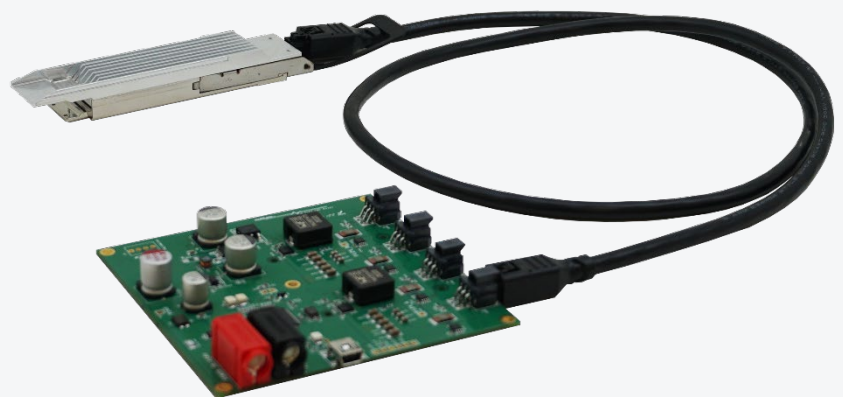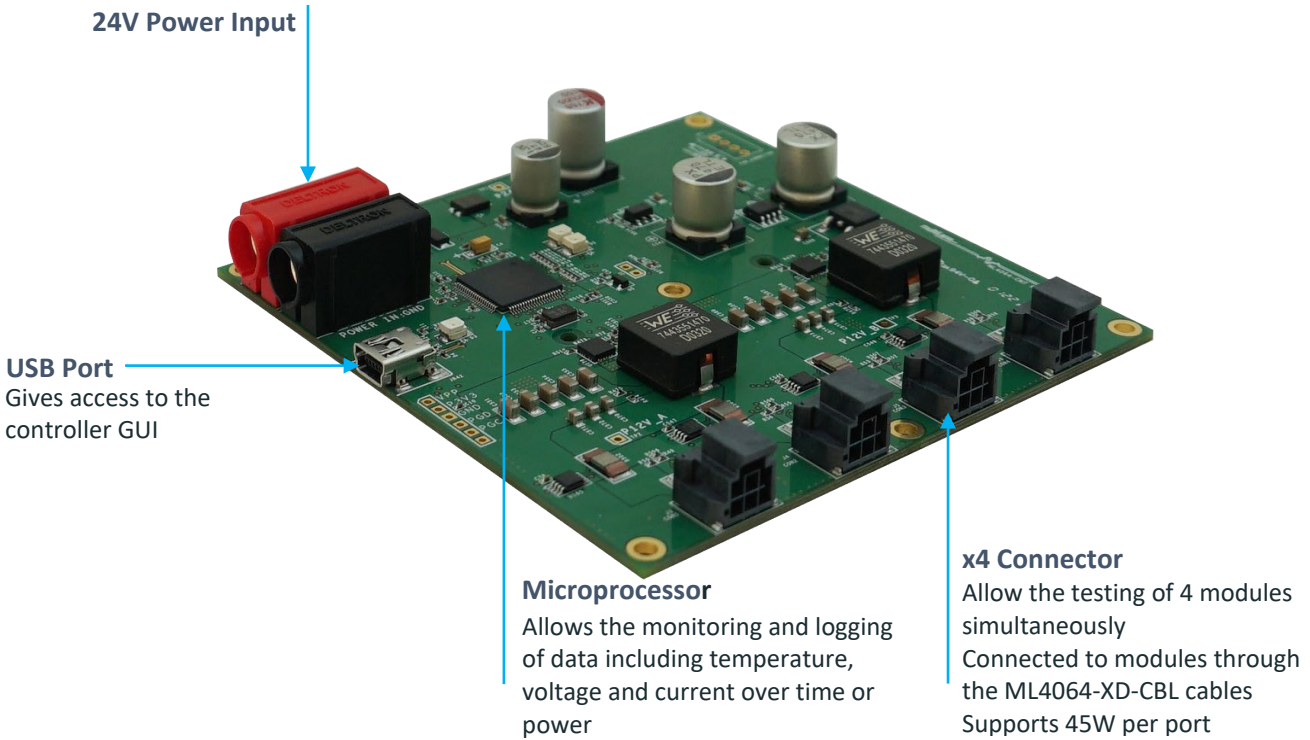# OSFP-XD

