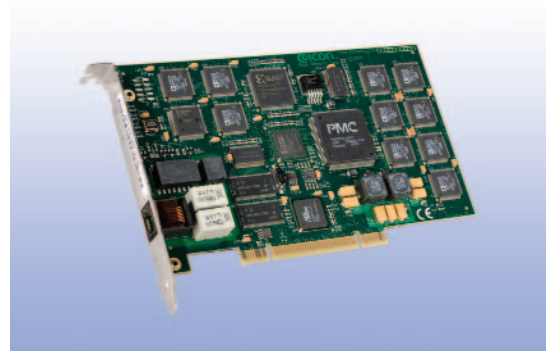


## Dialogic® Diva® PRI/E1/T1-8 Media Board

The Dialogic® Diva® PRI/E1/T1-8 Media Board is a simple and powerful, yet cost-effective entry-level CTI and fax platform.

Offering digital network interfaces selectable for full and fractional E1, T1, or ISDN PRI standards, the Diva PRI/E1/T1-8 provides proven connectivity with a wide range of PBX and switch systems, plus voice processing functionality for voice mail, IVR, call centers, and alarm server applications. Because of its additional eight dedicated DSP-based media processing resources, up to eight calls out of the total E1 or T1 span can concurrently handle demanding operations such as V.90 data modem, high-speed 33.6 kbps fax, or enhanced echo cancellation.



Features	Benefits
<b>Comprehensive set of voice processing features including built-in DTMF processing dedicated to each channel and full-duplex operation on each channel</b>	Enables all popular CTI applications, including IVR barge-in
<b>Sophisticated switching</b>	Allows interconnection of any Dialogic® Diva® board in a server
<b>Powerful DSPs for up to eight communications channels</b>	Ensures real-time processing of complex operations to enhance overall system performance and lower implementation costs
<b>Other Dialogic Diva boards can be used with the Diva PRI/E1/T1-8 without modification</b>	Minimizes porting and reduces time to market
<b>Up to eight Dialogic Diva boards can be used in the same system along with the Diva PRI/E1/T1-8</b>	Allows easy scalability from 2 to 240 channels
<b>Half-size PCI form factor</b>	Fits into compact systems
<b>GUI-based configuration</b>	Makes configuration simple and straightforward
<b>Conforms to plug and play standards</b>	Easy installation

## Technical Specifications

### Quick Reference

Voice resources	24 (T1) or 30 (E1)
Fax resources	8
Conferencing resources	8
Maximum boards/system	8
CSP	8 channels
Form factor	Half-size PCI
Resource bus	PCI rev 2.2 up to 66 MHz
Connection	RJ-45
Network interface	PRI, T1, and E1
Signaling	ETSI, NI-1, 4ESS, 5ESS, and all major ISDN protocols; QSIG, T1/RBS, E1/R2 (on 8 channels), SS7 (ITU-T ISUP), and many more
Operating system	Windows®; Linux. Details at <a href="http://www.dialogic.com/systemreleases">http://www.dialogic.com/systemreleases</a>
Volts	3.3, 5
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
- 10 x 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
  - 174.63 mm x 106.68 mm
  - 187.84 mm x 126.37 mm (including bracket and retainer)
- Production quality: ISO 9002

### Power Consumption and Environmental

- Power consumption: 650 mA @ +5 V typical
- 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, E1/R2 (China), E1/R2 (India), Channelized E1, External Signaling (transparent D-channel), Direct Access Mode (no signaling), Network Termination (NT Mode)
- B-channel protocols
  - Basic (available for up to 24 (T1) and up to 30 (E1) concurrent connections): 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
  - Enhanced (additionally available for up to 8 concurrent connections): T.30, modem up to V.90, V.42, V.110
- 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)
- 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. Diva SIPcontrol can be downloaded from <http://www.dialogic.com>.

### Features and Basic Voice Features (on all 24/30 channels)

- Voice and speech
  - Basic (available for up to 24 (T1) and up to 30 (E1) concurrent connections): G.711, Full-duplex voice, barge-in, DTMF detection and generation, recording and playback, OKI ADPCM, 8 KHz sampling, audio tapping
- Switching and conferencing
  - Basic (available for up to 24 (T1) and up to 30 (E1) concurrent connections): 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
  - Basic (available for up to 24 (T1) and up to 30 (E1) concurrent connections): Fax Group 4
- Remote access
  - Basic (available for up to 24 (T1) and up to 30 (E1) concurrent connections): Via HDLC, V.90, GSM, V.120, X.75

### Fax and Modem Features (on 8 channels)

- 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 (on 8 channels)

- 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)

## Technical Specifications

### Voice Features (on 8 channels) (cont.)

- 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,  $\mu$ -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 <a href="http://www.dialogic.com/rohs">http://www.dialogic.com/rohs</a>
Country-specific approvals	Global product approvals database at <a href="http://www.dialogic.com/declarations">http://www.dialogic.com/declarations</a>
Warranty	Warranty information at <a href="http://www.dialogic.com/warranties">http://www.dialogic.com/warranties</a>

## Ordering Information

Dialogic® Diva® Product	Order Code
PRI/E1/T1-8	306-206
PRI/E1/T1-8 North America	306-207
PRI/E1/T1-8 Australia	306-227

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

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