

# Diva™ Server V-Series



***A powerful hardware platform for Voice, Speech  
and Conferencing Applications***



# Diva™ Server V-Series

*Diva Server V-Series is a family of intelligent telephony boards based on the established and popular Diva Server range of intelligent ISDN adapters from Eicon Networks.*

*The powerful hardware architecture and rich media processing features of Diva Server V-Series boards allow companies to develop and deploy voice, speech and conferencing applications which deliver enhanced performance, greater accuracy and reduced costs.*

*Eicon works closely with well established software partners through its Eicon Technology Partner programme giving you optimal choice for your communications solution. The support of open standards ensures interoperability of the Diva Server V-Series boards with a wide range of applications.*

*The Diva Server V-Series family ranges from a single Basic Rate (BRI) board to multi-BRI as well as Primary Rate (PRI), E1 and T1 models. Designed to be scalable, any combination of Diva Server V-Series boards can be mixed and matched in your system offering a flexible solution to your communications needs. Superior performance and functionality is provided as all family members run the same software and share the same architecture of RISC CPU and Digital Signal Processors.*

*For any voice, speech or conferencing solution Eicon has the most powerful, flexible and scalable hardware platform you could want.*

## Diva Server V-Series Product Family

### The Diva Server V-BRI

is an intelligent telephony board that provides two channels of digital connectivity for an ISDN Basic Rate (BRI) interface.

The on-board DSPs allow one server to support two concurrent channels of communication with a full set of voice, speech and conferencing functions on each channel. The Diva Server V-BRI is ideal for small to medium installations or pilot projects.



**Diva Server V-BRI**

### The Diva Server V-4BRI

is an intelligent telephony board that provides eight channels of digital connectivity for four ISDN Basic Rate (BRI) interfaces.

The on-board DSPs allow one server to support eight concurrent channels of communication with a full set of voice, speech and conferencing functions on each channel. The Diva Server V-4BRI is ideal for medium sized installations.



**Diva Server V-4BRI**

### The Diva Server V-PRI

is a powerful intelligent telephony board that provides 24 (T1) or 30 (E1) channels of digital connectivity for ISDN Primary Rate (PRI) lines.

The on-board DSPs allow one server to support up to 30 concurrent channels of communication with a full set of voice, speech and conferencing functions on each channel. The Diva Server V-PRI is ideal for large projects.



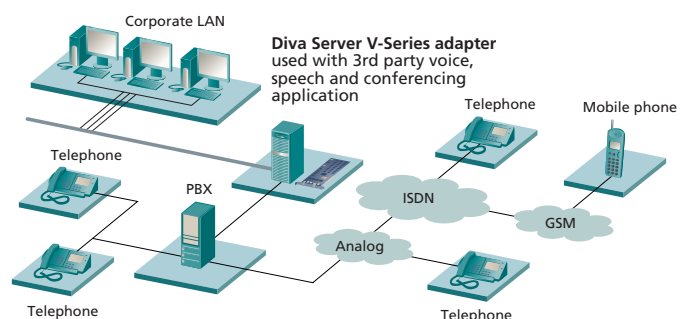
**Diva Server V-PRI**

## Diva Server V-Series – Features at a Glance

- **Powerful Hardware.** Every Diva Server V-Series board has an on-board high specification RISC CPU, plenty of memory and one DSP per ISDN channel. The DSPs perform speech processing tasks such as echo cancellation which would place a heavy load on the host CPU. Having one DSP per channel not only ensures maximum performance even under the heaviest traffic, it also helps developers when writing applications as they are not constrained by lack of hardware resources on the board.
- **Voice Activity Detection (VAD).** Diva Server V-Series boards have sophisticated VAD which detects the presence of a voice and identifies when a user starts and stops speaking. This is very important in Interactive Voice Response (IVR) applications as much of a typical session consists of silence between the system prompts and the user's response. By filtering out all audio such as silence, the Diva Server V-Series board only passes voice signals to the host allowing it to process more calls simultaneously.
- **Echo Cancellation.** This is critical for Automatic Speech Recognition (ASR) in applications as echo from the network or speech prompts can distort a user's voice and make it much harder for the ASR engine to accurately interpret the speech. Diva Server V-Series boards have echo cancellation with a long 'echo tail' of 32 milliseconds which eliminates even far end echo from the line thereby improving the performance of speech applications.
- **Switching and Conferencing.** Diva Server V-Series supports the conferencing of calls, (routing, transferring, and connecting more than two parties), on the board allowing these capabilities to be easily incorporated into PC-based Computer Telephony applications. Switching of calls is supported including Cross Board switching between different Diva Server V-Series boards in a server. Automatic Gain Control (AGC) is provided to automatically adjust the signal level of incoming calls for recording at normal levels.
- **Interrupt speech prompts by speaking over them – Known as "Barge-In".** This application-friendly feature allows callers to control the pace of the conversation and complete the interaction more quickly, which leads to a more pleasant user experience and a more efficient platform utilization.
- **Voice Processing.** Diva Server V-Series boards play and record voice messages to and from callers through the digital network interface. Messages can be stored using G.711 u-law or A-law PCM, at a rate of 64 Kb/s, as is used in the PSTN. It can also deal with compressed voice according to G.726 and GSM standards.
- **Consistent Application Programming Interface (API).** All boards in the Diva Server V-Series range have the same software interface meaning that an application developed on the Diva Server V-BRI will also run on the Diva Server V-PRI. This allows true scalability and preserves your investment in application code.
- **PBX integration.** Next to a broad range of international ISDN D-channel signalling standards, all Diva Server V-Series cards support the QSIG protocol for integration into a PBX. This allows programmers to develop speech and voice applications which will run alongside a traditional PBX to provide additional functionality.

