

## T11.1 Plenary Meeting Minutes

**June 9th, 1999  
Minneapolis, MN**

### 1.0 Opening remarks and introductions

The T11.1 Chairman, Roger Ronald of Power Micro Research, opened this meeting at 6:00 PM and thanked Robert Cornelius of Ancor 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](http://www.hippi.org)) before the meeting.

There were no changes and 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.

FCI-Berg would have been in jeopardy for failure to attend meetings. Since no mailing had been sent to FCI-Berg to warn them of the loss of membership that would result on failure to attend, no companies lost their membership. The chair accepted an action item to mail warning letters as needed for the August meeting.

T11.1 has 12 member organizations. Organizations in jeopardy of loosing their membership from lack of attendance if they are not present at the August T11.1 will be FCI-Berg, Compaq, and IBM.

Last month, Roger had noted that NCITS had sent a document regarding lack of payment by four

members. All of these payment issues have been cleared up and no companies have lost membership as a result.

### 4.0 Document distribution

Roger described the HIPPI web page at [www.hippi.org](http://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 April 14th T11.1 Plenary meeting in Palm Springs, California, were reviewed.

Jeff Young moved and Sean Rieb seconded, to approve the April 14th T11.1 Plenary minutes as written. Motion passed unanimously.

### 6.0 Review action items

The action items from the April 14th meeting were reviewed.

1. Roger Ronald to produce the minutes for the April meeting. (**done**)
2. Anyone with a proposed change to HIPPI-6400-PH to present a written proposal to T11.1, or its working groups, by the June T11.1 Plenary. (**carryover** to August with the end-date changed)

### 7.0 Liaison Reports

#### 7.1 T11 LIAISON REPORT- February, 1999

Don Woelz presented the liaison report for Kumar Malavalli.

Membership of T11 stood at 63 at the end of April, 1999 T11 plenary meeting in Palm Spring, CA

Following new projects have been approved by NCITS) and related work has begun

- FC-GS-3 (Fibre Channel Generic Services - 2: Project #: 1556-D
- FC-SB2-2 (Fibre Channel Single Byte Command Set-2: project #: 1557-D
- Amendment to NCITS 323-1998, HIPPI-6400-PH: Project #: 1375-D

Recommendation to NCITS for 1999 maintenance revision for the following standards was made by the chair through separate motions:

- ANSI X3-230: 1994. FC-PH
- ANSI X3-254: 1994. FC-FP

Motions passed with 2 thirds rule

TG tasks:

- T11-2: Shelto Van Doorn, on behalf of T11.2 made a motion to forward, the 100-SM-LL-V project to NCITS for further processing: Motion passed
- T11-3: Jeff Stai, on behalf of T11.3 made a motion to accept the responses to the T11 letter ballot comments and to forward revision 7.0 of the dpANS for project 1133-D, FC-AL-2 for further processing, including a compliance review and the first Public Review; Motion passed
- T11 Multi-Speed Study Group (MSSG) work assignment complete and the group disbanded. Two "Speed Negotiation" proposals, generated will be developed under FC-FS and FC-PI

Instructions to IR for ISO. Have fast track processed:

- ANSI NCITS 324-199x(HIPPI-6400-SC)
- ANSI NCITS 323-1998(HIPPI-6400-PH)
- Take necessary steps for approval of new work item and simultaneous work item for FC-AL-2 version 7.0

T11 Delegation to SC25/WG, week of 28th June, 1999 in Berlin

- Gene Milligan: TC-IR
- Kumar Malavalli: TC-Chair

## 7.2 HNF

Don Woelz reported that Don Tolmie had been authorized by the HNF to continue to perform his services in support of standards activities.

Don also reported on the HNF financial situation, the HNF has roughly 60K in the bank with another 30K in dues pending.

GSN demonstrations, past, present, and future were noted.

- There was a demo held at the University of Minnesota this month with SGI, Genroco, and Ciprico. Disk transfer rates in excess of 600 MB/s were shown over a single GSN link.
- Upcoming demos were being considered for the University of New Mexico, the Stennis center in Mississippi, in Southern California, and in Washington, D.C.
- A demo is scheduled for October 8th at CERN.

## 7.3 ISO report

There was no ISO report.

## 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](mailto:amarasco@ansi.org). A patent policy description is at [www.ansi.org/proctbl.html](http://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 3.0 was reviewed at the May meeting and revision 3.1 was reviewed early in this meeting. The document seemed almost ready to go, but two new items will keep it around, at least until August.

- The mapping of ST onto Ethernet (DIX and 802.3) have been modified with the addition of a length field. This change is needed for correct function and it's a good thing that we caught it. A new Ethertype was added (x'8183') for this mapping with 4 bytes of fill and 4 bytes of length pre-pending the ST operation
- Variable Block sizes were proposed and debated. Most in the group were starting to accept the idea. However, there was no consensus on the best approach for implementing this capability.

#### 9.1.1 Vote to Forward

In light of the changes mention above, there was no vote to forward.

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

Rev 1.1 was reviewed at the June 8th HIPPI-6400 Optical working meeting. There were very few changes. Most of the changes were accepted as written.

The gating factor on completing the optical work still appears to be the characterization of the SuMAC at 1 Gbaud. The judgement of Joel Darnauer was that achieving success with the SuMAC 8-bit data front would be difficult and still had many steps to go.

