 N.

Rochester, MN 55901-7829

Mr. Dan Colegrove (A#) Phone: (408) 256-1978 Fax: (408) 256-1044 IBM Corp. LJ4/012 Email: colegrov@us.ibm.com

5600 Cottle Rd.

San Jose, CA 95193

Mr. John P. Scheible (A) Phone: (512) 823-8208 IBM Corp. Fax: (512) 823-0758

Bldg 815 MS 4051 Email: Scheible@vnet.ibm.com 11400 Burnett Rd.

Austin, TX 78758

Phone: (520) 799-4923 Mr. Robert Basham (0)

IBM Corp. Fax:

65U/031-Z Email: robbyb@us.ibm.com

9000 S. Rita Rd. Tucson, AZ 85744

Mr. Tim Bradshaw (P) Phone: (801) 778-4262 Fax: (801) 778-4170 Iomega Corp. Email: bradshat@iomega.com 1821 Iomega Way

Roy, UT 84067

Mr. Darrell Redford (A) Phone: (801) 778-4432 Fax: (801) 778-4170 Iomega Corp. 1821 West Iomega Way Email: redfordd@iomega.com

Roy, UT 84067

Mr. David L. Jolley (A#) Phone: (801) 778-3641 Iomega Corporation Fax: (801) 778-5261 1821 West Iomega Way Email: jolley@iomega. Email: jolley@iomega.com

Roy, UT 84067

Mr. Dennis Moore (P) Phone: (303) 465-1800
KnowledgeTek, Inc. Fax: (303) 426-1350
7230 West 119th Pl, Suite C Email: dmoore@ix.netcom.com

Broomfield, CO 80020

Mr. Hayden Smith (0) Phone: (650) 969-4428
Lasercard Systems Corp. Fax: (650) 967-6524
2644 Bayshore Parkway Email: hsmith@laserca:

2644 Bayshore Parkway Email: hsmith@lasercard.com

Mountain View, CA 94043

Mr. Louis Grantham (P) Phone: (972) 396-7002 Fax: (972) 396-7533 Linfinity Micro

101 W. McDermott Email: lgrantham@linfinity.com

Allen, TX 75013

Phone: (719) 533-7560 Mr. John Lohmeyer (P) Fax: (719) 533-7183 LSI Logic Corp. Email: lohmeyer@t10.org 4420 ArrowsWest Dr.

Colorado Springs, CO 80907

Phone: (972) 503-3205 x228 Mr. Ralph O. Weber (A) LSI Logic Corp. Fax: (972) 503-2258 Suite 400 Email: roweber@acm.org

12377 Merit Drive Dallas, TX 75251

Ms. Jie Fan (P) Phone: (508) 752-2884 x306
Madison Cable Corp. Fax: (508) 752-4230
125 Goddard Memorial Dr. Email: jfan@madisoncable.com

Worchester, MA 01603

Mr. Michael Karg (A)
Madison Cable Corp. Phone: (508) 752-2884 x210 Fax: (508) 752-4230

Madison Cable Corp.

125 Goddard Memorial Drive Email: mkarg@madisoncable.com

Worcester, MA 01603

Mr. Takaharu Ai (0) Matsushita Elec. Indust. Co. Phone: +81-6-6906-2330 Fax: +81-6-906-1549 4-16-12 Email: aiai@dsd.mei.co.jp

Matsuo-cho

Kadoma, Osaka 571-8504 Japan

Mr. Hiroshi Ueda (O) Phone: +81-6-6900 9259

Matsushita Electric Fax:

Email: hueda@isl.mei.co.jp 1006 Kadoma Kadoma-shi

Osaka, Japan

Mr. Pete McLean (P) Phone: (303) 678-2149 Maxtor Corp. Fax: (303) 678-2165

2190 Miller Dr. Email: pete_mclean@maxtor.com

Longmont, CO 80501

Mr. Charley Riegger (A) Phone: (408) 432-4571 Maxtor Corp. Fax: (408) 432-4432

510 Cottonwood Dr. Email: charles_riegger@maxtor.com

Milpitas, CA 95035

Mr. LeRoy Leach (0) Phone: (303) 678-2828 Maxtor Corp. Fax: (303) 678-2308

2190 Miller Dr. Email: leroy_leach@maxtor.com

Longmont, CO 80501-6744

Mr. Randy Banton (0) Phone: (508) 256-1300 x134

Mercury Computer Fax: 199 Riverneck Road Email: Chelmsford, MA 01824

Mr. Bob Masterson (O) Phone: (708) 867-9600
Methode Electronics, Inc. Fax: (708) 867-3149
7444 West Wilson Ave Email: rwmast@methode.com

Chicago, IL 60656

Mr. Joe Dambach (P) Phone: (708) 527-4546 Molex Inc. Fax: (708) 969-1352 2222 Wellington Court Email: jdambach@molex.com

Lisle, IL 60532

Mr. Jay Neer (A) Phone: (561) 447-2907 Fax: (561) 447-2908 Molex Inc. 399 W. Camino Gardens Blvd. Email: jneer@molex.com

Suite 103

Boca Raton, FL 33432

Mr. Martin Ogbuokiri (O) Phone: (630) 527-4370 Fax: (630) 969-1352 Molex Inc. 2222 Wellington Court Email: mogbuokiri@molex.com

Data Comm

Lisle, IL 60532

Mr. Richard Wagner (0) Phone: (508) 791-3161 Montrose/CDT Fax: (508) 798-8353

28 Sword Street Email: rwagner@montrose-cdt.com

Auburn, MA 01501

Mr. Brian McKean (A#) Phone: (303) 381-4246 Mylex Corp. Fax: (303) 413-0464

4900 Pearl East Circle #104 Email: brianm@mylexboulder.com

Boulder, CO 80301-6108

Mr. Edward A. Gardner (P) Phone: (719) 593-8866 Ophidian Designs Fax: (719) 593-8989 1262 Hofstead Terrace Email: eag@ophidian.com Colorado Springs, CO 80907

Mr. Han Zou (P) Phone: (609) 734-7326 Panasonic Technologies, Inc Fax: (609) 987-8827

2 Research Way

Princeton, New Jersey 08540

Dr. Terry Nelson (A) Phone: (609) 734-7324 Panasonic Technologies, Inc Fax: (609) 987-8827

2 Research Way Email: tnelson@research.panasonic.com

Email: hanzou@research.panasonic.com

Princeton, NJ 08540

Mr. William P. McFerrin (P) Phone: (303) 651-5408 Philips Electronics Fax: (303) 682-3029 1860 Lefthand Circle Email: BMcFerrin@aol.com Longmont, CO 80501

Phone: (303) 651-5406 Mr. Randall C. Hines (A) Philips Electronics Fax: (303) 682-3029

Email: hinesr@worldnet.att.net 1860 Lefthand Circle

Longmont, CO 80501

Philips Semiconductors
811 E. Argues Ave. Phone: (408) 991-3348 Fax: (408) 991-2600

Email: frank.fang@philips.com

Sunnyvale, CA 94088-3409

Costa Mesa, CA 92626

Mr. Skip Jones (P) Phone: (714) 668-5058 QLogic Corp. Fax: (714) 688-5008 3545 Harbor Blvd. Email: sk_jones@qlc.com Mr. Richard Moore (A#) Phone: (714) 668-6816

QLogic Corp. Fax

3545 Harbor Blvd. Email: r_moore@qlc.com

Costa Mesa, CA 92626

Mr. Dean Wallace (A) Phone: (714) 668-5028
QLogic Corp. Fax: (714) 668-5095
3545 Harbor Blvd. Email: d_wallace@qlc.com

Costa Mesa, CA 92675

Mr. Mark Evans (P) Phone: (408) 894-4019 Quantum Corp. Fax: (408) 894-4990

500 McCarthy Blvd. Email: mark.evans@quantum.com

Milpitas, CA 95035

Mr. Patrick McGarrah (A) Phone: (508) 770-6364 Quantum Corp. Fax: (508) 770-2299

333 South St. Email: pat.mcgarrah@quantum.com

Shrewsbury, MA 01545

Mr. James McGrath (A#) Phone: (408) 894-4504
Quantum Corp. Fax: (408) 894-6375
500 McCarthy Blvd. Email: JMCGRATH@QNTM.COM

Milpitas, CA 95035

Mr. John A. Fobel (0) Phone: (909) 987-3966
Rancho Technology, Inc. Fax: (909) 989-2365
10783 Bell Court Email: johnf@rancho.com

Rancho Cucamonga, CA 91730

Mr. Ken-Ichi Kojima (O) Phone: 584-64-4399
Sanyo Electric Co., Ltd. Fax: 584-64-5096

180 Ohmori Anpachi-Cho Email:

Anpachi-Gun

Gifu-Ken 503-01 Japan

Mr. Gene Milligan (P) Phone: (405) 324-3070 Seagate Technology Fax: (405) 324-3794

MS OKM 251 Email: Gene_Milligan@notes.seagate.com

P. O. Box 12313

Oklahoma City, OK 73157

Mr. Gerald Houlder (A) Phone: (612) 402-2869 Seagate Technology Fax: (612) 402-3471

Mailstop SHK231 Email: gerry_houlder@notes.seagate.com

1280 Disc Drive

Shakopee, MN 55379-1863

Mr. Jon P. Baker (0) Phone: (405) 324-3591

Seagate Technology Fax:

10323 W. Reno Ave. Email: jon_baker@notes.seagate.com

Oklahoma City, OK 73116

Mr. Daniel (Dan) F. Smith (O) Phone: (408) 439-7146 Seagate Technology Fax: (408) 438-4846

4585 Scotts Valley Dr. Email: daniel_f_smith@notes.seagate.com

Scotts Valley, CA 95066-4544

Mr. Yasunori Hiyoshi (0) Phone: Seiko Epson Corp. Fax:

Corporate Res & Dev Email: yasunori.hiyoshi@exc.epson.co.jp

3-3-5 Owa Suma-Shi

Nagano-Ken 392-8502 Japan

Mr. Erhard Weiss (0) Phone: 49-821-804-3602 Fax: 49-821-804-2910 Siemens Nixdorf Depatment: SNI PC SB ESW Email: weiss.abg@sni.de

Burgermeister-Ulrich-St D-86199 Augsburg Germany

Mr. James Ryland (L) Phone: (410) 965-2166
Social Security Admin Fax: (410) 966-1893
NCC Room 5110 OMC liaison Email: JRYLAND@SSA.SSW.DHHS.GOV

6201 Security Blvd. Baltimore, MD 21234-0001

Boulder Creek, CA 95006

Phone: (408) 338-4285 Mr. Greg Alvey (0) Solution Technology Fax: (408) 338-4374 Email: kd6hnm@aol.com P.O. Box 104

 Mr. Dennis Pak (0)
 Phone: (408) 955-5247

 Sony Electronics, Inc.
 Fax: (408) 955-5066

 3300 Zanker Rd. MS# SJ-3B2
 Email: dennis_pak@asd.sel.sony.com

San Jose, CA 95134

Mr. Jeffrey Schroeder (0) Phone: (408) 487-3965 ST Microelectronics Fax: (408) 441-8470

Email: jeffrey.schroeder@st.com 1060 E. Brokaw Rd.

