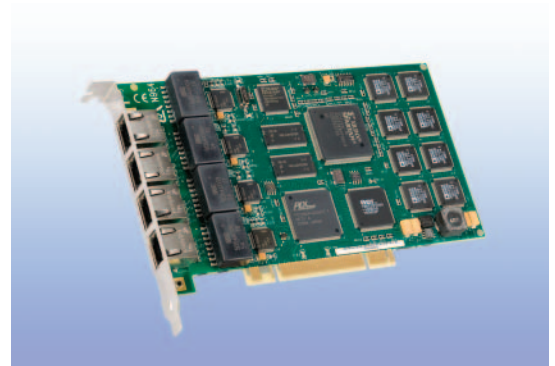


Dialogic® Diva® V-4BRI-8 Media Board

The Dialogic® Diva® V-4BRI-8 Media Board enables voice, speech, and conferencing applications. Based on the latest PCI standards, the Diva V-4BRI-8 board provides connectivity to the telephony network via four ISDN Basic Rate Interfaces (BRIs). Powerful Digital Signal Processors (DSPs) — one dedicated to each communication channel — ensure real-time voice processing that reduces system latency and improves overall system performance.



An open and well-documented Application Programming Interface (API), combined with support for a broad range of operating systems, facilitates development of leading-edge, voice-based business applications. The Diva V-4BRI-8 takes advantage of the latest advances in speech recognition technologies and the ubiquity of mobile phones to create exciting new speech solutions.

Features	Benefits
Onboard CPU and Digital Signal Processors (DSPs)	Removes performance bottlenecks by performing real-time tasks that would ordinarily place an excessive burden on the host server
Voice packetization into Real-time Transport Protocol (RTP), voice compression (G.726 and GSM), adaptive jitter buffer, and Comfort Noise Generation (CNG)	Integrates established voice, speech, and conferencing applications with VoIP clients and IP phones
Full-duplex voice channels	Allows use of barge-in to improve user experience and utilize system resources more efficiently
Enhanced echo cancellation and Voice Activity Detection (VAD)	Improves speech recognition accuracy and better utilizes host platform resources
Voice handled either in PSTN standard or compressed coding	Adapts to any kind of telephony system
Supports line interconnection and conferencing on a single board or across multiple boards in a server and Automatic Gain Control (AGC)	Enhances switching and conferencing
Standard software interfaces such as CAPI 2.0 and TAPI	Supports industry-leading software packages, allowing network administrators to build communications platforms that are well suited to an organization's needs
Up to eight Dialogic® Diva® boards can operate concurrently in a single server	Easy scalability to meet an organization's increasing communications needs
Conforms to plug and play standards	Easy installation and operation

Technical Specifications

Quick Reference

Voice resources	8
Fax resources	0
Conferencing resources	8
Maximum boards/system	8
CSP	Yes
Form factor	Half-size PCI
Resource bus	PCI rev 2.2 up to 66 MHz
Connection	4 RJ-45
Network interface	BRI (TE and NT Mode)
Signaling	ETSI, NI-1, 4ESS, 5ESS, and all major ISDN protocols; QSIG and many more
Operating system	Windows®; Linux. Details at http://www.dialogic.com/systemreleases
Volts	3.3 V, 5 V
Required accessories	None

Hardware

- Active ISDN adapter for Basic Rate Interface (BRI)
- 4 X RJ-45 connectors / 4 BRI (S/T) / (8B and 4D channels)
- Bus type: PCI 2.2 (3.3/ 5 V)
- 32-bit RISC CPU, 100 MHz, 131 MIPS
- 8 x 65 MHz, 65 MIPS DSP
- 16 MB onboard SDRAM
- High-impedance mode for passive monitoring
- I/O addresses and interrupt placed by the system
- Plug and play interface
- Scaleable to 8 adapters per system
- Power down management
- Form factor: Half-size PCI
- Physical Dimensions:
 - 174.63 mm x 106.68 mm (PCB)
 - 187.84 mm x 126.37 mm (with bracket)
- Production quality: ISO 9002

Power Consumption and Environmental

- Power consumption: 580 mA @ +5 V typical
- Operating temperature: 10°C to 70°C
- Storage temperature: 0°C to 70°C
- Maximum tolerance in voltage fluctuation: According to the respective PCI or PCI Express specification

Driver Software

- Supported operating systems: Window®; Linux. Details at <http://www.dialogic.com/systemreleases>
- D-channel protocols: DSS1 (Euro-ISDN), NI-1 (North America National ISDN 1), 5ESS (North America), 1TR6 (Germany), INS Net 64 (Japan), VN3 (France), CT1 (Belgium), QSIG
- B-channel protocols: 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
- Application interfaces: Microsoft®: WAN Miniport, COM Port, TAPI, CAPI 2.0, extended CAPI, Diva® API, Component API (VB6 and VB.NET), VoIP (SIP/RTP); Linux: TTY, CAPI 2.0, extended CAPI, Diva® API, VoIP (SIP/RTP)
- Diagnostic tools: B-channel and D-channel trace program
- SNMP support: Windows®: v2c; Linux: Net-SNMP v1, v2c and v3
- Dialogic® Diva® SIPcontrol™ Software: VoIP (SIP) Gateway Software. For up to 8 channels per system, the licenses are free of charge. If more than 8 channels are required, licenses can be ordered from Dialogic. Diva SIPcontrol can be downloaded from <http://www.dialogic.com>

Technical Specifications (cont.)

Voice Features

- DTMF/MF transmission, detection and generation
- Voice Activity Detection (VAD)
- Generic tone detection and generation
- Fax signal detection
- Full-duplex voice, barge-in
- G.168 echo cancellation, up to 128 ms tail length
- Pitch control
- Audio tap
- ISDN supplementary services
 - Number identification services (CLIP, CLIR, COLP, COLR, KEY, MSN, DDI, SUB)
 - Call offering services (TP, CFU, CFB, CFNR)
 - Call completion services (CW, HOLD, ECT)
 - Charging services (AoC)
 - Three-party conference
 - Large conference
- Special Information Tone (SIT) detection
- DTMF clamping and filtering
- Silence detection
- Automatic Gain Control (AGC)
- Cross-board switching
- Onboard switching and conferencing via line interconnect (call tromboning)
- VoIP support (features available when used in VoIP installations)
 - G.711 voice coder (64 kbps, μ -law, A-law)
 - G.726 voice coder (32 kbps)
 - GSM voice coder (13 kbps)
 - G.168 echo cancellation, up to 128 ms tail length
 - Adaptive jitter buffer
 - Voice Activity Detection (VAD)
 - Comfort Noise Generation (CNG)
 - Real-time Transport Protocol (RTP) framing

Safety and EMC

Canada	ICES-003 Class B, CSA 60950-1
Europe	EN60950-1, EN55022, EN55024
United States	FCC Part 15 Class B UL60950-1

Telecommunications

United States	TIA-968
Canada	CS03

Approvals, Compliance, and Warranty

Hazardous substances	RoHS compliance information at http://www.dialogic.com/rohs
Country-specific approvals	Global product approvals database at http://www.dialogic.com/declarations
Warranty	Warranty information at http://www.dialogic.com/warranties

Ordering Information

Dialogic® Diva® Product	Order Code
V-4BRI-8	306-218
V-4BRI-8 AU	306-275

To learn more, visit <http://www.dialogic.com>

Dialogic Corporation

9800 Cavendish Blvd., 5th floor
Montreal, Quebec
CANADA H4M 2V9

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