MDI Naming and MDI Pin Mapping

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Overview

- **MDI naming**
- **Improving MDI mapping**
- **Addressing comment # 57, 63, and 64.**

MDI Naming

- **Some of the MDI names in the 802.3ck implies specific speed**
- **To avoid confusion SFP+, SFP-DD, and QSFP+ should be updated throughout the document**
  - SFP+ implies 10G and should be replaced with SFP112
    - http://sfp-dd.com
  - SFP-DD implies 50G and should be replaced with SFP-DD112
    - http://sfp-dd.com
  - QSFP+ implies 10G and should be replaced with QSFP112
    - http://www.qsfp-dd.com .

Table 162D–1—Host receptacles and cable assembly plugs

Receptacle/Plugs	Reference
SFP+	162C.2.1
SFP-DD	162C.2.2
DSFP	162C.2.3
QSFP+	162C.2.4
QSFP-DD800	162C.2.5
OSFP	162C.2.6

MDI Connector Pin Mapping

- **After further review the table content is correct but somewhat confusing**
- **Here is a recommendation how to better organize the table:**
  - SL0n – pin # of each PMD
  - SL0p – pin # of each PMD
  - DL0n – pin # of each PMD
  - DL0p – pin # of each PMD
  - SL1n – pin # of each PMD
  - SL1p – pin # of each PMD
  - DL1n – pin # of each PMD
  - DL1p – pin # of each PMD

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Table 162C–3—MDI connector contact mapping

SFP+	SFP-DD	DSFP	QSFP+	OSFP	QSFP-DD800	Connector signal name	Description
—	40	22	1	1	1	GND	Ground
—	39	1	2	3	2	SL1n	Transmitter Inverted Data Input
—	38	2	3	2	3	SL1p	Transmitter Non-Inverted Data Input
—	37	3	4	4	4	GND	Ground
—	—	—	5	6	5	SL3n	Transmitter Inverted Data Input
—	—	—	6	5	6	SL3p	Transmitter Non-Inverted Data Input
—	—	—	7	7	7	GND	Ground
—	—	—	13	24	13	GND	Ground
—	—	—	14	26	14	DL2p	Receiver Non-Inverted Data Output
—	—	—	15	25	15	DL2n	Receiver Inverted Data Output
14	14	14	16	27	16	GND	Ground
13	13	13	17	29	17	DL0p	Receiver Non-Inverted Data Output
12	12	12	18	28	18	DL0n	Receiver Inverted Data Output
11	11	11	19	30	19	GND	Ground
—	31	10	20	31	20	GND	Ground
—	32	9	21	33	21	DL1n	Receiver Inverted Data Output
—	33	8	22	32	22	DL1p	Receiver Non-Inverted Data Output
—	34	7	23	34	23	GND	Ground
—	—	—	24	36	24	DL3n	Receiver Inverted Data Output
—	—	—	25	35	25	DL3p	Receiver Non-Inverted Data Output
—	—	—	26	37	26	GND	Ground
—	—	—	32	54	32	GND	Ground
—	—	—	33	56	33	SL2p	Transmitter Non-Inverted Data Input
—	—	—	34	55	34	SL2n	Transmitter Inverted Data Input
17	17	17	35	57	35	GND	Ground
18	18	18	36	59	36	SL0p	Transmitter Non-Inverted Data Input
19	19	19	37	58	37	SL0n	Transmitter Inverted Data Input
20	20	20	38	60	38	GND	Ground

Table 162C–3—MDI connector contact mapping *(continued)*

SFP+	SFP-DD	DSFP	QSFP+	OSFP	QSFP-DD800	Connector signal name	Description
—	—	—	—	—	39	GND	Ground
—	—	—	—	9	40	SL5n	Transmitter Inverted Data Input
—	—	—	—	8	41	SL5p	Transmitter Non-Inverted Data Input
—	—	—	—	10	42	GND	Ground
—	—	—	—	12	43	SL7n	Transmitter Inverted Data Input
—	—	—	—	11	44	SL7p	Transmitter Non-Inverted Data Input
—	—	—	—	13	45	GND	Ground
—	—	—	—	18	51	GND	Ground
—	—	—	—	20	52	DL6p	Receiver Non-Inverted Data Output
—	—	—	—	19	53	DL6n	Receiver Inverted Data Output
—	—	—	—	21	54	GND	Ground
—	—	—	—	23	55	DL4p	Receiver Non-Inverted Data Output
—	—	—	—	22	56	DL4n	Receiver Inverted Data Output
—	—	—	—	—	58	GND	Ground
—	—	—	—	39	59	DL5n	Receiver Inverted Data Output
—	—	—	—	38	60	DL5p	Receiver Non-Inverted Data Output
—	—	—	—	40	61	GND	Ground
—	—	—	—	42	62	DL7n	Receiver Inverted Data Output
—	—	—	—	41	63	DL7p	Receiver Non-Inverted Data Output
—	—	—	—	43	64	GND	Ground
—	—	—	—	48	70	GND	Ground
—	—	—	—	50	71	SL6p	Transmitter Non-Inverted Data Input
—	—	—	—	49	72	SL6n	Transmitter Inverted Data Input
—	—	—	—	51	73	GND	Ground
—	—	—	—	53	74	SL4p	Transmitter Non-Inverted Data Input
—	—	—	—	52	75	SL4n	Transmitter Inverted Data Input