

**OSFP-800 Test Board Specification  
8xPAM4x112Gbps**

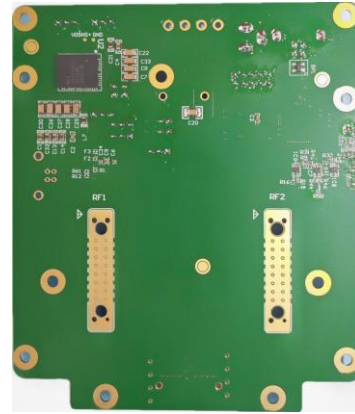
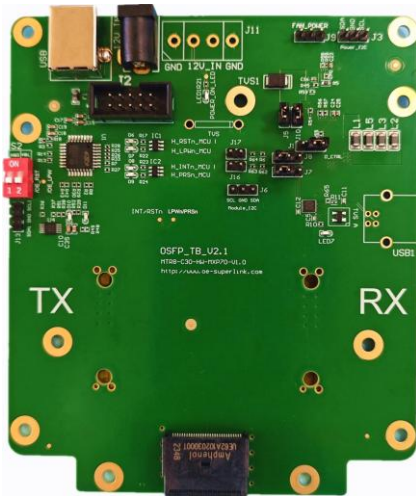


Figure 1 800Gbps 2x8 connector version

**Product description:**

Using M7 material for precision wiring and simulating high-speed signal routing, the signal quality is good, which can ensure the consistency of module testing and signal restoration, and avoid the test board affecting the module's eye diagram indicators; The communication interface is USB interface, ensuring the universality and universality of the product, or an external USB to I2C adapter board for upper computer communication.

**Standards and protocols:**

1. Compliant with SFF-8679, SFF-8024, IEEE 802.3ck standards and so on;
2. OSFP800 status and control;
3. MSA protocol compatibility

**Ordering information:**

Description: OSFP-800 test board;  
Model: MTR8-C30-HW-MXP70-V1.0

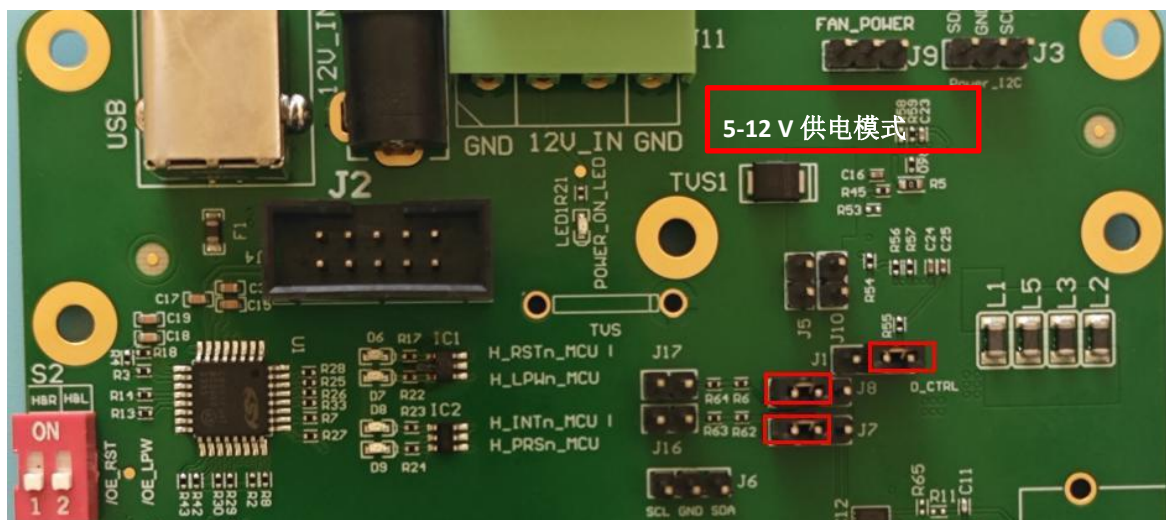
**Product features:**

1. Powered by a DC 5-12V power supply, convenient for research and development testing;
2. Comply with MSA agreement;
3. Differential port line length matching;
4. I2C interface communication;
5. Onboard LED status indication;
6. Includes upper computer GUI software;
7. Compatible with OSFP and OSFP400 modules;
8. Rate support PAM56baud (112Gbps)
9. M7 board