San Jose, CA 95131

Mr. Rich Wahler (0) Phone: (516) 435-6174 Standard Microsystems Corp. Fax: (516) 724-1505

300 Kennedy Drive Email:

Hauppauge, NY 11788

Mr. Erich Oetting (P) Phone: (303) 673-2178 Storage Technology Corp. Fax: (303) 673-8196 Storage Technology Corp. Fax: (303) 673-8196

2270 South 88th St. Email: erich_oetting@stortek.com

Louisville, CO 80028-0268

Phone: (303) 661-7271 Mr. Doug Charnley (A) Fax: (303) 673-8196 Storage Technology Corp.

2270 South 88th St. MS 0211 Email: doug_charnley@stortek.com Louisville, CO 80028-0211

Mr. David Peterson (0) Phone: (612) 391-1008 StorageTek Network Sys. Grp Fax: (612) 391-1095 7600 Brooklyn Blvd. Email: dap@network.com

Brooklyn Park, MN 55428

Mr. Robert N. Snively (P) Phone: (510) 574-9051
Sun Microsystems Computer Co Fax: (510) 574-9504
Mail Stop NWK04-104 Email: bob.snively@sun.com

901 San Antonio Road Palo Alto, CA 94303-4900

Mr. Franklin Ng (A) Phone: (510) 574-9195
Sun Microsystems Computer Co Fax: (510) 574-9501

MS NWK02-101 Email: franklin.ng@ebay.sun.com

901 San Antonio Rd. Palo Alto, CA 94303

Mr. Vit Novak (A) Phone: (650) 688-9033
Sun Microsystems, Inc. Fax: (650) 688-9265
Mail Stop 15-46 Email: vit.novak@sun.com

2550 Garcia Ave.
Mountain View, CA 94043-1100

Mr. Pete Tobias (A#) Phone: (408) 285-9913

Tandem, a Compaq Company Fax: (408) 285-9924 Loc 100-03 Email: tobias_pete@tandem.com

10555 Ridgeview Ct. Cupertino, CA 95014-0789

Mr. Ken Plourde (0) Phone: (508) 839-5987
Temp Flex Cable, Inc. Fax: (508) 839-4128
11 Depot St. Email: kplourde@templex.com

S. Grafton, MA 01560

Mr. Paul D. Aloisi (P) Phone: (603) 429-8687
Texas Instruments Fax: (603) 429-8963
MS: 84 Email: Paul_Aloisi@ti.com

7 Continental Blvd Merrimack, NH 03054

Mr. Stephen G. Finch (A#) Phone: (714) 573-6808 Texas Instruments Fax: (714) 573-6916

14351 Myford Road Email: steve.finch@tus.ssil.com

Tustin, CA 92780-7022

4010 Moorpark Ave. San Jose, CA 95117-1843

Mr. Robert Morris (A) Phone: (714) 573-6616

Texas Instruments Fax:

14351 Myford Rd. Email: bob.morris@ti.com

Tustin, CA 92780

Phone: (714) 573-6156 Mr. Paresh Sheth (A#) Texas Instruments Fax: (714) 573-6916 14351 Myford Rd. Email: paresh.sheth@ti.com

Tustin, CA 92780

Ms. Dora M. Deivert (O) Phone: (408) 952-3510 The JPM Company Fax: (408) 435-9775 Email: dmdeivert@jpmsj.com 2135 Ringwood Ave.

San Jose, CA 95131

Mr. Bill Youngman (0) Phone: (408) 952-3503 The JPM Company Fax: (408) 435-1109 2135 Ringwood Ave. Email: byoungman@jpmsj.com

San Jose, CA 95131

Mr. Fred Hooper (O) Phone: (203) 840-0583
Thomas & Betts Fax: (203) 840-0587 Thomas & Betts Fax: (203) 840-0587 5 Honeysuckle Dr. Email: fred_hooper@tnb.com

Norwalk, CT 06851

Mr. Davin Stockwell (O) Phone: (714) 951-6621 x3433 Thomas & Betts Corp. Fax: (714) 951-1016

Electronics Division Email: dstockwell@thombetts.com

Irvine, CA 92618

Mr. Tasuku Kasebayashi (P) Phone: (949) 461-3886 Toshiba America Elec. Comp. Fax: (949) 458-7815

35 Hammond

Irvine, CA 92618-1607

Email: task.kasebayashi@taec.toshiba.com

Phone: (717) 986-5534 Mr. Hank Herrmann (O) Tyco Electronics Fax: (717) 986-7070

Email: hank.herrmann@tycoelectronics.com PO Box 3608 MS 140-010 Harrisburg, PA 17105-3608

Phone: (717) 986-7235 Mr. Michael F. Laub (0) Tyco Electronics Fax: (717) 986-3334

2901 Fulling Mill Rd. Email: mike.laub@tycoelectronics.com

Middletown, PA 17057

Mr. Kenneth J. Hallam (P) Phone: (949) 380-5115 Fax: (949) 380-5858 UNISYS Corporation

MV201

25725 Jeronimo Road Mission Viejo, CA 92691 Email: ken.hallam@unisys.com

Mr. Arlan P. Stone (A) Phone: (949) 380-5982 UNISYS Corporation Fax: (949) 380-5858

MS 201 Email: arlan.stone@unisys.com

25725 Jeronemo Rd. Mission Viejo, CA 92691

Mr. Dave Wehrman (0) Phone: (313) 426-8847 UNISYS Corporation Fax: (313) 426-8847

11716 Highridge Email: dave.wehrman2@unisys.com

Pinckney, MI 48169

Mr. Marq Elliott (0) Phone: (408) 662-7900

Verisys Fax: 335-H Spreckels Dr. Email: Aptos, CA 95003

Mr. Michael G. Kaminski (0) Phone: (408) 945-7766 Volex Inc. Fax: (408) 945-4360

835 Sinclair Frontage Road Email: Mike_Kaminski@volex.com

Milpitas, CA 95035

Mr. Praveen Viraraghavan (A) Phone: (507) 286-7668 Western Digital Corp. Fax: (507) 286-7079

1599 N Broadway Email: Praveen.Viraraghavan@wdc.com

Rochester, MN 55906

Mr. Jeffrey L. Williams (P) Phone: (507) 286-7589 Western Digital Corporation Fax: (507) 536-8089 1599 N. Broadway Ave. Email: Jeffrey.L.Will

1599 N. Broadway Ave. Email: Jeffrey.L.Williams@wdc.com

Rochester, MN 55906

Mr. Paul Anderson (0) Phone: (970) 593-0392

Western Digital Corporation Fax:

2126 Breckenridge Dr. Email: paul.m.anderson@wdc.com Berthoud, CO 80513

Mr. Doug Piper (0) Phone: (803) 967-1751 Woven Electronics Fax: (803) 963-1761

PO Box 189 Email: doug.piper@wovenelectronics.com

Mauldin, SC 29662

Mr. Harvey Waltersdorf (0) Phone: (803) 967-1793 Woven Electronics Fax: (803) 963-1761

PO Box 189 Email: harvey.waltersdorf@wovenelectronics.

com

Mauldin, SC 29662

Mr. Larry Aszmann (0) Phone: (612) 828-5978 Fax: (612) 828-5990 Xiotech Corp. #200 Email: laszmann@xiotech.com

6509 Flying Cloud Dr.

Eden Prairie, MN 55344

Mr. Arnold Limjoco (O) Phone: (408) 456-0797 x134 Yamaichi Electronics Fax: (408) 456-0799 2235 Zanker Rd. Email: arnold.l@yeu.com San Jose, CA 95131

Enclosure(3) -- T10 Document Database

Generated on 1999/11/10 at 10:13:30

T10/99-001R0 Date: 1999/03/18 Author: John Lohmeyer Mailing: 1999_1 Agenda for T10 Meeting #31 (May '99)

T10/99-001R1 Date: 1999/03/24 Author: John Lohmeyer Mailing: 1999_1 Agenda for T10 Meeting #31 (May '99)

T10/99-002R0 Date: 1999/03/18 Author: John Lohmeyer Mailing: 1999_1 T10 Project Summary - Mar '99

T10/99-003R0 Date: 1999/03/18 Author: John Lohmeyer Mailing: 1999_1 Jeopardy letter for May '99 meeting

T10/99-004R0 Date: 1999/05/14 Author: John Lohmeyer Mailing: 1999_2 Agenda for T10 Meeting #32 (July '99)

T10/99-005R0 Date: 1999/05/11 Author: John Lohmeyer Mailing: 1999_2 T10 Project Summary - May '99

T10/99-006R0 Date: 1999/05/11 Author: John Lohmeyer Mailing: 1999_2 Jeopardy letter for July '99 meeting

T10/99-007R0 Date: 1999/07/23 Author: John Lohmeyer Mailing: 1999_3 Agenda for T10 Meeting #33 (September '99)

T10/99-008R0 Date: 1999/07/26 Author: John Lohmeyer Mailing: 1999_3 T10 Project Summary - July '99

T10/99-009R0 Date: 1999/07/26 Author: John Lohmeyer Mailing: 1999_3 Jeopardy letter for September '99 meeting

T10/99-010R0 Date: 1999/06/03 Author: John Lohmeyer Mailing: 1999_3 Letter Ballot on forwarding SSC to first public review

T10/99-011R0 Date: 1999/07/06 Author: John Lohmeyer Mailing: 1999_3 Results of letter ballot 99-010 on forwarding SSC

T10/99-011R1 Date: 1999/07/06 Author: John Lohmeyer Mailing: 1999_3 Results of letter ballot 99-010 on forwarding SSC

T10/99-011R2 Date: 1999/07/10 Author: John Lohmeyer Mailing: 1999_3 Results of letter ballot 99-010 on forwarding SSC

T10/99-012R0 Date: 1999/10/01 Author: J. Lohmeyer Mailing: 1999_4 Agenda for T10 Meeting #34 (November '99)

