IEEE 802.3 WG
Closing Plenary Report

IEEE 802.3

100 Gb/s Backplane and Copper Cable Study Group

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Force10 Networks

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Reflector and Web

- To subscribe to the 100GCU reflector, send an email to:

  ListServ@ieee.org

  with the following in the body of the message (do not include "<>"):

  subscribe stds-802-3-100GCU <yourfirstname> <yourlastname>

  end

- Send 100GCU reflector messages to:

  STDS-802-3-100GCU@listserv.ieee.org

- Task Force web page URL:

  http://www.ieee802.org/3/100GCU/index.html

Study Group Private Area

- URL: http://www.ieee802.org/3/100GCU/private/index.html
  - Username: xxxxxxxx
  - Password: xxxxxxxx
- Write it down…
- Note - The drafts within are posted for your review only, and neither the drafts nor access information should be copied or redistributed to others in violation of document copyrights.

This Week's Progress

- 80+ Attendees
- Heard 27 presentations
- Approved Objectives (All (y/n/a): 74 / 0 / 0)
  - Support full-duplex operation only
  - Preserve the 802.3 / Ethernet frame format utilizing the 802.3 MAC
  - Preserve minimum and maximum FrameSize of current 802.3 standard
- Objective Forms Adopted (see next pages)
- Multiple Straw polls (see next pages)
- Motion to extend Study Group passed by voice vote without objection
- Task Force Strawpoll (Approval by voice without objection) - I support the goal of requesting PAR at the July 2011 Plenary.

Reach

Motion: Adopt the following objective forms:

- Define a 4-lane 100 Gb/s PHY for operation over links consistent with copper traces on "improved FR-4" with lengths up to at least "X" m.
- Define a 4-lane 100 Gb/s PHY for operation over links consistent with copper twin-axial cables with lengths up to at least "Y" m.
- Results: All (y/n/a) 70 / 0 / 9 Motion Passed

- Notes: "Improved FR-4" to be defined
  Determine "X" and "Y"

Backplane Reach Strawpoll

- Per Motion #5 I would support a backplane reach (X) of:

1. 0.5m
2. 0.75m
3. 1.0

Results All (1/2/3): 4 / 20 / 24

All Chicago (1/2/3): 11 / 31 / 36

Copper Cable Strawpolls

- Per Motion #5 I would support a Cu cable reach (Y) of:

1. 3.0m
2. 5.0m
3. 7.0m

Results: All: 1) 10 2) 23 3) 20

- Per Motion #5 I would support a Cu cable reach (Y) based upon 24AWG cable of:

1. 3.0m
2. 5.0m
3. 7.0m

Results: All: 1) 2 2) 20 3) 17

BER

Motion - Adopt the following objective form:

- Support a BER of better than or equal to $10^{-"N"}$ at the MAC/PLS service interface

Results: All (y/n/a) 61 / 0 / 9 Motion Passed

Note: “N” needs to be determined

Motion - Adopt the following objective:

- Support a BER of better than or equal to 10^{-12} at the MAC/PLS service interface

Results:

- Yes: All (y/n/a) 40 / 15 / 16 Motion Failed

BER Strawpoll

- Per Motion #7 I would support BER (N) Exponent of:

1. 12 (1E-12)
2. 15 (1E-15)
3. 18 (1E-18)

Results: All: 1) 34 2) 13 3) 3

Latency / “Data Delay”

- Adopt the following objective form:
  - Support a (Tx + Rx) data delay of less than or equal to “t” ns between the CGMII and MDI.
- Motion withdrawn

Note – “data delay” as defined by IEEE p802.3 bf

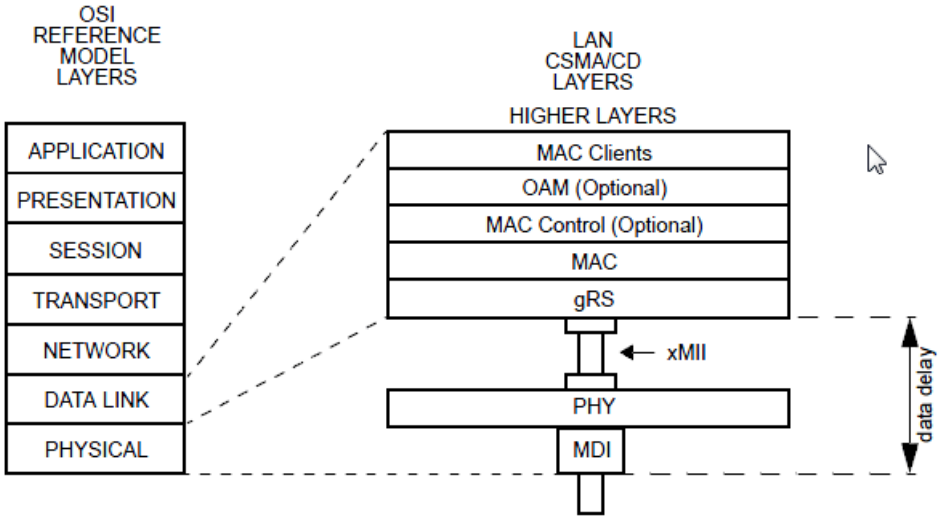

Figure 90–3—Data delay measurement

WG Motion

- Move that IEEE 802.3 extends the 100 Gb/s Backplane and Copper Cable Study Group

- Moved by John D'Ambrosia on behalf of the Study Group
- Second N/A

- 802.3 Voters (Y/N/A): 47 / 0 / 0
- Motion Passes

Thank You!