EdgeBlade™ - DC4800PP

PPP-ML DATACOMM PLATFORM

EdgeBlade™ DC4800PP is a PPP-ML based data communication platform developed by Cosystems capable of generating and processing PPP/ML-PPP traffic on a T1/E1 interface.

PPP-ML on board EdgeBlade™ DC4800PP is a scalable software implementation of the IETF-defined Point-to-Point Protocol (PPP), MultiLink PPP (ML-PPP) Protocol, Bandwidth Allocation Control Protocol (BAP/BACP) and related standards.
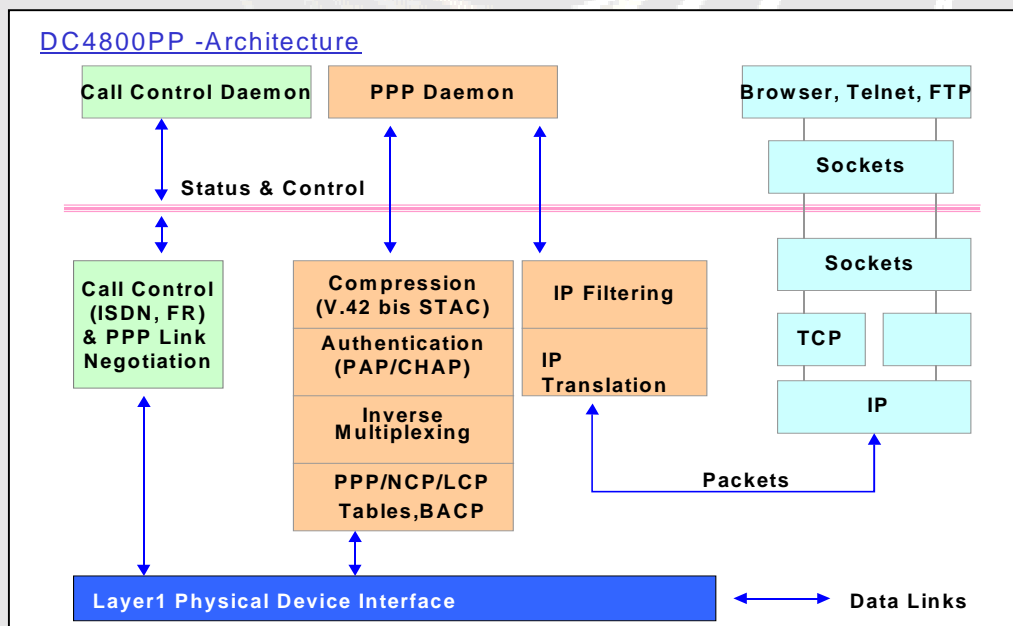
KEY FEATURES

- Highly flexible platform with up to 16 E1/T1/J1 for up to 480 HDLC channels fully loaded.
- Data traffic supported:
  - HDLC over E1/T1 interface of up to 480 PHY channels per card
  - IP data over PPP connection – a maximum size of 5Mb over a single PHY channel. Enables dynamic addition of channels.
  - HDLC/IP data generated from textiles can be stored and forwarded.
- Supports RADIUS, a client implementation of the Remote Authentication Dial-In User Service (RADIUS) protocol
  - Scalable PPP Multiplexor with PPP, NCP, LCP, IPCP, IPXCP, CCP, ECP, BCP and BACP engines.
- Point-to-Point (PPP) protocol, asynchronous and synchronous operation over multiple PPP links.

- Supports PPTP;
- Supports L2TP
- Bandwidth-on-Demand, Dial-on-Demand with idle timer disconnect, Call Back Facility, Bandwidth Allocation Control Protocol (BAP/BACP)
- Dynamic IP Address Allocation, Van Jacobson TCP/IP Header Compression, IP Packet Filtering, IP services support (Telnet, FTP, rlogin, mail, etc.).
- PAP/CHAP Authentication, V.42*bis* compression, and hooks for quick integration of STAC LZS.
- With CPU card, EdgeBlade™ has multi user intelligence and hence can be accessed by multiple users to initiate PPP session.
- Support for transporting HDLC and PPP traffic – IMPAIRMENT.
- Seamless integration with PPP/MultiLink PPP, Frame Relay and ISDN BRI and PRI stacks.

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TECHNICAL SUMMARY

FEATURES	DETAILS
Channel Capacity	Up to 480 HDLC Channels (CPU board required)
Ports	Available in E1/T1/J1s in optional 16, 12, 8 & 4 spans
Data	V.110 or RLP or HDLC or V.23
Management Support	SNMP V3: Standard MIB-2, RTP MIB, Trunk MIB, CoSystems proprietary MIBs, on board Java support
Operating Environment	VxWorks, pSOS, Windows XP, NT, 2000, Intel/Solaris & Sun/Solaris
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 Solaris and Windows over PCI and Ethernet
RFC Support	RFC Support (partial list, call for updates): ▪ RFC 1321 (MD5 Message Digest Algorithm) ▪ RFC 1332 (Internet Protocol Control - IPCP) ▪ RFC 1333 (Link Quality Reporting-LQR) ▪ RFC 1334/1994 (PPP Authentication), update to RFC 1994 ▪ RFC 1441 (TCP/IP Header Compression) ▪ RFC 1471 (Managed Objects for LCP / PPP) ▪ RFC 1473 (Managed Objects for IPCP / PPP) ▪ RFC 1551 Novell IPX over various WAN Media ▪ RFC 1552 (PPP Internet work Packet Exchange Protocol) ▪ RFC 1570 (PPP LCP Extensions with call-back support) ▪ RFC 1661 (Point-to-Point Protocol) State Machine ▪ RFC 1662 (PPP in HDLC framing) ▪ RFC 1663 (Reliable Transmission) ▪ RFC 1717/1990 (PPP MultiLink Protocol) ▪ RFC 1968 ECP ▪ RFC 2138 - Remote Authentication Dial-In User Service (RADIUS) ▪ RFC 2139 - RADIUS Accounting Procedures ▪ RFC 2661/PPP Working Group, L2TP and L2TP Accounting Procedures ▪ RFC 2686 (Multiclass Extension) ▪ IETF Draft / PPP Working Group, RADIUS Tunneling ▪ IETF Draft, PPP Compression Control Protocol (CCP) ▪ IETF Draft, PPP Bandwidth Allocation Control Protocol

DC4800PP -Architecture

Call Control Daemon
PPP Daemon
Browser, Telnet, FTP

Status & Control

Call Control (ISDN, FR) & PPP Link Negotiation

Compression (V.42 bis STAC)
Authentication (PAP/CHAP)
Inverse Multiplexing
PPP/NCP/LCP Tables,BACP

IP Filtering
IP Translation

Sockets
Sockets
TCP
IP

Packets

Layer1 Physical Device Interface
Data Links

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PPP-ML DATACOMM PLATFORM

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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