T10/99-012R1 Date: 1999/10/19 Author: J. Lohmeyer Mailing: Agenda for T10 Meeting #34 (November '99)

T10/99-013R0 Date: 1999/10/01 Author: J. Lohmeyer Mailing: 1999_4 T10 Project Summary - September '99

T10/99-014R0 Date: 1999/10/01 Author: J. Lohmeyer Mailing: 1999_4 Jeopardy Letter for November '99 meeting

T10/99-015R0 Date: 1999/09/28 Author: J. Lohmeyer Mailing: 1999_4 Letter Ballot on forwarding SPI-3 to first public review

T10/99-016R0 Date: 1999/10/29 Author: John Lohmeyer Results of letter ballot 99-015 on forwarding SPI-3	Mailing:	1999_5
T10/99-017R0 Date: 1999/11/08 Author: J. Lohmeyer Agenda for T10 Meeting #35 (January '00)	Mailing:	Missing
T10/99-018R0 Date: 1999/11/08 Author: J. Lohmeyer Agenda for T10 Meeting #35 (January '00)	Mailing:	Missing
T10/99-019R0 Date: 1999/11/08 Author: J. Lohmeyer Jeopardy Letter for January '00 meeting	Mailing:	Missing
T10/99-101R0 Date: 1998/12/04 Author: Ron Roberts Minutes of MMC-2 Working Group - 11/30 - 12/2/98	Mailing:	1999_1
T10/99-102R0 Date: 1998/12/08 Author: Larry Lamers Unexpected Bus Free Timeout Function	Mailing:	1999_1
T10/99-102R1 Date: 1999/01/25 Author: Larry Lamers UBF Timeout Function	Mailing:	1999_1
T10/99-102R2 Date: 1999/01/27 Author: Larry Lamers Synchronous Transfer Timeout Function	Mailing:	1999_1
T10/99-102R3 Date: 1999/01/28 Author: Larry Lamers STT Timeout Function	Mailing:	1999_1
T10/99-102R4 Date: 1999/02/05 Author: Larry Lamers STT Timeout Function	Mailing:	1999_1
T10/99-102R5 Date: 1999/03/10 Author: Larry Lamers STT Timeout Function	Mailing:	1999_1
T10/99-103R0 Date: 1998/12/17 Author: John Lohmeyer Minutes of SPI-3 Working Group - January 26-27, 1999	Mailing:	1999_1
T10/99-104R0 Date: 1999/01/10 Author: George Penokie Message Information Unit Definition	Mailing:	1999_1
T10/99-104R1 Date: 1999/03/09 Author: George Penokie Message Information Unit Definition	Mailing:	1999_1
T10/99-105R0 Date: 1999/01/06 Author: Stewart Wyatt Minutes of Fibre Channel Tape Profile Meeting - 12/16/98	Mailing:	1999_1
T10/99-106R0 Date: 1999/01/06 Author: Penman, Mottahedin, Nazir, & Moore	Mailing:	1999_1
Case Study: Fast-80 Setup and Hold Timings		
T10/99-107R0 Date: 1998/12/10 Author: ISO/IEC JTC 1/SC 25	Mailing:	1999_1
Optical Memory Card Device Commands (SCSI OMC)		
T10/99-108R0 Date: 1999/01/07 Author: John Lohmeyer Clarification of interaction of SDTR/WDTR messages with PP	Mailing: R message	
T10/99-108R1 Date: 1999/01/27 Author: John Lohmeyer	Mailing:	1999_1

Clarification of interaction of SDTR/WDTR messages with PPR message

T10/99-108R2 Date: 1999/02/09 Author: John Lohmeyer Mailing: 1999_1 Clarification of interaction of SDTR/WDTR messages with PPR message

T10/99-108R3 Date: 1999/03/09 Author: John Lohmeyer Mailing: 1999_1 Clarification of interaction of SDTR/WDTR messages with PPR message

T10/99-109R0 Date: 1999/01/07 Author: John Lohmeyer Mailing: 1999_1 Clarification of MODIFY DATA POINTER message

T10/99-110R0 Date: 1999/01/07 Author: Gene Milligan Mailing: 1999_1 SCSI Version Proposal Flavor Two for SPC-2

T10/99-110R1 Date: 1999/03/04 Author: Gene Milligan Mailing: 1999_1 SCSI Version Proposal Flavor Two for SPC-2

T10/99-110R2 Date: Author: Gene Milligan Mailing: 1999_1 SCSI Version Proposal Flavor Two for SPC-2

T10/99-111R0 Date: 1999/01/26 Author: Zane Daggett Mailing: 1999_1 Recommended changes to SPI-3 Tables

T10/99-111R1 Date: 1999/05/11 Author: Zane Daggett Mailing: 1999_3 Recommended for content in SPI-3 relating to cable performance

T10/99-111R3 Date: 1999/06/15 Author: Zane Daggett Mailing: 1999_3 Recommendations for content in SPI-3 relating to cable performance

T10/99-111R4 Date: 1999/07/28 Author: Bill Ham Mailing: 1999_4 Recommendations for content in SPI-3 relating to cable performance

T10/99-111R5 Date: 1999/08/31 Author: Bill Ham Mailing: 1999_4 Recommendations for content in SPI-3 relating to cable performance

T10/99-111R6 Date: 1999/09/13 Author: Bill Ham Mailing: 1999_4 Recommendations for content in SPI-3 relating to cable performance

T10/99-111R7 Date: 1999/09/28 Author: Bill Ham Mailing: 1999_4 Recommendations for content in SPI-3 relating to cable performance

T10/99-112R0 Date: 1999/01/22 Author: Bill Galloway Mailing: 1999_1 Synchronous ATN timing

T10/99-112R1 Date: 1999/03/07 Author: Bill Galloway Mailing: 1999_1 Synchronous ATN timing

T10/99-112R2 Date: 1999/03/13 Author: Bill Galloway Mailing: 1999_1 Synchronous ATN timing

T10/99-113R0 Date: 1999/01/22 Author: Bill Galloway Mailing: 1999_1 DiffSense Timing

T10/99-113R1 Date: 1999/03/07 Author: Bill Galloway Mailing: 1999_1 DiffSense Timing

T10/99-113R2 Date: 1999/03/13 Author: Bill Galloway Mailing: 1999_1 DiffSense Timing

T10/99-114R0 Date: 1999/01/22 Author: Bill Galloway Mailing: 1999_1

LVD Receiver offset voltage

T10/99-115R0 Date: 1999/01/22 Author: Keld Simonsen Mailing: 1999_1

Tips & Techniques for JTC 1 web-based distribution

T10/99-116R0 Date: 1999/01/22 Author: Jie Fan Mailing: 1999_1

Cable Testing Requirements

T10/99-116R1 Date: 1999/01/26 Author: Jie Fan Mailing: 1999_1

Cable Testing Requirements

T10/99-117R0 Date: 1999/01/22 Author: ISO Mailing: 1999_1

ISO's long-range strategies 1999-2001

T10/99-118R0 Date: 1999/01/25 Author: Jim McGrath Mailing: 1999_1

Common CRC for DT and Packetized SCSI

T10/99-119R0 Date: 1999/02/26 Author: Jim McGrath Mailing: 1999_1
Protection for the Asynchronous Information phases (Command, Message, Status)

T10/99-119R1 Date: 1999/03/05 Author: Jim McGrath Mailing: 1999_1
Protection for the Asynchronous Information phases (Command, Message, Status)

T10/99-119R2 Date: 1999/04/06 Author: Mark Evans and Mailing: 1999_2 Bruce Leshay

Protection for the Asynchronous Information phases (Command, Message, Status)

T10/99-119R3 Date: 1999/04/21 Author: Mark Evans and Mailing: 1999_2 Bruce Leshay

Protection for the Asynchronous Information phases (Command, Message, Status)

T10/99-119R4 Date: 1999/04/23 Author: Mark Evans and Mailing: 1999_2 Bruce Leshay

Protection for the Asynchronous Information phases (Command, Message, Status)

T10/99-119R5 Date: 1999/05/28 Author: Mark Evans and Mailing: 1999_3
Bruce Leshay

Protection for the Asynchronous Information phases (Command, Message, Status)

T10/99-119R6 Date: 1999/06/21 Author: Mark Evans and Mailing: 1999_3
Bruce Leshay

Protection for the Asynchronous Information phases (Command, Message, Status)

T10/99-120R0 Date: 1999/01/22 Author: Gene Milligan Mailing: 1999_1

SCSI ATN Timing Sort of Proposal for SPI-3 $\,$

T10/99-121R0 Date: 1999/02/10 Author: Rob Sims Mailing: 1999_1

Mt. Fuji Commands for Multimedia Devices

T10/99-122R0 Date: 1999/01/25 Author: Frank Gasparik Mailing: 1999_1

SPI-3 LVD Setup/Hold Time Issues

T10/99-123R0 Date: 1999/01/26 Author: Vince Bastiani Mailing: 1999_1

Setup and Hold Time Measurements

T10/99-124R0 Date: 1999/01/24 Author: Bruce Leshay Mailing: 1999_1

Packetized CRC Proposal

T10/99-125R0 Date: 1999/01/27 Author: Ron Rober Minutes of MMC-2 Working Group - 1/25-27/99	ts Mailing: 1999_1
T10/99-126R0 Date: Author: not used	Mailing: Missing
T10/99-127R0 Date: 1999/01/27 Author: Paul Aloi Proposed changes to SPI-3 LVD AC timing diagrams	si Mailing: 1999_1
T10/99-127R1 Date: 1999/01/28 Author: Paul Aloi Proposed changes to SPI-3 LVD AC timing diagrams	si Mailing: 1999_1
T10/99-127R2 Date: 1999/03/09 Author: Paul Aloi LVD Timing Diagram Correction	si Mailing: 1999_1
T10/99-127R3 Date: 1999/03/09 Author: Paul Aloi LVD Timing Diagram Correction	si Mailing: 1999_1
T10/99-127R4 Date: 1999/03/09 Author: Paul Aloi LVD Timing Diagram Correction	si Mailing: 1999_1
T10/99-127R5 Date: 1999/05/05 Author: Paul Aloi LVD Timing Diagram Correction	si Mailing: 1999_2
T10/99-127R6 Date: 1999/05/27 Author: Paul Aloi LVD Timing Diagram Correction	si Mailing: 1999_3
T10/99-127R7 Date: 1999/07/12 Author: Paul Aloi LVD Timing Diagram Correction	si Mailing: 1999_3
T10/99-127R8 Date: 1999/07/13 Author: Paul Aloi LVD Timing Diagram Correction	si Mailing: 1999_3
T10/99-128R0 Date: 1999/02/02 Author: Hayden Sm Comments on Draft 14776-381 (SCSI OMC)	ith Mailing: 1999_1
T10/99-128R1 Date: 1999/03/16 Author: Hayden Sm Comments on Draft 14776-381 (SCSI OMC)	ith Mailing: 1999_1
T10/99-129R0 Date: 1999/02/02 Author: Ralph Web George Pe	_
Minutes of SPC-2 Working Group - 1/28/99	
T10/99-130R0 Date: 1999/02/10 Author: George Pe Changes to INQUIRY	nokie Mailing: 1999_1
T10/99-130R1 Date: 1999/03/10 Author: George Pe Changes to INQUIRY	nokie Mailing: 1999_1
T10/99-131R0 Date: 1999/02/05 Author: Tariq Abo / Vince B Setup and hold time measurements for Ultra 160/m	1 3 =
-	
T10/99-132R0 Date: 1999/03/07 Author: Bill Gall Removing zero length data transfers with CRC	oway Mailing: 1999_1
T10/99-133R0 Date: 1999/03/07 Author: Bill Gall Timing for SCSI RST line	oway Mailing: 1999_1

