

Dialogic® Diva® V-xPRI Modem Boards

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

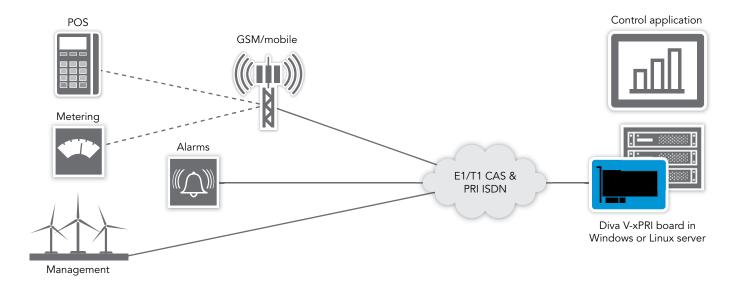
- Bell 103, Bell 212A, V.21, V.22, V.22 fast connect, V.22bis, V22bis fast connect, V.29, V.29 fast connect, V.32, V.32bis, V.34, V.90 V.42, V.42bis, MNP4, MNP5, V.110, V.120
- eCall PSAP supporting IVS (in vehicle systems); available for validated projects
- Modem with extension: V.18, V.21, Bell 103, 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 requirements	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	
Four Diva V-xPRI Media Boards of the same or different capacity can operate concurrently in a single server, depending on slot availability	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); up to 8 may be possible — application and server-dependent

Form factor PCIe: half length (1, 2, 4 trunks)/full length (4, 8 trunks)

Resource bus Connection 2.5GHz PCIe Gen 1, half length: x1 lane, PCIe Rev 1.1 compliant; full length: x4 lane, PCIe Rev 1.0a

compliant, 3.3/12 V.

PCle: 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

Required accessories 1, 2, 4, or 8 shielded RJ-45/RJ-45 cables; V-8PRI requires 4 RJ45 Y-Cables

Hardware

- $\bullet\,$ 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 $\,$
- Half length: 12 DSPs (Diva V-1PRI, Diva V-2PRI, Diva V-4PRI)
- Full length: 24 DSPs (Diva V-4PRI, Diva V-8PRI)384, 448, 704, or 896 MB onboard SDRAM
- Physical dimensions:
- Full height, half length: 167.65 mm x 111.15 mm (PCB); 180.96 mm x 126.31 mm (including bracket)
- Full height, full length: 311.81 mm x 111.15 mm (PCB); 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

Dialogic® Diva® V-xPRI Modem Boards

Power Consumption and Environmental

- Power consumption:
- Half length: V-1PRI, V-2PRI, V-4PRI: 0.91 A @ 3.3 V (maximum), 1.00 A @ 12 V (maximum)
- Full length: 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

Dialogic® Diva® System Release Software

- $\bullet \ \, {\sf Supported\ operating\ systems:\ Windows\ and\ Linux.\ Details\ at\ www.dialogic.com/systemreleases}$
- 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

Environmental Information http://www.dialogic.com/en/company/environmental-policy.aspx

Country-specific safety and telecom approvals http://www.dialogic.com/declarations
Warranty information http://www.dialogic.com/warranties

Ordering Information

Board size	Item Name	Part number	Concurrent calls up to V.32 14.4kbps	Concurrent calls up to V.90 56kbps
Half length	Diva V-1PRI/E1/T1-30 PCIe HS	306-398	30	30
Half length	Diva V-2PRI/E1/T1-60 PCIe HS	306-397	60	60
Half length	Diva V-4PRI/E1/T1-120 PCIe HS	306-396	120	60
Full length	Diva V-4PRI/E1/T1-120 PCIe FS	306-403	120	120
Full length	Diva V-8PRI/E1/T1-240 PCIe FS	306-404	240	120

Modem License	Item name	Part number
	Diva Data Modem 1 CH SW License	G01-033



www.dialogic.com

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