

## BN-CKM-SP-T-AO

IBM® BN-CKM-SP-T Compatible TAA Compliant 100/1000/10000Base-TX SFP+ Transceiver (Copper, 30m, RJ-45)

### Features

- SFF-8432 Compliance
- RJ-45 Connector
- Commercial Temperature -5 to 85 Celsius
- Copper Media Type
- Hot Pluggable
- Excellent ESD Protection
- Metal with Lower EMI
- RoHS Compliant and Lead Free



### Applications

- 10GBase Ethernet
- Access and Enterprise

### Product Description

This IBM® BN-CKM-SP-T compatible SFP+ transceiver provides 100/1000/10000Base-TX throughput up to 30m over a copper connection via a RJ-45 connector. This TX module supports 100/1000/10000Base auto-negotiation and can be configured to fit your needs. It is guaranteed to be 100% compatible with the equivalent IBM® transceiver. This easy to install, hot swappable transceiver has been programmed, uniquely serialized and data-traffic and application tested to ensure that it will initialize and perform identically. It is built to meet or exceed the specifications of IBM®, as well as to comply with MSA (Multi-Source Agreement) standards to ensure seamless network integration. This transceiver is Trade Agreements Act (TAA) compliant. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

AddOn's transceivers are RoHS compliant and lead-free.

TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to foster fair and open international trade. TAA requires that the U.S. Government may acquire only "U.S. – made or designated country end products."



### Regulatory Compliance

- ESD to the Electrical PINs: compatible with MIL-STD-883E Method 3015.4
- ESD to the LC Receptacle: compatible with IEC 61000-4-3
- EMI/EMC compatible with FCC Part 15 Subpart B Rules, EN55022:2010
- Laser Eye Safety compatible with FDA 21CFR, EN60950-1& EN (IEC) 60825-1,2
- RoHS compliant with EU RoHS 2.0 directive 2015/863/EU

### Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit
Maximum Supply Voltage	V <sub>cc</sub>	3.135	3.6	VDC
Storage Temperature	T <sub>S</sub>	-40	85	°C
Operating Case Temperature	T <sub>c</sub>	-5	85	°C
Operating Humidity	RH	5	95	%
Maximum Bitrate	B <sub>max</sub>		11.4	Gbps

### Electrical Characteristics (TOP=25°C, V<sub>cc</sub>=3.3Volts)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Power Supply Voltage	V <sub>cc</sub>	3.135	3.30	3.465	V	
Low Speed Input Voltage		-0.5		V <sub>cc</sub> +0.3	V	
Two-Wire Interface Input Voltage		-0.3		V <sub>cc</sub> +0.5	V	
Power (30m @ 25C ambient)			2.3	2.5	W	

## Pin Descriptions

Pin	Symbol	Name/Descriptions	Ref.
1	VeeT	Transmitter Ground	1
2	Tx_Fault	Transmitter Fault LVTTTL-O	2
3	Tx_Disable	Transmitter Disable LVTTTL-I	
4	SDA	2-wire Serial Interface Data Line LVTTTL-I/O	
5	SCL	2-wire Serial Interface Clock LVTTTL-I/O	
6	Mod_ABS	Module Absent, connect to VeeT or VeeR in the module	
7	RS0	Rate Select 0 LVTTTL-I	
8	Rx_LOS	Receiver Loss of Signal Indication LVTTTL-O	2
9	RS1	Rate Select 1 LVTTTL-I	
10	VeeR	Receiver Ground	1
11	VeeR	Receiver Ground	1
12	RD-	Receiver Inverted Data Output CML-O	
13	RD+	Receiver Non-Inverted Data Output CML-O	
14	VeeR	Receiver Ground	1
15	VccR	Receiver 3.3V Supply	
16	VccT	Transmitter 3.3V Supply	
17	VeeT	Transmitter Ground	1
18	TD+	Receiver Inverted Data Output CML-I	
19	TD-	Transmitter Inverted Data Input CML-I	
20	VeeT	Module Transmitter Ground	1

### Notes:

1. The module signal grounds should be isolated from the module case.

# Mechanical Specifications



## **About AddOn Networks**

In 1999, AddOn Networks entered the market with a single product. Our founders fulfilled a severe shortage for compatible, cost-effective optical transceivers that compete at the same performance levels as leading OEM manufacturers. Adhering to the idea of redefining service and product quality not previously had in the fiber optic networking industry, AddOn invested resources in solution design, production, fulfillment, and global support.

Combining one of the most extensive and stringent testing processes in the industry, an exceptional free tech support center, and a consistent roll-out of innovative technologies, AddOn has continually set industry standards of quality and reliability throughout its history.

Reliability is the cornerstone of any optical fiber network and is engrained in AddOn's DNA. It has played a key role in nurturing the long-term relationships developed over the years with customers. AddOn remains committed to exceeding industry standards with certifications from ranging from NEBS Level 3 to ISO 9001:2005 with every new development while maintaining the signature reliability of its products.

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