

Dialogic® Diva® V-xPRI Modem Boards



- Supporting up to 120 full-featured V.90 or 240 V.32 channels per card
- Supporting E1 and T1 (software selectable)
- Available in 1, 2, 4 and 8 span variants

The Diva V-xPRI Media Boards are available in 1, 2, 4 and 8 E1/T1 variants, and offer the scope to build high-density modem banks with up to 240 ports in a single server. The wide range of modem protocols make them well suited for a variety of applications ranging from point of sale termination and M2M modem applications, network and protocol test equipment to monitoring and termination of utility metering devices.

Supported under both Windows and Linux, the V-xPRI Boards enable COM port or TTY port emulation in the operating system, allowing for transparent support of existing modem / COM port applications.

Support for V.22FastConnect, V.22bisFastConnect and V.29FastConnect minimizes training and connect time, to beneficially increase overall data acquisition and transfer rates per channel.

Modem standards supported

Bell 103, Bell 212A, V.21, V.22, V.22 fast connect, V.22bis, V22bis fast connect, V.29, V.29 fast connect, V.32, V.32bis, V.34, V.90 V.42, V.42bis, MNP4, MNP5, V.110, V.120

eCall PSAP - supporting IVS (in vehicle systems)

Modem with extension: V.18, V.21, Bell 103, V.23, EDT, Baudot45/47/50 incl. DTMF, V.42, V.42bis

B-channel protocols supported

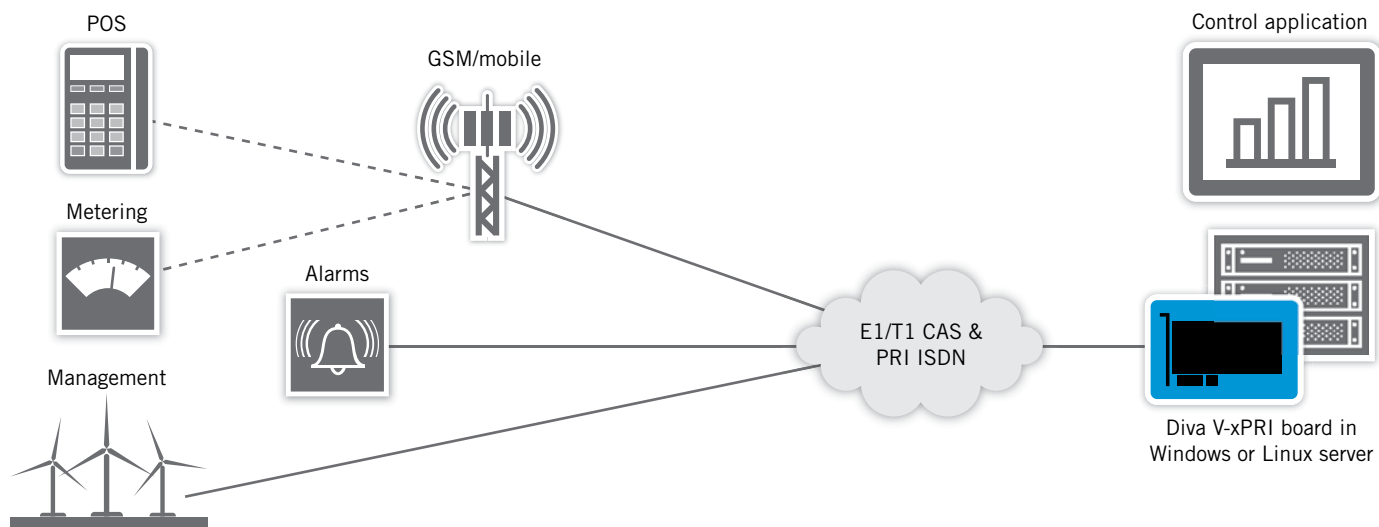
Transparent HDLC, Transparent Voice, Synchronous PPP and MLPPP, X.75 (LAPB)

X.75/V.42bis, LAPD, T.90NL, T.70NL, X.25, X.31, Rate adaption (56 kbps), PIAFS 1.0 / 2.0, SDLC

Features	Benefits
Onboard CPU with large RAM and powerful FPGA chip for fast data streaming between the host CPU, the DSPs, the phone line, and the other active components onboard	Can remove performance bottlenecks by offloading key real-time tasks that would ordinarily place an excessive burden on the host server, allowing Quality of Service (for data integrity and connection speed) to be more consistent
Sophisticated hardware design	Operates with low power consumption
Conforms to plug-and-play standards	Permits easy installation and operation
Supports the same programming interfaces as other Dialogic® Diva® Media Boards, including Dialogic® Diva® APIs, CAPI, TTY, COM port, and others	Reduces porting efforts and time to market by making Diva Media Boards compatible with notable standard telephony and communications applications
Up to four or more Diva V-xPRI Media Boards of the same or different capacity can operate concurrently in a single server, depending on the application and performance of the server hardware	Easy scalability and flexibility to address an organization's fixed and GSM modem needs in diverse environments
Enable modem ports via license	Cost effective way to scale



