

## *Xedge Packet Cell Link Controller with Flexible Cell Relay Transport*



*Xedge PCL shown in 6002 chassis with LIMs*

### **INTRODUCTION**

The PCL is part of GDC's next generation MultiService Packet Exchange platform (MSPx) that offers end users and operators flexible and modular technologies that support multi-protocol applications. As networks evolve to more packet-based technologies and services, the Xedge MSPx platform can converge protocols such as TDM, ATM, Frame Relay, Ethernet, and IP across emerging packet based MPLS, Ethernet, and IP backbones.

The Xedge Packet Cell Link (PCL) is a cost effective solution for concentration of end user traffic to a service provider's ATM service or, in a private network, as a branch office solution connecting remote sites running multiservice applications back to main or headquarter sites. A variety of Xedge line interfaces modules (LIMs) plug directly into an available slot behind the PCL in the Xedge chassis for a variety of applications, such as CE or IMA.

#### *Circuit Emulation Applications*

In circuit emulation applications, the PCL can employ the Low Speed Circuit Emulation module (LCE-16) or the Analog Voice module (AVM) to transport 64kbps and lower circuits over a packet, optical or ATM broadband backbone.

#### *IMA Applications*

In IMA applications, the PCL employs DS3 and E3 modules and the 16-port DS1-IMA or E1-IMA module to enable DS3 or E3 ATM cell traffic across bonded IMA links (DS1 or E1). A user selectable option permits the choice of PLCP or HEC formats.

Each DS1 or E1 module supports one or two groups of 8 physical DS1 or E1 links. Bonded group(s) can be combinations of 2, 4, or 8 links. Either the DS1 or the E1 module can support individual DS1 or E1 ATM UNI-NNI links that are not part of a group.

### **FEATURE HIGHLIGHTS**

- Cost-effective DS1 IMA to DS3 or E1 IMA to E3 cell-relay transport
- ATM standard compliant ATMF UNI 3.1 solution
- Conformance with IMA 1.0 and IMA 1.1 standards
- NNI support for both DS1/E1 IMA or DS3/E3 ATM
- Fast Ethernet for management and/or Ethernet/IP data (up to 4 connections)
- ATM loopback and diagnostic of physical layer performance
- Optional choice of PLCP and HEC formats for DS3/E3
- Next generation platform supports migration to Ethernet/IP MPLS based solutions
- Conforms to RFC 1884 IPV6 addressing schemes

### **High or Low Density Options**

Housed in the compact 1RU two-slot Xedge 6002 chassis, the PCL offers versatile and reliable performance in a compact, standards based platform (shown above). In the higher density Xedge chassis, the PCL can be installed in slot-0 or non-slot 0 positions to scale to user requirements for cell relay concentration.

The Xedge PCL slot controller plugs into two adjacent slots of an Xedge AC- or DC-powered chassis: the Xedge 6002 with 2 slots, the Xedge 6160 with 4 slots, the Xedge 6280 (7 slots) and the 16-slot Xedge 6640 or 6645.