Unapproved Minutes IEEE P802.3AP - Backplane Ethernet June 21 - 23, 2005 Minneapolis, MN

Prepared by John D'Ambrosia

Meeting convened at 9:41 am, June 21, 2005

Agenda / Housekeeping Issues

- Introductions
- Agenda (agenda_01_0605)
 - Approved by voice vote without objection
 - Moved by Fulvio Spagna
 - Seconded by Charles Moore
 - Agenda approved by voice vote without objection
- Review of Minutes from May meeting
 - o Header Information (Date / location) need corrected
 - Motion to approve minutes from March meeting
 - Moved by Schelto Van Doorn
 - Seconded by Justin Gaither
 - Minutes were Approved by voice vote without objection
- Goals for meeting discussed
 - Development of Draft 1.0
 - Resolve comments against Draft 0.91
 - Presentations
 - Formalize points of agreement with motions
- IEEE rules read to the body by Chair
- IEEE Patent policy read to the body by Chair
- Inappropriate Topics for IEEE meetings read to the body by Chair
- IEEE Project Flow Discussed
- Project Details
 - Approved PAR http://standards.ieee.org/board/nes/projects/802-3ap.pdf
 - 5 Criteria http://ieee802.org/3/ap/802 3 ap 5criteria.pdf
 - Objectives http://ieee802.org/3/ap/802 3 ap objectives.pdf
- Discussion of going to working group ballot.
 - Review of Task Force Objectives
- Project schedule discussed
 - See agenda 1 0605 for Project Timeline
- Chair requested
 - All questions on presentation be held to end
 - All questions relevant to content and clarification of content

Presentation #1

Title – Editor's Report
By – Schelto van Doorn
See – vandoorn_01_0605.pdf

Presentation #2

Title – Channel Model Ad Hoc Report

By – Charles Moore See - moore 01 0605.pdf

Presentation #3

Title – Concerns Regarding the Stability and Consistency of Channel Analysis Methods

By – Goergen Oganessyan See - Oganessyan_01_0605.pdf

Discussion

Voltage output relations to channels that appear similar are being observed.

Consistency and relation to stub / return loss noted.

Break 10:05am

Reconvene at 10:22am

Presentation #4

Title – Improved ATCA Channel Measurement Data

By – Bill Peters

See - peters_01_0605.pdf

Discussion

- New channel data to be submitted
- Request for channel data web page to be updated to remove ambiguity of what is current data.
- Request for channel data to be grouped (Thru / NEXT / FEXT) when channel data is submitted.

Presentation #5

Title – ATCA Channel Crosstalk Worst Cases Analysis on Equalization Performance

By – Xiao Ming Gao See - gao 01 0605.pdf

Presentation #6

Title – Informative IL Data and Spec Value / Test Recommendations

By – Rich Mellitz

See – Mellitz_01_0605.pdf

Discussion

Philosophical question over proposed "Green-Gray" approach

Presentation #7

Title – Update to dambrosia c1 0605 –

The Informative Model and Interesting Test Cases

By – John D'Ambrosia

See - dambrosia 01 0605.pdf

Break for lunch – 12pm Reconvened at 1:30pm

Presentation #8

Title – Comparing Predictions From Informative Models Against Simulation Results

By – John D'Ambrosia

See – dambrosia_02_0605.pdf

Discussion

Concern over use of Signaling Ad Hoc Results

Missing items

Too worst case?

The presentation implies correlation to the simulations only.

Presentation #9

Title – Tx and Rx Return Loss Proposal

By – Shannon Sawyer See – Sawyer 01 0605.pdf

Presentation #10

Title – BGA Package Analysis

By – Mike Oltmanns

See - oltmanns 01 0605.pdf

Presentation #11

Title – Proposed Receiver Specifications

By – Stephen Anderson See – anderson_01_0605.pdf

Discussion

 Use of 4 taps for Tx versus multiple taps that were discussed in May meeting. May be too harsh on receiver.

Presentation #12

Title – Rx Interference Tolerance Results

By – Shannon Sawyer See – Sawyer_02_0605.pdf

Break at 3:25pm

Meeting Reconvene at 3:40pm

Presentation #13

Title – Bounds on Interference Tolerance Spec.

By – Charles Moore See – moore_02_0605.pdf

Discussion

• Interference numbers based on ICR.

- Concern expressed over proposed interference numbers. Some feel too high.
- Will existing parts meet these proposed numbers.

Presentation #14

Title – Options for Controlling DFE Error Propagation

By – Andre Szczepanek

See – szczepanek_01_0605.pdf

Discussion

- Use IPG for CRC8. There may be some issues there, as people use it now for other things.
- Concern over creating shim layers or modifying the PCS. Modifying the PCS would not be in conflict with the project objectives.

Presentation #15

Title – Coefficient Update SM By – Andre Szczepanek

See – szczepanek_02_0605.pdf

Presentation #16

Title – Transmitter Tap Range Selection

By – Brian Brunn

See - brunn 01 0605.pdf

Discussion

- Concern over short / long channels next to each other and running at max power would exasperate xtalk
- Long / short channels near each other is a fact of life, not just a choice of design practice.

Comments Resolution began at 5:15pm Meeting adjourned at 5:49pm

Meeting reconvened at 8:30am, June 22.

Comment resolution

Break at 10am Reconvened at 10:20am

Lunch at noon Reconvened at 1pm

Break at 3pm Reconvened at 3:20pm

Meeting adjourned at 6:15pm

Meeting convened at 8:10am June 23. Comment resolution continued

Draft verbiage for response to Interference tolerance testing (moore_03_0605) - Annex 69.A,

Draft verbiage for informative channel model characteristics presented (mellitz_02_0605).

Draft verbiage for coefficient update state machine presented (szczepanek 03 0605)

Supporting material for auto-negotation related comments (ganga 01 0605)

Break at 10:05am Meeting reconvened at 10:25am

Draft verbiage for transmitter output waveform testing presented (brink_01_0605)

Comment resolution ended.

No channel ad hoc conference calls between now and July Plenary.

Review of process from this point given.

Motion #1 Description:

General Session Motion

- Accept proposed comment resolutions (with editorial comments to be resolved by the editor) and instruct the editor to generate Draft 1.0
- Grant editor license to make necessary editorial changes not addressed by editorial comments.
- Pre-submit Draft 1.0 to IEEE 802.3 in anticipation of requesting WG ballot at the July Plenary.

Motion Type: Technical 75 % required

Moved By: John D'Ambrosia

Seconded By Rich Mellitz

Results: All Yes -24 No -0 Abstain -0

P/F Motion Passes

Chair acknowledged the Xilinx sponsorship of the interim.

Next meeting – July 2005 Plenary

Week of July 17th

Location: Hyatt Regency, San Francisco

No new business.

Motion to adjourn approved by voice vote (Moved by John D'Ambrosia, Seconded by Rob brink) without objection

Meeting adjourned at 11:43am