**Operation guidance:**

1. Install the short-circuit jump cap at the position shown in Figure 1 (red box). Connect the power supply (5-12V) to the test board (be sure to connect the power supply first), then use a USB cable (insert after the power supply, unplug first) to connect the test

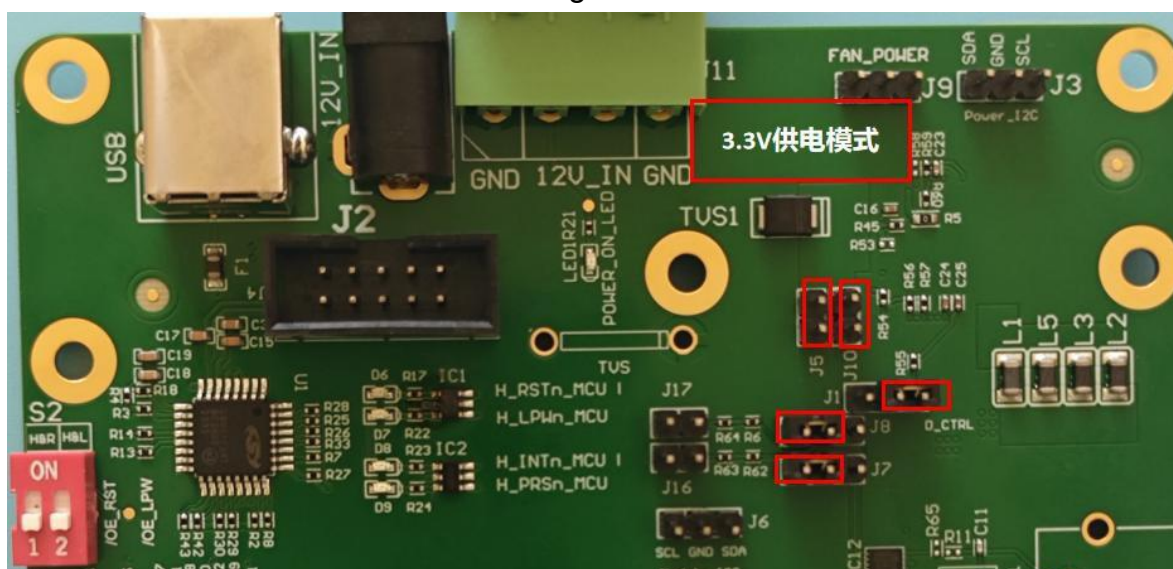
Figure 1



board to the USB port of the computer, and then turn on the power. The power indicator light will turn on. In this power supply mode, the supply voltage is stable at 3.3V and will not change with changes in the input voltage of the test board.

If you need to use a 3.3V power supply to directly power the module, please connect the short-circuit jumper cap as shown in Figure 2. In this power supply mode, the module power supply voltage changes with the input voltage of the test board. **In this mode, please pay special attention to the input voltage setting of the test board to avoid damaging the test board or the metering module due to excessive input voltage!!!**

Figure 2



2. Install driver: Find the driver, double-click to install the driver, go all the way to yes until the installation is complete, then find the device manager (Figure 3), find the hardware with a question mark or a driver that is not installed properly, and then plug and unplug the USB cable of the test board to see if the problem disappears. If the problem disappears, it proves that the board driver is not installed properly and needs to be manually updated. Right click on the hardware icon of the driver to be updated (Figure 6), click manually search for the driver (Figure 7), and find the driver for the USB communication chip in the installation directory (usually the C drive by default). Do not select other chips (there may be other chips). Then click Next to complete the driver installation (Figure9&Figure10).

