
IEEE 802.3 Working Group Chair's Report 16 March 2004

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802.3 Officers

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- 802.3aq 10GBASE-LRM: David Cunningham (david_cunningham@agilent.com)
- Congestion Management SG: Ben Brown (benjamin.brown@ieee.org)
- Frame Expansion SG: Devin Daines (kevin.daines@worldwidepackets.com)
- Residential Ethernet SG: TBD

P802.3ah Ethernet in the First Mile

- Project completed
 - Unanimous June approval by RevCom and Standards Board of P802.3ah/D3.3
 - Major contributors to the standard recognized in IEEE 802.3
 - Publication of IEEE Std 802.3ah-2004 scheduled for late August

P802.3REVam

- Revision of IEEE Std 802.3
 - Consolidated edition merges:
 - IEEE Std 802.3-2002 (8 Mar 2002)
 - IEEE Std 802.3ae-2002 (30 Aug 2002)
 - IEEE Std 802.3af-2003 (18 Jun 2003)
 - IEEE Std 802.3aj-2003 (26 Sep 2003)
 - IEEE Std 802.3ak-2004 (1 March 2004)
 - Working Group ballot approved:
 - Consolidated edition
 - P802.3ah/D3.3
 - Approved 802.3 change requests
 - All material approved by WG will be consolidated into a new five section consolidated edition prior to Sponsor Ballot
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P802.3an 10GBASE-T

- Extends Ethernet capabilities at 10 Gb/s
 - Operation over horizontal twisted pair
 - New physical layer to run under 803.2ae specified XGMII
- Progress on technical decisions
 - Adopted Tomlinson-Harashima precoding, LDPC coding
 - Adopted PAM modulation (8 or 12 level still TBD)
 - Adopted TIA TSB-155 NEXT, PSNEXT and return loss
 - Adopted ANEXT and IL values for augmented Class E/Cat 6
 - Adopted upper frequency of 500 MHz
 - Adopted baseline autonegotiation and MDIO
 - Adopted definitions of channel diagnostic functions
- Will create first draft -- P802.3an/D1.0

802.3ap Backplane Ethernet

- Specify Ethernet operation over electrical backplanes
- Working toward first draft.
 - Identified points of agreement on autonegotiation
 - Agreed to specify 10 GbE serial, GbE serial and 10 GbE four lane (change of Five Criteria approved to be consistent with these interface objectives)
 - Adopted definition of “improved FR4”
 - Signaling ad-hoc to be formed

802.3aq 10GBASE-LRM

- Extends Ethernet capabilities at 10 Gb/s
 - Operation over installed multimode fiber
 - New physical layer to run under 802.3ae specified XGMII
- Working toward first draft

Congestion Management SG

- Adopted narrowed problem statement: 802.3 MAC client needs to be able to limit traffic being received from its peer to avoid congestion due to oversubscription
- Agreed on a partial set of objectives for a possible project
- Study Group extended through November plenary meeting

Frame Expansion SG

- Address request from 802.1 to expand 802.3 maximum frame size to allow addition of protocol header and trailer fields
 - IEEE 802.3 Ad Hoc/CFI held
 - Also subject of joint technical plenary with 802.1
 - Half duplex repeater limits and other PHY layer limitation were discussed, additional study required for PHY layers that support retiming in the data path
- Study Group approved by 802.3 and Executive Committee

Residential Ethernet SG

- Successful call for interest held on Residential Ethernet
 - Focus is requirements of consumer electronics within the home
 - Issues include latency, latency jitter, and timing synchronization for consumer media distribution/playback
- Study Group approved by 802.3 and Executive Committee

Other Activities

- IEEE 1394 tutorial sponsored
- New maintenance requests approved, interpretations response approved
- Autumn interim meeting
 - Details are TBD
 - Target week: 27 September 2004
 - Target location: North America