

1394b Working Group Tempe, AZ - March 17, 1998

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Bill Northey Secretary northewa@bergelect.com

Agenda

- Review and approval of last meeting's minutes - Summary Follows:
 - Revised 1394a cable test method presented and put into ballot draft.
Baseline for our testing
 - On-going proposal for bulk cable testing methodology
 - Adding some items from Fiber Channel may be needed (Jitter)
 - Cable detect pin in 6 ckt I/O added to scope
 - On going proposal to change shape/geometry of existing contacts in the socket
 - Chuck Brill to propose an EMI/RFI test for review

- *** Motion to accept minutes made by Max, seconded by Don Chambers,
Voting unanimously approved the motion.

- Review of past presentations
 - Bob Gannon and Al Kelly reviewed the status of their efforts to develop a test methodology for 1394 bulk cable. They provided several test procedures referencing sections of annex K. These procedures identify test equipment used in the tests. Mike Fogg suggested that keystroke by keystroke test methods would not serve well for defining test methods. The group is asking for feedback on this. It was generally agreed that jitter test is really not needed for bulk cable and that we propose only test jitter for terminated assemblies. Also it was noted that the difference between grounded and ungrounded eye patterns was insignificant. We agreed that we would remove the need for eye pattern testing from the test. Rise and fall time testing should be done with grounded internal shields. Max proposed that we use TDR method (Ref. K.6) eliminating time sweep.

 - Bob Gannon made a presentation on a new cable product from C&M. The construction didn't seem to hold much promise for longer cable lengths (4.5meters)

 - Mike Fogg gave a presentation about EMI performance exploring various shield termination methods, and how they stack up to FCC class B requirements. He indicated that by very good DC coupling to the bulkhead opening. AMP is

promoting a capacitive coupling system that connects the shell to the opening, which may hold promise for meeting FCC class B.

Bill Prouty expressed the concern that the outside cable shield, as the return for the common mode energy needs to be controlled. Mike showed an approach for testing this with a transfer impedance measurement method. Mike will formalize his proposal for a future meeting. Don Chambers (JAE) offered to assist Mike. Mike will supply the Chairman with a complete soft copy of this presentation for posting on the ftp site. If a copy is not made available this will be removed from the body of work.

- Bill Northey deferred his follow-up presentation on revised connector geometry and testing until next month's meeting.

- It was generally agreed that the fact that the cable has two twisted pairs for signals and that the power pair is not twisted, but is actually symmetric in the cable lay, is not an issue.

- Ongoing Action Items
 - EMI/RFI Baseline test method
 - Cable detect pin in copper connector
 - Bulk cable specification methodology (proposal for vote on the ftp site)
 - Matrix of physical interfaces
- Proposal for contact modifications
 - Deadline for comments is April 20

END