Technical Product Sheet

In an everchanging industry, new form factors are launched to support higher speeds like 800G and later, 1.6T. With the speed per lane increasing exponentially, the need for thermal and cooling tests also rises with new requirements and demands.
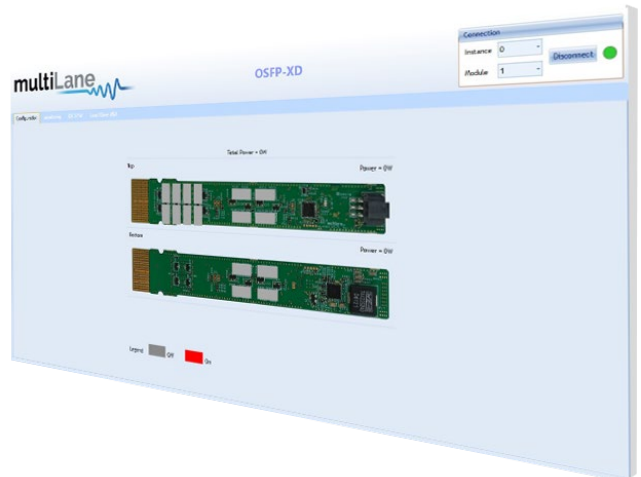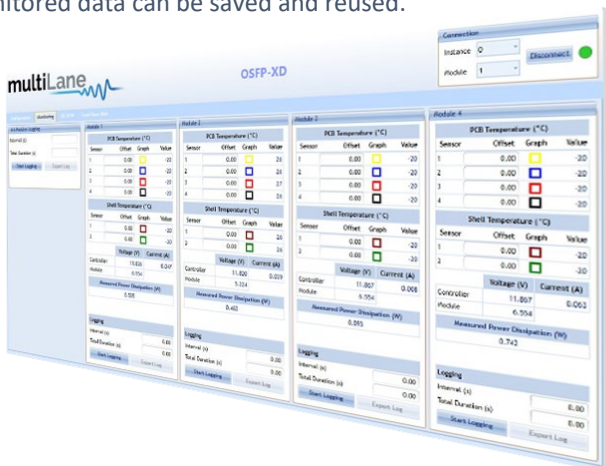
Multilane is offering an OSFP-XD thermal load with a controller board, with the goal of emulating transceiver thermal behavior, but also to test cooling systems.

24V Power Input

USB Port
Gives access to the
controller GUI

Microprocessor
Allows the monitoring and logging
of data including temperature,
voltage and current over time or
power

x4 Connector
Allow the testing of 4 modules
simultaneously
Connected to modules through
the ML4064-XD-CBL cables
Supports 45W per port

Controller GUI

The ML4064-XD-CNT GUI is accessible through the USB connector on the controller board. It gives the user access to monitor the temperature, the heat or power dissipation, amongst other features, across 4 different modules simultaneously. Monitored data can be saved and reused.

Allows the user to monitor the temperature, current and voltage on all four modules simultaneously, with the ability to save and export the data.

Allows the user to set the power configuration they require, with the ability to save the configuration and reuse it.
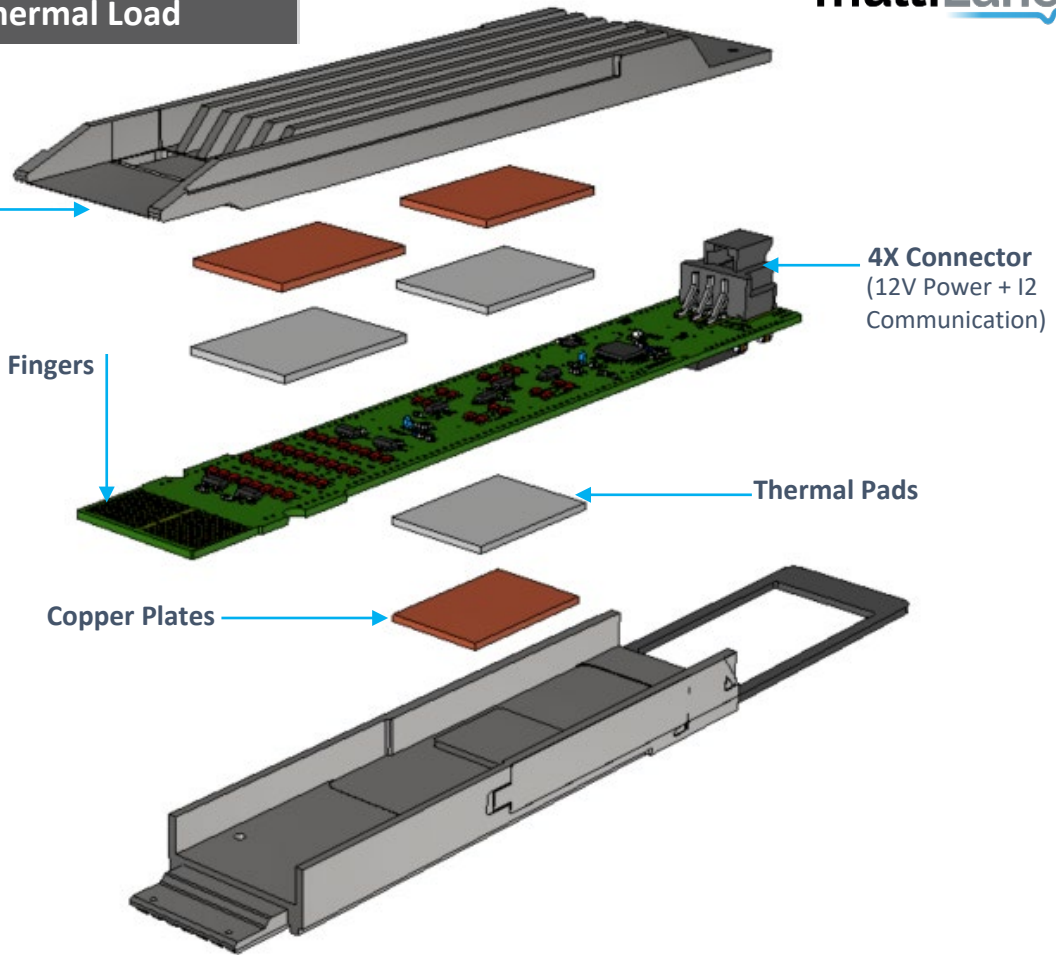
The GUI also has the below capabilities:

