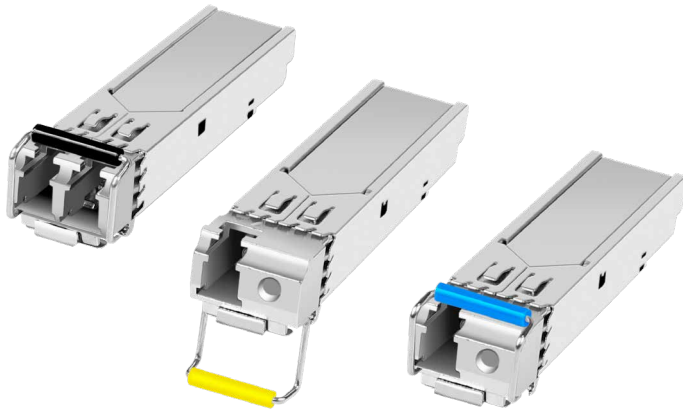


# LogiLink®

## 1.25 Gbps SFP Modules



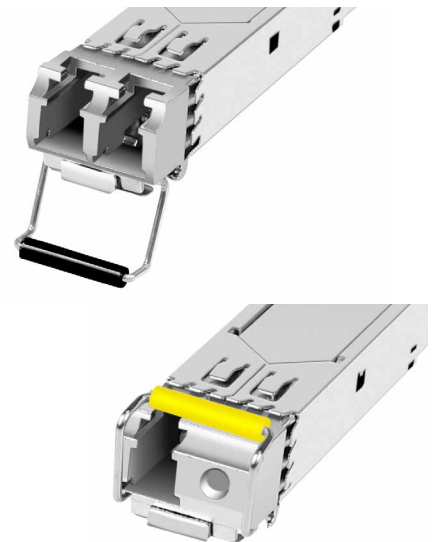
Art. No.: SFP001  
SFP002

SFP003  
SFP004

LogiLink's mini GBIC (SFP) transceiver family offers the highest quality and reliability. Whether for switch-to-switch, converter-to-switch, converter-to-converter, or any other application, the wide product range of LogiLink modules enables flexible use of fiber technology. Compliance with the MSA (Multi-Source Agreement) standard ensures compatibility with third-party manufacturers.

### Features:

- » Mini GBIC SFP (Small Form Factor Pluggable) module
- » Wide specifications and fiber types available
- » Provides digital diagnostics monitoring (DDM) functionality
- » Comes with metal enclosure for EMI
- » High quality and excellent reliability
- » Class 1 laser product compliant with EN 60825-1
- » Easy plug-and-play installation
- » MSA (Multi Source Agreement) compliant
- » Hot pluggable



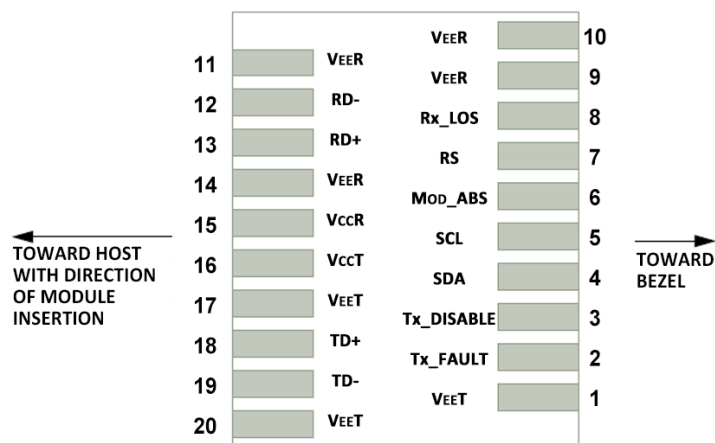
## Specification:

