

Accredited Standards Committee^{*}
INCITS, Information Technology

Doc. Number: 06-188v0
Date: 02/24/06
Project: FC-BaseT
Reply to: Claudio DeSanti
Rich Ramos

TO: MEMBERSHIP of T11.2

FROM: Claudio DeSanti, Chair
Rich Ramos, secretary

SUBJECT: Draft minutes from FC-BaseT WG meeting

AGENDA

- | | | |
|-----|--|-------------------|
| 1. | Opening remarks and introductions | DeSanti (Cisco) |
| 2. | Administrivia | |
| 2.1 | Approval of this agenda | All |
| 2.2 | Approval of minutes
(05-846v0, 06-072v0) | All |
| 3. | Meeting Policies | DeSanti (Cisco) |
| 4. | Review of old FC-BaseT action items | Ramos (Xyratex) |
| 5. | Scheduled FC-BaseT business | |
| 5.1 | An Error Detecting Code for FC-BaseT
06-115v0 | DeSanti (Cisco) |
| 5.2 | FC-BaseT PCS Synchronization
06-116v0 | DeSanti (Cisco) |
| 5.3 | Simplified Auto-Negotiation
06-041v1 | Ghiasi (Broadcom) |
| 6. | Unscheduled FC-BaseT business | |
| 7. | Review of FC-BaseT action items | Ramos (Xyratex) |
| 8. | Next meeting schedule | DeSanti (Cisco) |
| 9. | Adjournment | |

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RESULTS OF MEETING

1. Opening remarks and introductions

Chairperson Claudio DeSanti led the meeting. He started the meeting at 4:11 PM. He thanked our host company, QLogic, and led a round of introductions.

2. Administrivia

The agenda (06-105v0) was approved with no one objecting to the agenda. Claudio moved, Horst Truedstedt seconded.

The minutes (05-846v0 and 06-072v0) were approved with no modifications. Claudio moved, Bob Kembel seconded.

3. Meeting Policies

3.1 Attendance and Membership

Claudio DeSanti stated that all persons present are considered members of this meeting and may vote on questions, limited to one vote per company present. Attendance at this meeting does not count toward attendance at the plenaries of T11 and its task groups (i.e., being here will not get you out or keep you out of membership jeopardy).

3.2 Patents

Claudio DeSanti indicated that among the rules and policies under which this working group operates are the INCITS patent policies. He requested persons wishing to make statements or ask questions relevant to this policy not to do so at this work group meeting, but instead to do so at the T11.3 or T11 plenary meeting. The INCITS patent policies are specified in subclause 8.4 of RD-1, "Policies and Guidelines", available at http://www.incits.org/sd9_rev1c.htm#p8-4

3.3 Antitrust

Claudio DeSanti indicated that among the rules and policies under which this working group operates are the INCITS Antitrust Guidelines. Any member of the meeting is responsible for objecting if he believes discussion in the meeting violates those guidelines. If such discussion is not immediately terminated, it is the chairperson's responsibility to terminate the meeting. The INCITS Antitrust Guidelines are available at <http://www.incits.org/inatrust.htm>

4. Review of old FC-BaseT action items

AI-12: Scott Powell will define self synchronizing scrambler for next time. (carryover)

AI-13: Schelto Van Doorn will work on Port Management, section 9. (carryover)

AI-14: Scott Powell will work on section 6. (carryover)

AI-15: Ali Ghiasi will work on section 7 and 8. (carryover)

5. Scheduled FC-BaseT business

5.1 An Error Detecting Code for FC-BaseT, 06-115v0, Claudio DeSanti

Claudio presented the results of an investigation to define an optimal error detecting code (EDC) for FC-BaseT. An EDC optimized 36/33 transcoding was proposed. By considering an error model for the specific transmission technology, an FC-BaseT EDC may detect transient big errors over a single lane, persistent small errors over a single lane, transient small errors over three lanes and most transient small errors over all four lanes. The usage of a self-synchronizing scrambler is an issue for the EDC, because this type of scrambler multiplies the errors. In reality it is a bigger issue, because FC-BaseT does not have error corrections capabilities. For FC-BaseT it makes more sense to use a side-stream scrambler (that does not multiply errors), as the one used in 1000Base-T. Closure on the scrambler is needed in order to determine an optimal EDC.

5.2 FC-BaseT PCS Synchronization, 06-117v0, Claudio DeSanti

Claudio presented a proposal on how the FC-BaseT PCS may achieve word synchronization. Something similar to the comma character in the 10b encoding is needed to delineate the transcoded 33-bit blocks. An analysis of currently defined Ordered Sets showed that it is possible to individuate specific bit patterns to achieve synchronization during the PHY startup. Synchronization may then be maintained in conjunction with the error detecting code: if the EDC verification succeeds, then the PCS is in synch. Brett McClellan observed that there is an additional synchronization to achieve at a layer below, the alignment among the four wire pairs. Action: Brett McClellan to look at training issues for pairs alignment.

5.3 Simplified Auto-Negotiation, 06-041v1, Ali Ghiasi

Ali presented a revision of the presentation he gave at the interim meeting, incorporating the comments received at the meeting. The proposed approach makes sense to the WG.

6. Unscheduled FC-BaseT business

None.

7. Review of FC-BaseT action items

AI-12: Scott Powell will define self synchronizing scrambler for next time.

AI-13: Schelto Van Doorn will work on Port Management, section 9.

AI-14: Scott Powell will work on section 6.

AI-15: Ali Ghiasi will work on section 7 and 8.

AI-16: Brett McClellan to look at training issues for pairs alignment.

8. Next meeting schedule

Request 3 hours or more at the next T11 Plenary.

Request authorization for 2 conference calls and an Interim meeting, to be done if needed.

9. Motion to adjourn

Motion to adjourn by Schelto Van Doorn, Seconded by Brett McClellan.

Adjourned at 5:36 PM

10. Attendance

The following 23 people attended this meeting:

Company	Name
BROADCOM	Ali Ghiasi
BROADCOM	Kevin Brown
BROADCOM	Scott Powell
BROADCOM	Seyed Hamidi
BROCADE COMMUNICATIONS	Samar Dalal
BROCADE COMMUNICATIONS	Steven L. Wilson
CIENA CORPORATION	Sashi Thiagarajan
CISCO SYSTEMS	Claudio DeSanti
EMULEX	Ken Hirata
EMULEX	Hossein Hashemi
INTEL CORPORATION	Judy Chen
INTEL CORPORATION	Schelto Van Doorn
MARVELL	Wei Zhou
MCDATA	Scott Kipp
PRECISION FIBRE CHANNEL	Gary Warden
QLOGIC CORP.	Craig Carlson
QUAKE TECHNOLOGIES	John McNicol
SEAGATE TECHNOLOGY	Allen Kramer
SOLARFLARE	Brett McClellan
SOLUTION TECHNOLOGY	Robert Kembel
SYSTIMAX SOLUTIONS	Terry Cobb
TRUE FOCUS	Horst Truestedt
XRATEX	Rich Ramos