



Action Plan to a Technically Complete Draft

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Mar 18, 2008

IEEE 802.3ba Task Force Meeting, Mar 2008
Orlando, Florida

Overview

- Reference: ganga_01_1107 / ganga_01_0108 for architecture overview
- Reference: ganga_02_1107.pdf - proposed document structure
- To go to Working Group Ballot, the Task Force needs to come up with a technically complete draft
 - Changes to existing standard 802.3
 - New Clauses

Existing clauses

- Clause 1 – Introduction to 802.3
 - Add appropriate normative references, definitions and abbreviations
- Annex A –Bibliography
 - Add appropriate informative references
- Clause 4, Annex 4A –Media access control
 - Mostly speed independent, update Table 4-2 MAC parameters
- Clause 30, Annex 30A & 30B –Management
 - [Need presentation](#) - Add new objects, attributes, and enumerations for 40Gb/s and 100Gb/s functions

Existing clauses (cont'd)

- Annex 31B –MAC control PAUSE operation
 - **Need presentation** - Update timing considerations for PAUSE
- Clause 45 Management data input/output (MDIO) interface. **Need presentation(s)** -
 - Add new registers for the control and management of 40Gb/s and 100Gb/s PHY types
 - Add new MMDs if any, control/status of PMA/PMD and PCS
 - Update Backplane Auto-Negotiation and FEC registers

Existing clauses (cont'd)

- Annex 69A –Interference tolerance testing
 - **Need presentation** - 40GbE test methodology
- Annex 69B –Interconnect characteristics
 - **Need presentation** - 40GbE cross-talk limits if needed
- Clause 72 –10GBASE-KR PMD
 - **Need presentation** – Changes if any due to 40GbE
- Clause 73 –Auto-Negotiation for Backplane Ethernet
 - **Need presentation** - Add technology ability bit for new 40GbE PHY
- Clause 74 –Forward error correction for 10GBASE-KR
 - **Need presentation** - Changes for 4 lane KR operation
- Clause 74A –FEC block coding examples
 - **Need presentation** - Additional patterns for 4 lanes if needed

New Clauses

- Introduction to 40Gb/s and 100Gb/s operation
 - Based on presentations for other new clauses
 - Global PICs - separate PICS tables for 40 and 100Gb/s Sublayers
- Reconciliation Sublayer and Media Independent Interface(s)
 - Need presentation to reference for baseline
- nGMII Extender Sublayer clause(s) if included in adopted baseline proposals
 - Need presentation to reference for baseline
- Physical Coding Sublayer clause(s)
 - Need presentation to reference for baseline
- PMA Sublayer clause(s)
 - Need presentation to reference for baseline(s)

New Clauses

- 40G Backplane PMD Sublayer
 - Need presentation to reference for baseline
- 40G / 100G Cu Cable PMD(s) Sublayer
 - Need presentation to reference for baseline
- 40G / 100G MMF PMD(s) Sublayer
 - Need presentation to reference for baseline
- 100G 10km / 40km SMF PMD(s) Sublayer
 - Need presentation to reference for baseline
- Additional annexes to describe test methods, channel characteristics, coding details, etc.,
 - Need presentations to reference for baseline(s)

Summary

- It is essential to have complete proposals that provide solution to all the objectives to create a “technically complete 802.3ba draft” to go to Working Group Ballot
- Need presentations to address each section highlighted in this action plan