Art. No.	SFP001	SFP002	SFP003	SFP004
EAN Code	4052792075595	4052792075601	4052792075618	4052792075625
Fiber Media Support	Multi-Mode	Single Mode	Single Mode	Single Mode
Distance	550 m	20 km	20 km	20 km
Connector	Duplex LC	Duplex LC	Single LC	Single LC
Direction	Single Direction	Single Direction	Bi-Direction	Bi-Direction
Wavelength	850 nm	1310 nm	TX 1310 nm RX 1550 nm	TX 1550 nm RX 1310 nm
Sensitivity	-18 dB	-23 dB	-22 dB	-22 dB
Cable Type	Multi-mode 50 um or 62.5 um fiber	Single-mode 9/125 um fiber	Single Mode 9/125 um fiber	Single Mode 9/125 um fiber
Power Supply	+3.3 V			
Hot Pluggable	Yes			
Laser Safety <sup>(1)</sup>	Laser Class 1			
MSA Compliant	Yes			
Digital Diagnostics Monitoring (DDM)	Yes			
RoHS Compliant	Yes			
Case Operating Temperature	0–70°C			
Storage Temperature	-40–85°C			
Storage Humidity	5–95% RH non-condensing			
Dimensions	56.7 x 13.7 x 12.8 mm		56.74 x 14.59 x 13.7 mm	
Weight	17.5 g			
Compatible LogiLink Media Converter	NMC001			

<sup>(1)</sup> This is a Class 1 Laser Product complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019.

Caution: Use of control or adjustments or performance of procedure other than those specified herein may result in hazardous radiation exposure.

## Pin Assignment:



Host PCB SFP Pad Assignment Top View

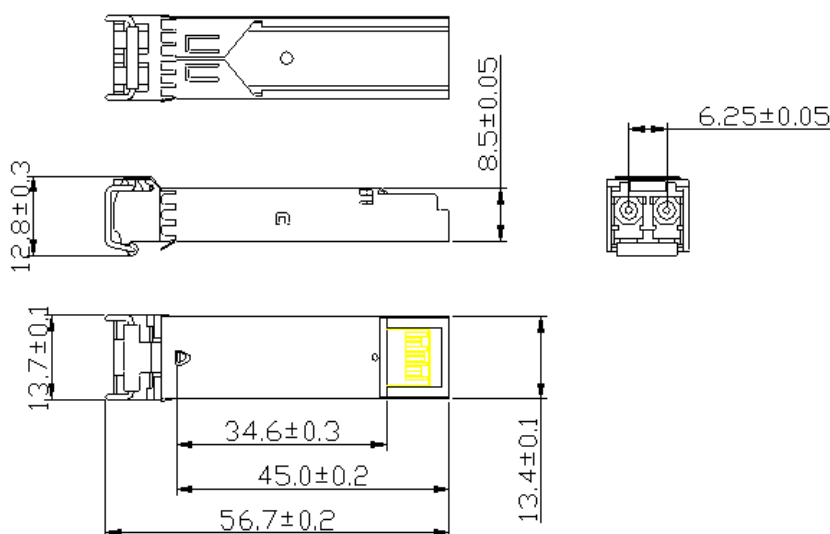
PIN	Name	Function/Description
1	VEET	Transmitter Ground
2	Tx_FAULT	Transmitter Fault Indication <sup>(1)</sup>
3	Tx_DISABLE	Transmitter Disable – Turns off transmitter laser output <sup>(2)</sup>

4	SDA	2-wire Serial Interface Data Line (SDA: Serial Data Signal) <sup>(3)</sup>
5	SCL	2-wire Serial Interface Clock (SCL: Serial Clock Signal) <sup>(3)</sup>
6	MOD_ABS	Module Absent, connected to VEET or VEER in the module <sup>(3)</sup>
7	RS	Rate Select, optional <sup>(5)</sup>
8	Rx_LOS	Receiver Loss of Signal Indication <sup>(4)</sup>
9	VEER	Receiver Ground
10	VEER	Receiver Ground
11	VEER	Receiver Ground
12	RD-	Receiver Inverted Data output, Differential LVPECL, AC coupled
13	RD+	Receiver Non-Inverted Data output, Differential LVPECL, AC coupled
14	VEER	Receiver Ground
15	VCCR	Receiver 3.3 V Power Supply
16	VCCT	Transmitter 3.3V Power Supply
17	VEET	Receiver Ground
18	TD+	Transmitter Non-Inverted Data Input, Differential LVPECL, AC coupled
19	TD-	Transmitter Inverted Data Input, Differential LVPECL, AC coupled
20	VEET	Receiver Ground

