

Diva[™] Server V-4BRI

The Ultimate Voice, Speech and **Conferencing Platform**







Key Benefits

World-Class Voice Processing

Most peoples' interaction with PCs is text-based such as

email and instant messaging, but human voice is still the

most natural way of communicating. Advances in speech

Processors (DSP) - one dedicated to each

operating systems facilitates development of leading-

edge voice business applications.

communication channel - ensure real-time voice processing reducing system latency and improving overall system performance. An open and well documented application programming interface (API) combined with support for a broad range of

> **Facilitates Speech-Enabled Applications**

Enhanced Switching and Conferencing Support

Robust Voice Over IP (VoIP) Technology

Supports Best-of-Breed Applications

Superior Scalability and Flexibility

Easy to Install

Diva Server V-4BRI adapters provide a full set of voice processing functions including tone detection and generation, voice activity detection and echo cancellation. Handling voice either in PSTN standard coding or in compressed coding allows adaptation to any kind of telephony system. Onboard DSPs perform these complex operations in real-time enhancing overall system performance and lowering implementation cost.

Thanks to supporting full-duplex voice channels, callers can use an application-friendly feature known as "Barge-In". This allows a caller to interrupt speech prompts by speaking over them thereby controlling the pace of the conversation for a more pleasant user experience and better platform utilization. Enhanced echo cancellation and voice activity detection improve recognition accuracy and make better use of host platform resources.

Diva Server V-4BRI adapters support line interconnection and conferencing of calls on a single board as well as across boards within a server. Automatic gain control (AGC) is provided to automatically adjust the signal level of incoming calls for recording at normal levels.

For integrating established voice, speech and conferencing applications with emerging IP-Telephony clients and IP-Phones, Diva Server V-4BRI provides key enabling features such as voice packetization into real-time transport protocol (RTP), voice compression (G.726 and GSM), adaptive jitter buffer and comfort noise generation.

The support of standardized software interfaces such as CAPI 2.0 or TAPI as well as an open API (Diva Server SDK) facilitate the development of voice business applications. Common applications include voice portals, speech enabled interactive voice response (IVR) systems and media servers.

Up to eight Diva Server adapters - offering 2 to 480 channels - can be installed and operated concurrently in a single server. Any type of Diva Server adapter whether for Analog, ISDN BRI, ISDN PRI, E1/T1 or VoIP lines can be mixed and matched.

Diva Server V-4BRI adapters conform to Intel and Microsoft Plug and Play standards, eliminating the need to manually configure the server.



Technical Specifications

Hardware:	 Active ISDN adapter for Basic Rate Interface (BRI) Plug and Play Interface 4 X RJ45 Connectors 8 x 65 MHz, 65 MIPS DSP Form factor: Half size PC I/O Addresses and Interrupt are placed by the system Production Quality: ISO 9002 	 4 Basic Rate Interfaces (S/T), (8B+4D) Bus type: PCI rev. 2.2 (3.3V / 5V) 32-bit RISC CPU, 100 MHz, 131 MIPS 16 MB onboard SDRAM Scaleable to 8 adapters per system Power Down Management 5 year warranty
Power Consumption and Environmental	 Power consumption: 580 mA @+5 V typical Maximum tolerance in power supply variation: -5% to +5% 	 Operating temperature: 10°C to 70°C Storage temperature: 0°C to 70°C
Driver Software	 Supported operating systems: - Microsoft: Windows 2000, Windows XP, Windows Server 2003 – including 64-Bit Editions Linux: Red Hat, SuSE and Debian distributions, Source Level RPM and DEB 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, Q-SIG, 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 Server API, Component API (VB6 and VB.NET) - Linux: TTY, CAPI 2.0, extended CAPI, Diva Server API Diagnostic Tools: B-channel and D-channel trace program Software Development Kit (SDK): Windows and Linux M-Adapter Feature (patent pending): Combined Virtual Adapter, Internal Call Transfer, Explicit Call Transfer Emulation 	
Voice, Speech and Conferencing Features:	 DTMF/MF transmission, detection and generation Voice Activity Detection (VAD) DTMF Clamping and Filtering 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 (CW, HOLD, ECT) Charging Services (AoC) Three-party conference Large Conference 	 Special Information Tone (SIT) detection Silence Detection Generic Tone detection and generation Automatic Gain Control (AGC) Cross board switching On-board switching and conferencing via line interconnect (call tromboning) VolP support G.711 voice codec (64 kb/s, µ-law, A-law) G.726 voice codec (32 kb/s) GSM voice codec (13 kb/s) G.168 echo cancellation, up to 128 ms tail length Adaptive jitter buffer Voice activity detection (VAD) Comfort noise generation (CNG) Real Time Protocol (RTP framing)

Ordering Information

Product Name	Product Code
Diva Server V-4BRI-8	306-218

National variants might be available. Please contact the Eicon Networks office in your region or look at www.eicon.com for further information.



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