

Serial LIM for Low Speed 16-Port Circuit Emulation Applications

Introduction

The Xedge LCE-16 LIM operates with the Xedge ACP or PCx controllers in Xedge switches to enable transport of 64 Kbps and lower applications over a broadband backbone network. The LCE-16 features 16 interfaces with an overall throughput of 768 Kbps. Each interface is software configurable as a DTE or DCE interface, and to asynchronous (75 bps to 38.4 Kbps) or synchronous (2.4 Kbps to 64 Kbps) formats.

The Xedge LCE-16 is ideal for customers who need to consolidate low speed circuits over modern high speed networks. The LCE-16 has the port density necessary to lower the cost of aggregating legacy circuits over a fast packet network.

Circuit Emulation

The LCE-16 LIM is used in combination with the ACP or PCX slot controllers. It supports lower speed circuit emulation, enabling transparent encapsulation of a bitstream. The LCE-16 provides constant bit rate, low delay, circuit emulation using standard encapsulation techniques. These techniques make the LIM suitable for applications that require transmission over a packet (IP, MPLS, VLAN, Ethernet) or ATM, or optical backbone.

An optional EIA530/EIA232 Distribution Panel Kit contains two extender cables and a 19 or 23-inch rack-mount panel providing 16 DB25 connectors corresponding to the 16 links of the LCE-16 LIM. The extender cables extend the LCE-16 front panel LINK 0-7 and LINK 8-15 connectors to the EIA530/EIA232 Distribution panel.

Diagnostics & Alarms

- Line-side and Network-side loopbacks.
- IS (In Service) LED
- AL LED (Fault, all ports disabled, loopback enabled)

Alarms & Performance

- Loss of signal
- Parity error detect

Features & Benefits

- Asynchronous interfaces from 75 bps to 38.4 Kbps; synchronous interfaces from 2.4 to 64 Kbps
- Sixteen physical ports per LIM
- End-to-End transport of control signals
- Per port configuration of rate and interface type (DCE/DTE)
- SNMP manageable

Specifications

- Interfaces:
EIA/TIA-232, EIA-530, EIA-449, X.21, or V.35 (configurable per port)
- Connector Type:
100-pin high density
- Operating Modes:
Asynchronous or synchronous (DCE or DTE mode configurable per port)
- Asynchronous Data Rates:
75, 150, 300, 1200, 4800, 7200, 9600, 19,200, and 38,400 bps
- Synchronous Data Rates:
2.4, 4.8, 9.6, 19.2, 56, 64 Kbps
- Port Capacity:
16 interfaces per module
- Control Leads:
Four send and four receive (up to 4 ports)
- Timing and Synchronization:
Asynchronous - self timed
Synchronous - system timed
- With the PCx-2 controller, supports the Precision Timing Protocol (IEEE 1588) to recover system timing between nodes in Ethernet over packet applications.