install\_USBXpress\_SDK\_v4.exe

Figure 3



Figure 4



Figure 5



Figure 6



Figure 7

Figure 8



Figure 9



Figure 10

- Find the upper computer software, then double-click the exe icon on the upper computer, as shown in Figure 11, to open the communication software. At this time, there is a red icon (USB not connected) in the bottom left corner of the communication software interface. Then click the left mouse button to find the drop-down menu and connect the USB (Figure 13). After connecting, the interface diagram will appear (Connected Figure 14);

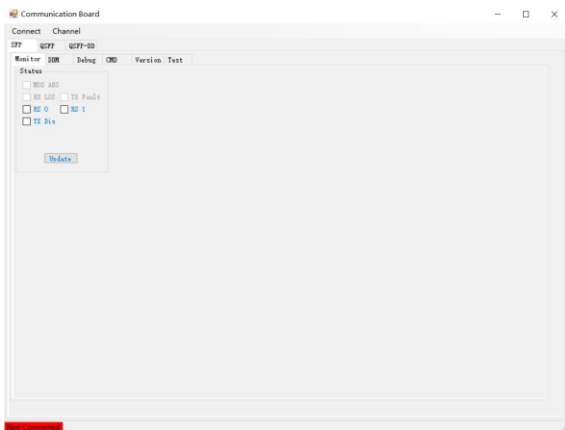


Figure 11

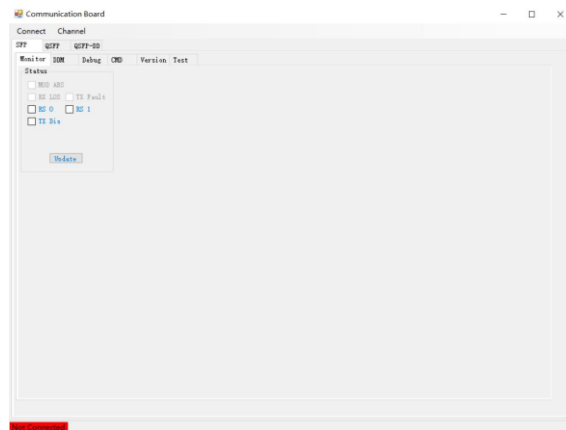


Figure 12

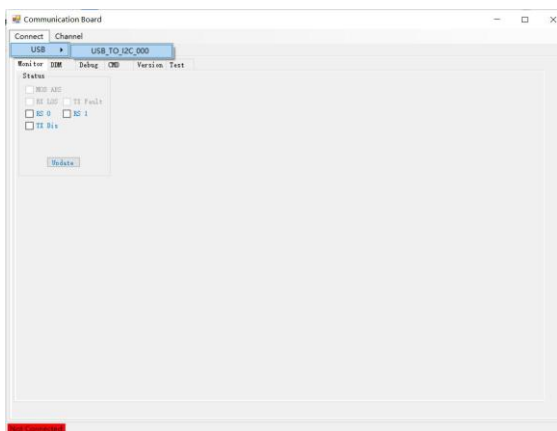


Figure 13

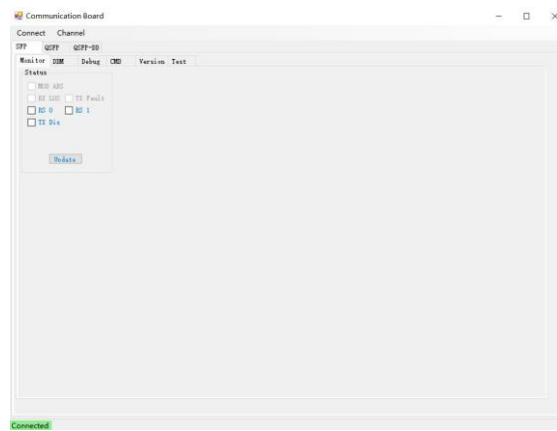


Figure 14

- After connecting the computer and test board, select the communication channel, choose ch0 in OSFP, then select OSFP, choose DDM, and click update to see the module voltage and module case temperature. Select Auto Update to automatically update the module status;