T10/99-134R0 Date: 1999/03/07 Author: Bill Galloway Mailing: 1999_1 PPR Protocol options negotiation T10/99-134R1 Date: 1999/03/13 Author: Bill Galloway Mailing: 1999_1 PPR Protocol options negotiation T10/99-135R0 Date: 1999/03/16 Author: Weber & Lohmeyer Mailing: 1999_1 Minutes of SPI-3 Working Group - March 9, 1999 T10/99-135R1 Date: 1999/03/23 Author: Weber & Lohmeyer Mailing: 1999_1 Minutes of SPI-3 Working Group - March 9, 1999 T10/99-136R0 Date: 1999/03/17 Author: Weber & Lohmeyer Mailing: 1999_1 Minutes of SCSI-3 Working Group - March 10, 1999 T10/99-137R0 Date: 1999/03/17 Author: Weber & Lohmeyer Mailing: 1999_1 Minutes of T10 Plenary Meeting #30 - March 11, 1999 T10/99-137R1 Date: 1999/03/23 Author: Weber & Lohmeyer Mailing: 1999_1 Minutes of T10 Plenary Meeting #30 - March 11, 1999 T10/99-138R0 Date: 1999/02/09 Author: Larry Lamers Mailing: 1999_1 Patent Letter for SPI-3 from Adaptec T10/99-139R0 Date: 1999/03/04 Author: Gene Milligan, Mailing: 1999_1 George Penokie, & Larry Lamers Packet Protocol Extensions T10/99-139R1 Date: 1999/03/10 Author: Gene Milligan, Mailing: 1999_1 George Penokie, & Larry Lamers Packet Protocol Extensions T10/99-139R2 Date: 1999/03/10 Author: Gene Milligan, Mailing: 1999_1 George Penokie, & Larry Lamers Packet Protocol Extensions T10/99-139R3 Date: 1999/03/15 Author: Gene Milligan, Mailing: 1999_1 George Penokie, & Larry Lamers Packet Protocol Extensions T10/99-139R4 Date: 1999/04/08 Author: Gene Milligan, Mailing: 1999_2 George Penokie, & Larry Lamers Packet Protocol Extensions T10/99-140R0 Date: 1999/02/28 Author: Larry Lamers Mailing: 1999_1 Project Proposal for SCSI Parallel Interface - 4 (SPI-4) T10/99-140R1 Date: 1999/03/24 Author: Larry Lamers Mailing: 1999_1 Project Proposal for SCSI Parallel Interface - 4 (SPI-4) T10/99-140R2 Date: 1999/05/06 Author: Larry Lamers Mailing: 1999_2 Project Proposal for SCSI Parallel Interface - 4 (SPI-4) Mailing: 1999_2 T10/99-140R3 Date: 1999/05/06 Author: Larry Lamers

Project Proposal for SCSI Parallel Interface - 4 (SPI-4)

T10/99-141R0 Date: 1999/02/26 Author: Larry Lamers Mailing: Missing

A Common CRC Method for Packetized and Legacy Devices

T10/99-142R0 Date: 1999/09/08 Author: Larry Lamers Mailing: 1999_4

Flow Control

T10/99-143R0 Date: 1999/03/02 Author: Steve Wilson Mailing: 1999_1

Extended Copy Command

T10/99-143R1 Date: 1999/04/02 Author: Steve Wilson Mailing: 1999_2

Extended Copy Command

T10/99-144R0 Date: 1999/03/01 Author: Bob Snively Mailing: 1999_1

Suggested changes to REPORT LUNS command for SPC-2

T10/99-144R1 Date: 1999/03/15 Author: Bob Snively Mailing: 1999_1

Suggested changes to REPORT LUNS command for SPC-2

T10/99-145R0 Date: 1999/03/01 Author: Stewart Wyatt Mailing: 1999_1

Minutes of Joint T11/T10 FC-TAPE Meeting - 2/10-11/99

T10/99-146R0 Date: 1999/03/02 Author: Bob Snively Mailing: 1999_1

Correction in interaction of persistent and legacy reservations

T10/99-146R1 Date: 1999/03/15 Author: Bob Snively Mailing: 1999_1

Correction in interaction of persistent and legacy reservations

T10/99-147R0 Date: 1999/03/05 Author: Bob Snively Mailing: 1999_1

Make CT and TTD obsolete

T10/99-148R0 Date: 1999/03/18 Author: Ian 'Sid' Mailing: 1999_1

Crighton

Memory in Cartridge proposal

T10/99-148R1 Date: 1999/05/19 Author: Ian 'Sid' Mailing: 1999_3

Crighton

Proposal for Storage and Access of Data on Media Auxiliary Memory

T10/99-148R2 Date: 1999/09/08 Author: Ian 'Sid' Mailing: 1999_4

Crighton

Proposal for Storage and Access of Data on Media Auxiliary Memory

T10/99-148R3 Date: 1999/10/22 Author: Steve Jerman Mailing: 1999_5

Proposed Addition of Read and Write Attribute Commands to SPC-2

T10/99-149R0 Date: 1999/03/08 Author: Bill Ham Mailing: 1999_1

Revised SPI-3 Timing Diagram

T10/99-150R0 Date: 1999/03/08 Author: Richard Mailing: 1999_1

Tomaszewski, Tom

Grieff, & Rob

Elliott

Justification for asynchronous information phase protection

T10/99-151R0 Date: 1999/03/04 Author: Gene Milligan, Mailing: 1999_1

George Penokie, and Larry Lamers

Packet Protocol Extensions Illustrations (see 99-139r3)

T10/99-152R0 Date: 1999/03/09 Author: Ron Roberts Mailing: 1999_1

Minutes of MMC-2 Working Group - 3/9-10/99

T10/99-153R0 Date: 1999/05/06 Author: Ron Roberts Mailing: 1999_2

Project Proposal for MMC-3

T10/99-153R1 Date: 1999/05/06 Author: Ron Roberts Mailing: 1999_2

Project Proposal for MMC-3

T10/99-153R2 Date: 1999/05/06 Author: Ron Roberts Mailing: 1999_2

Project Proposal for MMC-3

T10/99-154R0 Date: 1999/05/06 Author: Ron Roberts Mailing: 1999_2

Project Proposal for RMC

T10/99-154R1 Date: 1999/05/06 Author: Ron Roberts Mailing: 1999_2

Project Proposal for RMC

T10/99-154R2 Date: 1999/05/06 Author: Ron Roberts Mailing: 1999_2

Project Proposal for RMC

T10/99-155R0 Date: 1999/03/09 Author: Gene Milligan Mailing: 1999_1

Timing Diagram

T10/99-156R0 Date: 1999/03/09 Author: Bill Ham and Mailing: 1999_1

Zane Daggett

Report from the SCSI Cable Testing Ad hoc -- March 2, 1999

T10/99-157R0 Date: 1999/03/10 Author: Bruce Leshay Mailing: 1999_1

Proposed edit to SPI-3 on P_CRCA transitions during DT transfers

T10/99-157R1 Date: 1999/03/17 Author: Bruce Leshay Mailing: 1999_2

Proposed edit to SPI-3 on P_CRCA transitions during DT transfers

T10/99-158R0 Date: 1999/03/10 Author: Bob Snively Mailing: 1999_1

Very long CDBs in FCP-2 and SPI-3

T10/99-158R1 Date: 1999/03/15 Author: Bob Snively Mailing: 1999_1

Very long CDBs in FCP-2 and SPI-3

T10/99-158R2 Date: 1999/03/17 Author: Bob Snively Mailing: 1999_1

Very long CDBs in FCP-2 and SPI-3

T10/99-158R3 Date: 1999/03/17 Author: Bob Snively Mailing: 1999_2

Very long CDBs in FCP-2 and SPI-3

T10/99-158R4 Date: 1999/04/28 Author: Bob Snively Mailing: 1999_2

Very long CDBs in FCP-2 and SPI-3

T10/99-159R0 Date: 1999/03/09 Author: Dale LaFollette Mailing: 1999_1

Joint T10/T11 FC-TAPE / SSC / FCP-2 Liaison Report

T10/99-160R0 Date: 1999/04/01 Author: Rob Elliott & Mailing: 1999_2

Gerry Houlder

Arbitration Fairness Control (in SPC-2/SPI-3/FCP-2)

