DanRiver TECHNOLOGIES

CTX Series

TPX6P

Multi-rate 6x SFP+, Transponder w/ APS

Main Features

- Transparent Transponder
- Support Multi-rate: 0G to 11.5G
- Dual 1:2 duocast and dual 1:2 selector
- Supports 1+1 failover mechanisms, switchover time< 900µs
- Layer-1 Low latency
- Energy-efficient Green modes
- Pay-as-you-grow architecture based on pluggable module
- Comprehensive line and service performance monitoring
- Easy maintenance with field-replaceable parts

Figure 1: TPX6P Transponder Card

Benefits

- High Reliability and Low latency
- Managed service platform CTX6600
- Modular and cost-effective for future growth and maintenanceaccess
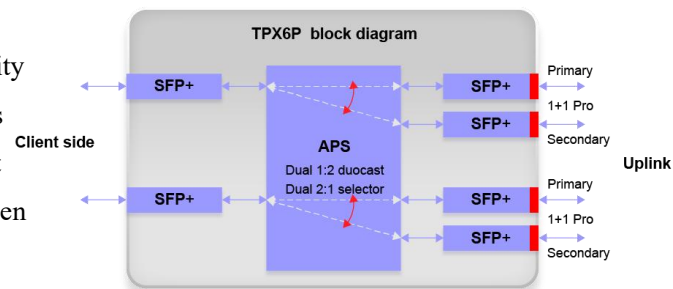- Layer-1 APS switching

Applications

- Finance, securities, games etc for reliability and low latency
- As transponder,repeater or media converter.
- Enterprise Private Line
- DWDM DCI Networking
- Infiniband

Description

In addition to the use as transponder, the TPX6P can also be used as repeater or media converter.

The TPX6P Supports forward and APS operation modes, In especial, Hardware Layer 1 low latency and APS mode meet the application need of Finance, securities, games etc.

The TPX6P is a high density multilane transponder module for the CTX6600 chassis system. Each TPX6P offers five independent transponders operating from 0 G to 11.5G line rates, enabling 6x DWDM channels per 1U (or more channels for 2U/5U) for high capacity needs. 40G interfaces can be transported via 4x10G wavelength groups with CWDM or DWDM traffic being supported. The TPX6P is perfect for new xWDM transmission deployments or as part of any modern open Source Hardware initiatives DWDM deployment strategy and can be used with any mux/demux platform compliant to ITU DWDM standard G.694.1 or CWDM standard G.694.2. TPX6P block diagram on the right

Technical Specifications

Transmission Rate and standard	
OC192/STM64	9.953 Gbps, ITU G.707, GR-253
10GbE	10.312 Gbps, IEEE802.3ae, 10GBASE-LW, 10GBASE-LR
10G FC	10.518 Gbps , draft standard 1200-SM-LL-L, 1200-MX-SN-I
OTU2	10.709 Gbps, FEC, ITU G.709
8G Fiber channel	8.5G FC-PI-4 800-SM-LC-L FC
Other Data Rate	On Request
Client Interface	
Density	2
Data Rate	0 G to 11.5G, 8G/10G FC
Optical interface	Hot pluggable SFP/SFP+ module
Wavelength	850nm/1310nm/CWDM/DWDM
Optical Reach	300m/10km/40km/80km
Line Interface (Uplink)	
Density	4
Data Rate	0 G to 11.5G, 8G/10G FC
Optical interface	Hot pluggable SFP/SFP+ module
Wavelength	CWDM/DWDM
Optical Reach	300m/10km/40km/80km/120km/combined with Amplifier for long distance
Main feature	
Operation mode	Forward and APS
CDR Mode	3R, bypass
Run Mode	Transmitter on, off, Automatic laser shut-down (ALS)
Latency(ptp)	<4μs
APS	Switchover time<900μs
Performance Monitoring	
Visual Indicators	LED status indicators for: client and line ports,STAT of line card
Optical Monitoring	Rx/Tx Optical Power, link status etc
OAM	Event logs / Alarms
Physical feature	
Dimensions(HxWxD mm)	20x192x223
Weight (kg)	0.3
Package options	Plug-in Card
Platform	CTX6600 I/II/V
Slot assignment	Any slot except for Slot 1
Environment	
Operating Temperature	-5°C to 50°C
Storage	-20°C to 85°C
Humidity	5% ~ 85% RH non-condensing
Power Supply	
Power Input	DC -48V input from backplane
Power Consumption	< 20W
Compliance	
Standards	RoHS 5/6