P802.3ch Draft 0.3

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May 2018

IEEE P802.3ch

P802.3ch Editorial Team

- Natalie Wienckowski, Chief Editor
 - Front matter, Clause 1, Definitions
 - Clause 30 Management
 - Clause 44 Introduction to 10 Gb/s baseband network
 - Clause 45 Management Data Input/Output (MDIO) Interface
 - Clause 78 Energy-Efficient Ethernet (EEE)
 - Clause 98 Auto-Negotiation for single differential-pair media
 - Clause 104 Power over Data Lines (PoDL) of Single Balanced Twisted-Pair Ethernet
 - Clause 125 Introduction to 2.5 Gb/s and 5 Gb/s networks
 - Clause 149 Physical Coding Sublayer (PCS), Physical Medium Attachment (PMA) sublayer and baseband medium, type 2.5GBASE-T1
 - Clause 150 Physical Coding Sublayer (PCS), Physical Medium Attachment (PMA) sublayer and baseband medium, type 5GBASE-T1 and 10GBASE-T1
- Curtis Donahue, Editor
 - PICS

Draft 0.3 Chief Editor's Notes

- Draft 0.3 was loaded to our website on May 1, 2018
- Draft 0.3 has been updated to include the approved "Environmental Requirements" from the March 2018 meeting.
- Additional "common content" has been added.
- Clauses 44 and 125 have been added. These are the introductory clauses for our three PHY speeds.

P802.3ch Draft 0.3 Structure

- Typical legacy clause content:
 - Frontmatter with Abstract
 - Clause 1 with definitions
 - Clause 30 with management objects
 - Clause 45 Management Data Input/Output (MDIO) Interface
- Placeholders for existing clauses included, required or mentioned in our objectives:
 - Clause 44 Introduction to 10 Gb/s baseband network
 - Clause 78 Energy-Efficient Ethernet (EEE)
 - Clause 98 Auto-Negotiation for single differential-pair media
 - Clause 104 Power over Data Lines (PoDL) of Single Balanced Twisted-Pair Ethernet
 - Clause 125 Introduction to 2.5 Gb/s and 5 Gb/s networks
- Additional clauses included
 - Clause 149 2.5GBASE-T1
 - Clause 150 5GBASE-T1 and 10GBASE-T1

Clause Status: 1, 30, and 45

- Clause 1
 - Changed "automotive cabling" to "single shielded twisted-pair copper cabling"
- Clause 30
 - Minor wording changes
- Clause 45
 - Added additional standard registers

Clause 1 - Cable definition (will also be in Link Segment)

- What should we call the cabling?
 - 1. "Automotive cabling" as is in the objectives. This was used because we didn't know what the final cable type would be.
 - 2. "single shielded twisted-pair copper cabling" which is what the limit lines are based on and what is used in Clauses 96 & 97. This is also used in the definition of BASE-T1 (1.4.151 BASE-T1: PHYs that belong to the set of specific Ethernet PCS/PMA/PMDs that operate on a single twisted-pair copper cable, including 100BASE-T1 and 1000BASE-T1. (See IEEE Std 802.3, Clause 96 and Clause 97.)
 - 3. "single shielded balanced pair copper cabling" which is more generic and applies to both shielded and parallel pair cable.
 - 4. P802.3cg is now using "single balanced pair of conductors" to support PCB usage as well. We could use "single shielded balanced pair of conductors".

Clause Status: 44, 45, 78, 98, 104 and 125

- Clause 44 was added to the draft as it is 'Introduction to 10 Gb/s baseband network'
 - Standard content has been added
 - Indicates all sections that I think need to be updated/modified. This will be done as the PHYs are defined.
- Clause 45
 - Standard content has been added
 - Contributions are required for this section
- Clauses 78, 98 and 104 have no content
- Annex 98B has been updated in cooperation with P802.3cg
- Clause 125 was added to the draft as it is 'Introduction to 2.5 Gb/s and 5 Gb/s networks'
 - Standard content has been added
 - Indicates all sections that I think need to be updated/modified. This will be done as the PHYs are defined.

Clause Status: 149 and 150

- Subsections have been added and or rearranged to match current practice
- Common text has been added throughout the Clauses.
- 149.9 and 150.9, Environmental specifications, have been updated to the approved text from March 2018

HELP WANTED

- We have a long way to go to get to working group ballot out of our November meeting.
- Please look at our updated Timeline with the tasks that need to be completed at each meeting and consider making a contribution. You can find this in the meeting minutes of the previous meeting: <u>March edition</u> May edition to be created at the end of the meeting.
- Please look at our <u>"ToDo" Spreadsheets</u> available on our home page and consider making a contribution.
- Volunteers are also needed to "own" different spec sections. We will need additional editors or spec writers to help complete technical content.

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- THIS MEANS YOU!



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