## Diva Server V-Series - Key Benefits

- **High-Performance Hardware.** All Diva Server V-Series adapters are built on the same high-performance technology of on-board RISC processor and digital signal processors (DSPs). These processors perform key real-time speech processing tasks that would ordinarily cause an excessive burden on the host server. One dedicated DSP for each channel guarantees the optimal unrestricted data transfer even under heavy traffic.
- **Scalability.** Multiple Diva Server V-Series adapters can be mixed and matched into one system in any combination to meet your organization's increasing communication needs.
- **Best Production Quality.** All Diva Server V-Series adapters conform to ISO 9002 ensuring the highest production standards. A 5 year warranty gives you the real peace of mind available only from one of the world's leading communications hardware manufacturers.
- **Easy To Install.** The ease of installation is guaranteed as all Diva Server V-Series adapters conform to Plug and Play standards, eliminating the need to manually configure your server.
- **Operating System Support.** All Diva Server V-Series adapters support the most requested server operating systems Windows NT, Windows 2000 & 2003, Windows XP, Linux and NetWare. Diva Server for Windows 2000/2003/XP is officially certified by the Windows Hardware Quality Labs (WHQL).
- **Interoperability.** Interoperability is one of our key goals. The support of standardized application interfaces, such as CAPI and TAPI enables the Diva Server V-Series adapters to be used with industry leading third-party software packages.
- **Easy Application Development:** Eicon offers the Diva Server SDK, a software development kit that provides application programming interfaces (APIs) which allow software vendors to easily develop their own communication applications for all Diva Server V-Series adapters.



## Divaserver - Strong through Partnership

### Eicon Networks Technology Partner Program

Divaserver V-Series telephony boards are part of the Divaserver family which provides a true open communications platform with high flexibility to support a great variety of applications. The Divaserver adapters are the essential hardware components to build a Remote Access Server, Fax Server, Unified Messaging and voice solution as well as VoIP and Soft-PBXs. To provide a complete solution to satisfy customer needs, the Divaserver hardware is used in combination with communication software provided by Independent Software Vendors (ISVs). Eicon has established the Eicon Networks Technology Partner program to work closely with different ISVs to provide an ideal selection for a customer's communication needs.

Together, through close relationships with more than 40 ISVs, the Divaserver family is feature rich and continuously improved to address market requirements. Eicon is constantly extending partnerships in all communications areas. These strong partnerships have already made the Divaserver family the leading European hardware supplier for Fax and Unified Messaging.



**Eicon Networks  
Technology Partner**

### Microsoft Partnership

Divaserver has a longstanding history of supporting Microsoft's operating systems as an important server operating system. Eicon is committed to supporting Microsoft's Windows NT, Windows 2000, Windows 2003 and Windows XP. As a testimony to this, all Microsoft Windows 2000, 2003 and XP CDs include the Eicon Divaserver drivers. Eicon has been working closely with Microsoft's development team from the earliest stages of the product life cycle. With an Eicon Systems Engineer on site at Microsoft's headquarters in Redmond, USA, Eicon is able to develop and test its own products in tandem with those of Microsoft. This cooperative relationship ensures that Eicon's products are tightly integrated with Microsoft's latest generation of PC computing, providing its customers with truly compatible and secure product offerings. All Divaserver drivers are officially tested and certified by the Windows Hardware Quality Labs (WHQL).

For the requirements of smaller companies, the Divaserver family offers full support for communication parts of the Microsoft Small Business Server (SBS). In addition to the Microsoft operating system support, Eicon is a close Microsoft partner through the Windows Telecommunications Alliance.



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