## IEEE P1394a Working Group October 8, 1996 Redmond, WA

Peter Johansson called the meeting to order and began by having everyone introduce themselves. He presented the following agenda.

- 1. Introductions
- 2. Voting Procedures
- 3. International Participation Fee
- 4. High Speed PHY Task Group
- 5. Alternate Physical Connector Task Group
- 6. IP Transport Issues Task Group
- 7. Project Authorization
- 8. Project Scope
- 9. Document Status
- 10. New Business
  - DAVIC Request for Address Space Allocation
  - Boot devices
  - Security Proposal (Document Distribution)
- 11. Action items
  - DAVIC request for testing information
- 12. Meeting Schedule
- 13. Adjournment

Peter announced that the PAR for this project has been approved by the IEEE, so we are now operating as an officially sanctioned working group. Peter reminded us that as an IEEE working group, we operate as individuals rather than as representatives of our employers.

Peter reminded the group that the voting rules are:

- A member who has attended 2 of the last 3 meetings (including the current meeting) has the right to vote at the current meeting.
- At this first meeting, all attendees have the right to vote.
- If a person does not meet the "2 out of 3" rule but can demonstrate continued active participation in the work of the group (such as email contributions or other activity) then they may vote.

The IEEE International Participation Fee was discussed. Dave Wooten moved:

The chair should send a list of all voting members of the working group to IEEE so that IEEE can bill those members for the IPF. Payment of the fee is a requirement for voting in the working group. In the event of a letter ballot in the working group, the chair is to request from IEEE a list of working group members who have paid the IPF. If such a list is provided by IEEE then the chair shall use the list to qualify voters.

John Fuller seconded the motion, and it passed unanimously.

We discussed the work being done on an 800 Mbps phy. Dave Wooten moved:

This working group authorizes the formation of a High Speed Phy Task Group, chaired by Mike Teener, to study the issue of a plug-compatible 800 Mbps phy. The task group is to report back to the working group at a later time with recommendations. During the course of the work, periodic liaison reports are expected from the task group chair.

Harrison Beasley seconded the motion, and it passed unanimously. It was also noted that the task group is open to any interested party. The working group chair will announce information about the task group (reflector, ftp site,

etc.) by email. It is possible that the work of this task group may in the future be added to the PAR of the working group, or a PAR may be written for the work as a separate project.

Peter distributed copies of the approved PAR for the working group. He suggested June 1997 as a target completion date to finish the P1394a work. He will also check with IEEE about setting up ftp and www sites for the working group.

The P1394a draft document was presented as it currently stands: a one page table of contents. Peter intends to serve as collector and compiler of sections, but not as creator of text. The following are the responsible person and target date (for first draft text) for each technical section:

Alternative cable physical: Max Bassler 12/1/96 (?)
PHY/LINK interface: Richard Mourn (technical information),
Peter Johansson (text collection) 12/1/96

Cable physical layer performance enhancement: Bill Duckwall 12/15/96
The subsections will each be written and released for review separately.
The probable order will be:

Bus reset after arbitration

Accelerated arbitration after an acknowledge packet

Tree identify resolution of looped topologies

Incremental topology change notification

Isochronous connection management: Peter Johansson 12/15/96 Request and response error handling: Calto Wong 12/1/96 Corrigenda: Steve Finch (ongoing)

Copies of a 1394 Trade Association proposal regarding security enhancements were distributed.

Dick Scheel brought up a request from DAVIC to the 1394 community for information about phy/link isolation. Their concern is whether devices built without isolation will have difficulty passing regulatory testing, particularly surges applied to the 1394 cable. There was some discussion, with no conclusion. TI thinks it may be able to provide some information to Dick that will help.

Next the group addressed the topic of whether this working group should allocate reserved addresses. This is in response to requests from several other bodies for such addresses. Peter temporarily gave the chair to Harrison Beasley so he could speak on the matter. Tom Suters gave a presentation on DAVIC's work on defining the Internet Protocol (IP) over 1394, which includes a request to this working group for allocation of a reserved address. There is also a fixed address used in the Function Control Protocol (FCP) specification. Discussion followed, and it was suggested that an informal task group be formed to address the issue of allocating fixed addresses. Peter and Tom will lead this group, and it is anticipated that most of the work will be by email (on the IEEE and Trade Association 1394 reflectors). There may be some actual meetings. Topics will be allocation of fixed addresses and IP over 1394. Harrison then returned the chair to Peter.

Mike Teener gave a presentation about the current state of the high speed phy work. He noted that the next meeting of the task group will be 11/15/96 at National Semiconductor in Santa Clara. This will be announced on several reflectors. It is hoped that rough test chips will be available in late summer of 1997, and they plan to have a draft document ready for voting by the end of 1997.

David James moved:

This working group authorizes the formation of a task group to design a way to operate Internet Protocol transport over 1394. The task group should make a proposal for this design to the working group.

Richard Mourn seconded the motion, and it was passed unanimously.

## Steve Finch moved:

This working group authorizes a task group to write the alternative connector section of the P1394a specification, with Max Bassler as chair.

Max Bassler seconded the motion, and it was passed unanimously.

Curtis Stevens suggested defining a "boot" bit in the bus info block of the configuration ROM. This bit would indicate that there is a unit directory in the configuration ROM that indicates a boot device (a device that can provide boot services to other devices, such as a hard disk in a PC). This bit would be redundant information, but it would speed up the boot process as a device scans nodes looking for a boot device. Discussion followed concerning whether this is sufficiently useful that we should assign a previously reserved bit for a redundant function. An informal straw poll was taken on whether this should probably be done. The result was: 8 for, 0 against, 20 abstain.

The schedule for our next meeting was discussed. Possible times were suggested:

- Monday of the week that the 1394 TA meets in January (in Houston)
- During the 1394 TA meeting, use the time and room that would normally be allocated for the Silicon Working Group
- The week after the 1394 TA meeting, adjacent to the "Disk Boys" meeting in San Jose

Peter will work this out and announce the result by reflector.

The meeting was then adjourned.

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