

T11.1 Plenary Meeting Minutes

December 8th, 1999

Reno, Nevada

1.0 Opening remarks and introductions

The T11.1 Chairman, Roger Ronald of Power Micro Research, opened this meeting at 6 PM and thanked Dave Deming, Solution Tech, and Transoft Networks for hosting this meeting.

These minutes are separate from both the HIPPI Working Group minutes and the HIPPI Optical Working Group minutes. Roger volunteered to record and produce these minutes.

Roger lead a round of introductions. The list of attendees is at the end of these minutes.

2.0 Review / modify the draft agenda

Draft agendas were distributed via the web site (www.hippi.org) before the meeting.

The working group did not make sufficient progress to allow a vote to forward the HIPPI-6400-PH amendment, so the agenda was modified to remove this item. However, the working group did make sufficient progress to allow a vote to forward the HIPPI-6400-OPT document, so the agenda was modified to add this item.

These minutes reflect the approved agenda.

3.0 Attendance and membership

The membership and voting rules were reviewed. See the web page at <http://www.x3.org/>, look under Standing Documents, then SD2, for our operating procedures including a detailed explanation of the membership rules.

3.1 Roll call of members in jeopardy

T11.1 has 12 member organizations. The only organization in jeopardy of losing its membership from lack of attendance if it was not present at the this meeting is Essential/ODS. Essential/ODS was present and retains their membership.

T11.1 has a membership of 12.

Roger noted that Brad Allen had replaced Nicolas Droux as the principle for Essential/ODS and that Tom Torrico was the temporary alternate for IBM at this meeting.

No members are in jeopardy of losing their membership at the February meeting.

4.0 Document distribution

Roger described the HIPPI web page at www.hippi.org. Meeting documents will be placed there and people are encouraged to pick up the documents before the meeting as extra documents are generally not available at the meeting.

5.0 Review minutes of previous meeting

The minutes of the October 6th T11.1 Plenary meeting in Ft. Lauderdale, FL, were reviewed.

Jeff Young moved and Don Woelz seconded, to approve the October 6th T11.1 Plenary minutes as written. The motion passed unanimously.

6.0 Review action items

The action items from the October 6th meeting were reviewed.

1. Roger Ronald to produce the minutes for this (Oct 99) meeting. **(done)**
2. Roger Ronald to present the ST Reliable Transfer Profile Project Proposal to T11 for further processing at the December meeting. **(carryover till Thursday December 9th)**
3. Anyone with a proposed change to HIPPI-6400-PH to present a written proposal to T11.1, or its working groups, by the December T11.1 Plenary.
4. Roger Ronald to issue a membership warning letter to Essential/ODS. **(done)**

7.0 Liaison Reports

7.1 T11 LIAISON REPORT- October, 1999

Kumar Malavalli presented the T11 liaison report.

The membership of T11, in Ft. Lauderdale, FL, stood at 73 at the end of the meeting.

Gain of 1 member and loss of 3 members

7.1.1 T11 Task Group Actions

Schelto Van Doorn, on behalf of T11.2, made a motion to accept the T11 letter ballot comments and to forward Revision 5.1 of the draft Technical Report for project 1343-DT, FC-HSPI, to NCITS for further processing. The motion passed. Subsequently, this has been forwarded to NCITS.

Ed Lee, on behalf of T11.4, moved to request NCITS to rescind the change for project 1237-D from an NCITS standard to an NCITS Technical Report.

Rich Taborek presented a project proposal for a 10 Gb/s physical interface. The name changed to FC-PI-2.

A Motion to forward the proposal to NCITS for approval failed due to lack of quorum (32 For, 1 Opposed, 40 Not Voting)

Chair requested to conduct a T11 letter ballot to forward the project proposal to NCITS for approval

7.1.2 T11 actions post October T11 meeting:

FC-HSPI Rev. 5.1 submitted to NCITS for further processing.

Merger of Task Groups T11.3 and T11.4 was recommended to NCITS Letter ballot to forward project proposal for FC-PI-2 to NCITS for approval was conducted: Ballot passed with two thirds majority.

FC-TAPE: NCITS Management review ended on 23 Oct. 99.

7.1.3 NCITS Business

Meeting held between October 12 - 14 in Red Bank, NJ.

Approved changes to the rules pertaining to TCs and TGs (http://www.ncits.org/SD-2rev6f_issues.htm).

I Presented the T11 annual report (IT/99-0469).

Management Review of FC-AL-2: NCITS directed the Secretariat to issue the letter ballot for final approval.

