Minutes SAS 1.1 PHY working group conference call September 9, 2004

Kevin Marks Dell Barry Olawsky HP Bill Bissonette Intel George Penokie IBM Michael Rost Molex Alvin Cox Seagate Vitesse David Springberg Don Schulte Vitesse Bill Gintz Zues Kalev Sepp Tektronics

9 people present.

1. 04-195r4 SAS-1.1 Internal Wide Connector/Cable Electrical Requirements Barry Olawsky

Reviewed update and will discuss at face-to-face. No additional changes were identified.

2. Impact to SAS 1.1 PHY to include SATA at 3 Gbps. Bill Bissonette

References can be made to the SATAii specification. SATA values are requirements for SAS devices/expanders/initiators and not requirements for SATA. Bill will bring simulation data to face-to-face to give guidance on table values.

3. 03-240r4 SAS-1.1 Internal wide connector and cable Rob Elliott

Found conflict between statement on the bottom of page 3 and at the bottom of the tables on pages 10 and 11 (notes 4 and 6). Suggested that the statement on page 3 be dropped. "The internal wide connector contains 6 sideband signals which are crossed when attaching a controller to a backplane but are not crossed when attaching a controller to a controller." Alvin did not like the use of the word "crossed" with reference to sideband signals.

Fanout illustration for backplane (Figure 8) should have targets on fanout side rather than backplane. Separate drives is expected to be the most common usage model.

2-lane plus sideband version in SFF-8484 does not support S, G, SB designations for pins. Will discuss the issue within the SFF working group.

Discussed possible changes to the text under Table 1000 on page 8: The use of the sideband signals by a backplane is vendor-specific. NOTE 3 - One possible implementation of the sideband signals by a backplane is an SGPIO target interface (see SFF-8485). Implementations should be electrically compatible with SGPIO to avoid damage.

Suggest that Note 3 becomes part of the vendor-specific paragraph and that "possible" and "to avoid damage" be dropped:

The use of the sideband signals by a backplane is vendor-specific. One possible implementation of the sideband signals by a backplane is an SGPIO target interface (see SFF-8485). Implementations should be electrically compatible with SGPIO to avoid damage.

4. TCTF section update Barry Olawsky

TCTF section discussed with respect to inconsistency in signs and the use of the term "loss". Several editorial changes will be included in a proposal by Barry Olawsky. Also suggested shaded areas on graphs to indicate the acceptable TCTF range.

Barry plans to have a proposal for review at the face-to-face.

5. External cable electrical requirements. Kalev Sepp

Kaley will find out what John Calvin had in mind as far as the cable performance specification and draft a proposal based on that discussion.