### 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 working meeting, and the changes accepted.

It is expected that we will receive a RFC number in the next two months.

No additional changes were proposed at this meeting.

### 9.4 ST-API

There was zero progress on a low level API for ST due to the absence of the concerned parties.

This project desperately needs the active participation of an editor.

### 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 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 meeting, both by this group and by T11. A draft document has also been started by Don Tolmie.

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.

A long report on progress for RFI/EMI testing is included in the working group minutes. However, work is not complete. SGI is leading this effort but there is no certain date when the work will be completed.

Anyone with other proposed changes was given an action item to making formal proposals to the committee as soon as possible.

## 10.0 Review projects in approval phase

### 10.1 HIPPI-6400-SC Public Review status

HIPPI-6400-SC Rev 2.5 passed its second public review on November 24, 1998, with no comments. Unfortunately, it missed the NCITS meeting cycle and had to wait for the March 30, 1999 NCITS meeting to complete its management review.

HIPPI-6400-SC finally passed NCITS management review on March 30th. It will conclude an NCITS letter ballot on May 13th. The results of this ballot were not available at this meeting.

Roger Ronald has attempted to contact the ANSI editor to obtain the pre-edits so that a clean copy can be used for the NCITS Letter Ballot. Roger reported that the Harvey Rosenfeld, the ANSI editor, indicated that it was unlikely that they would be able to get to the document before the NCITS letter ballot. This isn't a problem, it just means that all of the edits will need to be made after it is an approved standard.

## 11.0 Review other HIPPI-related items

### 11.1 Bridging to HIPPI-800

Nicolas Droux was not in attendance, so there was no progress on this topic. However, 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 expect to get one in the next few month.

### 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

There were no actions required by T11.1, or any action taken, on any of the following activities:

- HIPPI end-point MIB
- HIPPI switch MIB
- HIPPI-6400 MIB

It was noted that these are not without hope; Mark Doppke is working on the HIPPI Switch MIB and the HIPPI-6400 ARP and IP RFC will be a subset of the HIPPI-800 one.

### 11.5 IEEE Tutorial for HIPPI-6400 ULA usage

No action.

## 12.0 New business and new technical items

### 12.1 Project Proposal for SCSI on ST

Roger Ronald presented a Project Proposal for SCSI on ST (SST). Jeff Young moved and Don Woelz seconded a motion to forward the proposal to T11 for further processing.

A roll call vote was taken:

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

This vote failed to meet the requirements of the two-thirds rule. The rule requires a majority of the members in attendance, with at least two-thirds of the voting members voting yes for approval. Only 6 of 12 members were present, so the motion failed.

We will take up this motion again at the August T11.1 plenary meeting.

## 13.0 Administrative matters

### 13.1 Interim meeting authorizations

The T11.1 Chairman, Roger Ronald authorized the following T11.1 interim working meetings and will chair these meetings. Only the August dates include HIPPI-6400 Optical working meetings.

- July 13-14                      Seattle, WA
- August 2-6                      Rochester, MN

## 14.0 Future meeting schedule

### 14.1 August 4, Rochester, MN

The next T11.1 plenary meeting will be held August 4th from 6-9 PM (during the August Plenary week in Rochester, MN.) The hotel information is posted at the [www.hippi.org](http://www.hippi.org) web site.

### 14.2 Future meeting dates and locations

The Optical working group will meet Tuesday morning during the T11 Plenary week, before the HIPPI working meetings.

#### 1999

Jul 13-14	Interim	Seattle, WA	Tera
Aug 2-6	Plenary	Rochester, MN	ENDL
Oct 4-8	Plenary	Miami Beach, FL	Jaycor
Dec 6-10	Plenary	Reno, NV	Solution

#### 2000

Feb 7-11	Plenary	Huntington Beach, CA	Qlogic
Apr 3-7	Plenary	Palm Springs, CA	Brocade
Jun 5-9	Plenary	Boise, ID	HP
Aug 7-11	Plenary	** open **	?

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 meeting.
2. Anyone with a proposed change to HIPPI-6400-PH to present a written proposal to T11.1, or its working groups, by the August T11.1 Plenary.
3. Roger Ronald to issue membership warning letters to FCI-Berg, Compaq, and IBM.

## 16.0 Adjournment

Jeff Young moved and Don Woelz seconded to adjourn at 6:34 PM on June 9th. There were no objections.

## Attendance

Name	Status	Company	Phone	E_mail
Bill Lynn	O	Adaptec	303-684-4706	bill_lynn@corp.adaptec.com
Donald Woelz	A	Genroco, Inc.	414-644-2505	don@genroco.com
Ian Philp	P	Los Alamos National Lab	505-667-4305	philp@lanl.gov
Roger Ronald	P	Power Micro Research	972-437-9461	rronald@pmr.com
Walter R. Smith	P	Raytheon Systems Co.	972-205-5378	wrsmith@gar.esys.com
Jeff Young	A	SGL/Cray Research	651-683-5536	jsy@cray.com
Albert F. Kelley	P	Tensolite Co.	904-829-5600 x281	akelley@tensolite.com
Sean M Rieb	P	Tera Computer Co.	206-701-2164	srieb@tera.com