

P802.3dj

Chief Editor's Report

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Introduction

- Introduce IEEE 802.3dj editorial leadership team
- Provide prospective draft structure
 - final depends on what baselines get adopted
 - starts with Clause 300 for new clauses for now
 - proper Clause numbers will be assigned when D1.0 is approved
- Indicates where baselines are complete or needed

Editorial Team, so far

Editor	Duties
Matt Brown	Chief Editor
Gary Nicholl	Logic lead editor
Adee Ran	Electrical lead editor
Tom Issenhuth	Optical lead editor
Others	TBD

Legacy clauses to amend (part 1)

Clause #	Clause title	Baseline status	Notes
FM	Front matter	N/A	new front matter
1	Definitions, abbreviations, etc.	N/A	new defs., abbrs., etc.
4	MAC	Incomplete	Add 1.6T
4A	Simplified full duplex media access control	Incomplete	Add 1.6T
30	Management Objects	N/A	New content for 200G, 400G, 800G, and 1.6T
31B	MAC Control PAUSE operation	Incomplete	new content for 1.6T
45	MDIO	N/A	New content for 200G, 400G, 800G, and 1.6T
69	Backplane	N/A	New content for 200G, 400G, 800G, and 1.6T
73	AN	Complete	New content for 200G, 400G, 800G, and 1.6T
90	Ethernet support for time synchronization protocols	Incomplete	New content for 1.6T
90A	Ethernet support for time synchronization protocols	Incomplete	New content for 1.6T

Legacy clauses to amend (part 2)

Clause #	Clause title	Baseline status	Notes
93A	Specs. for Electrical Channels (COM)	Incomplete	New content for 200 Gb/s electrical interfaces (CR, KR, C2C, C2M) Considering new annex for new features.
116	400GE/200GE introduction	N/A	add new 200G and 400G PHY types and sublayers
118	200G/400G extender, XS	Incomplete	add new 200GAUI-1, 400GAUI-2, symbol-mux PMA
119	200G/400G PCS	Complete	add stateless encoder/decoder for 200 Gb/s PHYs
120F	100GAUI-1, 200GAUI-2, 400GAUI-4, 800GAUI-8 C2C	Complete	add 1.6TAUI-16
120G	100GAUI-1, 200GAUI-2, 400GAUI-4, 800GAUI-8 C2M	Complete	add 1.6TAUI-16
169	Introduction to 800GE	N/A	add new 800G PHY types and sublayers
170	800G RS, MII	Incomplete	add 1.6T RS and 1.6TMII
171	800G MII extender, XS	Incomplete	add 1.6T extender and XS, 800GAUI-4, 1.6TAUI-16/8

New clauses (part 1)

Clause #	Clause title	Baseline status	Notes
300	Introduction to 1.6TE	N/A	
301	1.6TBASE-R PCS/FEC	Complete	
302	200G, 400G, 800G, 1.6T symbol-mux PMA	Complete	
302A	200G, 400G, 800G, 1.6T symbol-mux PMA examples	Complete	
302B	200GAUI-1, 400GAUI-2, 800GAUI-4, 1.6TAUI-8 C2C	Incomplete	
302C	200GAUI-1, 400GAUI-2, 800GAUI-4, 1.6TAUI-8 C2M	Incomplete	
303	200G, 400G, 800G, and 1.6T concatenated inner FEC + PMA (IMDD)	Complete	New proposals for pad size and synchronization
304	200GBASE-DR1/DR1-2, 400GBASE-DR2/DR2-2, 800GBASE-DR4/DR4-2, 1.6TBASE-DR8/DR8-2	Incomplete	
305	800GBASE-FR4	Incomplete	
306	800GBASE-LR4 (IMDD PAM4)	Incomplete	
307	800GBASE-LR1 FEC/PMA (BCH inner FEC)	Complete	possibly include ER1 if common FEC
308	800GBASE-LR1 PMD (coherent)	Incomplete	possibly include ER1 if common FEC
309	800GBASE-ER1 PCS/PMA (TBD FEC)	Incomplete	necessary if FEC is different than for LR1
310	800GBASE-ER1 PMD (coherent)	Incomplete	possibly merge with LR1 if comment FEC

New clauses (part 2)

Clause #	Clause title	Baseline status	Notes
311	200GBASE-CR1, 400GBASE-CR2, 800GBASE-CR4, 1.6TBASE-CR8	Incomplete	
311A	200GBASE-CR1, 400GBASE-CR2, 800GBASE-CR4, 1.6TBASE-CR8 test points, budget, etc.	Incomplete	
311B	200GBASE-CR1, 400GBASE-CR2, 800GBASE-CR4, 1.6TBASE-CR8 test fixtures	Incomplete	
311C	200GBASE-CR1, 400GBASE-CR2, 800GBASE-CR4, 1.6TBASE-CR8 MDIs	Incomplete	
311D	200GBASE-CR1, 400GBASE-CR2, 800GBASE-CR4, 1.6TBASE-CR8 form factors	Incomplete	
312	200GBASE-KR1, 400GBASE-KR2, 800GBASE-KR4, 1.6TBASE-KR8	Incomplete	
annex	New COM methodology	Incomplete	consider for FFE, MLSD, etc.
annex	New electrical test methodology, common to CR, KR, C2M, C2C	Incomplete	consider for common test methodologies
annex	BER/FLR considerations	Incomplete	consider for provided system guidance
annex	optical link training (if adopted)	Incomplete	common annex for multiple optical PMDs
annex	link training for C2C and C2M (if adopted)	Incomplete	common annex for C2C and/or C2M

Baseline deficit

- To meet the objectives, we need baselines for the following
 - MAC, MAC control, time synchronization
 - All PMDs
 - All 200 Gb/s AUIs
 - COM updates (may be part of electrical PMD and AUI baselines)
 - FEC/PCS/PMA for 800GBASE-ER1
- Other baselines being discussed
 - Optical link training
 - C2M/C2C link training

Summary

- Structure and content for 802.3dj Draft 1.0 is proposed.
- Some items will be excluded if no baseline is adopted.
- Many areas where an adopted baseline is required.

Thanks!