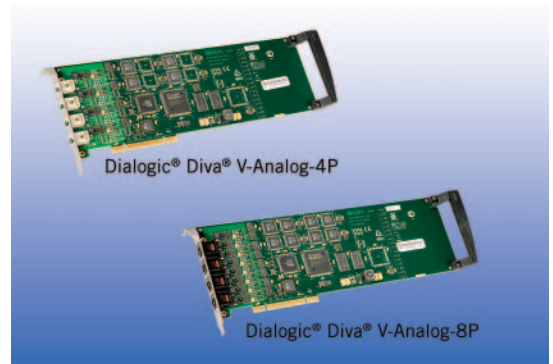


Dialogic® Diva® Media Boards

The Dialogic® Diva® Media Boards for analog voice applications provide a voice- and speech-optimized 4-port and 8-port communications platform that enables speech-based technologies, voice-based applications for wired and mobile phones, as well as VoIP support.



Products Discussed in This Datasheet

- Dialogic® Diva® V-Analog-4P
- Dialogic® Diva® V-Analog-8P

Features

Benefits

Onboard DSPs

Performs complex operations in real-time, enhancing overall system performance and lowering implementation costs

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

Automatic Gain Control (AGC)

Automatically adjusts the signal level of calls within a conference or for recording at normal levels

Supports same programming interfaces as other Dialogic® Diva® boards: CAPI, TAPI, and Dialogic® Diva® API

Minimizes porting efforts and reduces time to market

Up to eight Diva® boards of the same or mixed types 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

Based on the latest PCI standards, the Diva V-Analog-4P and V-Analog-8P boards allow connectivity to the telephone network through either four or eight analog trunk interfaces. Equipped with powerful onboard CPU and Digital Signal Processors (DSPs), the Diva V-Analog-4P and V-Analog-8P boards can perform even the most demanding media processing functions including echo cancellation and Voice over Internet Protocol (VoIP) processing.

The Diva V-Analog-4P and V-Analog-8P boards support the same set of programming interfaces as other Dialogic® Diva® boards: CAPI, TAPI, the Dialogic® Diva® API, and SIP. Because of this consistent support, an application written for another Dialogic® Diva board will either work without modifications or is easily portable to systems using the V-Analog-4P and V-Analog-8P boards.

Technical Specifications

Quick Reference

Voice resources	4 or 8
Conferencing resources	4 or 8
Maximum boards/system	8
CSP	Yes
Form factor	Full-size PCI
Resource bus	PCI rev 2.2 up to 66 MHz
Connection	4 or 8 RJ-11/14
Network interface	Analog
Signaling	Loopstart
Operating system	Windows®; Linux. Details at http://www.dialogic.com/systemreleases
Volts	3.3 V, 5 V
Required accessories	None

Hardware

- 32-bit RISC CPU, 100 MHz, 131 MIPS
- 4/8 x 32.76 MHz, 65 MIPS DSP
- 16 MB onboard SDRAM memory
- Host Interface
 - Full-size PCI form factor
 - PCI 2.2 up to 66 MHz
 - 3.3/5 V universal signaling
 - PCI plug and play
 - Scaleable to 8 adapters per system
- Telephony Interface
 - POTS trunk interface, loopstart signaling
 - 4 x RJ-10 connectors (Diva V-Analog-4P), RJ-10 to RJ-11 cables supplied
 - 4 x RJ-45 connectors (Diva V-Analog-8P), RJ-45 to RJ-10 adapters and RJ-10 to RJ-11 cables supplied
- Physical dimensions:
 - 312.00 mm x 106.68 mm
 - 352.17 mm x 126.37 mm (including bracket and retainer)

Power Consumption and Environmental

- Power consumption: 450 (4P) and 500 mA (8P) @ +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>
- 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)
- 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 (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>.

Features

- Call progress analysis:
 - Busy tone detection
 - Ring back tone detection
 - Special Information Tone (SIT) detection
 - Fax/modem detection
 - Dial tone detection
- Pulse dialing
- Analog caller identification (via FSK and DTMF signaling)
- Tone (DTMF/MF) dialing
- Hold/retrieve (via hookflash)
- Collection of DTMF post dial digits
- Voice and speech
 - G.711 coding (A-law, μ -law selectable)
 - DTMF detection and generation
 - DTMF clamping and filtering
 - Generic tone detection and generation
 - Pulse tone detection
 - Full-duplex voice, barge-in
 - Voice Activity Detection (VAD)
 - Silence detection
 - Human talker detection
 - Recording Automatic Gain Control (AGC)
 - Pitch control
 - Audio tap
 - G.168 echo cancellation, up to 32 ms tail length
- Voice over IP (VoIP)
 - G.711 voice coder (64 kbps, μ -law, A-law)
 - G.726 voice coder (32 kbps)
 - GSM voice coder (13 kbps)
 - Adaptive jitter buffer
 - Voice Activity Detection (VAD)
 - Comfort Noise Generation (CNG)
 - Real-time Transport Protocol (RTP) framing
 - G.168 echo cancellation, up to 32 ms tail length
- Switching and conferencing
 - Onboard switching and conferencing
 - Automatic Gain Control (AGC)

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-Analog-4P	306-236
V-Analog-4P North America	306-238
V-Analog-4P China	306-258
V-Analog-8P	306-237
V-Analog-8P North America	306-239
V-Analog-8P China	306-257

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

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