

# D-TECH SFP 10G BIDI Tx1550/Rx 1490nm DDM

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## Variants

80km LC

## Details

### General Description of SFP 10G, BIDI Tx1550nm/Rx1490nm, 80KM, LC DDM:

HTF'HTSX-B495596Zx/HTSX-B554996Zx SFP+ transceiver is designed for use in 10-Gigabit Ethernet links up to 80km over single-mode fiber. The module consists of CWDM DFB Laser, APD and Preamplifier in a highly integrated optical sub-assembly. Digital diagnostic functions are available via a 2-wire serial interface, as specified in SFF-8472.

HTSX-B495596Zx/HTSX-B554996Zx transceivers provide a unique enhanced digital diagnostic monitoring interface which allows real-time access to device operating parameters such as transceiver temperature, laser bias current, transmitted optical power, received optical power and transceiver supply voltage. It also defines a sophisticated system of alarm and warning flags which alerts end-users when particular operating parameters are outside of a factory-set normal range.

The SFP+ MSA defines a 256-byte memory map in EEPROM that is accessible over a 2-wire serial interface at the 8-bit address 1010000X (A0h). The digital diagnostic monitoring interface makes use of the 8-bit address 1010001X (A2h), so the originally defined serial ID memory map remains unchanged

### Features of SFP 10G, BIDI Tx1550nm/Rx1490nm, 80KM, LC DDM:

Up to 11.1 GB/s data

1490nm DFB laser and APD receiver for HTSX-B495596Zx

1550nm DFB laser and APD receiver for HTSX-B554996Zx

2-wire interface with integrated Digital Diagnostic monitoring

Up to 80km transmission on SMF

BIDI LC optical connector

Single +3.3V power supply

Metal enclosure, for lower EMI

Maximum power consumption: 1.8W

RoHS-6-compliant and lead-free

SFF-8472 MSA-compliant, and SFF-8431

Operating case temperature

Commercial: 0 ~ +70 oC

Extended: -10 ~ +80oC

Industrial: -40 ~ +85 oC

### Part Number Ordering Information:

Part Number	Data Rate (Gb/s)	Wavelength (nm)	Transmission Distance(km)	Temperature (oC) (Operating Case)
HTSX-B495596ZC	10.3125	1490Tx/1550Rx	80km SMF	0~70 commercial
HTSX-B554996ZC	10.3125	1550Tx/1490Rx	80km SMF	0~70 commercial
HTSX-B495596ZE	10.3125	1490Tx/1550Rx	80km SMF	-10~80 extended
HTSX-B554996ZE	10.3125	1550Tx/1490Rx	80km SMF	-10~80 extended
HTSX-B495596ZI	10.3125	1490Tx/1550Rx	80km SMF	-40~85 industrial
HTSX-B554996ZI	10.3125	1550Tx/1490Rx	80km SMF	-40~85 industrial

### Absolute Maximum Ratings:

It has to be noted that the operation in excess of any individual absolute maximum ratings might cause permanent damage to this module.

Parameter	Symbol	Min	Max	Unit	Notes
Storage Temperature	TS	-40	85	oC	

Power Supply Voltage	VCC	-0.5	3.6	V	
Relative Humidity (non-condensation)	RH	5	95	%	
Damage Threshold	THd	0		dBm	

## Recommended Operating Conditions and Power Supply Requirements:

Parameter	Symbol	Min	Typical	Max	Unit	Notes
Operating Case Temperature	TOP	0		70	oC	commercial
Power Supply Voltage	VCC	3.135	3.3	3.465	V	
Data Rate			10.3125		Gb/s	
Control Input Voltage is high.		2		Vcc	V	
Control Input Voltage is low.		0		0.8	V	
Link Distance (SMF)	D			80	km	9/125um