

*IEEE p1394.B Working Group, Portland Oregon August 19, 1998
Connector/Cable task group – “Copperheads”*

Bill Northey, Acting Chair (v. Max Bassler)
Chuck Brill, Interim Secretary (v. Bill Northey)

Agenda -

1. Review and approval of last meeting's minutes:

Indication was made that the full minutes were on the web page.

- Need new copy of EMI/RFI testing from Mike Fogg which has fewer slides per page, to ease readability
- Discussion was held on Mr. Saito's proposal for cable assembly speed detection using a miniature switch and a notch on the cable connector nose piece.
- Action items were reviewed and passed to the next meeting
- Request for comments to the Trade Association reflector regarding compliance testing of connectors and cables, the criteria for which are under development.

Meeting Minutes were approved

2. August Tasks

- None

1. New Items / Presentations

- Colin Whitby-Stevens presented information coming from the ASC-T11.2 Copper task group (Fibre Channel). He is their liaison to 1394. The discussion was related to the Fibre Channel Arbitrated Loop (FC-AL) group who are having problems when they turn on their switch mechanism to bypass the port circuit loop. According to Colin, the hardware can be switched on but the software is not ready. A special task group at 11.2 was set up in June 1998 to deal with near end cross talk (NEXT) issues. The two connector styles in question are the DB-9 and HSSDC. Internal construction and rise times were discussed and it was mentioned that the Fibre Channel group is getting up to 10% difference in transmitted signal. It was mentioned that the whole interconnect must be looked at closely (part of jitter budget). According to the 1394 specification, NEXT should be < -26dB, which Colin indicated to be about 5%.

- Colin requested on behalf of the Upstarts and the Standard Electrical working groups that the Copperheads provide NEXT figures for the 6-pin I/O system (cable and connectors) so they can understand what they need to budget for in their designs. A rise time of 100 ps at S800 and S1600 was set for the 1394 test. If so inclined 50ps could be used at S3200.

4. Ongoing Action Items

- Additional reliability testing for contact geometry change proposal - in process
 - David Wooten requested that we should indicate whether or not S1600 can be achieved in existing cables with changes to the 6-pin walk up connector. He requested data by October since this information affects whether or not a cable sense system is required in the connector, and thus additional signals and pins on chips to handle the signal.
- Discussion regarding Mr. Saito's proposal for a methodology of cable speed detection using a switch and a notch in the cable connector
 - Request made to the attendees for input to Mr. Saito regarding his proposal ie suggestions and/or concerns

- Request made for any other proposals for other methodologies to signal cable speed capability
- Accepted work on bulk cable test to be converted to Word or Framemaker by Secretary
 - Status - Information passed to Eric Hannah for him to put into Framemaker
- EMI/RFI test proposal needs to be reviewed. The information requested previously about fixturing etc. is still outstanding. Chuck Brill to get a revised copy of Mike Fogg's presentation with one slide per page.
- TA connector/cable compliance testing effort
 - David Wooten asked if the TA document included 1394.b level testing (yes)
 - David asked if the end resulting TA document would find a home in the IEEE 1394.b spec. (likely to be used at some level in an annex)

Meeting Adjourned