P802.3ae TF Logic Track
Summary

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Blue Book Distribution

• Bob Grow, Intel: “History of the Blue Book”
  – Showed the original 1980 Ethernet Blue Book as generated by Digital, Intel & Xerox
  – Blue Books existed for 100 Mbps and 1000 Mbps Ethernet

• Brad Booth, Intel: “Blue Book Structure”
  – Layers for LAN & WAN, WWDM & Serial
  – Interfaces to be specified (XGMII, XAUI & XBI)
  – Adjacent blocks without specific interfaces (PCS/WIS, PMA/PMD)
  – Describes existing and new clauses
  – Reviewed latest nomenclature for PHY Types
  – Backup slides with possible implementations using standardized functions and interfaces
Presentations

- Shimon Muller, Sun: “Open Loop PHY Rate Control”
  - Entire scheme is more precise in response to Steve Haddock’s “IPG & Frame Alignment” proposal
- Shimon Muller, Sun: “Changes to Existing Clauses”
  - Describes changes necessary for the “must haves”
    - Open Loop Rate Control
    - New References, Definitions, Abbreviations and Interfaces
    - Half/ Full Duplex Operation
    - Layer Diagram(s)
  - And the “services to humanity”
    - Speed Independence
    - CRC Passing
    - Document Structure
    - MAN/ WAN “friendliness”
    - Editorial Stuff
Presentations (cont.)

- Ed Turner, 3Com: “MDC/MDIO Baseline Proposal”
  - 24 PHYs were tested at UNH IOL for their response to ST=00
  - All 24 ignored them!
- David Law, 3Com: “Management MIB Baseline Proposal”
  - No changes
- Howard Frazier, Cisco: “XGMII Update”
  - Added code point values for I, S, T & E
  - Added some proposed setup & hold numbers
- Steve Haddock, Extreme: “IPG & Frame Alignment”
  - Keep MAC’s minimum IPG at 12 bytes (96 bits)
  - Allow RS to “slide” packet to align S with lane 0
  - Results in minimum observed IPG of 9 bytes
  - Maintains minimum average IPG of 12 bytes
Presentations (cont.)

- Rich Taborek, nSerial: “XAUI/XGXS”
  - No changes

- Rich Taborek, nSerial: “/Random[A,K]/R/”
  - In support of 12-byte/3 column IPGs
  - Guarantees an /R/ column even in the shortest IPG
  - Statistically guarantees an /A/ and /K/ in 50% of shortest IPGs

- Rick Walker, Agilent: “64b/66b PCS”
  - Clarified bit ordering from 36-bit RS words to 66-bit frames
  - Added preamble to sample test vector
  - Clean up of state machines
Presentations (cont.)

• Norival Figueira, Nortel: “WIS Update”
  – Suggestions on how to write the standard by cross-reference to ANSI standards (T1.416-1999)

• Osamu Ishida, NTT: “LSS Proposal”
  – No technical changes

• Stuart Robinson, PMC-Sierra: “XBI - Optional Serial PMA Service Interface”
  – Includes some options for REFCLK specs
  – Add waveforms and proposed timing numbers

• Paul Bottorff, Nortel: “SUPI Update”
  – Added detail for lane synchronization and lane deskew
  – Proposed as a PMD Service Interface not a physical instantiation
Presentations (cont.)

- Tom Palkert, AMCC: “SUPI”
  - Suggest change to striping from 16 bits to 16 bytes
  - Compatible with proposed OIF VSR protocol
Motions

• Motion #1 included all non-PMD proposals in the Blue Book
  – Through a procedural maneuver, the motion was divided

• Motion #2: “Open Loop PHY Rate Control”
  – 802.3 Voters Y: 113 N: 0 A: 7 Pass 100%

• Motion #3: “MDC/MDIO Baseline Proposal”
  – 802.3 Voters Y: 106 N: 0 A: 10 Pass 100%

• Motion #4: “Management MIB Baseline Proposal”
  – 802.3 Voters Y: 105 N: 0 A: 9 Pass 100%

• Motion #5: “XGMII Update”
  – 802.3 Voters Y: 110 N: 0 A: 4 Pass 100%

• Motion #6: “XAUI/XGXS” as modified with /Random\[A,K]/R/proposal (taborek_1_0700)
  – 802.3 Voters Y: 113 N: 0 A: 7 Pass 100%

• Motion #7: “64b/66b PCS”
  – 802.3 Voters Y: 104 N: 4 A: 9 Pass 96.3%
Motions

- Motion #8: “WIS Update”
  - 802.3 Voters  Y: 104  N: 4  A: 9  Pass  96.3%
- Motion #9: “LSS Proposal”
  - 802.3 Voters  Y: 55  N: 32  A: 43  Fail  63.2%
  - Attendees  Y: 76  N: 49  A: 83  60.8%
- Motion #10: “XBI - Optional Serial PMA Service Interface”
  - 802.3 Voters  Y: 85  N: 11  A: 22  Pass  88.5%
- Motion #11: “SUPI Update”
  - 802.3 Voters  Y: 83  N: 9  A: 25  Pass  90.2%
- Motion #12: “IPG & Frame Alignment”
  - 802.3 Voters  Y: 92  N: 1  A: 6  Pass  98.9%
Thanks!