T10/99-160R1 Date: 1999/04/21 Author: Rob Elliott & Mailing: 1999_2

Gerry Houlder Arbitration Fairness Control (in SPC-2/SPI-3/FCP-2)	
T10/99-160R2 Date: 1999/05/05 Author: Rob Elliott & Gerry Houlder	Mailing: 1999_2
Arbitration Fairness Control (in SPC-2/SPI-3/FCP-2)	
T10/99-160R3 Date: 1999/06/27 Author: Rob Elliott Normal Arbitration Fairness Control in SPI-3	Mailing: 1999_3
T10/99-161R0 Date: 1999/03/11 Author: Larry Lamers Meeting Notice - SPI-3 Working Group 4/7-8/99	Mailing: 1999_1
T10/99-162R0 Date: 1999/03/15 Author: Stewart Wyatt Minutes of Joint T11/T10 FC-TAPE Meeting - 3/9/99	Mailing: 1999_1
T10/99-163R0 Date: 1999/05/01 Author: Ralph Weber Comments on Extended Copy	Mailing: 1999_2
T10/99-163R1 Date: 1999/05/13 Author: Ralph Weber EXTENDED COPY command for SPC-2	Mailing: 1999_2
T10/99-163R2 Date: 1999/07/22 Author: Ralph Weber EXTENDED COPY command for SPC-2	Mailing: 1999_2
T10/99-164R0 Date: 1999/03/11 Author: Gene Milligan ISO Report for March 1999	Mailing: 1999_1
T10/99-165R0 Date: 1999/03/22 Author: Lamers and Lohmeyer	Mailing: 1999_1
CONTINUE TASK Message	
T10/99-166R0 Date: 1999/03/24 Author: Larry Lamers Enabling Upper Byte Hamming	Mailing: 1999_1
T10/99-166R1 Date: 1999/03/26 Author: Larry Lamers Enabling Upper Byte Hamming	Mailing: 1999_2
T10/99-166R2 Date: 1999/03/31 Author: Larry Lamers Enabling Upper Byte Hamming	Mailing: 1999_2
T10/99-166R3 Date: 1999/04/07 Author: Larry Lamers Enabling Upper Byte Hamming	Mailing: 1999_2
T10/99-167R0 Date: 1999/04/08 Author: John Lohmeyer Minutes of SPI-3 Working Group - April 7-8, 1999	Mailing: 1999_2
T10/99-167R1 Date: 1999/04/13 Author: John Lohmeyer Minutes of SPI-3 Working Group - April 7-8, 1999	Mailing: 1999_2
T10/99-168R0 Date: 1999/03/15 Author: Bob Snively FCP-2 changes from revision 0 to revision 1	Mailing: 1999_2
T10/99-168R1 Date: 1999/03/31 Author: Bob Snively FCP-2 changes from revision 0 to revision 1	Mailing: 1999_2
T10/99-168R2 Date: 1999/04/27 Author: Bob Snively FCP-2 changes from revision 0 to revision 1	Mailing: 1999_2

T10/99-169R0 Date: 1999/03/31 Author: Larry Lamers & Vince Bastiani	Mailing:	1999_2
Groundwork for Expander Communication		
T10/99-169R1 Date: 1999/04/08 Author: Larry Lamers & Vince Bastiani	Mailing:	1999_2
Groundwork for Expander Communication		
T10/99-170R0 Date: 1999/04/04 Author: Bill Galloway Packetized cleanup and improvements	Mailing:	1999_2
T10/99-170R1 Date: 1999/04/09 Author: Bill Galloway Packetized cleanup and improvements	Mailing:	1999_2
T10/99-171R0 Date: 1999/04/07 Author: Bill Ham Implied Assumptions in SPI-3 Timing Budget	Mailing:	Missing
T10/99-172R0 Date: 1999/04/07 Author: Bill Ham & Zane Daggett	Mailing:	1999_2
Report on April 6th Cable Performance meeting		
T10/99-173R0 Date: 1999/04/08 Author: Bill Galloway Restrict QAS to Packetized	Mailing:	1999_2
T10/99-174R0 Date: 1999/04/12 Author: George Penokie Annex A Modification	Mailing:	1999_2
T10/99-175R0 Date: 1999/05/07 Author: Weber & Lohmeyer Minutes of SPI-3 Working Group - May 2-3, 1999	Mailing:	1999_2
T10/99-175R1 Date: 1999/05/20 Author: Weber & Lohmeyer Minutes of SPI-3 Working Group - May 2-3, 1999	Mailing:	1999_2
T10/99-176R0 Date: 1999/05/10 Author: Weber & Lohmeyer Minutes of SCSI-3 Working Group - May 5, 1999	Mailing:	1999_2
T10/99-177R0 Date: 1999/05/12 Author: Weber & Lohmeyer Minutes of T10 Plenary Meeting #31 - May 6, 1999	Mailing:	1999_2
T10/99-177R1 Date: 1999/05/20 Author: Weber & Lohmeyer Minutes of T10 Plenary Meeting #31 - May 6, 1999	Mailing:	1999_2
T10/99-178R0 Date: 1999/04/20 Author: Stewart Wyatt Minutes of Joint T11/T10 FC-Tape Working Group - April 14-	_	1999_2
T10/99-179R0 Date: 1999/04/26 Author: Mark Evans Hard Drive Self Tests	Mailing:	1999_2
T10/99-179R1 Date: 1999/05/14 Author: Mark Evans Hard Drive Self Tests	Mailing:	1999_2
T10/99-179R2 Date: 1999/07/08 Author: Mark Evans Logical Unit Self Tests	Mailing:	1999_3
T10/99-179R3 Date: 1999/07/23 Author: Mark Evans Logical Unit Self Tests	Mailing:	1999_4
T10/99-179R4 Date: 1999/07/29 Author: Mark Evans Logical Unit Self Tests	Mailing:	1999_4

T10/99-179R5 Date: 1999/09/15 Author: Logical Unit Self Tests	Mark Evans	Mailing: 1999_4
T10/99-180R0 Date: 1999/04/22 Author: Application Client Log Page proposal	Gerry Houlder	Mailing: 1999_2
T10/99-180R1 Date: 1999/07/15 Author: Application Client Log Page proposal	Gerry Houlder	Mailing: 1999_3
T10/99-181R0 Date: 1999/04/23 Author: SSC Compression Algorithm default values	Rob Elliott and Carl Zeitler	Mailing: 1999_2
SSC Compression Argorithm default values	5	
T10/99-182R0 Date: 1999/04/27 Author: Still more on Persistent Reservations	Tom Coughlan	Mailing: 1999_2
T10/99-182R1 Date: 1999/05/05 Author: Still more on Persistent Reservations	Tom Coughlan	Mailing: 1999_2
T10/99-183R0 Date: 1999/04/27 Author: Slow DT Timing Revision Proposal for SPI	J	Mailing: 1999_2
T10/99-183R1 Date: 1999/05/02 Author: Slow DT Timing Revision Proposal for SPI	Gene Milligan -3	Mailing: 1999_2
T10/99-184R0 Date: 1999/04/29 Author: Miscellaneous SPI-3 Technical Changes	George Penokie	Mailing: 1999_2
T10/99-184R1 Date: 1999/04/29 Author: Miscellaneous SPI-3 Technical Changes	George Penokie	Mailing: 1999_2
T10/99-185R0 Date: 1999/05/01 Author:	Rob Elliott & Keith Childs	Mailing: 1999_2
Change CRC timing values		
T10/99-185R1 Date: 1999/05/10 Author:	Rob Elliott & Keith Childs	Mailing: 1999_2
Change CRC timing values		
T10/99-185R2 Date: 1999/06/25 Author:	Rob Elliott & Keith Childs	Mailing: 1999_3
Change CRC timing values		
T10/99-186R0 Date: 1999/05/03 Author: ISO Report for May 1999	Gene Milligan	Mailing: 1999_2
T10/99-187R0 Date: 1999/05/10 Author: Proposal to change MSE High-Z Current Sp	-	_
T10/99-187R1 Date: 1999/06/18 Author: Proposal to change MSE high-impedance cu	_	_
T10/99-187R2 Date: 1999/07/12 Author: Proposal to change MSE high-impedance cu	-	Mailing: 1999_3 n in SPI-3
T10/99-188R0 Date: 1999/05/04 Author: SPI-3, rev 7, Section 7 Table and Figure		Mailing: 1999_3

T10/99-188R1 Date: 1999/07/13 Author: Dan Smith Mailing: 1999_3 SPI-3, rev 7, Section 7 Table and Figure Clarification

T10/99-189R0 Date: 1999/05/05 Author: Gerry Houlder Mailing: 1999_2 SBC-2: Clarification of ECC Correction Span Field (>255 bits)

T10/99-190R0 Date: Author: Mailing: Missing (not used)

T10/99-191R0 Date: 1999/05/12 Author: Richard Moore Mailing: 1999_2 Release Glitch Management for QAS

T10/99-191R1 Date: 1999/07/13 Author: Richard Moore Mailing: 1999_3 Release Glitch Management for QAS

T10/99-192R0 Date: 1999/05/11 Author: Barry Blount Mailing: 1999_2 Compaq patent position re US Patent 5,586,272 pertaining to SPI-2

T10/99-193R0 Date: 1999/05/11 Author: Stewart Wyatt Mailing: 1999_2 Minutes of Joint T10/T11 FC_TAPE Meeting - May 4, 1999

T10/99-194R0 Date: 1999/05/21 Author: Larry Lamers Mailing: 1999_3 Meeting Notice - CAM-3 Working Group - June 29-30, 1999

T10/99-195R0 Date: Author: Mailing: Missing (not used)

T10/99-196R0 Date: 1999/06/01 Author: Paul Aloisi Mailing: 1999_3 SPI-3 Assumptions for receiver and driver levels

T10/99-197RO Date: 1999/05/28 Author: Rob Elliott Mailing: 1999_3 REPORT LUNS and small allocation lengths

T10/99-198R0 Date: 1999/06/06 Author: Ralph Weber / Mailing: 1999_3
Deborah Donovan

Public Review Comment #1 on NCITS 330:199x (RBC)

T10/99-199R0 Date: 1999/06/22 Author: Tom Coughlan and Mailing: 1999_3

John Meneghini
Persistent Reservation: Register and Ignore Existing Key

T10/99-200R0 Date: 1999/07/20 Author: Weber & Lohmeyer Mailing: 1999_3 Minutes of SPI-3 Working Group - July 12-13, 1999

T10/99-200R1 Date: 1999/07/26 Author: Weber & Lohmeyer Mailing: 1999_3 Minutes of SPI-3 Working Group - July 12-13, 1999

T10/99-201R0 Date: 1999/07/21 Author: Weber & Lohmeyer Mailing: 1999_3 Minutes of SCSI Working Group - July 14, 1999

T10/99-201R1 Date: 1999/07/26 Author: Weber & Lohmeyer Mailing: 1999_3 Minutes of SCSI Working Group - July 14, 1999

T10/99-202R0 Date: 1999/07/23 Author: Weber & Lohmeyer Mailing: 1999_3 Minutes of T10 Plenary Meeting #32 - July 15, 1999

T10/99-202R1 Date: 1999/08/12 Author: Weber & Lohmeyer Mailing: 1999_4 Minutes of T10 Plenary Meeting #32 - July 15, 1999

