Streamlining P802.3ck MDIs

Proposal to delete an MDI from the proposed list

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Proposal to revise MDI Adoption from Spokane: palkert_3ck_01_0918

- Motion at Spokane, WA meeting agreed to adopt seven MDIs as proposed in palkert_3ck_01_0918
- One of the MDI, microQSFP, has had no market adoption due to
  - Lack of optics support (road map congestion, timing, etc)
  - Minimal end user engagement
- In the interest of managing the workload of P802.3ck, and including only items that task force members strongly support, I propose to eliminate microQSFP from the list of seven MDIs and proceed with the remaining 6 MDIs

Number of PMDs supportable for each connector: (update from Table 136C-1)

MDI Types	100GBASE-CR	200GBASE-CR2	400GBASE-CR4	Reference
SFP112	1	-		
QSFP112	1,2,4	1,2	1	
microQSFP	1,2,4	1,2	1	
QSFP112-DD	1,2,4,8	1,2,4	1,2	
OSFP	1,2,4,8	1,2,4	1,2	
SFP112-DD	1,2	1	-	
DSFP	1,2	1	-	

- Proposed new MDIs

Note: New MDIs will require additional cable assembly mappings (See 802.3cd Annex 136D)

palkert_3ck_01_0918

TE connectivity

Draft Annex 162C

Remove microQSFP from draft Annex 162C

Annex 162C

(normative)

MDIs for 100GBASE-CR1, 200GBASE-CR2, and 400GBASE-CR4

> Editor's note: This annex is associated with the new 100GBASE-CR1, 200GBASE-CR2, and 400GBASE-CR4 PHYs. An associated baseline specification has been adopted: http://www.ieee802.org/3/ck/public/18_09/palkert_3ck_01_0918.pdf

162C.1 Overview

This annex defines the Media Dependent Interface (MDI) for 100GBASE-CR1, 200GBASE-CR2, and 400GBASE-CR4. The MDI couples the PMD (specified in 162.8 and 162.9) to the cable assembly (specified in 162.11). The PMDs supportable for each MDI connector type are given in Table 162C–1. The QSFP112, microQSFP, QSFP112-DD, OSFP, SFP112-DD and DSFP are also referred to as multi-lane connectors.

Table 162C–1—Number of PMDs supportable for each connector type

MDI types	100GBASE-CR1	200GBASE-CR2	400GBASE-CR4	Reference
SFP112	1	—	—	162C.2.1
QSFP112	1, 2, 4	1, 2	1	162C.2.2
microQSFP	1, 2, 4	1, 2	1	162C.2.3
QSFP112-DD	1, 2, 4, 8	1, 2, 4	1, 2	162C.2.4
OSFP	1, 2, 4, 8	1, 2, 4	1, 2	162C.2.5
SFP112-DD	1,2	1	—	162C.2.6
DSFP	1, 2	1	—	162C.2.7

For 100GBASE-CR1, the mechanical interface between the PMD and the cable assembly may be a mated pair of connectors meeting the requirements of 162C.2.1 (SFP112), 162C.2.2 (QSFP112), 162C.2.3 (microQSFP), 162C.2.4 (QSFP112-DD), 162C.2.5 (OSFP), 162C.2.6 (SFP112-DD), or 162C.2.7 (DSFP). The plug connector is used on the cable assembly and the receptacle is used on the PMD.

For 200GBASE-CR2 and 400GBASE-CR4, the mechanical interface between the PMD and the cable assembly is a mated pair of connectors meeting the requirements of 162C.2.2 (QSFP112), 162C.2.3 (microQSFP), 162C.2.4 (QSFP112-DD), 162C.2.5 (OSFP), 162C.2.6 (SFP112-DD), or 162C.2.7 (DSFP). The plug connector is used on the cable assembly and the receptacle is used on the PMD.

The cable assembly connector shall be the MDI connector plug. The PMD connector shall be the MDI connector receptacle.