

Minutes of T11.1 HIPPI Optical Ad Hoc Working Group

October 5, 2000

Nashua, NH

1.0 Opening remarks and introductions

The T11.1 Chairman, Roger Ronald of VIEO, opened this meeting at 8 AM and thanked Zane Daggett of Hitachi 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).

The list of attendees is at the end of these minutes.

Roger Ronald lead a round of introductions. Roger will record and produce the final HIPPI-6400 Optical minutes separate from the other HIPPI minutes.

2.0 Review / modify the draft agenda

Draft agendas were distributed via e-mail before the meeting.

There were no changes.

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 August 9, 2000 HIPPI Optical Working Meeting in Seattle, WA, were reviewed.

Don Woelz moved and David Hyer seconded a motion to approve the August 9, 2000 optical working meeting minutes as written.

The motion passed without objection.

5.0 Review action items

The action items from the August 9, 2000 meeting were reviewed.

1. Roger Ronald to produce the minutes for the August, 2000 meeting. **(done)**
2. Schelto Van Doorn to take a cut at producing a document section for the DC mode parts. **(carryover)**
3. Roger Ronald to post the charts for the optical testing presentation on the web site. **(done)**
4. Roger Ronald to post the optical pinout on the reflector. **(done)**
5. Klaus Schulz to investigate and expedite availability of parts for testing optical interfaces. **(carryover)**
6. David Hyer to calculate the distance values supported when operating the SuMAC at half-speed. **(done)**

6.0 Presentations

There were no presentations at this meeting.

7.0 HIPPI-6400-OPT, Revision 1.9

7.1 Half-speed operation

The group voted to accept a half-speed mode at the August meeting. This mode of operation uses the SuMAC at 500 MBaud, but is otherwise unchanged from the currently documented standard. While this mode only supports moving data at 3200 Mbits/second, it does work properly and should support signaling over increased distances.

During the August meeting, David Hyer accepted an action item to produce distance charts for operation with the SuMAC operating at 500 MHz. David completed this action item and the data was posted to the web site prior to this meeting.

It was interesting to note that half-speed operation substantially improved distance with the varying grades of fiber, but that the improvement was the greatest (on a percentage basis) with the lowest

bandwidth grade. Even the least capable fibers allows operation beyond 500 meters at half speed.

After the group reviewed the data, it was decided that it should be added to the standard.

7.2 Optical connector

The choice of optical connector was revisited.

Originally the MTP connector was picked. However, there are no DC mode parts with a built in MTP connector. And even when using the 1/2 speed mode, most vendors seem to be using Infineon parts (which are not MTP, but instead use SMC).

There may be some virtue in keeping different modes of operation in different connectors to avoid confusion.

After a period of discussion, Roger Ronald proposed that the AC mode of operation should continue to use the MTP, but that DC operation should use the SMC connector

- Full speed AC = MTP
- 1/2 Speed AC = MTP
- Full speed DC = SMC

A show of hands was requested and the proposal received support from 10 attendees versus 2 who were opposed. This will be the new document baseline when DC parts are added.

7.3 Optical Pinouts

The current optical component pinout assignments were made for the baseline optical arrangement (8 data signals at 1 GBaud).

This arrangement is not optimal for the existing parts. A pinout has been suggested that allows use of both AC and DC parts, by using on board zero-ohm resistors for jumpers. This pinout also supports AC mode parts made by WL Gore and Infineon.

All in attendance agreed that the new pinout should be adopted.

7.4 DC mode

The Infineon DC mode part needs to be added. At the April meeting, Schelto Van Doorn agreed to take an action item to produce a document section for the DC mode operation.

Schelto reported that some progress was being made and that some material should be ready in the not-too-far distant future.

The action item was reassigned to Richard Johnson.

Also discussed at this meeting was a concern that the optical components were continuously unavailable and were not even promised before April or even June, 2000. Infineon reported poor yields and agreed again to consider expediting a small number of parts to support standards development activities.

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 Planning for future work

It appears that we will continue with the same meeting schedule and plans for some time.

10.0 Future meeting schedule

10.1 December 7th, Austin, TX

The next Optical working group meeting will be held December 7th from 8 AM till 10 AM during the December, 2000 Plenary week in Austin, TX.

The hotel information is available at the www.hippi.org web site.

10.2 Future meeting dates and locations

The Optical working group will meet on Thursday mornings (8 AM till 10 AM) during the T11 Plenary week, before the HIPPI plenary meeting.

2000

Dec 4-8 Austin, TX Crossroads

2001

Feb 5-9 Huntington Beach, CA Qlogic
 Apr 9-13 Toronto, ON Brocade
 Jun 4-8 Minneapolis, MN Ancor
 Aug 6-10 **Hawaii**, HI Solution Tech
 Oct 8-12 San Diego, CA JNI
 Dec 3-7 Austin, TX Crossroads

2. Richard Johnson to take a cut at producing a document section for the DC mode parts.
3. Richard Johnson to investigate and expedite availability of parts for testing optical interfaces.
4. Roger Ronald to convey the agreed changes in HIPPI-6400-OPT to Don Tolmie.

12.0 Adjournment

Don Woelz moved and Bob Willard seconded to adjourn at 9:40 AM on October 5th. There were no objections.

11.0 Review action items

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

1. Roger Ronald to produce the minutes for the August, 2000 meeting.

Attendance

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