Minutes of T11.1 HIPPI Ad Hoc Working Group

February 7, 2001 Huntington Beach, CA

1.0 Opening remarks and introductions

The T11.1 Chairman, Roger Ronald of VIEO, opened this meeting at 9 AM and thanked Skip Jones and QLogic for hosting this meeting.

This group is constituted as both the HIPPI Working Group under T11.1, and the High Performance Networking Forum (HNF) - Technical Committee (TC).

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

2.0 Review / modify the draft agenda

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

David Gaskill of Essential requested that an agenda item for IPv6 be added.

These minutes reflect the approved agenda.

3.0 Document Distribution

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

4.0 Review minutes of previous meeting

The minutes of the December 6th, 2000, HIPPI Working Meeting in Austin, TX were reviewed.

No corrections were noted during the meeting. However Bob Willard noted a spelling error in section 8.2 (though ->thought) that the chair subsequently corrected on his own initiative. Don Woelz moved and Sean Murphy seconded, to approve the December, 2000 working meeting minutes as written.

The motion passed without objection. Since the minutes were approved without the spelling correction, the official version at the T11 web site will not be updated, but the one at www.hippi.org will be updated.

5.0 Review old action items

The action items from the December 6, 2000, HIPPI Working Meeting in Austin, TX were reviewed.

- Ed Cady of FCI to send Don Tolmie updated information and drawings on the new SGI receptacle to match the cable information that has been received (to replace the drawings on page 43 of rev 2.6 of HIPPI-6400-PH). (carryover)
- 2. Don Tolmie to update the HIPPI-6400-PH amendment to include the new SGI cable configuration. (carryover)
- Brad Allen to update the version of the HIPPI-800 to Ethernet bridging RFC (overcome by events)
- 4. Don Woelz to update the SST document (done)
- 5. The Chair (Roger Ronald) to produce the minutes for the December, 2000 meeting (**done**)
- 6. Sean Murphy to update the HIPPI-6400 HARP document (**done**)
- 7. Roger Ronald to convey HIPPI-6400-PH changes to Don Tolmie. (**done**)
- Roger Ronald to send a copy of the SGI patent statement to Gary Robinson (carryover)
- Don Woelz to validate that targets never send option payloads (done, they do send option payloads)

- 10. Anthony Voellm to update the ST-API (carryover)
- 11. Roger Ronald to store comments about ST on the web site so that they will be available for future updates (**done**)
- 12. Roger Ronald to verify with Robert Clarkson that the notes on page 53 of HIPPI-6400-PH are answered (**carryover**)
- 13. Sean Murphy to investigate and recommend an IETF processing path for HARP (**done**)
- 14. Ed Cady to provide VHDCI cable and receptacle drawings (carryover)
- 15. Roger Ronald to post the HIPPI-800 to Ethernet bridging document (**done**)

6.0 HIPPI-6400-PH (ref: Rev 2.7)

6.1 Draft Amendment Review

Changes noted during document review:

- 3.1.3 had some extraneous editorial text
- EMC (used on p.40) should be defined up front and on first use
- There were some Adobe pdf artifacts associated with dotted lines on p41. The group recommends using solid lines in place of the dotted ones.
- The figure titles were displaced from the figures on page 41 and should be moved around so that the titles and figures are unambiguously coupled together
- Annex B (p52) has a mis-acronym'ed word (PCI). This should be added into section 3.3 as well.
- The group thought that adding a pointer to the PCI specs on page 52 would be a good idea.
- The group liked the new connector drawings in Annex C, but felt that C.2(a) should be cleaned up. David Gaskill volunteered to work with Don Tolmie on this drawing.

6.1.1 Existing Cable Changes

Since FCI had not provided a new drawing for figure 28 (cable end), the group felt that we should not wait longer. If no drawing is available, the consensus was that the specification for the cable end could just require a connector that mates with the receptacle (which is properly specified).

6.1.2 New PCI/Cables/Connectors Changes

At the October meeting, there was an agreement that the FCI VHDCI connector should be added to the standard. Several vendors have an immediate need for PCI form factor adapters and optics are not an option if they aren't available.

Drawings of the new connector (receptacle and cable ends) are still needed. If we can't get the cable drawing but do have the receptacle drawing, the group feels that we should proceed to document the receptacle and to require that the cable mate with it (in preference to waiting for both).

6.2 Draft Amendment Processing Plans

The group feels that it should be possible to complete the processing of the amendment during the next few meetings if the connector drawings can be collected.

Don Tolmie raised an issue questioning whether the amount of change was suitable for an amendment, but the group disliked changing the current approach and felt that other update options would add time and effort.

Don consulted with the ANSI editor for this project (Harvey Rosenfield) and was told that annexes can be placed out of order in cases like this (a normative annex following an informative one).

The group expressed a strong desire to forward as soon as possible, even if that meant that some drawings might be left out of the document (for example, a cable drawing could be left out and a note added to specify that the cable should mate with the receptacle. This means that the sole drawing that is absolutely required is the VHDCI receptacle drawing.

7.0 SCSI on ST Mapping

7.1 Document Review

A read thru of document changes was done during the meeting. This involved much of the document. There were a few minor changes and corrections made, but the text appears almost complete.

7.2 Processing Plans

SCSI on ST was thought to be virtually complete and was taken to T10 for an editing session on 10/ 30. T10 took exception to the use of terminology that was inconsistent with the T10 document family.

