SKU: 0110-0192
Category:

T1 Asynchronous Transceiver (T1A)

The line powering T1 Asynchronous Transceiver (T1A) plug-in card provides a DSX-1 rate interface and line-powering. The T1A card operates at the T1 rate of 1.544 Mbps with a receiver sensitivity of -36 dB. Use the T1A card in applications that require transport of intact T1 signals from one network location to another.

Features

- •One T1 (1.544 Mbps) interface per card
- •Intact T1 transport
- •Customer T1 service capability
- •Line-powering capability
- •Front panel jack access for testing and monitoring
- •Dual memory support for upgrades

Highlights

Power and Repeaters

The T1A power feed system (60 mA constant current source at -130 Vdc) can power multiple span line repeaters in any of several power feed options. The number of
repeaters is a function of the repeater voltage and wire gauge used between repeaters. The external power feed resistance of the T1A card must not exceed a 2000 ÃŽÂ© equivalent resistance for the network.

Alarms, Test and Stastics

The transceiver has selectable alarm thresholds, BER calculation, performance monitoring statistics, and alarm history.

Line Coding and Signaling

Line coding options are AMI or B8ZS. The T1A card does not perform signaling conversion or datalink termination, only clear transport.

Easy Provisioning

The T1A can be easily provisioned from CUI or Tellabs Panorama Element Management System (EMS)

Many Applications

The T1A transports intact T1 sig nals from the customer premises to the Tellabs 1000 MSAP or from one network location to another. The card also features line powering for applications requiring line-powering capabilities.

Faceplate LED Indicators

The T1A has three LED indicators on the faceplate. The green ACTV LED indicates the plug-in card is communicating with a counter part T1A in another Tellabs 1000 terminal. The ACTV LED blinks rapidly (120 flashes per minute) during self-test and provisioning, and slowly (60 flash es per minute) during a loopback test. The red FAIL LED indicates a plug-in card failure or problem communicating with the CPU. The red FAIL LED blinks when there is illegal signaling. The red LOC LED indicates a problem receiving incoming data (LOS or high BER). The green AIS LED is reserved for future use.

Specifications

Physical

- •Height: 5.125 inches (13.018 cm)

- Width: 0.563 inch (1.429 cm)
- Depth: 10.5 inches (26.67 cm)
- Weight: 0.5 pound (0.23 kg)

Interfaces

- One (1) T1 (1.544 Mbps) interface per card

Power

- Output current: 60 mA Â3 3 mA
- Output voltage (open circuit): -135 Vdc Â3 5 Vdc
- External power feed resistance: x â°Â€ 2000 ÃŽÂ© equivalent resistance
- Output noise (DC-20 MHz): < 10 mV pk-pk
- Typical power consumption (span power off): 2.0 W
- Typical power consumption (span power for 5 repeaters): 12.0 W

Environmentals

- Operating temperature: -40 F / -40 C to +149 F / +65 C
- Humidity (relative): 5 to 95% non-condensing

Compliance

- GR-1089-CORE
- GR-499

Signaling

- Framing: Unframed
- Line coding: AMI/ZCS or B8ZS
- Loopback modes: Equipment and Facility

Faceplate LED Indicators

- FAIL Red: Plug-in card failure, or card unable to communicate with the CPU
- FAIL Flashing Red: Illegal signaling detected
- ACTV Green: Datalink is established
- ACTV Flashing Green: Flashes 120 times per minute when card is in self-test mode and Flashes 60 times per minute when card is in loopback mode
- LOC Red: Local signal reception is unsatisfactory
- AIS Green or Blue: Card is receiving an Alarm Indication Signal (AIS) from an upstream source

Management

- Tellabs Panorama Element Management System (EMS)
- Craft User Interface (CUI)

Software Support

- Minimum base software FP16 and higher

Installations

- Supported in Tellabs 1000 MSAP CBA1120 and CBA1048

Faceplate Jacks

- E OUT Equipment Output: DS1 test access toward the internal cross-connect (backplane)

- F OUT Facility Output: DS1 test access toward the facility (line)
- E IN Equipment Input: DS1 monitoring access from the internal cross-connect (backplane)
- F IN Facility Input: DS1 monitoring access from the facility (line)

Analog Parameters

- Equalization Receive: Automatic line build out (36 dB attenuation)
- Equalization Transmit: 4 step attenuator – 0, -7.5, -15, -22.5 dBm
- Input impedance: 100 ÃŽÂ©