T10/99-203R0 Date: 1999/06/16 Author: Paul Aloisi Mailing: 1999_3 Modeling LVD Terminators T10/99-204R0 Date: 1999/06/18 Author: Dean Wallace Mailing: Missing Simulation Document T10/99-205R0 Date: 1999/06/21 Author: Dean Wallace Mailing: 1999_3 Minutes of SCSI signal modeling study group - June 16, 1999 T10/99-206R0 Date: 1999/06/24 Author: George Penokie Mailing: 1999_3 MCM Additions to Fibre Channel Control page in FCP-2 T10/99-206R1 Date: 1999/06/24 Author: George Penokie Mailing: 1999_4 MCM Additions to Fibre Channel Control page in FCP-2 T10/99-206R2 Date: 1999/09/16 Author: George Penokie Mailing: 1999_4 MCM Additions to Fibre Channel Control page in FCP-2 T10/99-207R0 Date: 1999/07/04 Author: Ralph Weber Mailing: 1999_3 SAM-2 Changes for queuing T10/99-208R0 Date: 1999/06/09 Author: Rob Elliott Mailing: 1999_3 MRIE behavior with TEST bit asserted T10/99-208R1 Date: 1999/09/15 Author: Rob Elliott Mailing: 1999_5 MRIE behavior with TEST bit asserted T10/99-208R2 Date: 1999/11/03 Author: Rob Elliott Mailing: 1999_5 MRIE behavior with TEST bit asserted T10/99-209R0 Date: 1999/07/06 Author: Ron Roberts Mailing: 1999_3 Resolution of Public Review Comments on RBC T10/99-210R0 Date: 1999/07/06 Author: Jeff Williams Mailing: 1999_3 ASC/ASCO for CRC errors during DT transfer T10/99-210R1 Date: 1999/07/06 Author: Jeff Williams Mailing: 1999_3 ASC/ASCQ for CRC errors during DT transfer T10/99-211R0 Date: 1999/07/04 Author: Bob Snively Mailing: 1999_3 FCP-2 changes between revision 1 and revision 2 T10/99-212R0 Date: 1999/07/07 Author: George Penokie Mailing: 1999_3 Packetized error handling changes for SPI-3 T10/99-212R1 Date: 1999/07/07 Author: George Penokie Mailing: 1999_3 Packetized error handling changes for SPI-3 T10/99-212R2 Date: 1999/07/14 Author: George Penokie Mailing: 1999_3 Packetized error handling changes for SPI-3 T10/99-213R0 Date: 1999/07/08 Author: William Petty Mailing: 1999_3 SCSI out of band communications method T10/99-214R0 Date: 1999/07/15 Author: Larry Lamers Mailing: 1999_3 Project Proposal for SCSI Domain Validation Technical Report

Mailing: 1999_3

T10/99-214R1 Date: 1999/07/15 Author: Larry Lamers

Project Proposal for SCSI Domain Validation Technical Report

T10/99-215R0 Date: 1999/07/14 Author: Paul Alois Crosstalk Issues with 99-111r3	i Mailing: 1999_3
T10/99-215R1 Date: 1999/09/13 Author: Paul Alois Crosstalk Issues with 99-111r5	i Mailing: 1999_4
T10/99-216R0 Date: 1999/07/14 Author: Gene Millig ISO Report for July 1999	gan Mailing: 1999_3
T10/99-217R0 Date: 1999/07/13 Author: Rob Elliot Expansion of ASCQs for ASC 5Dh	t Mailing: 1999_3
T10/99-218R0 Date: 1999/09/16 Author: Erich Oett. Project Proposal for SMC-2 Standard	ing Mailing: 1999_4
T10/99-218R1 Date: 1999/09/13 Author: Erich Oett. Project Proposal for SMC-2 Standard	ing Mailing: 1999_4
T10/99-218R2 Date: 1999/09/16 Author: Erich Oett. Project Proposal for SMC-2 Standard	ing Mailing: 1999_4
T10/99-219R0 Date: 1999/07/15 Author: Tom Coughle Persistent Reservations Conflict Behavior	an Mailing: 1999_3
T10/99-220R0 Date: 1999/07/15 Author: Gene Millig Information about US Patent # 4,633,350	gan Mailing: 1999_3
T10/99-221R0 Date: 1999/07/14 Author: Kumar Mala T11 Liaison Report	valli Mailing: 1999_3
T10/99-222R0 Date: 1999/07/15 Author: Paul Alois SCSI Trade Association Report - July 1999	i Mailing: 1999_3
T10/99-223R0 Date: 1999/07/13 Author: Steve Jerm Proposal for Storage and Access of Data on Media Au	3 =
T10/99-223R1 Date: 1999/08/04 Author: Sid Crighter Proposal for Storage and Access of Data on Media Au	on Mailing: 1999_4 xiliary Memory
T10/99-223R2 Date: 1999/09/15 Author: Steve Jerma Proposal for Storage and Access of Data on Media Au	
T10/99-224R0 Date: 1999/07/13 Author: Stewart Wyo Minutes of T10/T11 FC-Tape Joint Working Group - Ju	_
T10/99-224R1 Date: 1999/07/22 Author: Stewart Wyo Minutes of T10/T11 FC-Tape Joint Working Group - Ju	_
T10/99-225R0 Date: 1999/08/28 Author: Rob Elliot QAS Arbitration Fairness	t Mailing: 1999_4
T10/99-226R0 Date: 1999/08/04 Author: Jim Coomes Mode Page 19h DSA bit Clarification in FCP-2	Mailing: 1999_4
T10/99-226R1 Date: 1999/09/20 Author: Jim Coomes Mode Page 19h DSA bit Clarification in FCP-2	Mailing: 1999_4
T10/99-226R2 Date: 1999/09/24 Author: Jim Coomes	Mailing: 1999_4

Mode Page 19h DSA bit Clarification in FCP-2

SMU Note for SPC-2

-	
T10/99-227R0 Date: 1999/08/04 Author: George Penokie Task management handling changes for SPI-3	Mailing: 1999_4
T10/99-227R1 Date: 1999/08/18 Author: George Penokie Task management handling changes for SPI-3	Mailing: 1999_4
T10/99-227R2 Date: 1999/08/27 Author: George Penokie Task management handling changes for SPI-3	Mailing: 1999_4
T10/99-227R3 Date: 1999/09/15 Author: George Penokie Task management handling changes for SPI-3	Mailing: 1999_4
T10/99-228R0 Date: 1999/08/04 Author: Dave Peterson Proposed response to SSC letter ballot comments	Mailing: 1999_4
T10/99-228R1 Date: 1999/09/13 Author: Dave Peterson Proposed response to SSC letter ballot comments	Mailing: 1999_4
T10/99-228R2 Date: 1999/10/04 Author: Dave Peterson Proposed response to SSC letter ballot comments	Mailing: 1999_5
T10/99-228R3 Date: 1999/10/04 Author: Dave Peterson Proposed response to SSC letter ballot comments	Mailing: 1999_5
T10/99-229R0 Date: 1999/08/15 Author: Ralph Weber Restricting Mode Page Code Usage	Mailing: 1999_4
T10/99-230R0 Date: 1999/08/15 Author: Ralph Weber Extended Copy Support for Persistent Reservations	Mailing: 1999_4
T10/99-230R1 Date: 1999/09/16 Author: Ralph Weber Extended Copy Support for Persistent Reservations	Mailing: 1999_4
T10/99-231R0 Date: 1999/08/18 Author: Ralph Weber EXTENDED COPY and Abort Task Management Functions	Mailing: 1999_4
T10/99-231R1 Date: 1999/09/16 Author: Ralph Weber EXTENDED COPY and Abort Task Management Functions	Mailing: 1999_4
T10/99-232R0 Date: 1999/08/21 Author: Ralph Weber SAM-2 Tasks and Work	Mailing: 1999_4
T10/99-232R1 Date: 1999/09/15 Author: Ralph Weber SAM-2 Tasks and Work	Mailing: 1999_4
T10/99-233R0 Date: 1999/08/21 Author: Ralph Weber SAM-2 TASK SET FULL Clarifications	Mailing: 1999_4
T10/99-233R1 Date: 1999/09/15 Author: Ralph Weber SAM-2 TASK SET FULL Clarifications	Mailing: 1999_4
T10/99-233R2 Date: 1999/09/17 Author: Ralph Weber SAM-2 TASK SET FULL Clarifications	Mailing: 1999_4
T10/99-234R0 Date: 1999/08/18 Author: Ralph Weber	Mailing: 1999_4

T10/99-235R0 Date: 1999/08/06 Author: Ralph Weber Mailing: Missing SMU task management functions changes

T10/99-236R0 Date: 1999/08/12 Author: Dean Wallace Mailing: 1999_4 Minutes of SCSI signal modeling study group (draft) - July 29, 1999

T10/99-236R1 Date: 1999/09/09 Author: Dean Wallace Mailing: 1999_4 Minutes of SCSI signal modeling study group (approved) - July 29, 1999

T10/99-237R0 Date: 1999/08/13 Author: ISO/IEC Mailing: 1999_4
Draft IS on SCSI Controller Commands - 2 (SCC-2)

T10/99-238R0 Date: 1999/08/18 Author: John Lohmeyer Mailing: 1999_4 Response to NCITS 330 (RBC) 1PR comment #1 from Ralph Weber

T10/99-239R0 Date: 1999/08/19 Author: Roger Ronald Mailing: 1999_4 Project Proposal for SCSI on Scheduled Transfer (SST)

T10/99-239R1 Date: 1999/09/16 Author: Roger Ronald Mailing: 1999_4
Project Proposal for SCSI on Scheduled Transfer (SST)

T10/99-240R0 Date: 1999/08/23 Author: Stewart Wyatt Mailing: 1999_4 Minutes of Joint T11/T10 Tape ad hoc Meeting - Aug 4, 1999

T10/99-241R0 Date: 1999/08/28 Author: Rob Elliott Mailing: 1999_4 SPI-3 Setup and Hold Timings text changes

T10/99-242R0 Date: 1999/09/01 Author: John Lohmeyer Mailing: 1999_4 Proposed addition to SPI-3 integrity check fall back procedure

T10/99-242R1 Date: 1999/09/01 Author: John Lohmeyer Mailing: 1999_4 Proposed addition to SPI-3 integrity check fall back procedure

T10/99-242R2 Date: 1999/09/13 Author: John Lohmeyer Mailing: 1999_4 Proposed addition to SPI-3 integrity check fall back procedure

T10/99-243R0 Date: 1999/09/01 Author: Bill Ham Mailing: 1999_4 Project Proposal for SCSI Signal Modeling (SSM)

T10/99-243R1 Date: 1999/09/16 Author: Bill Ham Mailing: 1999_4 Project Proposal for SCSI Signal Modeling Technical Report (SSM)

T10/99-244R0 Date: 1999/09/01 Author: Bill Ham Mailing: 1999_4 References to signal integrity publications

