

92.11 MDI specification

This sub-clause defines the Media Dependent Interface (MDI). The 100GBASE-CR4 and, as per 92.7, is coupled to the cable assembly, as per 92.10, by the MDI.

92.11.1 100GBASE-CR4 MDI connectors

Connectors meeting the requirements of 92.11.1.1 (Style-1) or 92.11.1.2 (Style-2) shall be used as the mechanical interface between the PMD of 92.7 and the cable assembly of 92.10. The plug connector shall be used on the cable assembly and the receptacle on the PHY. Style-1 or Style-2 connectors may be used as the MDI interface.

For Style-1 and Style 2 100GBASE-CR4 plug connectors the receive lanes are AC coupled; the coupling capacitors are contained within the plug connectors as specified in 92.8.4.5.

92.11.1.1 Style-1 100GBASE-CR4 MDI connectors

The connector at the end of the cable assembly shall be the quad small form factor pluggable (QSFP28) with the mechanical mating interface defined by SFF-TBD and illustrated in Figure 92–18. The MDI connector shall be the quad small form factor pluggable (QSFP28) receptacle with the mechanical mating interface defined by SFF-TBD and illustrated in Figure 92–19. These connectors have contact assignments matching that in Table 92–13, and electrical performance consistent with the signal quality and electrical requirements of 92.8 and 92.9.

Use figure in Draft 0.1

Figure 92-18

Use figure in Draft 0.1

Figure 92-19

The Style-1 MDI connector of the 100GBASE-CR4 PMD comprises 38 signal connections. The Style-1 100GBASE-CR4 MDI connector contact assignments shall be as defined in Table 92–13.

Use table in Draft 0.1

Table 92-13

92.11.1.2 Style-2 100GBASE-CR4 MDI connectors

The connector at the end of the cable assembly shall be the 100G Form Factor Pluggable (CFP4) with the mechanical mating interface defined in CFP4 MSA HW Specification and illustrated in Figure 92-20. The MDI connector shall be the 100G Form Factor Pluggable (CFP4) receptacle with the mechanical mating interface defined by CFP4 MSA HW Specification and illustrated in Figure 92-21. These connectors have contact assignments matching that in Table 92–14, and electrical performance consistent with the signal quality and electrical requirements of 92.8 and 92.9.

TBD

Figure 92-20

TBD

Figure 92-21

The Style-2 MDI connector of the 100GBASE-CR4 PMD comprises 56 signal connections. The Style-2 100GBASE-CR4 MDI connector contact assignments shall be as defined in Table 92–14.

TBD

Table 92-14