- I2C R/W tab: read from or write to the module EEPROM.
- Load/Save MSA: gives access to the full module EEPROM

ML4064-XD-TL: Thermal Load

OSFP-XD Shell
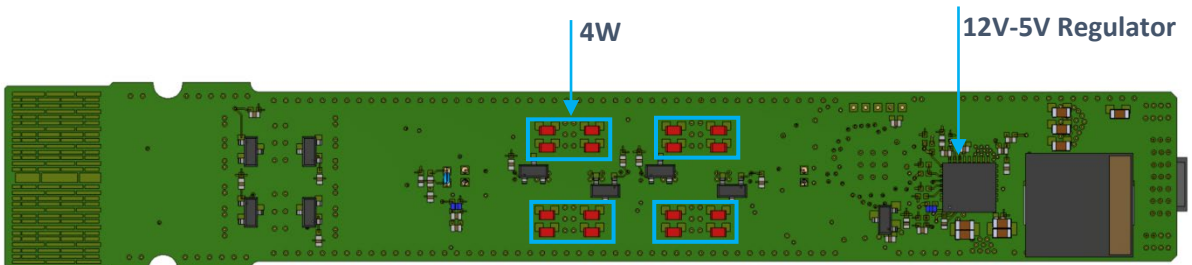Available in different types
Customization available

Fingers

Copper Plates

4X Connector
(12V Power + I2 Communication)

