

Clause 86 selected comment resolution

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Contents

- List of sublayers table for Clause 85 and Clause 86 can be improved
 - Comment 586, readability
 - Comment 377, table referenced in 86.1 but appears much later.
- Analysis of Clause 86 structure
 - Comment 450, 455
- Other

Present table is inefficient

Associated clause	40GBASE-SR4	100GBASE-SR10
81—RS	Required	Required
81—XLGMIIa	Optional	Not applicable
81—CGMIIa	Not applicable	Optional
82—PCS for 40GBASE-R	Required	Not applicable
82—PCS for 100GBASE-R	Not applicable	Required
83—PMA for 40GBASE-R4 (4 lanes at PMD service interface)	Required	Not applicable
83—PMA for 100GBASE-R10 (10 lanes at PMD service interface)	Not applicable	Required
83A—XLAUI (4 lanes)b	Optional	Not applicable
83A—CAUI (10 lanes)b	Not applicable	Optional
86—40GBASE-SR4	PMD Required	Not applicable
86—100GBASE-SR10 PMD	Not applicable	Required

- Much "not applicable". Not intuitive

Could be like this

Clause	40GBASE-SR4	100GBASE-SR10	Status
81	RS	RS	Required
81	XLGMIIa	CGMIIa	Optional
82	PCS	PCS	Required
83	PMA (4 lanes at PMD service interface)	PMA (10 lanes at PMD service interface)	Required
83A	XLAUI (4 lanes)b	CAUI (10 lanes)b	Optional
86	PMD (4 lanes)	PMD (10 lanes)	Required

- More compact, easier to read
- More like equivalent table for single-speed PMD clause
- Footnotes a and b stay the same
- Helps the 2-speed PMD clauses (85, 86)
- Smaller table fits better on first page (for comment 377)

Clause 86 structure

- Same order of content as PMD clauses in previous projects

Subclause	Number of pages	
86.1 Overview	2	Add a paragraph of signposting (450)
86.1.1 PMD service interface	2	
		Propose promote this to 86.2 (comment 450, ordering of subclauses)
86.2 Delay and skew	1	
86.3 PMD MDIO function mapping	1	
86.4 Functional and block diagram	2	
86.5 Lane assignments	0	
86.6 Optical and electrical specifications		
		Currently called "PMD to MDI specifications". Propose rename (455)
		Total ~6 pages as below
86.6.1 PPI transmitter electrical	2	Order here follows signal flow; easy to remember Could group electrical and optical; I tried this and it didn't make much difference Add a sentence of signposting (455)
86.6.2 Transmitter optical	1	
86.6.3 Characteristics of signal within... optical channel	<1/2	
86.6.4 Receiver optical	1	
86.6.5 PPI receiver electrical	1	
86.6.6 Optical link power budget (informative)	1/2	
86.7 Definitions of electrical and optical parameters and measurement methods		Add a sentence of signposting
		Total 12 pages as below
86.7.1 Test points and compliance boards	1	Don't want to separate test points from compliance boards. Test points diagram should stay in clause
86.7.1.1 Compliance board parameters	4	
86.7.2 Test patterns	1	
86.7.3 Parameters for electrical and optical	1	
86.7.4 Electrical parameters	2	
86.7.5 Optical parameters	3	Some info here used by Clauses 87 and 88 to avoid repetition
86.8 Safety, installation, environment, and labeling	1	
86.9 Recommended electrical channel	1	
86.10 Optical channel (inc. MDI)	4	
86.11 PICS	8	

Alternative Clause 86 structure

Subclause	Number of pages	
86.1 Overview	2	Add a paragraph of signposting (450)
86.1.1 PMD service interface	2	
Propose promote this to 86.2 (comment 450, ordering of subclauses)		
86.2 Delay and skew	1	
86.3 PMD MDIO function mapping	1	
86.4 Functional and block diagram	2	Possible rearrangement shown in purple italic (subclause numbering would change)
86.5 Lane assignments	0	
86.6 Optical and electrical specifications		
Currently called "PMD to MDI specifications". Propose rename (455)		
Total ~6 pages as below		
86.6.2 Transmitter optical	1	
86.6.3 Characteristics of signal within... optical channel	<1/2	
86.6.4 Receiver optical	1	
86.6.6 Optical link power budget (informative)	1/2	Add a sentence of signposting (455)
86.7 Definitions of electrical and optical parameters and measurement methods		
Total 12 pages as below		Add a sentence of signposting
86.7.1 Test points and compliance boards <i>(part)</i>	1	
86.7.2 Test patterns	1	
86.7.3 Parameters for electrical and optical	1	
86.7.5 Optical parameters	3	
86.8 Safety, installation, environment, and labeling	1	Some info here used by Clauses 87 and 88 to avoid repetition
86.10 Optical channel (inc. MDI)	4	
86.6.1 PPI transmitter electrical	2	
86.6.5 PPI receiver electrical	1	
86.7.1 Test points and compliance boards <i>(part)</i>	1	
86.7.1.1 Compliance board parameters	4	
86.7.4 Electrical parameters	2	
86.9 Recommended electrical channel	1	
86.11 PICS	8	

Other

- Scratch pad for other comment resolution issues