

Diva Media Boards

Dialogic[®] Diva[®] PRI/E1/T1-CTI Voice Board

The Dialogic® Diva® PRI/E1/T1-CTI Media Board is a simple, powerful, yet cost-effective entry-level platform for computer telephony integration applications such as voice mail, IVR, call centers, and alarm servers that increase productivity and improve customer satisfaction. The Diva PRI/E1/T1-CTI also provides the benefits of both seamless connectivity to the telephone network and comprehensive call control capabilities.



Offering E1, T1, or ISDN PRI digital network interfaces, the Diva PRI/E1/T1-CTI provides proven connectivity with a wide range of PBX and switch systems. Because of its comprehensive implementation of signaling protocols, including all international ISDN variants and QSIG, the Diva PRI/E1/T1-CTI also enables many sophisticated supplementary services, which can then be used by computer telephony integration applications.

Designed for full-duplex operation on every channel, simultaneous voice prompt streaming and recording are available for every active call. Powerful DTMF recognition and generation capabilities provide the in-band control required for voice mail and IVR applications.

Features	Benefits
Comprehensive set of voice processing features including built-in DTMF dedicated to each channel and full-duplex operation on each channel	Enables many popular computer telephony integration applications, including IVR barge-in
Other Dialogic® Diva® boards can be used with the Diva PRI/E1/T1-CTI without modification	Minimizes porting and reduces time to market
Up to eight Dialogic Diva boards can be used in the same system along with the Diva PRI/E1/T1-CTI	Allows easy scalability from 2 to 240 channels
Half-size PCI form factor	Fits into compact systems
GUI-based configuration	Makes configuration simple and straightforward
Conforms to plug and play standards	Easy installation

Technical Specifications

Quick Reference

Voice resources 24 (T1) or 30 (E1)

Fax resources 0

Conferencing resources 0

Maximum boards/system 8

CSP No

Form factor PCI version: Half-size PCI; PCI Express version: Low-profile PCIe

Resource bus PCI version: PCI rev 2.2 up to 66 MHz

PCI Express version: PCI Express 1.0a x1 lane (3.3/12 V)

Connection RJ-45

Network interface PRI, T1, and E1

Signaling ETSI, NI-1, 4ESS, 5ESS, and all major ISDN protocols; QSIG, T1/RBS, SS7 (ITU-T ISUP), and

many more

Operating system Windows®; Linux. Details at http://www.dialogic.com/systemreleases

Volts PCI: 3.3 V, 5 V or PCI Express: 3.3 V, 12 V

Required accessories PRI/E1/T1 cable (RJ-45/RJ-45)

Hardware

Active ISDN adapter for Primary Rate Interface (PRI)

- 1 X RJ-45 connector
- 64-bit RISC CPU, 300 MHz, 420 MIPS
- 2 x 33 DSP, 33 MHz, 60 MIPS each
- 32 MB onboard SDRAM Memory
- Plug and play interface
- I/O addresses and interrupt are placed by the system
- · Power down management
- Telephony interface
 - RJ-45 connector with software-selectable PRI/E1/T1 interface
 - High-impedance mode for passive monitoring
- Physical dimensions:

PCI version (half-size):

- 174.63 mm x 106.68 mm
- 187.84 mm x 126.37 mm (including bracket and retainer)

PCI Express version (low-profile):

- 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: typical 580 mA @ +5 V
- Operating temperature: 10°C to 50°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), 4ESS (AT&T),5ESS (AT&T), 5ESS (Lucent), DMS100 (Nortel), T1/RBS (Robbed Bit Signaling), INS-64 (Japan), INS-1500 (Japan), Australia on-ramp, QSIG, Channelized E1, External Signaling (transparent D-channel), Direct Access Mode (no signaling), Network Termination (NT Mode)
- B-channel protocols: Transparent HDLC, Transparent (Voice), Synchronous PPP and MLPPP, X.75 (LAPB), X.25, T.90NL, T.70NL, Rate adaptation (56 kbps), V.42bis, V.120, PIAFS
- Application interfaces: Microsoft®: WAN Miniport, COM Port, TAPI, CAPI 2.0, extended CAPI, Dialogic® Diva® API, Component API (VB6 and VB.NET), VoIP (SIP/RTP); Linux: TTY, CAPI 2.0, extended CAPI, Diva API, VoIP (SIP/RTP)

Technical Specifications (cont.)

Driver Software (cont.)

- Diagnostic tools: B-channel and D-channel trace program
- Dialogic® Diva® Software Development Kit 4.5 (Diva SDK 4.5): Windows® and Linux
- M-adapter feature (patent pending): Combined Virtual Adapter, Internal Call Transfer, Explicit Call Transfer Emulation
- SNMP support: Windows: v2c; Linux: Net-SNMP v1, v2c and v3

Features

- Voice
- G.711 coding (A-law, μ-law selectable)
- Full-duplex voice, barge-in
- DTMF detection and generation
- Recording and playback
- OKI ADPCM, 8 KHz sampling
- Audio tapping
- Switching and conferencing
- Onboard switching
- Cross-board switching
- 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
- Fax
- Support for fax Group 4 (via third party application)
- Remote access features
 - Via HDLC, V.90, GSM, V.120, X.75

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
PRI/E1/T1-CTI PCI	306-211
PRI/E1/T1-CTI PCI North America	306-212
PRI/E1/T1-CTI PCI China	306-244
PRI/E1/T1-CTI PCI Australia	306-228
PRI/E1/T1-CTI PCI Japan	306-278
PRI/E1/T1-CTI PCIe (with additional LP bracket)	306-320



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

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

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH PRODUCTS OF THE DIALOGIC CORPORATION ("DIALOGIC"). NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN A SIGNED AGREEMENT BETWEEN YOU AND DIALOGIC, DIALOGIC ASSUMES NO LIABILITY WHATSOEVER, AND DIALOGIC DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF DIALOGIC PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT OF A THIRD PARTY.

Dialogic products are not intended for use in medical, life saving, life sustaining, critical control or safety systems, or in nuclear facility applications.

Dialogic and Diva are either registered trademarks or trademarks of Dialogic Corporation or its subsidiaries. Dialogic's trademarks may be used publicly only with permission from Dialogic. Such permission may only be granted by Dialogic's legal department at the address listed above. Any authorized use of Dialogic's trademarks will be subject to full respect of the trademark guidelines published by Dialogic from time to time, and any use of Dialogic's trademarks requires proper acknowledgement.

Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries. Other names of actual companies and products mentioned herein are the trademarks of their respective owners.

Dialogic encourages all users of its products to procure all necessary intellectual property licenses required to implement their concepts or applications, which licenses may vary from country to country.

None of the information provided in this datasheet other than what is listed under the section entitled Technical Specifications forms part of the specifications of the product and any benefits specified are not guaranteed.

Dialogic may make changes to specifications, product descriptions, and plans at any time, without notice.

 $\label{lem:copyright @ 2007 Dialogic Corporation All rights reserved.}$

08/07 10501-01