T10/99-245R0 Date: 1999/09/09 Author: Jim Hafner Mailing: 1999_4 A detailed proposal for access controls (in SPC-2)

T10/99-245R1 Date: 1999/11/01 Author: Jim Hafner Mailing: 1999_5 A detailed proposal for access controls (in SPC-2)

T10/99-246R0 Date: 1999/09/02 Author: Ed Gardner Mailing: 1999_4
Project Proposal for SCSI VI Protocol (SVP)

T10/99-246R1 Date: 1999/11/04 Author: Ed Gardner Mailing: 1999_4
Project Proposal for SCSI VI Protocol (SVP)

T10/99-247R0 Date: 1999/09/08 Author: Bob Snively Mailing: 1999_4 FCP-2 changes from revision 02 to revision 03

T10/99-247R1 Date: 1999/09/30 Author: Bob Snively Mailing: 1999_5 FCP-2 changes from revision 02 to revision 03

T10/99-248R0 Date: 1999/09/10 Author: Vince Bastiani Mailing: 1999_4 Ultra N Proposal / Adaptec

T10/99-249R0 Date: 1999/09/14 Author: Charles Monia Mailing: 1999_4 Parallel SCSI Extended Addressing Proposal

T10/99-249R1 Date: 1999/09/14 Author: Charles Monia Mailing: 1999_4 Parallel SCSI Extended Addressing Proposal

T10/99-250R0 Date: 1999/09/14 Author: Charles Monia / Mailing: 1999_4 Larry Lamers

Proposal for Increasing the Addressability of Parallel SCSI

Proposal for Increasing the Addressability of Parallel SCSI

T10/99-250R2 Date: 1999/10/27 Author: Charles Monia / Mailing: 1999_5 Larry Lamers

Proposal for Increasing the Addressability of Parallel SCSI

T10/99-251R0 Date: 1999/09/03 Author: Keith Parker Mailing: Missing SSS - SCSI Socket Services Overview

T10/99-252R0 Date: 1999/09/03 Author: Keith Parker Mailing: Missing SSS Applied to SCSI Storage Devices & Systems

T10/99-253R0 Date: 1999/09/03 Author: Keith Parker Mailing: Missing SSS Applied to SCSI Communication Devices & Systems

T10/99-254R0 Date: 1999/09/03 Author: Keith Parker Mailing: Missing SSS Applied to SCSI Peripheral Modules

T10/99-255R0 Date: 1999/09/03 Author: Keith Parker Mailing: Missing SSS Applied to SCSI Processor Modules

T10/99-256R0 Date: 1999/09/03 Author: Keith Parker Mailing: Missing SSS Applied to SCSI Application Modules

T10/99-257R0 Date: 1999/09/03 Author: Keith Parker Mailing: Missing SSS Academic Evaluation and Develoment

T10/99-258R0 Date: 1999/09/07 Author: George Penokie Mailing: 1999_4 List lengths that exceed maximum allocation length

T10/99-258R1 Date: 1999/09/23 Author: George Penokie Mailing: 1999_4 List lengths that exceed maximum allocation length

T10/99-258R2 Date: 1999/11/04 Author: George Penokie Mailing: 1999_5 List lengths that exceed maximum allocation length

T10/99-259R0 Date: 1999/09/09 Author: George Penokie Mailing: 1999_4 Beyond 2 Tbytes

T10/99-259R1 Date: 1999/10/29 Author: George Penokie Mailing: 1999_5

Beyond 2 Tbytes

T10/99-260R0 Date: 1999/09/09 Author: William Petty Mailing: 1999_4 SPI-4 ISI reduction via transmit pre-compensation

T10/99-261R0 Date: 1999/09/09 Author: William Petty Mailing: 1999_4 SPI-4 timing budget utilizing receiver signal deskew method

T10/99-261R1 Date: 1999/10/13 Author: William Petty Mailing: 1999_5 SPI-4 timing budget utilizing receiver signal deskew method

T10/99-262R0 Date: 1999/09/09 Author: William Petty Mailing: 1999_4 SPI-4 REQ/ACK ISI removal via qualified clocking method

T10/99-262R1 Date: 1999/10/13 Author: William Petty Mailing: 1999_5 SPI-4 REQ/ACK ISI removal via qualified clocking method

T10/99-263R0 Date: 1999/09/08 Author: Paul Suhler Mailing: 1999_4 SSC Proposal to Support Partial Loading & Unloading

T10/99-263R1 Date: 1999/10/26 Author: Paul Suhler Mailing: 1999_5
Proposal to Support Partial Loading & Unloading

T10/99-264R0 Date: 1999/08/12 Author: Larry Lamers Mailing: 1999_4 Margin Control

T10/99-264R1 Date: 1999/10/27 Author: Larry Lamers Mailing: 1999_5 Margin Control

T10/99-265R0 Date: 1999/09/09 Author: George Ericson Mailing: 1999_4 Comments on SAM multi-port model (rev 8 vs. rev 11)

T10/99-266R0 Date: 1999/09/11 Author: Ralph Weber Mailing: 1999_4 Description Lengths for 5D ASC/ASCQs

T10/99-266R1 Date: 1999/09/17 Author: Ralph Weber Mailing: 1999_4 Description Lengths for 5D ASC/ASCQs

T10/99-266R2 Date: 1999/11/04 Author: Ralph Weber Mailing: 1999_5 Description Lengths for 5D ASC/ASCQs

T10/99-267R0 Date: 1999/09/20 Author: Weber & Lohmeyer Mailing: 1999_4 Minutes of SCSI Physical Working Group - Sept 13-14, 1999

T10/99-267R1 Date: 1999/09/30 Author: Weber & Lohmeyer Mailing: 1999_4 Minutes of SCSI Physical Working Group - Sept 13-14, 1999

T10/99-268R0 Date: 1999/09/20 Author: Weber & Lohmeyer Mailing: 1999_4 Minutes of SCSI Working Group - Sept 15, 1999

T10/99-268R1 Date: 1999/09/30 Author: Weber & Lohmeyer Mailing: 1999_4 Minutes of SCSI Working Group - Sept 15, 1999

T10/99-269R0 Date: 1999/09/20 Author: Weber & Lohmeyer Mailing: 1999_4 Minutes of T10 Plenary Meeitng #33 - Sept 16, 1999

T10/99-269R1 Date: 1999/09/30 Author: Weber & Lohmeyer Mailing: 1999_4 Minutes of T10 Plenary Meeitng #33 - Sept 16, 1999

T10/99-270R0 Date: 1999/09/09 Author: Bill Ham Mailing: 1999_4 Minutes of SCSI signal modeling study group (draft) - Sept 1, 1999

T10/99-270R2 Date: 1999/09/29 Author: Bill Ham Mailing: 1999_4 Minutes of SCSI signal modeling study group (approved) - Sept 1, 1999

T10/99-271R0 Date: 1999/09/10 Author: John Lohmeyer Mailing: 1999_4 Proposed revision to T10 Electronic Procedures

T10/99-271R1 Date: 1999/09/13 Author: John Lohmeyer Mailing: 1999_4 Proposed revision to T10 Electronic Procedures

T10/99-272R0 Date: 1999/09/15 Author: John Lohmeyer Mailing: 1999_4 T10 Annual Report for 1999

T10/99-273R0 Date: 1999/09/10 Author: Gene Milligan Mailing: 1999_4 Address Assignment Pins on SCA and Three-in-one SFF 8009 connectors

T10/99-274R0 Date: 1999/09/13 Author: Richard Moore Mailing: 1999_4 Forcing Bus Free from QAS -- Initiator Method

T10/99-275R0 Date: 1999/09/13 Author: Donald Woelz Mailing: 1999_4 Presentation on the project proposal for SCSI on Scheduled Transfer

T10/99-276R0 Date: 1999/07/27 Author: Don Woelz Mailing: 1999_4 proposed draft for SCSI on Scheduled Transfer

T10/99-276R1 Date: 1999/09/29 Author: Don Woelz Mailing: 1999_4 proposed draft for SCSI on Scheduled Transfer

T10/99-277R0 Date: 1999/09/15 Author: Gerry Houlder Mailing: 1999_4 Allow WRITE BUFFER when drive not ready

T10/99-278R0 Date: 1999/09/15 Author: Jim Hafner Mailing: 1999_4 Presentation: A proposal for Access Control

T10/99-278R1 Date: 1999/11/03 Author: Jim Hafner Mailing: 1999_5 Presentation: A proposal for Access Control

T10/99-279R0 Date: 1999/09/15 Author: Keith Parker Mailing: Missing SSS - SCSI Socket Services Report 9/15/99

T10/99-280R0 Date: 1999/09/16 Author: Neil Wanamaker Mailing: 1999_4
T11 liaison report to September T10 Plenary

T10/99-281R0 Date: 1999/09/14 Author: Paul Aloisi Mailing: 1999_4 STA Liaison Report to T10 - September 16, 1999

T10/99-282R0 Date: 1999/10/27 Author: Larry Lamers Mailing: 1999_5 Ultra3 Expander Guidelines

T10/99-283R0 Date: 1999/09/29 Author: Larry Lamers Mailing: Missing PPR Message Enhancements

T10/99-284R0 Date: 1999/09/16 Author: Ron Roberts Mailing: 1999_4
Quote on Conversion of RBC standard to ISO/IEC document

T10/99-285R0 Date: 1999/10/05 Author: Ralph Weber Mailing: 1999_5 Changes made while incorporating Logical Unit Self-tests

T10/99-286R0 Date: 1999/09/28 Author: Bill Ham Mailing: 1999_4 Minutes of the SCSI Cable Media Performance WG (draft) - 9/28/99

T10/99-286R1 Date: 1999/10/26 Author: Bill Ham Mailing: 1999_5 Minutes of the SCSI Cable Media Performance WG (aprvd) - 9/28/99

T10/99-287R0 Date: 1999/09/29 Author: Bill Ham Mailing: 1999_4 Minutes of SCSI signal modeling WG (draft) - Sept 29, 1999

T10/99-287R1 Date: 1999/10/28 Author: Bill Ham Mailing: 1999_5 Minutes of SCSI signal modeling WG (aprvd) - Sept 29, 1999

T10/99-288R0 Date: 1999/09/14 Author: Stewart Wyatt Mailing: 1999_4 Minutes of Joint T10/T11.3 Activity (Tape) Ad Hoc - 9/14/99

T10/99-289R0 Date: 1999/09/29 Author: Jim Broomall Mailing: 1999_5 Cable Assembly Modeling and Simulation

