TNC2 for CTX6600 platform

OTN 100G Transponder

Key Features

- OTN 100G Transponder with 1x100G line port and 1x 100G client port 1or 2x40G client ports
- Uplink (Line side) supports OTU4
- Client side supports 100GE/OTU4, 40GE/OUT3
- Fully compliant with ITU-T standard, such as G.709, G.798, etc.
- Standards based ITU-T G709 RSFEC, I.4, I.7
- Supports full C-band DWDM for line side
- Performance Monitoring
- Automatic Laser Shutdown(ALS) for all ports

Figure 2: TNC2 Transponder

Applications

TNC2 pluggable board in CTX6600 chassis is Danriver's 100G multi-rate/multi-protocol Transponder for high capacity transport solutions, it allows migration exist various and future services without replacement.

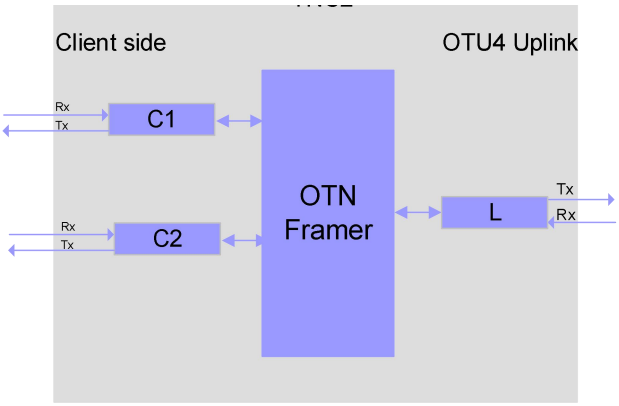

Figure 1: TNC2 Block Diagram

Application Scenarios:

|Metro Network Application

|Regional Network Application

|Data Center interconnection（DCI）

|High Capacity and Long Haul Solution

|Enterprise Line

| DWDM Upgrade

Technical Specifications

Operation Mode	TNC2
Transponder Mode	1x 100G client and 1x100G uplink
	2x40G client and 1x100G uplink
Client port	
Number of port	1 QSFP28 based 100G port (100G, OTU4) Or 2 QSFP+ based 40G port (40GE, OTU3)
Interface	QSFP28/QSFP+
Transceiver	Wavelength, Protocol, Distance depend on QSFP28/QSFP+
Protocol	100GE/OTU4 40GE/OTU3
Uplink port	
Number of port	1
Interface	1xCFP2
Transceiver	Fixed or Tunable wavelength
Protocol	OTU4
FEC Feature	
FEC function	Regular FEC (G.709)
	SD-FEC
FEC gain(dB)	8~9 Max with CFP2-DCO
Client Side Signal and Mapping Mode	
100GE	100GE (via GMP) <-> ODU4
OTU4	OTU4 <-> ODU4
40GE	40GE (via GMP) <-> ODU3
OTU3	OTU3 <-> ODU3
Performance Monitoring	
Optical module	TX/RX power level，wavelength，temperature
Ports	OTU Section OTU Far Section ODU Path ODU Far Path OTN FEC Correct error OTN FEC uncorrected error
Optical module	TX/RX power level，wavelength，temperature
Diagnostic test	

Loopback	Facility loopback：local loopback，remote loopback
PRBS test	Supports
Management	
In-band DCN Management	GCC0 on OTU4
	GCC1 or GCC2 or GCC1+2 on ODU4
	GCC0 on OTU3
	GCC1 or GCC2 or GCC1+2 on ODU3
Environmental	
Operating Temperature	0 to 45℃
Operating Humidity	5 to 95% (non-condensing)
Storage Temperature	-20 to + 70℃
Mechanics	
Card type	Pluggable
Slot assignment	2 adjacent slots vertically
Platform	CTX6600V
Dimensions (H x W x D mm)	40x192x223
Power Supply	
Card type	Pluggable power supply
Power feed	DC -48V input from backplane
Power Consumption	<90W