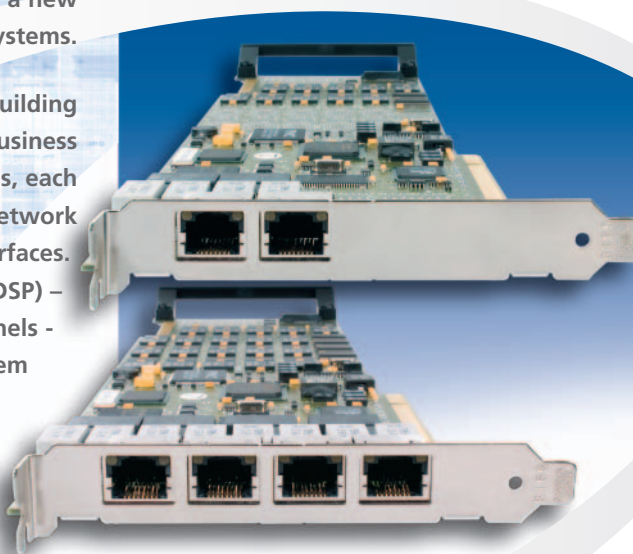


Diva™ Server V-2/4PRI

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 recognition technologies and the ubiquity of fixed and mobile telephones now opens up a new world of opportunities for voice based systems.

Diva Server V-2PRI and V-4PRI adapters are key building blocks for enabling large scale voice business applications. Based on the latest PCI standards, each adapter provides connectivity to the telephony network via 2 or 4 ISDN Primary Rate (PRI) or E1/T1 interfaces. Extremely powerful Digital Signal Processors (DSP) – each one dedicated to 6 communication channels – 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 operating systems facilitates development of leading-edge voice business applications.

The Ultimate Voice, Speech and Conferencing Platform for Multi-PRI and MultiSpan E1 or T1 Connections



Key Benefits

World-Class Voice Processing

Diva Server V-2/4PRI adapters provide a full set of voice processing functions including tone detection and generation, voice activity detection and echo cancellation. Onboard DSPs perform these complex operations in real-time enhancing overall system performance and lowering implementation cost.

Facilitates Speech-Enabled Applications

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.

Enhanced Switching and Conferencing Support

Diva Server V-2/4PRI 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.

Robust Voice Over IP (VoIP) Technology

For integrating established voice, speech and conferencing applications with emerging IP-Telephony clients and IP-Phones, Diva Server V-2/4PRI provides key enabling features such as voice packetization into real-time transport protocol (RTP), adaptive jitter buffer and comfort noise generation.

Supports Best-of-Breed Applications

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.

Superior Scalability and Flexibility

Up to four Diva Server V-2/4PRI adapters - offering 60 to 480 channels - can be installed and operated concurrently in a single server. In addition to the V-2/4PRI adapters any type of Diva Server adapter whether Analog, ISDN BRI, ISDN PRI, E1/T1 and SoftIP (VoIP) can be mixed and matched. In that case the maximum number of Diva Server adapters per server may be eight. This allows to install single systems scaling from 2 to 480 channels.

Easy to Install

Diva Server V-2/4PRI adapters conform to Intel and Microsoft Plug and Play standards, eliminating the need to manually configure the server.

