product brochure ≫ # Diva™ Server V-Analog-4P/-8P

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.
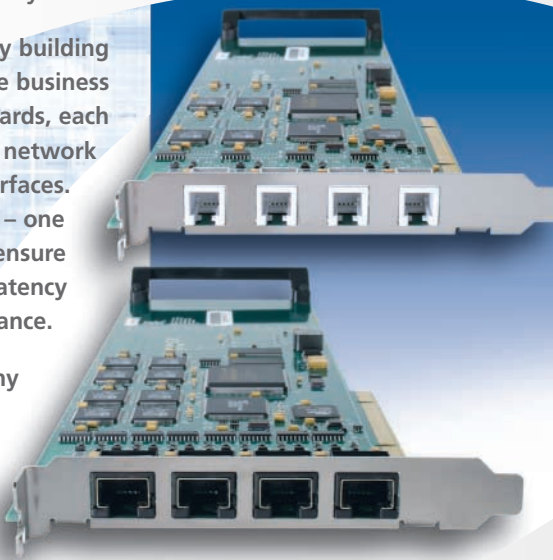
Diva Server V-Analog-4P/-8P adapters are key building blocks for enabling these new breeds of voice business applications. Based on the latest PCI standards, each adapter provides connectivity to the telephony network either via four or eight analog trunk interfaces. Powerful Digital Signal Processors (DSP) – one dedicated to each communication channel - ensure real-time voice processing reducing system latency and improving overall system performance.

Being part of the Diva Server family of telephony adapters, Diva Server V-Analog-4P/-8P supports the very same set of programming interfaces - CAPI, TAPI or Diva Server API (SDK). Thus any application written to Diva Server can immediately benefit of the new Diva Server V-Analog-4P/-8P adapters.
Design once – use on all!

The Ultimate Communications Platform for Voice, Speech and Conferencing Applications

Eicon Networks Certified
ISO ✓ 9001 2000

diva server®

Key Benefits

World-Class Voice Processing	Diva Server V-Analog-4P/-8P adapters provide a full set of voice processing functions including tone detection and generation, voice activity detection and echo cancellation. Automatic gain control (AGC) is provided to automatically adjust the signal level of calls within a conference or for recording at normal levels. 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.
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-Analog-4P/-8P 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.
Consistent Diva Server Programming Interface	Design once – use on all! This allows application developers and system integrators to minimize porting effort and reduces time to market. Whether using industry standard CAPI and TAPI, or Diva Server API via the Software Development Kit (SDK), an application once designed to work with any Diva Server adapter can seamlessly be used also with Diva Server V-Analog-4P/-8P.
State-of-the-Art Operating Systems Supported	Diva Server V-Analog-4P/-8P telephony adapters are ready to be used with all state-of-the-art operating systems, offering drivers for both Microsoft Windows and Linux. Even support of the latest 64-Bit edition of Windows Server 2003 and Window XP is readily available. Diva Server for Windows 2000/2003/XP is officially certified by the Windows Hardware Quality Labs (WHQL).
Superior Scalability and Flexibility	Up to eight Diva Server adapters – offering 2 to 240 channels - can be installed and operated concurrently in a single server. Any type of Diva Server adapter whether Analog, ISDN BRI, ISDN PRI, or E1/T1 can be mixed and matched.
Easy to Install and Configure	Ease of installation is guaranteed as all Diva Server V-Analog-4P/-8P adapters conform to Plug and Play standards, eliminating the need to manually configure your server. A GUI-based tool makes configuration simple and straight forward.

Technical Specifications

Hardware	• 32-bit RISC CPU, 100 MHz, 131 MIPS
	• 16 MB onboard SDRAM Memory
	• Telephony Interface
	  – POTS trunk interface, Loop start signaling
	  – 4 x RJ-10 connectors (Diva Server V-Analog-4P), RJ-10 to RJ-11 cables supplied
	  – 4 x RJ-45 connectors (Diva Server V-Analog-8P), RJ-45 to RJ-10 adapters and RJ-10 to RJ-11 cables supplied
		• 4/8 x 32.76 MHz, 65 MIPS DSP
		• 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
		• Physical dimensions:
		  – 312.00 mm x 106.68 mm
		  – 352.17 mm x 126.37 mm (incl. bracket and retainer)

Environmental	• *Operating temperature:* 10°C to 50°C • *Operating humidity:* 10% to 90% (non-condensing)	• *Storage temperature:* 0°C to 70°C
Power	• *Power consumption:* 500 mA @+5 V typical	• *Max. tolerance in power supply variation:* -5% to +5%
Warranty	• 5 year warranty	
Certifications and Approvals	• *EMC:* FCC part 15, ICES-003, EN55022, EN55024 • *Telecom:* TIA 968-A (FCC part 68), IC CS03, TS 103 021 (TBR21)	• *Safety:* UL 60950, CSA 60950, EN 60950 • *CE Mark*
Driver Software	• *Supported Operating Systems:* Microsoft: Windows 2003 Server, 2000, XP, Windows 2003 Server 64-Bit Edition, Windows XP 64-Bit Edition. Linux: Red Hat, SuSE and Debian distributions • *Application Interfaces:* Microsoft: WAN Miniport, COM Port, CAPI 2.0, TAPI, Diva Server API (SDK) Linux: TTY, CAPI 2.0, Diva Server API (SDK) • *M-Adapter Feature* (patent pending): Combined Virtual Adapter, Internal Call Transfer, Explicit Call Transfer Emulation	

Features

Call control	• Call Progress Analysis: Busy tone detection, Ring back tone detection, Special Information Tone (SIT) detection, Fax/modem detection, Dial tone detection	• Pulse Dialing • Tone (DTMF/MF) Dialing • Hold/Retrieve (via Hook Flash) • Collection of DTMF Post Dial Digits	• Analog Caller Identification (via FSK and DTMF signaling)
Voice and speech	• G.711 coding (a-law, µ-law selectable) • Generic Tone detection and generation • Voice Activity Detection • Recording Automatic Gain Control (AGC) • G.168 echo cancellation, up to 32 ms tail length	• DTMF detection and generation • Pulse tone detection • Silence Detection • Pitch Control	• DTMF Clamping and Filtering • Full-duplex voice, "barge-in" • Human talker detection • Audio Tap
Voice over IP (VoIP)	• G.711 voice codec (64 kb/s, µ-law, A-law) • Adaptive jitter buffer • Real Time Protocol (RTP framing)	• G.726 voice codec (32 kb/s) • Voice activity detection (VAD) • G.168 echo cancellation, up to 32 ms tail length	• GSM voice codec (13 kb/s) • Comfort noise generation (CNG)
Switching and Conferencing	• On-board switching and Conferencing	• Automatic Gain control (AGC)	

Ordering Information

Product Name	Product Code
Diva Server V-Analog-4P - International	306-236
Diva Server V-Analog-8P - International	306-237
Diva Server V-Analog-4P - North America	306-238
Diva Server V-Analog-8P - North America	306-239

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

Corporate LAN

Diva Server V-Series adapter used with 3rd party voice, speech and conferencing application

Telephone — Mobile phone — Telephone — PBX — ISDN — GSM — Analog — Telephone — Telephone

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