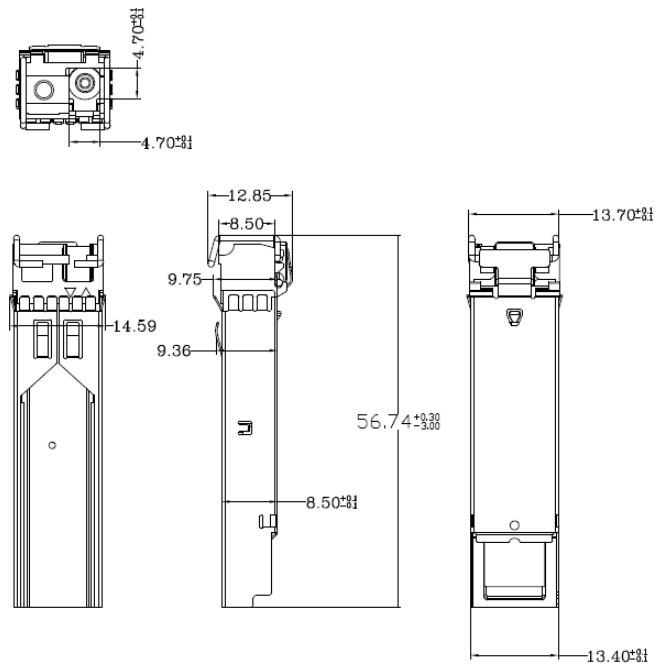
- (1) Tx Fault is open collector/drain output which should be pulled up externally with a 4.7K~10 K $\Omega$  resistor on the host board to supply  $<V_{ccT}+0.3$  V or  $V_{ccR}+0.3$  V. When high, this output indicates a laser fault of some kind. Low indicates normal operation. In the low state, the output will be pulled to  $<0.8$  V.
- (2) Tx Disable input is used to shut down the laser output per the state table below. It is pulled up within the module with a 4.7K~10K $\Omega$  resistor.
- 1) Low (0~0.8 V): Transmitter on;  
2) Between (0.8 V and 2 V): Undefined;  
3) High (2.0~  $V_{ccT}$ ): Transmitter Disabled;  
4) Open: Transmitter Disabled.
- (3) These are the module definition pins. They should be pulled up with a 4.7K~10K $\Omega$  resistor on the host board to supply less than  $V_{ccT}+0.3$  V or  $V_{ccR}+0.3$  V. MOD\_ABS is grounded by the module to indicate that the module is present.
- (4) Rx\_LOS (Loss of signal) is an open collector/drain output which should be pulled up externally with a 4.7K~10K $\Omega$  resistor on the host board to supply  $<V_{ccT}+0.3$  V or  $V_{ccR}+0.3$  V. When high, this output indicates the received optical power is below the worst case receiver sensitivity (as defined by the standard in use). Low indicates normal operation. In the low state, the output will be pulled to  $<0.8$  V.
- (5) No connect on this module.

## Technical Drawing:

SFP001/SFP002



\*All dimensions are  $\pm 0.2$  mm unless otherwise specified; Unit: mm



\*All dimensions are  $\pm 0.2$  mm unless otherwise specified; Unit: mm

#### Package Content:

- » 1x SFP Transceiver Module

#### Package Information:

- » Packing Dimension: 190 x 150 x 20 mm
- » Packing Weight: 0.229 kg (10 pcs/tray)
- » Carton Dimension: 320 x 200 x 120 mm
- » Carton Q'ty: 100 pcs
- » Carton Weight: 2.9 kg