Technical Specifications

Hardware	<ul style="list-style-type: none"> 64-bit RISC CPU, 466 MHz, 1070 MIPS with 64MB SDRAM 10 (V-2PRI) or 20 (V-4PRI) DSPs, 600 MHz, 1200 MIPS each 32MB SDRAM per DSP Telephony Interface <ul style="list-style-type: none"> 2 or 4 RJ-45 connectors, software-selectable E1/T1 interfaces 2 or 4 ISDN Primary Rate Interface (PRI) configurations High-Impedance Mode for passive monitoring 	<ul style="list-style-type: none"> Physical dimensions: <ul style="list-style-type: none"> 312,00 mm x 106,68 mm (PCB) 352,17 mm x 126,37 mm (incl. bracket and retainer) I/O addresses, memory and interrupt allocated automatically Host Interface <ul style="list-style-type: none"> Full-size PCI form factor PCI 2.2 (3.3 and 5.0 V required) supported in PCI-X slots PCI Plug and Play Scaleable to 4 adapters per system
Environmental	<ul style="list-style-type: none"> Operating temperature: 10°C to 50°C 	<ul style="list-style-type: none"> Maximum tolerance in power supply variation: -5% to +5%
Power Consumption	<ul style="list-style-type: none"> V-2PRI: 3.0 A @ +3.3 V typical, 4.9 A @ +3.3 V maximum V-4PRI: 5.5 A @ +3.3 V typical, 6.5 A @ +3.3 V maximum 	<ul style="list-style-type: none"> V-2PRI: 40 to 80mA @ +5 V (blue LEDs) V-4PRI: 80 to 160mA @ +5 V (blue LEDs)
Warranty	<ul style="list-style-type: none"> 5 year warranty 	
Certifications and Approvals	<ul style="list-style-type: none"> EMC: FCC part 15, EN55022, EN55024 Safety: UL 60950, EN 60950 	<ul style="list-style-type: none"> Telecom: TIA 968-A (FCC part 68), TBR4 Europe (CE Mark), US and Canada
Driver Software	<ul style="list-style-type: none"> Supported Operating Systems: Microsoft: Windows 2000, Windows 2003 Server, and Windows XP, including 64-Bit Editions. Linux: RedHat, SuSE and Debian distributions as well as source level RPM and DEB Application Interfaces: Microsoft: WAN Miniport, COM Port, TAPI, CAPI 2.0, extended CAPI, Diva Server API (SDK), Component API (VB6 and VB.NET) Linux: TTY, CAPI 2.0, extended CAPI, Diva Server API (SDK) M-Adapter Feature (patent pending): Combined Virtual Adapter, Internal Call Transfer, Explicit Call Transfer Emulation 	

Call Control Features

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, Q-SIG, E1/R2 (China), E1/R2 (India), Channelized E1, External Signaling (transparent D-channel), Direct Access Mode (no signaling), Network Termination (NT Mode)
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

Media Processing Features

	The features are available with the Diva Server 2PRI for up to 48 (2 X T1) or up to 60 (2 X E1) concurrent connections and with the Diva Server 4PRI for up to 96 (4 X T1) or up to 120 (4 X E1) concurrent connections
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, PLAPS
Voice and speech	G.711, Full-duplex voice, "bargain-in", DTMF Detection and Generation, DTMF Clamping and Filtering, Silence Detection, Human Talker Detection, G.168 Echo Cancellation (128ms), Automatic Gain Control (AGC) Recording and Playback, OKI ADPCM, 8 KHz sampling, Audio Tapping, Adaptive jitter buffer, Voice activity detection (VAD), Comfort noise generation (CNG)
Switching & Conferencing	On-board switching, Cross-board switching, G.168 echo cancellation (128ms), automatic gain control (AGC)
Voice over IP (VoIP)	G.711, Full-duplex voice, "bargain-in", DTMF Detection and Generation, DTMF Clamping and Filtering, Silence Detection, Human Talker Detection, G.168 Echo Cancellation (128ms), Automatic Gain Control (AGC) Recording and Playback, OKI ADPCM, 8 KHz sampling, Audio Tapping, Adaptive jitter buffer, Voice activity detection (VAD), Comfort noise generation (CNG)
Fax Support	Fax group 4
Remote Access (RAS)	Via HDLC, V.120, X.75

Ordering Information

Product Name	Product Code
Diva Server V-2PRI/E1-60	306-249
Diva Server V-2PRI/T1-48	306-250
Diva Server V-4PRI/E1-120	306-251
Diva Server V-4PRI/T1-96	306-252

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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Diva Server V-2PRI



Diva Server V-4PRI