EdgeBlade™ - PG4800V5

FLEXIBLE V5.2 PSTN PLATFORM

EdgeBlade™-PG4800V5 is a high-density PSTN Signaling platform built on industry's leading V5.2 protocol standard. PG4800V5 offers highly comprehensive features and benefits which OEMs, Operators and System integrators can exploit to build signal converters, access equipment, Class5 switches, etc. PG4800V5 comes with rich software support for access as well as central office applications.

- V5.2 based Access Equipment
- LE Media Gateways and Switches
- LE Switch Simulator
- Class5 Switches
- Access Gateways



KEY FEATURES

- High-density platform with up to 480 channels on 16 E1 spans per card
- V5 Protocols Supported: V5.1 & V5.2 AN; V5.1 & V5.2 LEsupporting Edition 1 and Edition 2, CAS, MFC-R1/R2
- Path Protection Switching
- Supports Link Redundancy on each EdgeBlade™ as a standard feature
- Grooming of multiple V5 interfaces towards the AN systems, into V5 interfaces towards the LE
- Compliance with a wide range of V5 national protocols
- Multiplexing and connections with full cross-connect capability
- Redundancy of critical system components
- Transparency to the network enabling advanced LE CLASS services
- Simultaneous support of various service types (PSTN, ISDN BRI & PRI)

- Enhanced scalability based on a flexible and modular design
- Local and remote Management via the Supervisor Terminal,
 Telnet and SNMP agent
- Enable remote management of the AN system
- Alarm monitor and display
- Supports large suite of network protocols for data traffic.
- Includes Application Programming Interface (API) under Linux, Windows and Solaris
- Layer 2: LAPV5 and ISDN D-channel Frame Relay.
- Layer 3 V5.1: PSTN and Control protocols; ISDN BRI; Semi-Permanent Leased Line and Permanent Line
- Layer 3 V5.2: Also provides BCC (Bearer Channel Connection), Link Control, and Protection Protocols, ISDN PRA support, and Protection Switching.
- Fully tested to conform to the ETSI ATS and proven to operate with LE switches around the world.



APPLICATION SCENARIO

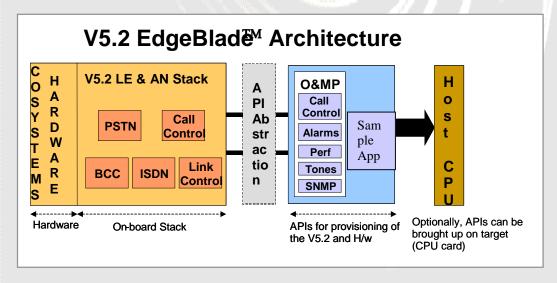
EdgeBlade[™] PG4800V5 is a comprehensive V5.2 board that can be used to build a variety of equipment, which are based on ETSI V5.2 technology. The EdgeBlade[™] comes with several modules and features covering a range of applications including CAS, R2/R1, Tones, etc. PG4800V5 is a flexible platform that can be used as V5.2/V5.1AN or V5.1/V5.2LE signaling variants. In addition, support is available for ISDN calls in the form of an enveloping function. Shown below is V5.2 technology on the boards that can be used in several applications.

Functions

- V5.1/V5.1 AN and LE function on-board
- Mapping multiple Interface groups of V5.2 to one interface group of V5.1
- Perform bearer channel cross connects for PSTN/ISDN
- ISDN signaling pass-through
- Remote management and Debug Interface support
- Semi permanent and Permanent Leased Line support
- LE BCC Resource Management
- Multiple levels of redundancy
 - Normal Mode: Path protection switching for Primary and Secondary link redundancy on single board
 - High Availability Mode:
 - Option 1: Link redundancy, for Primary and Secondary on different boards
 - Option 2: Carrier grade 1:1 redundancy (Hot Swap), for card and link redundancy
- V5.x based Signaling Conversion with R2/MFC and E1 CAS support

Applications Available

- V5 AN based access applications with on-board tone detection and generation features
- V5 LE application for Class5 switches or LE Media Gateway applications. (May need other resource cards)
- E1/T1-CAS to V5.1/V5.2, to enable CAS based PBX, switches to interface to the local exchange using V5
- V5.2 resource board for PSTN trunking and switching applications
- Signal conversion applications.