Management Review of FC-MJS: NCITS directed the Secretariat to issue letter ballot for final approval.

Informed about the approval of the merger between T11.3 and T11.4.

7.1.4 Technology Road Map

As part of the new item under the T11 Plenary agenda that was introduced to establish Technology Road map with input from industry trade associations and end users to use it as a guideline for future T11 projects, Paul Boulay of Hitachi made a presentation on initial Fibre Channel technology roadmap.

7.2 HNF

Don Woelz reported on HNF activities. This was the busiest period of the year for HNF.

There were three marketing events over the last two months.

- In October a GSN demonstration was held at CERN with good attendance.
- One week later, another GSN demo occurred in Tokyo.
- SC99 had a substantial quantity of GSN equipment on display.

HNF also held its annual meeting at the same time and place as SC99. There was good attendance with ten current members present. Two potential new members were also attending (Oak Ridge National Labs and HyperChip).

7.3 ISO report

Roger reported three pieces of ISO information:

- HIPPI-FP was balloted as a Draft International Standard and will be published as soon as the needed edits are complete. Don Tolmie has

completed these edits and the document has been passed back to our international representative.

- HIPPI-SC was balloted as a Draft International Standard and will be published as soon as the needed edits are complete. Don Tolmie has completed these edits and the document has been passed back to our international representative.
- HIPPI-6400-PH is now in the balloting process and the US JTC has asked for a recommendation from T11 as to the proper vote.

Jeff Young moved and Don Woelz seconded a motion to recommend that T11 recommend passage of DIS 11518-10 as an International Standard. A roll call vote was taken:

Adaptec	NP
Compaq Computer Corp.	Y
DPT	NP
Essential/ODS	Y
FCI-Berg	Y
Genroco	Y
IBM	Y
Los Alamos National Lab	Y
PMR	Y
Raytheon E-Systems	NP
Silicon Graphics / Cray	Y
Tensolite	NP

The votes was 8 for, 0 opposed, 4 Not Present. The chair took an action item to present the recommendation to T11 at the December meeting.

7.4 Other liaison reports

None.

8.0 Call for patents

Roger issued a call for disclosure of the existence of patents required to implement the results of any and all HIPPI standards. It is necessary for the patent holders to agree to license those patents in conformance with the ANSI patent policy if the project on which they apply is to proceed. T11 and its Task Groups are not involved in this process at all other than to issue the call and forward paperwork.

The contact at ANSI is the General Counsel, Ms. Amy Marasco - (212) 642-4954 or amarasco@ansi.org. A patent policy description is at www.ansi.org/proctbl.html, section 1.2.11.

No new patent claims were made at this meeting.

9.0 Review and act on projects in ANSI development phase

9.1 Scheduled Transfer Protocol

Revision 3.5 was reviewed at the working group meetings held this week. There were several changes made, but Don Tolmie was able to turn around a new version during the meeting. Therefore revision 3.6 was also reviewed.

The group then decided that ST, version 3.6 was ready to be forwarded to T11 for further processing.

Jeff Young moved and Don Woelz seconded a motion to forward Scheduled Transfer, revision 3.6 to T11 for further processing. A roll call vote was taken:

Adaptec	NP
Compaq Computer Corp.	Y
DPT	NP
Essential/ODS	Y
FCI-Berg	Y
Genroco	Y
IBM	Y
Los Alamos National Lab	Y
PMR	Y
Raytheon E-Systems	NP
Silicon Graphics / Cray	Y
Tensolite	NP

The votes was 8 for, 0 opposed, 4 Not Present. This vote meets the requirements of the 2/3rds rule. The chair took an action item to present the vote results to T11 at the December meeting.

9.2 HIPPI-6400-OPT (T11.2 - Physical Variant) activity

Rev 1.4 was reviewed at the October 5th HIPPI-6400 Optical working meeting. There were very few changes. Most of the changes were accepted as written. Don Tolmie was able to turn around a new version of the document during the meeting. Therefore revision 1.5 was also reviewed.

The group then decided that HIPPI-6400-OPT, version 1.5 was ready to be forwarded to T11 for further processing.

Jeff Young moved and Don Woelz seconded a motion to forward HIPPI-6400-OPT, revision 1.5, to T11 for further processing. A roll call vote was taken:

Adaptec	NP
Compaq Computer Corp.	Y
DPT	NP
Essential/ODS	Y
FCI-Berg	Y
Genroco	Y
IBM	Y
Los Alamos National Lab	Y
PMR	Y
Raytheon E-Systems	NP
Silicon Graphics / Cray	Y
Tensolite	NP

The votes was 8 for, 0 opposed, 4 Not Present. This vote meets the requirements of the 2/3rds rule. The chair took an action item to present the vote results to T11 at the December meeting.

