APOGEE LABS

2134

OC3CIF

PACKETIZER / DEPACKETIZER WITH SM/ST OC3c DATA LINK INTERFACE

1.   FEATURES

➢ Single Width Module Size

➢ 155.52 Mbps Fiber Optic Rate

➢ 1 Mbps to 122 Mbps Packetized Data Bandwidth

➢ Link Status Detection

➢ Incorporates Packetizer and Depacketizer

➢ Generates / Collects Composite Transfer Frames

➢ Multiplexes / Demultiplexes Source Packets from / to Application Modules

➢ Supports 1 ms or 10 ms Sample Interval

➢ Compatible with all AL4300 chassis and modules

2.   OVERVIEW

The OC3CIF module is intended to support configurations of AL4300 chassis where it is necessary to share data between system nodes that are separated by significant distances and are to be interconnected by way of a communications network. Both full duplex and half duplex operations are supported.

The OC3CIF module combines the functions of a full-duplex OC3 interface and both a packetizer and depacketizer for the Apogee Labs AL4300 series of multiplex systems.

The model 2134 (SC connector) OC3CIF module controls the passage of data from one system to another in the same manner as the standard Apogee Labs packetizer and depacketizer. The intersystem data path is the primary difference. A daughter card is mounted to the main or mother card that implements the OC3c interface structure.
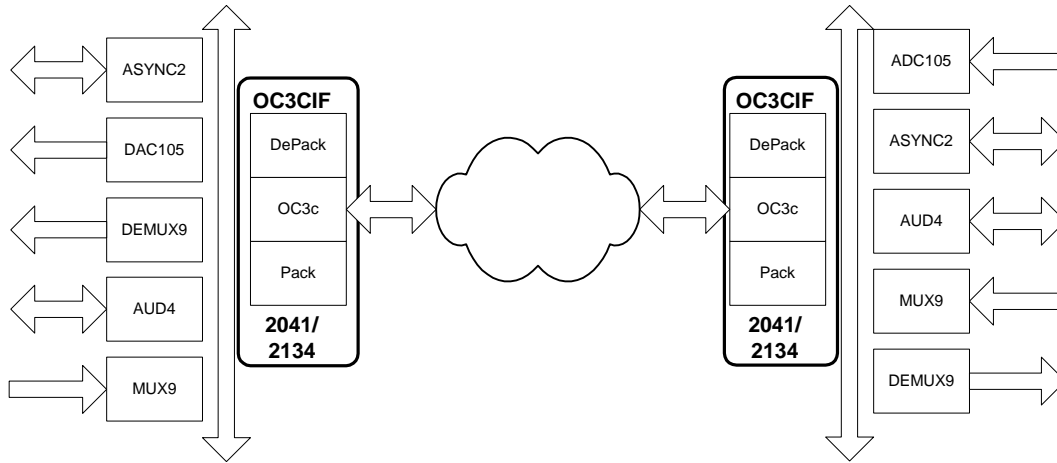
Figure 1 - Typical System Configuration

3.   SPECIFICATIONS

- ➢ Receive Loss of Signal Detection

- ➢ Fiber Optic Signaling Rate: 155.52M bps

- ➢ Packetized Data Rate: 1 Mbps to 122M bps Programmable in 1M bps Steps

- ➢ Fiber Optic Medium: Single Mode / ST Optical Connectors

- ➢ Fiber Optic Framing: ATM over STS-3c

- ➢ Transmit Power: -11 dBm Typical

- ➢ Receiver Sensitivity: -32 dBm Typical

- ➢ Center Wavelength: 1310 nm

- ➢ Transfer Frame Format: 8192 bits / Frame, CCSDS Packet Telemetry Format with Attached Synchronization Pattern contained in ATM cells

- ➢ Supports up to 16 Application Module Slots

- ➢ Supports 1 ms or 10 ms Sample Interval

- ➢ Compatible with all AL4300 chassis and modules

- ➢ Incorporates Packetizer and Depacketizer

- ➢ Requires only one AL4300 chassis slot