

Dialogic® Diva® BRI-2 Media Board

The Dialogic® Diva® BRI-2 Media Board supports one ISDN Basic Rate Interface (BRI). This Dialogic® Diva Media Board is an excellent choice for small- to medium-sized businesses since one board can support two concurrent communications with a mix of ISDN devices, V.90 analog modems, GSM mobile phones, and fax machines. It is available in a PCI and a PCI Express version.



Because the Diva BRI-2 is based on open systems architecture, industry-leading computer telephony integration, Voice over Internet Protocol (VoIP), and unified messaging applications integrate easily. The flexibility of the Diva BRI-2 provides network administrators with a simple, cost-effective, and powerful open-communications solution.

Features	Benefits
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
Dialogic® Diva® Software Development Kit - Version 4.5	Allows software vendors to develop applications easily
Dialogic® Diva® boards can be mixed and matched in a single system	Easy scalability to meet an organization's increasing communications needs
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
DTMF, ECM, MR, MMR, MH and 33.6 kbps fax. V.42bis compression and V.42 error-correction	Ensures fast and reliable modem and Group 3 fax transmission
Supplementary services, such as call forwarding and explicit call transfer	Excellent for Interactive Voice Response (IVR) and contact center applications since the board interoperates with the existing PBX infrastructure
Support for echo cancellation (G.168) and voice compression in a DSP	Enables high quality and high performance for Voice over IP (VoIP) gateways
Conforms to plug and play standards	Easy installation and operation
Supports multinational ISDN protocols	Ready for use virtually anywhere in the world

Technical Specifications

Quick Reference

Voice resources	2
Fax resources	2
Conferencing resources	2
Maximum boards/system	8
CSP	Yes
Form factor	Low-profile PCI or PCI Express
Resource bus	PCI rev 2.2 up to 66 MHz or PCI Express 1.0a x 1 lane (3.3/12 V)
Connection	1 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)
- 1 X RJ-45 connector
- Also available with a Low Profile bracket
- Bus type: PCI rev 2.2 up to 66 MHz or PCI Express 1.0a x 1 lane (3.3/12 V)
- 32-bit RISC CPU, 100 MHz, 131 MIPS
- 2 x 65 MHz, 65 MIPS DSP
- 8 MB onboard SDRAM
- I/O addresses and interrupt are placed by the system
- Plug and play interface
- Scaleable to 8 adapters per system
- Power down management
- Form factor: Max size of a low profile adapter (as defined by PCI 2.2 and PCI Express 1.0a specifications)
- Physical Dimensions:
 - 167.52 mm x 64.41 mm (PCB)
 - 181.36 mm x 120.88 mm (with standard bracket)
 - 181.36 mm x 80.06 mm (with Low Profile bracket)
- Production quality: ISO 9002

Power Consumption and Environmental

- Power consumption: 330 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: Windows®; Linux. Details at: <http://www.dialogic.com/systemreleases>
- D-channel and signaling protocols: ETSI-DSS1 (Euro-ISDN), NI-1 (North America National ISDN 1), 1TR6 (Germany), NET3 (Belgium), VN3/4/6 (France), 5ESS (AT&T), 5ESS (Lucent), DMS100 (Nortel), INS-64 (Japan), Australia on-ramp, QSIG, External Signaling (transparent D-channel), Network Termination (NT Mode)
- 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
- Dialogic® Diva® Software Development Kit – Version 4.5 (Diva SDK 4.5): Windows® and Linux
- M-adapter feature (patent pending): Combined Virtual Adapter, Internal Call Transfer, Explicit Call Transfer Emulation

Technical Specifications (cont.)

Driver Software (cont.)

- SNMP support: Windows®: v2c; Linux: Net-SNMP v1, v2c and v3
- Dialogic® Diva® SIPcontrol™ Software: VoIP and FoIP (T.38) 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>

Fax and Modem Features

- Fax Group 3 support
 - Up to 33.6 kbps with each B-channel (send and receive)
 - Fax compression MH, MR, MMR
 - Error Correction Mode (ECM)
 - Fax polling / fax on demand
 - Fax tone detection
 - Standard, fine, super-fine and ultra-fine resolution
- Support for fax class 1 and 2
- Fax Group 4 support (via third party application)
- Support for FoIP, T.38 (when using SIPcontrol)
 - Up to 33.6 kbps with each channel (send and receive)
- Remote access (via HDLC, V.90, GSM, V.120, X.75)
 - GSM support (V.110) up to 38.4 kbps
 - Communicates with analog modems up to V.90 (up to 56 kbps on each B-channel)

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

Technical Specifications (cont.)

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
BRI-2 (PCI)	306-162
BRI-2 North America (PCI)	306-165
BRI-2 Australia (PCI)	306-192
BRI-2 Low Profile (PCI)	306-216
BRI-2MRV30QD* (PCI)	306-323
BRI-2 (PCIe)	306-342

* This bundle consists of a Diva® board with Dialogic® HMP Software. More information on HMP Software can be found at: http://www.dialogic.com/products/ip_enabled/docs/10424-01_SIPHMPDivaBrd_tb.pdf.

To learn more about Dialogic® products, go to www.dialogic.com

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