Correcting the document to make T10 happy will take a fairly substantial revision. However, none of the changes are technical in nature.

Given the full review at this meeting and the relatively minor nature of the changes, it is hoped that this document can be forwarded shortly.

8.0 ST API Proposal

8.1 Document Review

No progress to report.

9.0 ST Reliable Transfer Profile (ST-RTP) Processing Status

At the June plenary meeting, T11.1 voted to forward ST-RTP to T11 for further processing. The ballot closed on July 29.

The ANSI editor has completed the document. No word has been received on when the standard will be approved and when the document will be published.

10.0 HIPPI-6400 HARP

At the December, 2000 meeting, the group proceeded to do a read through of the document and covered about 2/3rds of the text.

Sean accepted an action item to make the document changes.

At this meeting, a new document was passed out during the meeting and high level review of several open items occurred.

Sean agreed to update the document. A complete review will probably be required in the near future.

Sean also reported that HARP was in the IETF standards track and would continue in that track.

11.0 Other HIPPI items

11.1 Bridging to HIPPI-800

Essential Communications reported that they are no longer bridging HIPPI-800 to Ethernet, but instead are routing. Others were asked during the meeting if they had any interest in this protocol and the suggestion was made that it should be dropped.

Although no one at the meeting had any commercial interest in this protocol, the group thought it would be prudent to issue a call on the reflector before killing it.

11.2 MIBS

The only MIB of general interest seemed to be a HIPPI-6400 switch MIB.

Nothing new at this meeting.

11.3 IPv6

The mapping of IP version 6 over HIPPI-6400 was discussed. It seemed that this mapping would be very easy to do, but there were a few technical decisions to make (e.g., which VC should be used). Most of the format and information for this document could be extracted from the current IPv4 RFC for HIPPI-800 along with the IPv4 over HIPPI-6400 mapping and other IPv6 RFCs.

The group agreed to consider taking up IPv6 as an IETF project.

12.0 Future meeting schedule

12.1 Plenary week, April 11-12, 2001 - Toronto, ON

The April Plenary week will be held in Toronto, ON.

The hotel information is available on the www.hippi.org web site. The tentative schedule is as follows. Note that the start time for the working session is at 9 AM, but that the optical session starts at 8 AM followed by the Plenary at 10 AM.

Wednesday 4/11	9 AM - 6 PM	HIPPI ad hoc
Thursday 4/12	8 AM - 10 AM	HIPPI Optical
Thursday 4/12	10 AM - noon	T11.1 Plenary

12.2 Future meeting dates and locations

<u>2001</u>

Apr 9-13	Toronto, ON	Brocade

Jun 4-8	Minneapolis, MN	Ancor
Aug 6-10	Hawaii, HI (big island)	Solution Tech
Oct 8-12	San Diego, CA	JNI
Dec 3-7	Austin, TX	Crossroads

13.0 Review action items

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

- Ed Cady of FCI to send Don Tolmie updated information and drawings on the new SGI cable (to replace the drawings on page 44 of rev 2.7 of HIPPI-6400-PH).
- 2. Don Tolmie to update the HIPPI-6400-PH amendment to include the new SGI cable configuration or to eliminate the page and note that the cable must mate with the receptacle on the previous page.
- 3. Roger Ronald to post a call on the reflector to see if anyone wants to continue with the HIPPI-800 to Ethernet Bridging document.
- 4. Don Woelz to update the SST document
- 5. The Chair (Roger Ronald) to produce the minutes for the February, 2001 meeting
- 6. Sean Murphy to update the HIPPI-6400 HARP document

- 7. Roger Ronald to convey HIPPI-6400-PH changes to Don Tolmie.
- 8. Roger Ronald to send a copy of the SGI patent statement to Gary Robinson
- 9. Anthony Voellm to update the ST-API
- 10. Roger Ronald to verify with Robert Clarkson that the notes on the bottom of page 53 and in Annex B of HIPPI-6400-PH are correct/ answered
- 11. Ed Cady to provide VHDCI cable and receptacle drawings
- 12. Roger Ronald to post the HARP document reviewed at the February, 2001 meeting
- 13. David Gaskill and/or Don Tolmie to correct figure C.2 (a) in HIPPI-6400-PH

14.0 Adjournment

Don Woelz moved and David Gaskill seconded a motion to adjourn the meeting at 4:40 PM on the 7th of February. There were no objections.

Attendance

Name	Status	Company	Phone	E_mail
David Gaskill	0	Essential	505-344-0080 x340	dgaskill@esscom.com
Ed Cady	Р	FCI	503-359-4556	edcady@aol.com
Donald Woelz	Р	Genroco, Inc.	414-644-2505	don@genroco.com
Ken Davis	0	Hitachi Cable Manchester	603-669-4347 x262	kdavis@hem.hitachi.com
Tan Truong	Р	IBM	512-838-7813	truongtm@us.ibm.com
Tom Murphy	0	Infineon Technologies	49 30 386 23281	thomas.murphy@infineon.com
Walter R. Smith	Р	Raytheon Systems Co.	972-205-5378	wrsmith@gar.esys.com
Sean Murphy	0	SGI	301-595-2468	smurphy@sgi.com
Roger Ronald	Р	Vieo, Inc.	972-437-9461	rronald@vieo.com