Thermal Pads

ML4064-XD-TL: PCB Details

4W
Every power spot consists of 4 resistors

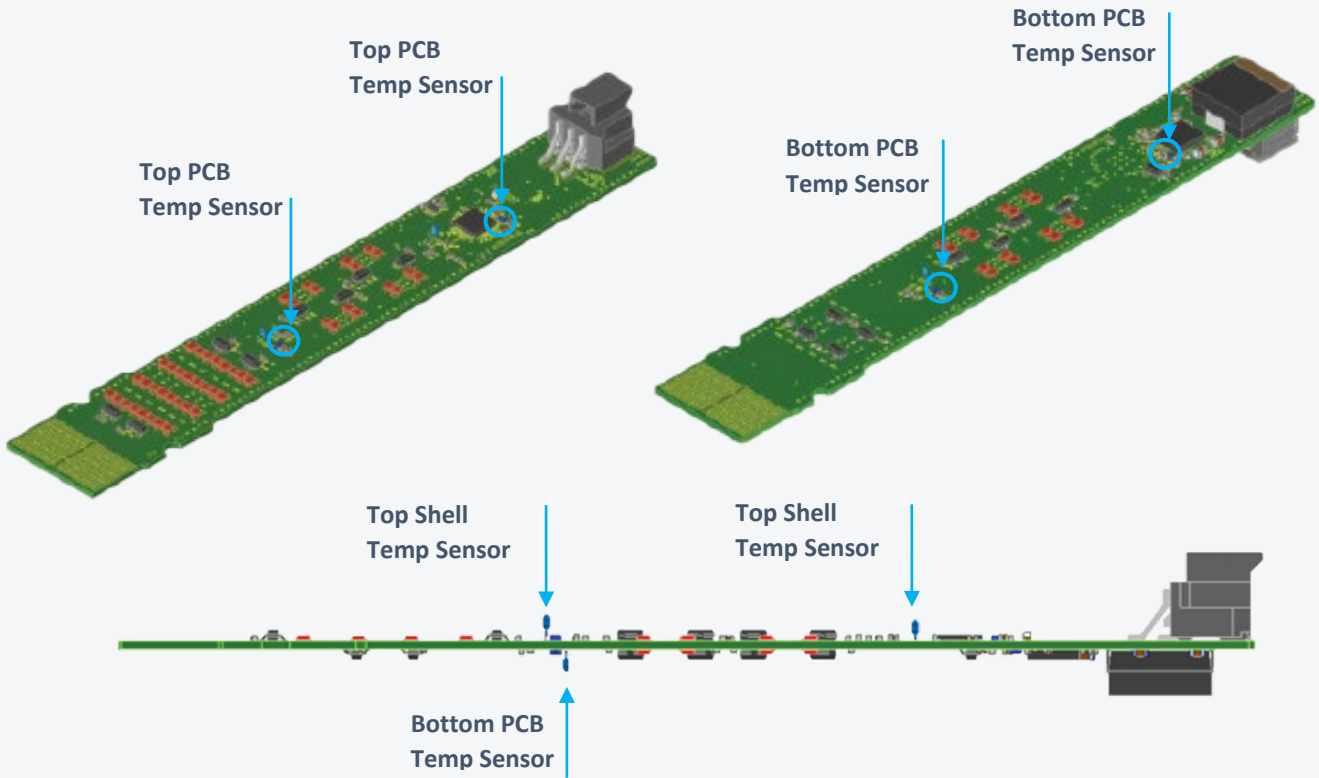**Microcontroller**

TOP

4W
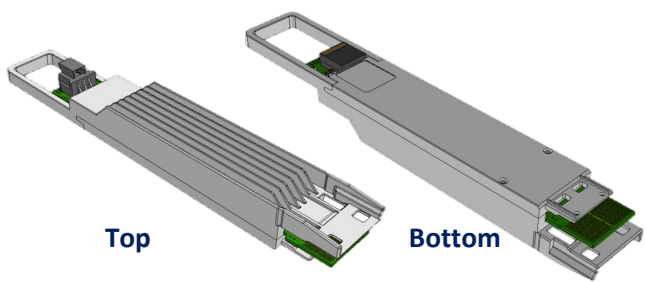
12V-5V Regulator

BOTTOM

The ML4064-XD-TL contains 16 power spots, with only 11 that can be activated simultaneously to reach 44W of maximum power dissipation
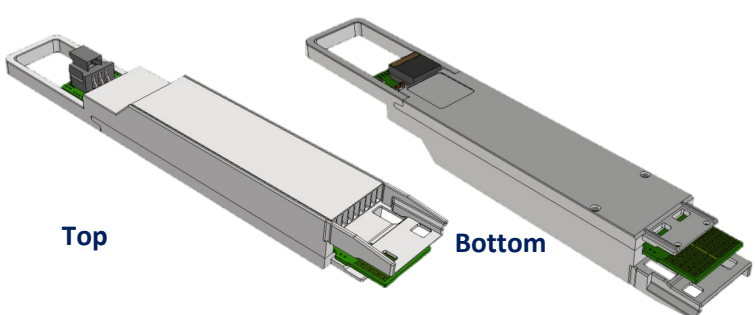
ML4064-XD-TL has 7 temperature sensors which help monitor the heat dissipation from the shell to the PCB. They are accessible through ML'S ML4064-XD-CNT GUI

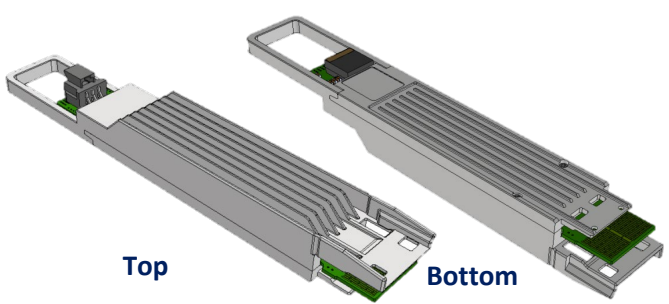| Part Number	Specification
ML4064-XD-TL2-A	Open Top Fin + Flat Bottom
ML4064-XD-TL2-B	Closed Top Heat Sink + Flat Bottom
ML4064-XD-TL2-C	Open Top Fin + Fin Bottom
ML4064-XD-TL2-D	Closed Top Heat Sink + Fin Bottom
ML4064-XD-CNT	Controller Board

ML4064-XD-TL2-A

Top   Bottom

ML4064-XD-TL2-B

Top   Bottom

ML4064-XD-TL2-C

Top   Bottom

ML4064-XD-TL2-D

Top   Bottom