Both CERN and PMR are moving forward to do optical testing per this draft standard.

9.3 HIPPI-LE

HIPPI-LE was updated to Rev 3.6 by removing the ARP text, Introduction, and Alphabetical Index. We are now waiting for the "ARP and IP Broadcast over HIPPI-800" to be assigned an RFC number so that we can reference it in HIPPI-LE. Once complete, HIPPI-LE should be ready to forward for public review and final processing. Rev 3.6 was reviewed at the November 1998 working meeting, and the changes accepted.

Due to the lengthy delays in getting the RFC number, there was a discussion and general consensus that HIPPI-LE might need to move forward without a reference to the IETF RFCs. The chair accepted an action item to post a message on the HIPPI reflector to stimulate discussion on this topic.

9.4 ST-API

The working group decided that progress on this standard was too slow and that an alternative approach was needed. Since Jim Pinkerton had a SGI specific ST-API document, the group requested that this information be edited and

passed on. Jim agreed to this plan and promised a quick turnaround.

9.5 HIPPI-6400-PH - Amendment

HIPPI-6400-PH Rev 2.3 was approved as ANSI standard "ANSI NCITS 323-1998, Information Technology - High-Performance Parallel Interface - 6400 Mbit/s Physical Layer (HIPPI-6400-PH)" on November 20, 1998. It has now also been published and can be purchased from ANSI.

At the September, 1998 working meeting Greg Chesson reported that the pin assignments in HIPPI-6400-PH did not match the SuMAC implementation. At that meeting we agreed to change the document, but to continue processing the present document, albeit incorrect, as an American National Standard before making the changes. The changes to match the SuMAC were reviewed at the November ad hoc meeting and accepted.

A Project Proposal for an amendment to NCITS 323-1998 was drafted and approved at the February 1999 meeting, both by this group and by T11.

The pinout change is the reason for the amendment, but other proposed changes will be considered. It appears as though changes will be needed to support passing the RFI/EMI testing required for commercial products and to make sure that the cabling system is compatible with PCI form factors.

All of these changes are very close to complete and Ed Cady of FCI-Berg accepted an action item to provide the new PCI compatible connector drawings quickly. This should allow forwarding the amendment in February.

9.6 SCSI on ST

Don Woelz presented a new version of his SCSI on ST document. Since T10 is the NCITS group with this project, Don has moved to using their numbering scheme. Consequently, his document was revision 00.

The review went well but there were still many editorial convention comments. A few technical areas also needed additional detail, but this document is generally in very good shape.

10.0 Review projects in approval phase

10.1 HIPPI-6400-SC Public Review status

HIPPI-6400-SC Rev 2.5 has been approved as an ANSI standard

The ANSI editor has contacted Roger Ronald (the document technical editor) and the document editing is complete. However, due to a change in NCITS/ANSI policy, the editing is supposed to occur prior to balloting. Since this did not happen NCITS is insisting that the final version should incur another expedited round of balloting.

The management of T11 determined that a T11.1 ballot was not required and moved directly to a T11 letter ballot which occurred during the period between the August and October meetings. The ballot closed on 9/19/99 and passed with a vote of 71 yes, 0 no, and 4 not voting.

NCITS reports that the final paperwork for re-approval is being sent to ANSI on Monday, November 29, 1999.

11.0 Review other HIPPI-related items

11.1 Bridging to HIPPI-800

Nicolas Droux provided a document update for the October meeting, but was not present. At this meeting, Brad Allen lead a review of the text.

It was reported that implementation is proceeding and that this real-world experience should help in producing a viable high-quality standard.

11.2 ARP over IP Broadcast over HIPPI-800

We are still waiting on an RFC number. We hope to get one in the next few months.

The chair was directed to give Jean-Michael Pettit an action item to provide details and status about his dealings with the IETF. This action will be recorded in the working group minutes.

11.3 IP and ARP over HIPPI-6400

Previously, Jean-Michel Pittet had convinced the group to wait for implementation of the HARP server and bridging devices before making any further changes in this protocol.

Thus, there was no activity on this topic.

11.4 HIPPI-MIBs

T11.1 decided that the only MIB that currently held interest for more than a single organization was a HIPPI-6400 switch MIB. All other MIB work will be removed from future agendas unless a champion

comes forward. There is an open action item in the working group to attempt coordination in switch MIBs among the GSN vendors.

