

Unapproved Minutes

IEEE P802.3ap Backplane Ethernet Task Force
September 18-20 Interim
Knoxville, TN

Prepared by Shannon Sawyer

September 18, 2006

Meeting convened at 9:01am

Attendee Introductions

Appointment of recording secretary

- Shannon Sawyer volunteered and was appointed by the Task Force Chair

Motion to approve agenda (agenda_01_0906.pdf)

- moved to accept by Fulvio Spagna
- seconded by Charles Moore
- approved by acclamation

Motion to approve minutes from July 2006 plenary

- moved by Fulvio Spagna
- seconded by Richard Mellitz
- approved by acclamation

Adam presented a draft response to an informal communication from P802.3ap to PICMG. PICMG has requested access to the P802.3ap draft, and permission was obtained from the IEEE-SA manager, intellectual property, to share the document.

Motion to approve informal communication to PICMG

- moved by Charles Moore
- seconded by Fulvio Spagna
- approved by acclamation

Communication to be sent to PICMG by the Task Force chair, and posted to the private area of the web site

Adam read the IEEE-SA standards board bylaws on patents in standards and supporting materials.

Ilango Ganga presented Editor's Report: ganga_01_0906.pdf

Comment Resolution

Morning Break 10:23am

Lunch 12:30-2pm

Straw Poll (comment 246)

Open clauses 34 and 44 to have 10GBASE-R PHY include 10GBASE-R FEC?
General ambivalence in room. Task force consensus was to accept suggested remedy.

Afternoon Break 3:30-4pm

Presentation – Adam Healey (healey_01_0906)
High Level Topics for discussion and careful thought

Presentation – Howard Baumer (baumer_01_0906)

Note: yellow cells indicate false positives

Note: values in SIMx columns are $\log_{10}(\text{BER})$

Option #1

- PRI
- PISI(f) – spectrum of noise response after masking -1UI to 5UI about the impulse response
- ICR modification

Option #2

- PISI(f)
- ICR modification
 - $\text{ICR}(f) = \text{Pnoise}(f) - \text{IL}(f)$

Charles asked to mask impulse response to up to 5 UI after the peak

Rich asked to provide #1 and #2 with all channels in backup slides

TX DCD was set to 0.025UI to match previous simulations. Study at 0.035 UI also done, with BER being slightly worse but no impact on the PASS/FAIL matrix.

Presentation – Rich Mellitz (mellitz_01_0906)

Conclusion: return loss is overly restrictive.

Straw Poll

Replace PILD with option 2 in Howard's presentation?

Yes - 10

No - 0

Straw Poll

Make option #2 normative

Yes - 2

No - 7

Straw Poll

Remove channel return loss?

Yes - 3

No - 3

Evening Break 7:20pm

September 19, 2006

Meeting convened at 8:45am

Morning Break 10-10:20am

Straw Poll

Keep existing RL spec for 1000GBASE-KX?

Yes - 10

No - 5

Extended frequency range covers fast transition times relative to signaling rate.

Lunch Break - 12:15-1:45pm

Straw Poll

Should the channel be informative or normative?

Normative: 3

Informative: 14

Consensus is to reject normative channel.

Straw Poll

Add swept sinusoidal jitter to RX Interference Tolerance Test

Yes - 6

No - 5

Reject due to lack of consensus to make change

Straw Poll

Reduce CDR to 400 kHz

Yes - 6

No - 5

Reject due to lack of consensus to make change

The counterpoint view to the suggested remedy was that knowledge of the high pass corner frequency used to measure transmit jitter provides the designer sufficient margin to set the tracking bandwidth of the receiver CDR.

Presentation - Charles Moore (moore_01_0906)

Add a channel test that represents short channels with large crosstalk to complement the long channel with smaller crosstalk test currently in place.

Straw Poll

Should we add a second test case to RX Interference Tolerance 10GBASE-KR per moore_01_0906.pdf?

Yes - 11

No - 1

Evening break 7:40pm

September 20, 2006

Meeting convened at 8:42am

Morning Break 10-10:20am

Presentation - Howard Baumer (baumer_02_0906.pdf)

Comment #15

Chicago Rules Straw Poll

How to handle system penalties in appendix 69B?

- | | |
|--------------------------|---|
| 1. fixed 3dB penalty | 8 |
| 2. current PILD equation | 5 |
| 3. new residual ISI | 4 |

Propose to accept in principle Charles' option #1 on comment 15

Lunch Break 12-1:20pm

Future Meetings

November Plenary 12-17 at Hyatt Regency Dallas at Reunion in Dallas, TX

Motion

- Grant editorial license to the P802.3ap editors to respond to unresolved editorial comments on D3.0
- Draft 3.0 and the resolution of comments against Draft 3.0 be used as the basis for the generation of Draft 3.1
- Forward Draft 3.1 for first sponsor ballot recirculation
 - Moved by Richard Mellitz
 - Seconded by Charles Moore
 - Motion Passes (Y: 11, N: 0, A: 0)

Motion to adjourn

- Moved Charles Moore
- Seconded by Tom Palkert
- approved by acclamation

Meeting adjourned 3:45PM

Attendance

Joe Abler	IBM
Kamal Ali	Gennum Corp
Arne Alping	Ericsson
Vittal Balasubramanian	FCI
Howard Baumer	Broadcom
Brad Booth	AMCC
Dave Brearley	Molex
Luke Chang	Intel Corporation
John D'Ambrosia	Force10
Ilango Ganga	Intel Corporation
Ali Ghiasi	Broadcom
Robert Grow	Intel Corporation
Adam Healey	Agere Systems
Sammy Hindi	Cisco Systems
David Law	3com
Arthur Marris	Cadence
Ken Martin	Snowbush
Rich Mellitz	Intel
Charles Moore	Avago Technologies
Bob Noseworthy	UNH-IOL
Tom Palkert	Xilinx
Shannon Sawyer	Intel Corporation
Helder Silva	Chipidea
Fulvio Spagna	Intel Corporation
Pat Thaler	Broadcom
Magesh Valliappan	Broadcom
Zhi Wong	Altera
Pavel Zivny	Tektronix