As described above, the V5.2 and all related APIs are abstracted for integration with application on host CPU card or with remote or local resource directly from the card (APIs are available from the card, hence does not need a CPU card).



TECHNICAL SUMMARY

FEATURES	DETAILS		
Channel Capacity	Up to 480 independent channels per board		
Ports	Available in 16, 12, 8 & 4 spans of E1/T1/J1s		
DTMF	DTMF detection and generation. Support for R1 and R2 signaling		
Data	V.110 or RLP or HDLC or V.23		
Management Support	SNMP V1: Standard MIB-2, RTP MIB, Trunk MIB, CoSystems proprietary MIBs, on board Java support		
Operating Environment	Linux, Windows XP, NT, 2000, Intel/Solaris & Sun/Solaris		
	■ Layer 2: LAPV5 and ISDN D-channel Frame Relay.		
V5.2	 Layer 3 V5.1: PSTN and Control protocols; ISDN PRI & BRI; Semi-Permanent Leased Line and Permanent Line. Layer 3 V5.2: Also provides BCC (Bearer Channel Connection), Link Control, and Protection Protocols; ISDN BRI & PRI support, and Protection Switching. 		
PSTN Signaling	CAS – R2/R1, T1 RBS; CCS – ETSI V5.2/V5.1, Built on proven stacks from CoSystems.		
Tones	DTMF/MF-R1/R2/ Telephony tones detection & generation: up to 480 channels		
Clock	T1/E1 BITS Clock: Timing Reference		
Management Bus	Primary PCI bus: 32/64bit 33/66MHz; Secondary PCI bus: 32bit 33/66MHz		
Ethernet	10/100Mbps management port		
Control Plane	APIs available for Linux, Solaris and Windows over PCI and Ethernet		

Ordering Information

EdgeBlade PG4800V5 – AN	16	V5.2 & V5.1 with AN Applications	
EdgeBlade PG4800V5 – LE	16	V5.2 & V5.1 with LE Applications	
EdgeBlade PG4800V5 – RV	16	V5.2 with R1/R2 Support	
EdgeBlade PG4800V5 – EC	16	V5.2 with E1/CAS support	

^{*} The above products are also available in 12, 8 and 4 port densities and also in High Availability mode. Call for price/details.



Why EdgeBlade™?

- ✓ Built with robust and optimized technology
- ✓ Pre-ported with required components
- Fully integrated with the hardware and OS
- ✓ Tested on various CPUs, chassis and interfaces Can be integrated easily.
- Rich suite of features
- Comprehensive suite of APIs drawn out
- ✓ Carrier grade system design with High Availability
- ✓ Optimized cost per port

ABOUT COSYSTEMS

CoSystems, headquartered in the Silicon Valley, is a leading edge Technology solution providing company that has a proven track record of delivering high-quality Technology solutions to global Telecom and Datacom companies. Backed by a 22-year existence in the communications technology horizon, CoSystems is dedicated to delivering complex systems and building blocks to telecom operators, ISPs, Cable Operators, MSOs, and to the emerging wireless voice and packet infrastructure markets. CoSystems solutions offer high-value applications, optimized costs and minimized risk global customers who benefit in rapid Return on Investments in their deployments. CoSystems addresses the market needs through a network of distributors, VARs, Systems Integrators and service providers across the globe. CoSystems solutions include Signal Conversions products, Access Gateways, Signaling Gateways, Media Gateways, products for Broadband using DSL, Cable and WiFi technology. For more information please contact:

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