Example Deployment Scenarios



Technical Specifications

Quick Reference

Max boards per server	4 (QA tested by Dialogic); more than 4 may be possible, depending on factors such as the type of application and the performance of the server hardware
Form factor	PCIe: Half Size (1, 2, 4 trunks)/Full Size (4, 8 trunks)
Resource bus Connection	2.5GHz PCIe Gen 1, Half Size: x1 lane, PCIe Rev 1.1 compliant; Full Size: x4 lane, PCIe Rev 1.0a compliant, 3.3/12 V. PCIe: 4 RJ-45 connectors
Network interface Signaling	E1/T1/J1 and ISDN PRI (Primary Rate Interface) in TE and NT Mode ETSI, NI-1, 4ESS, 5ESS, and major ISDN protocols; QSIG; and many more
Operating systems	Windows and Linux. Details at www.dialogic.com/systemreleases
Volts	3.3 and 5
Required accessories	1, 2, 4, or 8 shielded RJ-45/RJ-45 cables; V-8PRI requires 4 RJ45 Y-Cables

Hardware

- 64-bit RISC CPU, 466 MHz, 1070 MIPS with 64 MB SDRAM
- 16/32-bit DSPs, 600 MHz, 1200 MIPS with 32 MB SDRAM per installed DSP
- PCIe (Half Size): 12 DSPs (Diva V-1PRI, Diva V-2PRI, Diva V-4PRI)
- PCIe (Full Size): 24 DSPs (Diva V-4PRI, Diva V-8PRI)
- 384, 448, 704, or 896 MB onboard SDRAM
- Physical dimensions:
 - PCIe: 167.65 mm x 111.15 mm (PCB)
 - PCIe: 180.96 mm x 126.31 mm (including bracket and retainer)
 - PCIe: 352.17 mm x 126.31 mm (including bracket and retainer)

- I/O addresses, memory, and interrupt allocated automatically
- Plug-and-play interface
- Production quality: ISO 9002

Power Consumption and Environmental

- Power consumption:
 - PCIe Half Size: V-1PRI, V-2PRI, V-4PRI: 0.91 A @ 3.3 V (maximum), 1.00 A @ 12 V (maximum)
 - PCIe Full Size: V-4PRI, V-8PRI: 1.38 A @ 3.3 V (maximum), 1.57 A @ 12 V (maximum)
- Operating temperature: 10°C to 50°C
- Storage temperature: 0°C to 70°C
- Maximum tolerance in voltage fluctuation: According to PCI Express specification

Dialogic® Diva® System Release Software

- Supported operating systems: Windows and Linux. Details at www.dialogic.com/systemreleases
- SNMP support:
 - Windows: v2c
 - Linux: Net-SNMP v1, v2c and v3
- Application interfaces (provided by Diva System Release Software and Dialogic® Diva® SDK Software):
 - Microsoft: Diva API, Diva API for .NET, Diva Component API (VB.NET), COM Port, WAN Miniport, CAPI 2.0, extended CAPI,
 - Linux: Diva API, TTY, CAPI 2.0, extended CAPI,

Features – Signaling

- DSS1 (Euro-ISDN), NI-1 (North America National ISDN 1), 5ESS (North America), 1TR6 (Germany), INS Net 64 (Japan), VN3 (France), CT1 (Belgium), QSIG

Approvals, Compliance, and Warranty

Hazardous substances - RoHS compliance information: <http://www.dialogic.com/rohs>

Country-specific safety and telecom approvals: <http://www.dialogic.com/declarations>

Warranty information: <http://www.dialogic.com/warranties>

Ordering Information

Board size	Model	Part number	Concurrent calls up to V.32 14.4kbps	Concurrent calls up to V.90 56kbps
Half length	Diva V-1PRI HS	306-398	30	30
Half length	Diva V-2PRI HS	306-397	60	60
Half length	Diva V-4PRI HS	306-396	120	60
Full length	Diva V-4PRI HS	306-403	120	120
Full length	Diva V-8PRI HS	306-404	240	120

Modem License	Part number	Item name
	G01-033	Diva data modem 1 CH SW license

Dialogic®

www.dialogic.com

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