11.5 IEEE Tutorial for HIPPI-6400 ULA usage

No action.

12.0 New business and new technical items

12.1 Project Proposal for an ST Reliable Transfer Profile

At the October meeting, Jeff Young moved and Bob Willard seconded a motion to forward the ST Reliable Transfer Profile Project Profile to T11 for further processing.

The votes was 12 for, 0 opposed, 0 Not Present. This vote meets the requirements of the 2/3rds rule. The chair noted that since the proposal had not been placed on the T11 web site in time for the October T11 plenary, the proposal would be given to T11 at the December meeting. This action item is still pending, but should be complete on the day after this meeting (Thursday 12/9/99) at the T11 plenary meeting.

12.2 ST Reliable Transport Profile

The second version of this document was reviewed. Most changes were accepted, but there was still more to do to capture all of the nuances needed to really nail down a small interoperable subset of ST. However, the tabular format was very helpful in making changes and additions very easy to handle.

13.0 Administrative matters

13.1 Interim meeting authorizations

The T11.1 Chairman, Roger Ronald authorized the following T11.1 interim working meetings for all topics and will chair these meetings.

- February 15-16 Huntington Beach, CA

Note that the SCSI on ST work is authorized by T10 instead of T11, thus the SCSI on ST topic will be covered at a specific time (9 AM on February 16th to allow T10 members the chance to easily attend at a fixed scheduled moment in time.

14.0 Future meeting schedule

14.1 February 16, 2000, Huntington Beach, CA

The next T11.1 plenary meeting will be held February 16th from **5-8 PM** (during the Plenary week in Huntington Beach, CA). The hotel information is posted at the www.hippi.org web site.

14.2 Future meeting dates and locations

The Optical working group will continue to meet on Tuesday morning during the T11 Plenary week, prior to the HIPPI working meetings.

2000

Apr 3-7	Plenary	San Diego, CA	Brocade
Jun 5-9	Plenary	Boise, ID	HP
Aug 7-11	Plenary	Seattle, WA	?
Oct 2-6	Plenary	Manchester, NH	Hitachi
Dec 4-8	Plenary	Austin, TX	Crossroads

2001

Feb 5-9	Plenary	So. California	Qlogic
Apr 9-13	Plenary	Palm Springs, CA	Brocade

15.0 Review action items

The following action items were carryovers or were added at this meeting.

1. Roger Ronald to produce the minutes for this (Dec. 99) meeting.
2. Roger Ronald to present the ST Reliable Transfer Profile Project Proposal to T11 for further processing at the December meeting.
3. Roger Ronald to present HIPPI-6400-OPT, revision 1.5, to T11 for further processing.
4. Roger Ronald to present Scheduled Transfer (ST), revision 3.6, to T11 for further processing.
5. Anyone with a proposed change to HIPPI-6400-PH to present a written proposal to T11.1, or its working groups, by the February T11.1 Plenary.
6. Roger Ronald to present the voting recommendation to T11 for DIS 11518-10 at the December meeting.

7. Roger Ronald to post a message to the HIPPI reflector regarding options to remove the IETF references from HIPPI-LE.
8. Ed Cady of FCI-Berg to provide the new PCI compatible connector drawings to Don Tolmie.

16.0 Adjournment

Jeff Young moved and Don Woelz seconded to adjourn at 7:15 PM on December 8th. There were no objections.

Attendance

Name	Status	Company	Phone	E_mail
Kumar Malavalli	O	Brocade Communications	408-487-8156	kumar@brocade.com
David Hyer	A	Compaq Computer Corp.	508-467-4550	david.hyer@compaq.com
Brad Allen	P	Essential / ODS	505-344-0408	ballen@esscom.com
Jay Bhat	A	Essential / ODS	505-344-0080	jbhat@esscom.com
Ed Cady	P	FCI-Berg	503-359-4556	edcady@aol.com
Bharat Tailor	O	Gennum Corp	905-632-2996	bharat_t@gennum.com
Donald Woelz	P	Genroco, Inc.	414-644-2505	don@genroco.com
Tom Torrico	O	IBM	512-838-3986	torrico@us.ibm.com
Mike Boorman	A	Los Alamos National Lab	505-667-8503	tmb@lanl.gov
Roger Ronald	P	Power Micro Research	972-437-9461	rronald@pmr.com
Jeff Young	A	SGI/Cray Research	651-683-5536	jsy@cray.com
Sean M Rieb	O	Tera Computer Co.	206-701-2164	srieb@tera.com
Don Tolmie	O	Tolmie Enterprises	505-662-7110	tolmie@concentric.net