



112Gbps CONNECTIVITY SOLUTIONS

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## PLUGGABLE

#### CFP 112

- Up to 112Gbps PAM4/64Gbps-NRZ per differential pair
- Capacity up to 2.2A for latest generation of DCO
- · Connector, plug and mechanical sets available
- Custom-made cages and heat sinks with heat pipes for better heat dissipation or reduced dimension
- Supports Belly-to-Belly design
- Single and Dual-Port designs



#### CFP2 112

- Up to 112Gbps PAM4/64Gbps-NRZ per differential pair
- Capacity up to 2.2A for latest generation of DCO
- Connector, plug and mechanical sets available
- Custom-made cages and heat sinks with heat pipes for better heat dissipation or reduced dimension
- Supports Belly-to-Belly design
- Single and Dual-Port designs



#### CFP8

- Up to 112Gbps PAM4/64Gbps-NRZ per differential pair
- · Connector, plug and mechanical sets available
- Custom-made cages and heat sinks with heat pipes for better heat dissipation or reduced dimension
- Supports Belly-to-Belly design
- Single and Dual-Port designs

#### SEP 112/DSEP 112

- For SFP: 1 channel x 112Gbps
- For DSFP: 2 x 112Gbps/ch, up to 200GbE per slot same size as SFP but 2 channels
- For DSFP 112: Double channel vs. single channel when compared to SFP
- For both: 56Gbps NRZ and 112Gbps PAM-4 per diff. pair
- For DSFP: Same outer dimension as SFP
- For DSFP: SFP area size compatibility (same occupied area on the board)
- For DSFP: SFP mechanical parts compatibility (all custom-made mechanical parts can be used)
- For SFP 112:112Gbps performance for old footprint (SFP28) and new footprint (Subgroup of SFP-DD MSA)\*



- 4 channels x 112Gbps, 400GbE per slot
- Mating compatible to SFP & DSFP modules
- Double density = 2 DSFP contact rows







#### **OSFP 112**

- For style A (SFF-8662) style B (SFF-8672) upon request
- Industry leading signal integrity (SI report on request)
- Up to 56Gbps-NRZ or 112G-PAM4 per diff. pair
- Large variety of style A & style B cages and heat sink heights
- Widely applied for 100/200/400 GbE & InfiniBand EDR/FDR/QDR/HDR
- 112Gbps performance for old footprint (QSFP28) and new footprint (QSFP112 MSA)\*



#### QSFP-DD800

- 1x1, 1x4, 2x1 and 2x6 cage configurations
- Fin- and Pin type heat sink available
- Industry leading signal integrity (SI report on request)
- Up to 112Gbps-PAM4 per diff. pair (1x1 type)
- Up to 56Gbps-PAM4 per diff. pair for 2x1 SMT stack type
- Wafer technology outperforming the market
- Allowing significantly higher power ratings per module than MSA spec
- 112Gbps performance for old footprint (QSFP-DD56) and new footprint (QSFP-DD800)



### **OSFP 112**

- 1x4, 2x1 and 2x4 cage configurations
- Single (1x1) and (2x1) host connector available
- Allowing significantly higher power ratings per module than MSA spec
- 224Gbps item under development

# **MEZZANINE**

#### MEZZANINE CONNECTOR YTM-SERIES

· Modular concept allowing widest variety of mating heights and pin counts for 112G Mezzanine in the market

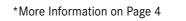
- 96 pins per blade (picture is showing 8 blade/384pins configuration)
- 920hms (other impedance possible)
- 112Gbps-PAM4 on all differential pairs
- Mating height with plug and socket: 5mm to 10mm in 1mm increments
- Height extension by Interposer: 11mm up to max 40mm
- Genderless design with two point contacts for a better connectivity
- Various pin counts: 192, 288, 384 up to 960 pins
- Differential signal pairs up to 240 pairs (GSSG)



# **CABLE SOLUTIONS**

#### JUMPER CABLE SOLUTIONS

- Extended signal reach by low loss cable vs. high loss PCB
- Simplifies the design of high-speed PCB
- Relaxes the spec of the PCB material
- board to board and board to cage solution availabe





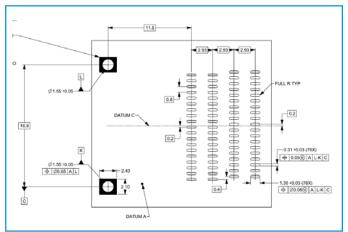
### MACHINING DIMENSIONS OF HOST BOARD FOR OSFP-DD

#### OLD FOOTPRINT REV.5.1 (FOR 400Gbps)

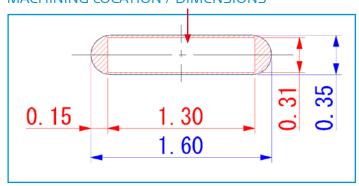
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Figure 49: SMT Host PCB Mechanical Layout

#### NEW FOOTPRINT REV.5.2.5 DRAFT (FOR 800Gbps)



#### MACHINING LOCATION / DIMENSIONS



Blue dimension: Pad dimension for 400Gbps Red dimension: Pad dimension for 800Gbps

Perform additional machining on the red part of the Signal pad with the red dimension.

#### SFP AND QSFP:

For 112Gbps Performance old Footprint vs. new footprint please contact us!

# 112G CONNECTIVITY SOLUTIONS

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The specifications are subject to change without notice.

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