Next-Generation BASE-T Study Group Opening Report

IEEE 802.3 Ethernet Working Group

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Reflector and Web

- To subscribe to the Next Generation BASE-T reflector, send an email to:

  ListServ@ieee.org

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

  subscribe **NGBASE-T** ***<yourfirstname> <yourlastname>***

  end

- Send NGBASE-T reflector messages to:

  STDS-802-3-NGBASET*@listserv.ieee.org*

- Study Group web page URL:

  http://www.ieee802.org/3/NGBASET/

- Private web area:

  http://www.ieee802.org/3/NGBASET/private/

Study Group Organization

Chair	Bill Woodruff	Broadcom
Vice-Chair	Dave Chalupsky	Intel
Secretary	George Zimmerman	CME Consulting

NGBT Study Group Status

- Met in Phoenix Tuesday and Wednesday, Jan 22, 23, 2013
- Presentation on IEEE process, patent policy, NGBT Web page and email reflector, etc.
- Thirteen presentations on technical and economic feasibility
- Approved Draft Objectives and Draft 5 Criteria
- Approved edited version of text of Draft PAR
  - IEEE P802.3bq Physical Layer and Management Parameters for 40 Gb/s Operation, Type 40GBASE-T
- PAR for P802.3bq has been submitted to NesCom for consideration 26-Apr-13
  - Submission to be withdrawn should the Objectives and 5 Criteria not be approved

Objectives

- Support full duplex operation only
- Preserve the 802.3 / Ethernet frame format utilizing the 802.3 MAC
- Preserve minimum and maximum Frame Size of current 802.3 standard
- Support a BER better than or equal to 10-12 at the MAC/PLS service interface
- Support Auto-Negotiation (Clause 28)
- Support Energy Efficient Ethernet (Clause 78)
- Support local area networks using point-to-point links over structured cabling topologies, including directly connected link segments
- Do not preclude meeting FCC and CISPR EMC requirements
- Support a data rate of 40 Gb/s at the MAC/PLS Service Interface
- Define a channel model based upon copper media specified by ISO/IEC JTC1/SC25/WG3 and TIA TR42.7 meeting the following characteristics:
  - 4-pair, balanced twisted-pair copper cabling
  - up to 2 connectors
  - up to at least 30 m
- Define a single 40 Gb/s PHY supporting operation on the channel model

Materials

- Drafts of PAR, 5 Criteria and Objectives are posted at http://www.ieee802.org/3/NGBASET/index.html

Goals for the Week

- Additional presentations
- Respond to any questions from related standards organizations
- Respond to Liaison letters submitted during the Study Group Phase
- Request SG extension
- Make request in closing plenary for:
  - Approval of Objectives and 5C
  - To approve submission of the PAR

Plan for the Week

- Meet Tuesday and Wednesday
  - Tuesday 9:00am to 5:00pm
  - Wednesday 9:00am if required for preparation of response from related standards organizations
  - Wednesday 1:00pm to 5:00pm
- 4 presentations
- Prepare responses to prior liaison requests

Thank You!