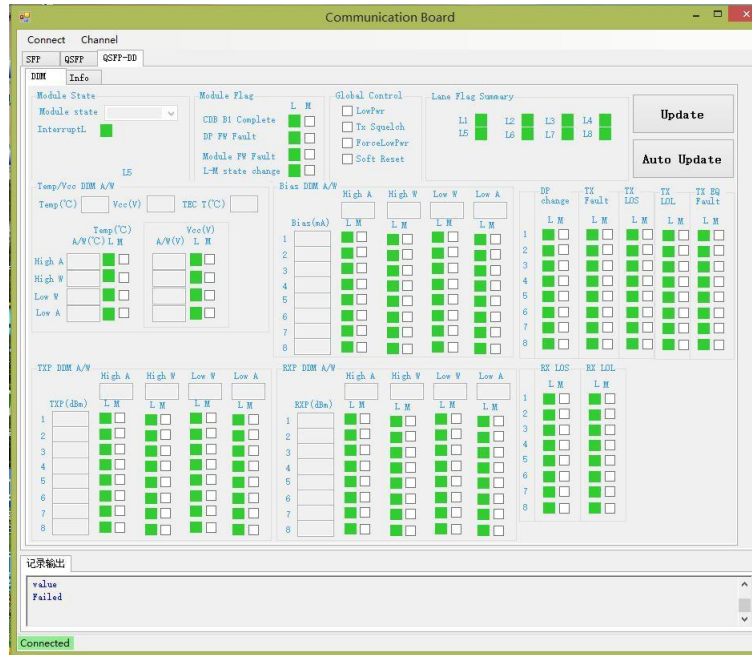


Figure 15

5. Other exception handling:

The device cannot connect to the USB. Generally, you can solve the problem by replacing the SiUSBXp. dll file with SiUSB x64 or SiUSB x86 (copy the xxx. dll file under the first two folders and overwrite the external files). Note that when using files under SiUSB x64, the USB connection is relatively slow and takes 15 seconds to connect (the Connector character in the lower left corner of the software interface turns green).

**Impedance and eye diagram:**

1 Impedance&VSWR indicators:

To be tested

**Others:**

The final interpretation right is held by Wuhan OE-SUPERLINK Co.,Ltd.. For technical parameters not specified in the specifications, please negotiate and determine them according to your needs during the ordering process, or we can customize a special test board based on your requirements. Generally, it is set based on this board and will not be designed separately.

**OE-Superlink**

---优越众联---

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----Our RF products include the following types: SMA, 3.5, 2.92 (K), 2.4, 1.85, 1.0, G3PO, GPPO, GPO, SMP Min-SMP、1.0/2.3 DIN、1.6/5.6、MMPX;

-----Our MCB test board includes various packages such as SFP, SFP+, SFP28, SFP56, and SFP112; QSFP、QSFP+、QSFP56、QSFP112; QSFP-DD、QSFP-DD400、QSFP-DD800; OSFP400、OSFP800; ONU-TB; OLT-TB、COMBO-PON-TB;

-----Our HCB test board includes various packages such as SFP, SFP+, SFP28, SFP56, and SFP112; QSFP、QSFP+、QSFP56、QSFP112; QSFP-DD、QSFP-DD400、QSFP-DD800; OSFP400、OSFP800; ONU-TB; OLT-TB、COMBO-PON-TB;

-----Our error code analyzer includes various frequencies: 125Mbps~4.25Gbps, 1.25Gbps~14Gbps, 40G-100Gbps, 400Gbps; 800Gbps and optical port error code analyzer;

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