

# IEEE 802.3 WG Closing Plenary Report

IEEE 802.3  
100 Gb/s Backplane and Copper Cable  
Study Group

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Singapore, March 2011

# Reflector and Web

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

[ListServ@ieee.org](mailto: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](mailto: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

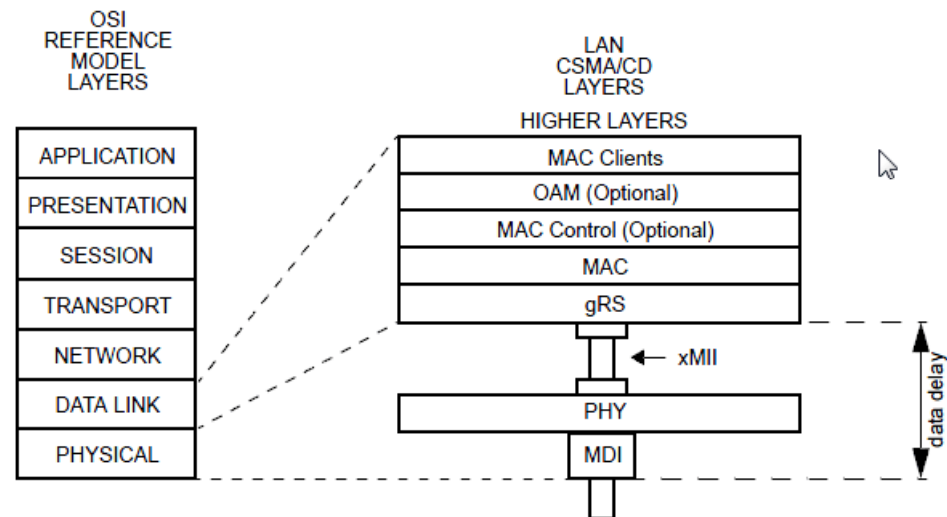


Figure 90-3—Data delay measurement

# 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!