802.3bj 2nd MDI Proposal

802.3bj 100 Gb/s Backplane and Copper Cable Task Force
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2nd MDI Proposal Background

- 802.3bj Baseline MDI Proposal (tracy_01_0312) has been made for QSFP28
- The co-authors of this presentation support QSFP28 as Baseline MDI for 802.3bj
- CFP4 is optimized for optical interfaces
- CFP4 with CAUI-4 (4x28G) I/O has been defined by the CFP MSA as a longer and 2x higher thermal capacity form factor than QSFP28 to enable full range of optical interfaces including 100GE-SR4, 100GE-SR10 with OIF MLG, 100GE-LR4, 100GE-ER4, and 100G Metro DWDM
- CFP4 provides full MIS (MDIO) compatibility with CFP MSA CFP and CFP2 form factors, as well as OIF 100G DWDM IA form factor, and future 400GE CFP form factors

2nd MDI Proposal Background, cont.

- The following are possible 100GE-CR4 cable assemblies:
  - QSFP28 ⇔ QSFP28
  - QSFP28 ⇔ CFP4
  - CFP4 ⇔ CFP4
- System OEMs that develop cards with interfaces that support the full range of optical interfaces desire that the same ports support 100GE-CR4 copper cable interfaces

CFP4 Status

- CFP4 Baseline Design rev.1 and CFP2 (2x size form factor using the same connector technology) Baseline Design rev.2 are now in formal Comment Resolution by the CFP MSA Reviewers (www.cfp-msa.org/reviewers.html)
- Incremental dimensional changes are being made as part of the Comment Resolution process
- Based on continued comments from CFP MSA Reviewers, the CFP2 Baseline Design is expected to be iterated through end of July
- CFP4 MSA Baseline Design is now expected to be iterated through the end of August
- Connector samples expected in September
- CFP4 electrical performance in nishimura_01_0512

CFP MSA Documentation

- All CFP MSA Documentation is available free of charge and free of any use restrictions to everyone
- All CFP MSA Documentation is available on the CFP MSA web site (www.cfp-msa.org/documents.html) including:
  - Next Gen PMD CFP MSA Baseline Specifications
  - CFP2 Baseline Concept and Design (rev.2)
  - CFP4 Baseline Concept and Design (rev.1)
  - CFP2 and CFP4 pin allocation
- CFP MSA will provide all requested documents to 802.3bj Editors in the proper format

2nd MDI Proposal

- Propose to adopt CFP4 as a 2nd MDI for 802.3bj
- Propose to add language in cole_02_0712 to Clause 92 (text language proposed by Chris D'Minico)