T10/99-290R0 Date: 1999/10/15 Author: John Lohmeyer Mailing: 1999_5 Minutes of SCSI Physical Working Group - Oct. 13-14, 1999

T10/99-290R1 Date: 1999/10/19 Author: John Lohmeyer Mailing: 1999_5 Minutes of SCSI Physical Working Group - Oct. 13-14, 1999

T10/99-291R0 Date: 1999/04/14 Author: Gene Milligan Mailing: 1999_5 GEM Handy dandy Technical Committee's Patents Guide 4/14/99

T10/99-292R0 Date: 1999/11/04 Author: Ralph Weber Mailing: 1999_5 Project Proposal for SCSI Block Commands - 2 (SBC-2)

T10/99-292R1 Date: 1999/11/04 Author: Ralph Weber Mailing: 1999_5
Project Proposal for SCSI Block Commands - 2 (SBC-2)

T10/99-293R0 Date: 1999/11/04 Author: Ralph Weber Mailing: 1999_5 Project Proposal for SCSI Architecture Model - 3 (SAM-3)

T10/99-293R1 Date: 1999/11/04 Author: Ralph Weber Mailing: 1999_5 Project Proposal for SCSI Architecture Model - 3 (SAM-3)

T10/99-294R0 Date: 1999/11/04 Author: Ralph Weber Mailing: 1999_5 Project Proposal for SCSI Primary Commands - 3 (SPC-3)

T10/99-294R1 Date: 1999/11/04 Author: Ralph Weber Mailing: 1999_5
Project Proposal for SCSI Primary Commands - 3 (SPC-3)

T10/99-295R0 Date: 1999/10/13 Author: Gene Milligan Mailing: 1999_5 Proposal for Fast-160 to be included in SPI-4

T10/99-295R1 Date: 1999/10/31 Author: Gene Milligan Mailing: 1999_5 Proposal for Fast-160 to be included in SPI-4

T10/99-296R0 Date: 1999/10/13 Author: Gene Milligan Mailing: 1999_5 Fast-160 Simplified Timing presentation

T10/99-297R0 Date: 1999/10/08 Author: Mark Evans Mailing: 1999_5 Proposal for a training pattern for SPI-4

T10/99-298R0 Date: 1999/10/08 Author: Mark Evans Mailing: 1999_5

Proposal for turn-on/turn-off of a free-running clock

T10/99-299R0 Date: 1999/10/13 Author: Stewart Wyatt Mailing: 1999_5 Minutes of Joint T10/T11.3 Activity (Tape) Ad Hoc - 10/5/99

T10/99-300R0 Date: 1999/10/12 Author: Mayank Patel Mailing: 1999_5 Fast-160 Presentation

T10/99-301R0 Date: 1999/10/13 Author: Bill Ham Mailing: 1999_5

Compaq's inputs on SPI-4

T10/99-302R0 Date: 1999/10/12 Author: Vince Bastiani Mailing: 1999_5 Rise Time Comparisons

T10/99-303R0 Date: 1999/10/12 Author: Dan Smith Mailing: 1999_5

T10/99-304R0 Date: 1999/10/12 Author: Dan Smith Mailing: 1999_5
ISI Measurement

T10/99-305R0 Date: 1999/10/12 Author: Vince Bastiani Mailing: 1999_5 How to verify goodness

T10/99-306R0 Date: 1999/10/19 Author: Larry Lamers Mailing: 1999_5 READ/WRITE BUFFER Behavior During Domain Validation

T10/99-306R1 Date: 1999/11/04 Author: Larry Lamers Mailing: 1999_5 READ/WRITE BUFFER Behavior During Domain Validation

T10/99-307R0 Date: 1999/10/12 Author: Frank Rutherford Mailing: 1999_5 Public Review Comment #1 on BSR NCITS.333:199x, MMC-2

T10/99-308R0 Date: 1999/11/09 Author: Weber & Lohmeyer Mailing: 1999_5 Minutes of SCSI Physical Working Group - Nov 1-2, 1999

T10/99-309R0 Date: 1999/11/09 Author: Weber & Lohmeyer Mailing: 1999_5 Minutes of SCSI Protocol Working Group - Nov 3, 1999

T10/99-310R0 Date: 1999/10/19 Author: Weber & Lohmeyer Mailing: Missing Minutes of T10 Plenary Meeitng #34 - Nov 4, 1999

T10/99-311R0 Date: 1999/10/29 Author: Charles Binford Mailing: 1999_5 Proposal for New Status Code: Commands Cleared by Another Initiator

T10/99-312R0 Date: 1999/11/04 Author: Gerry Houlder Mailing: 1999_5 Project proposal for object based storage devices command set (OSD)

T10/99-313R0 Date: 1999/10/22 Author: Ralph Weber Mailing: Missing Mode Page Extension

T10/99-314R0 Date: 1999/10/25 Author: Jim Hafner Mailing: Missing Request for Access Control Opcodes and ASC/ASCQ codes

T10/99-315R0 Date: 1999/10/25 Author: Gene Milligan Mailing: 1999_5
OBJECT BASED STORAGE DEVICES Command Set Proposal

T10/99-316R0 Date: 1999/11/03 Author: Ed Gardner Mailing: 1999_5 SVP Overview

T10/99-316R1 Date: 1999/11/03 Author: Ed Gardner Mailing: 1999_5

SVP Overview

T10/99-317R0 Date: 1999/10/28 Author: Bill Ham Mailing: 1999_5

Comments against SPI-3 rev 10 section 6 and annex ${\tt E}$

T10/99-318R0 Date: 1999/10/28 Author: John Fasig & Mailing: 1999_5

Jeff Williams

Meeting announcement Cable Performance, Signal Modeling, & SPI-4

T10/99-319R0 Date: 1999/10/28 Author: Hank Herrmann Mailing: 1999_5

Hot-Plug Problem & its Solution

T10/99-320R0 Date: 1999/10/29 Author: Bill Galloway Mailing: 1999_5

Letter ballot comments on SPI-3 r10

T10/99-321R0 Date: 1999/10/28 Author: Rob Elliott Mailing: 1999_5

SPI-3 Revision 10 Letter Ballot Comments

T10/99-322R0 Date: 1999/10/29 Author: Gene Milligan Mailing: 1999_5

Comments accompanying Gene Milligan's SPI-3 Rev 10 Letter Ballot 10/28/99

T10/99-323R0 Date: 1999/10/28 Author: Gary Dickinson, Mailing: 1999_5

Greg Goodemote, Chuck Micalizzi, and Richard Moore

Fast-160 Phase Encoded Data Enabling

T10/99-324R0 Date: 1999/10/26 Author: Gary Dickinson, Mailing: 1999_5

Greg Goodemote, Chuck Micalizzi, and Richard Moore

Fast-160 Buffer Credit Transfer Mechanism

T10/99-325R0 Date: 1999/10/30 Author: Bob Snively Mailing: 1999_5

FCP-2 changes from revision 03 to revision 04

T10/99-326R0 Date: 1999/11/01 Author: Dan Smith Mailing: 1999_5

ISI Measurements for Ultra4 Discussion

T10/99-327R0 Date: 1999/11/01 Author: Gene Milligan Mailing: 1999_5

Fast-160 Agreements

T10/99-328R0 Date: 1999/10/27 Author: Bill Ham Mailing: 1999_5

Minutes of the SCSI Cable Media Performance WG (draft) - 10/27/99

T10/99-329R0 Date: 1999/10/28 Author: Bill Ham Mailing: 1999_5

Minutes of SCSI signal modeling WG (draft) - 10/28/99

T10/99-330R0 Date: 1999/11/01 Author: Larry Lamers Mailing: Missing

Proposed revision for T10 Procedures for funding T10 technical editors

T10/99-331R0 Date: 1999/11/01 Author: Richard Moore Mailing: 1999_5

Comments on SPI-3 Letter Ballot

T10/99-332R0 Date: 1999/11/01 Author: Bill Petty Mailing: Missing

Cable analysis report for ISI compensation

T10/99-333R0 Date: 1999/11/03 Author: Ron Roberts Mailing: 1999_5

Proposed resolution of MMC-2 Public Review Comments

T10/99-334R0 Date: 1999/11/03 Author: Bill McFerrin & Mailing: 1999_5 Ron Roberts

Minutes of MMC Working Group - 11/2-3/99

T10/99-335R0 Date: 1999/11/01 Author: Andrew Bishop Mailing: 1999_5

Transmitter Pre-Compensation fo 320 MB/sec SCSI

T10/99-336R0 Date: 1999/10/28 Author: Andrew Bishop Mailing: 1999_5

Circuit Modeling of 30 AWG LVD SCSI Cable

T10/99-337R0 Date: 1999/11/06 Author: Wally Bridgewater Mailing: 1999_5

ISI Measurements

T10/99-338R0 Date: 1999/11/01 Author: Vince Bastiani Mailing: 1999_5

Crosstalk Presentation

T10/99-339R0 Date: 1999/11/02 Author: Neil Wanamaker Mailing: 1999_5

T11 Liaison Report to T10 - November 1999

T10/99-340R0 Date: 1999/10/29 Author: D. Anderson Mailing: 1999_5

Object Based Storage Devices Presentation to T10

T10/99-341R0 Date: 1999/11/02 Author: D. Anderson Mailing: 1999_5

Object Based Storage: A Vision

T10/99-342R0 Date: 1999/11/03 Author: Bob Snively Mailing: 1999_5

Report on Joint T10/T11.3 Activity working group - 11/02/99

T10/99-343R0 Date: 1999/11/03 Author: Bob Snively Mailing: 1999_5

Proposal for Queue Full clarification

T10/99-344R0 Date: 1999/11/04 Author: Paul Aloisi Mailing: 1999_5

STA liaison report to T10 - November 1999

T10/99-345R0 Date: 1999/11/04 Author: Larry Lamers Mailing: Missing

STT behavior for domain validation

T10/99-346R0 Date: 1999/11/05 Author: Roger Cummings Mailing: 1999_5

Mirror site report to T10

T10/99-347R0 Date: 1999/11/08 Author: Paul Suhler Mailing: 1999_5

Proposal for SPC Support for Partial Loading & Unloading

T10/99-348R0 Date: 1999/11/08 Author: Stewart Wyatt Mailing: 1999_5

Minutes of Joint T10/T11.3 Joint Ad Hoc -- 11/2/1999

T10/99-348R1 Date: 1999/11/09 Author: Stewart Wyatt Mailing: 1999_5

Minutes of Joint T10/T11.3 Joint Ad Hoc -- 11/2/1999