

# SFP MODULE SYSTEM PRODUCTS

1.25Gbps SFP Optical Transceiver, 550m-120km Reach



## FEATURE

- Class 1 laser product EN 60825-1 standards
- Compliant with SFP MSA and SFF-8472
- Compliant with SDH/SONET
- Duplex LC connector
- Hot pluggable
- 3.3V Single Power Supply

## APPLICATIONS

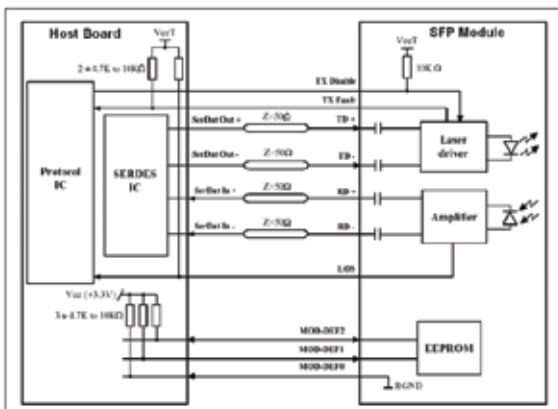
- Data-rate of 1.25Gbps operation
- 850nm VCSEL laser and PIN photodetector
- 1310nm FP laser and PIN photodetector for 10-40km transmission
- 1550nm DFB laser and PIN photodetector for 80-120km transmission
- Compliant with SFP MSA and SFF-8472 with duplex LC receptacle
- Digital Diagnostic Monitoring: Internal Calibration or External Calibration
- Temperature , Supply voltage , Transmitted bias current,
- Transmitted power, Received power
- 550m transmission with 50/125μm MMF
- 270m transmission with 62.5/125μm MMF
- Compatible with SONET OC-24-LR-1, Compatible with RoHS
- +3.3V single power supply
- Operating case temperature range of 0°C to +70°C (Standard)  
or -40°C to +85°C (Industrial)



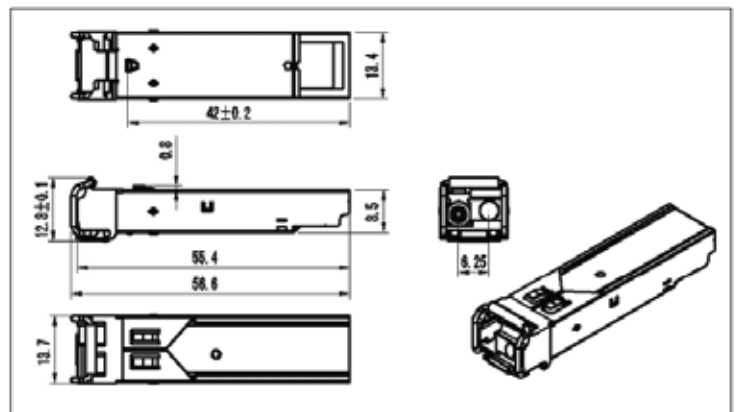
## OVERVIEW

- SDH STM-1, S-1.1, L-1.1, L-1.2
- SONET OC-3 IR1, LR1, LR2
- Router/Server interface
- Other optical transmission systems

## RECOMMENDED INTERFACE CIRCUIT



## MECHANICAL DIMENSIONS



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Email : [info@focomm-cabling.com](mailto:info@focomm-cabling.com) [www.focomm-cabling.com](http://www.focomm-cabling.com)

ABSOLUTE MAXIMUM RATINGS

| Parameter           | Symbol | Min  | Max | Unit |
|---------------------|--------|------|-----|------|
| Storage Temperature | Vcc    | -0.5 | 4.5 | V    |
| Supply Voltage      | Ts     | -40  | +85 | °C   |
| Operating Humidity  |        | 5    | 85  | %    |

RECOMMENDED OPERATING CONDITIONS

| Parameter                  |                  | Symbol | Min  | Typical | Max  | Unit |
|----------------------------|------------------|--------|------|---------|------|------|
| Operating Case Temperature | Commercial       | Tc     | 0    |         | +70  | °C   |
|                            | Industrial       |        | -40  |         | +85  | V    |
| Power Supply Voltage       |                  | Vcc    | 3.13 | 3.3     | 3.47 | mA   |
| Power Supply Current       |                  | Icc    |      |         | 300  | °C   |
| Data Rate                  | Gigabit Ethernet |        |      | 1.25    |      | Gbps |
|                            | Fiber Channel    |        |      | 1.063   |      | Gbps |

REGULATIRY COMPLIANCE

| Feature                                             | Standard                      | Performance                             |
|-----------------------------------------------------|-------------------------------|-----------------------------------------|
| Electrostatic Discharge (ESD) tothe Electrical Pins | MIL-STD-883E Method 3015.7    | Class 1(>500 V) Isolation with the case |
| Electromagnetic Interference(EMI)                   | FCC Part 15 Class B           | Compatible with standards               |
| Laser Eye Safety                                    | FDA 21CFR 1040.10 and 1040.11 | Compatible with Class I laser product.  |
|                                                     | EN60950, EN (IEC) 60825-1,2   | Compatible with TÜV standards           |
| Component Recognition                               | UL and CUL                    | UL file E317337                         |
| Green Products                                      | 2002/95/EC 2005/618/EC        | RoHS6                                   |

DESCRIPTION

| Model              | Rate  | Wavelength | Distance | Optical power | Sensitivity |
|--------------------|-------|------------|----------|---------------|-------------|
| MC-SFP-SX-MM-0205  | 1.25G | 850nm      | 550m     | -9~-3dBm      | <-17dBm     |
| MC-SFP-LX-SM-0210  | 1.25G | 1310nm     | 10km     | -9~-3dBm      | <-22dBm     |
| MC-SFP-LX-SM-0240  | 1.25G | 1310nm     | 40km     | -5~0dBm       | <-24dBm     |
| MC-SFP-ZX-SM-0280  | 1.25G | 1550nm     | 80km     | 0~5dBm        | <-25dBm     |
| MC-SFP-ZX-SM-02120 | 1.25G | 1550nm     | 120km    | 0~5dBm        | <-32dBm     |

ORDER INFOMATION

| PRODUCT                                | PART NUMBER        |
|----------------------------------------|--------------------|
| 850nm, 1.25Gbps, LC, 550m, 0°C~+70°C   | MC-SFP-SX-MM-0205  |
| 1310nm, 1.25Gbps, LC, 10km, 0°C~+70°C  | MC-SFP-LX-SM-0210  |
| 1310nm, 1.25Gbps, LC, 20km, 0°C~+70°C  | MC-SFP-LX-SM-0220  |
| 1310nm, 1.25Gbps, LC, 40km, 0°C~+70°C  | MC-SFP-LX-SM-0240  |
| 1550nm, 1.25Gbps, LC, 80km, 0°C~+70°C  | MC-SFP-ZX-SM-0280  |
| 1550nm, 1.25Gbps, LC, 120km, 0°C~+70°C | MC-SFP-ZX-SM-02120 |