Backplane Round Robin Teleconference   01-135r0
          PIP Working Group – 4-19-2001

Subject: Draft Minutes for the PIP Backplane Round Robin Teleconference on April 19, 2001.

Bruce Manildi hosted the meeting and took these minutes.

The following were in attendance:
          Bill Ham (Compaq), Umesh Chandra (Seagate), Himanshu R. Desai (Seagate), Greg Vaupotic (Amphenol, Spectra-Strip), Richard McMillan (Adaptec), Duncan Penniman (Maxtor), Larry Barnes (LSI Logic), Bill Troop (IBM), Dick Stack (Intel).

Umesh Chandra went through the document number T10/01-132r0 with references to T10/01-133r0. The following were comments and corrections to that document:

- On page 2, it will be noted that the listed documents are contained in T10/01-133r0
- Under 'Test Equipment' page 4, item 2, it should be noted that single ended probes could be used for calibration and for measuring common mode signals and offsets. It was also noted that these probes have bandwidths other than 1GHz and we should allow for them. The procedure will require that the participants note the bandwidth of their probes. Suggested by Bill Ham & Larry Barnes.
- Under 'Test Equipment' page 4, item 7, Twist and Flat Cable will be replaced with a short PCB interposer. Suggested by Bill Ham
- Participants should review pages 5 and 6 in detail and refer questions to Umesh Chandra.
- Crosstalk measurements should be made with two (2) sets of input signals. Drive the reference signal from the normal output of the AWG and the offending signal from the inverted output. And then drive from the vice-versa outputs (reference from the inverted output and the interfering from the normal output). Take the worst case.
- Bruce Manildi to contact Mr. Jay Neer   (Molex Inc.399 W. Camino Gardens Blvd. Suite 103 Boca Raton, FL 33432 (561) 447-2907 Email: jneer@molex.com) for information regarding the Harbor Backplane. He will try to acquire the layout to determine which trace signals are adjacent to one another, for crosstalk purposes.
- There are two (2) separate and independent 5 drive sub-backplanes. It was suggested that not every participant would measure both. The procedure will note which one to measure if one is not going to measure both.
- Dick Stack from Intel will supply a second backplane for the round robin. Umesh will e-mail him the part number, etc. from the one, which Seagate has measured.
- Several .pcx pictures will be added to the procedure to show positions of cursors, measurement techniques, data to be taken, etc. to clarify the procedure and help to get correlation.

- Use two (2) single ended probes on the differential points, and sum the signals to measure the CM signal.
- Use VNA to measure impedance for those who have them. Larry Barnes to write up a procedure by 4/24.
- Re-write document in the form of SPI-3r14 Annex E.
- Meeting adjourned in one hour from the commencement.