

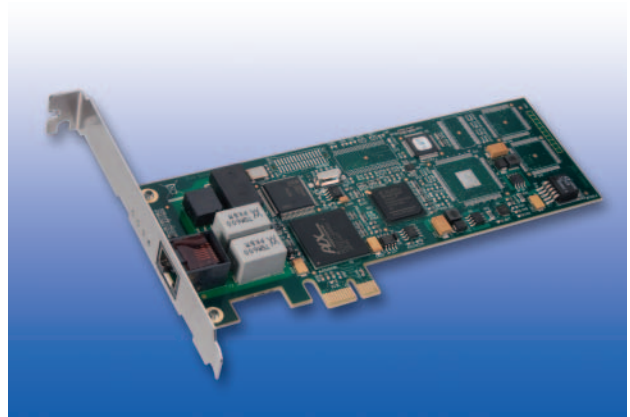
Dialogic® Blue™ Telephony Boards

Datasheet

The Dialogic® Blue™ OneSpan-24/30-S-LP Telephony Board Inaugurates a New Product Line for Open Source Markets

The Dialogic® Blue™ OneSpan-24/30-S-LP Telephony Board is an efficient one-span host-based call-processing board for the open source market, which includes features for Interactive Voice Response (IVR) along with call transfer emulation, G.711 support, Automatic Gain Control (AGC), and software-based echo cancellation.

The form factor of the OneSpan-24/30-S-LP Telephony Board is Low Profile PCI Express (PCIe), which is half the length and half the height of a standard PCIe board. The OneSpan Board is very well suited for installations in which one or two telephony boards are needed to provide from 24 to 60 channels (phone line connections) for a single server.



Features

Benefits

Supports a variety of standard APIs

Usable in many environments

Low Profile PCIe form factor

Uses space efficiently (half the length and half the height of a standard PCIe board)

Supports most of the signaling stacks in use today

Compatible with major PBXs and phone lines worldwide

Feature set well suited for use with the Asterisk telephony server

Brings Dialogic® technology to the Asterisk market

Plug-and-play

Easy to install and operate

Compatible with Dialogic® Diva® Media Boards

Facilitates upgrading to a more powerful Diva Media Board for increased scalability or extended feature set

The Dialogic® Blue™ OneSpan-24/30-S-LP Telephony Board Inaugurates a New Product Line for Open Source Markets

The OneSpan-24/30-S-LP Telephony Board supports features required for most communications applications and for use in many Asterisk environments. Because it supports many standard APIs, the OneSpan Board is very useful when developing new applications.

The OneSpan-24/30-S-LP Telephony Board is supported under the Linux operating system. Support for Windows® is planned for Q4 2010.

Choosing a Host Processor

Because it is a “passive” board without an onboard CPU or DSPs, the OneSpan-24/30-S-LP Telephony Board relies on the host CPU to provide the computing power for the functionality that an application requires, such as echo cancellation and line interconnect. For this reason, the host CPU must be carefully selected to provide an appropriate feature set and system load capabilities. A system with 3MB L3 cache and 2.26GHz processor speed and 4 GB of DDR3 memory, for example, should be sufficient for many applications.

Generally the OneSpan-24/30-S-LP Telephony Board is suitable for applications such as IVR systems designed to handle a maximum of 50 calls simultaneously, low-density conferencing servers with a maximum of six attendees, monitoring applications (two One Span Boards are required), and other telephony applications that use only a moderate amount of host resources.

Applications such as large conferencing servers with echo cancellation normally require a more powerful system and possibly more powerful telephony boards. For help in choosing an appropriate host system and/or telephony boards for your application, contact Dialogic. [Local Dialogic contact information](#) is available online.

Great care has been taken to allow for an easy upgrade from Dialogic® Blue™ Telephony Boards to Dialogic® Diva® Media Boards when increased scalability or an extended feature set is required. Information on [Diva Media Boards](#) is available on the Dialogic website.

The Dialogic® Blue™ OneSpan-24/30-S-LP Telephony Board Inaugurates a New Product Line for Open Source Markets

Technical Specifications

Quick Reference

Voice resources	24 (T1), 30 (E1)
Boards per system	1 for a mid-size system; 2 for a larger system; the number of boards depends on the application in use and server hardware performance
CSP	Yes
Form factor	Low Profile (shipped with mounted standard-size bracket; a low-profile bracket is also included)
Resource bus	PCIe 1.0a x1 lane (3.3/12 V)
Connection	1 RJ-45 connector
Network interface	E1/T1 and ISDN PRI in TE and NT Mode
Signaling	ETSI, NI-1, 4ESS, 5ESS, and major ISDN protocols; QSIG; and many more
Operating system	Linux; Windows® support planned for Q4 2010. Details at www.dialogic.com/systemreleases
Volts	3.3 and 5
Required accessories	1 shielded RJ-45/RJ-45 cable

Hardware

- FPGA for fast streaming of TDM packets
- Physical dimensions:
 - 167.65 mm x 68.90 mm (PCB)
 - 181.38 mm x 80.06 mm (with low profile bracket)
 - 180.96 mm x 120.88 mm (with standard bracket)
- High-impedance mode for passive monitoring
- I/O addresses, memory, and interrupt allocated automatically
- Plug-and-play interface
- Production quality: ISO 9002

Power Consumption and Environmental

- Power consumption: 0.58 A @ 3.3 V (typical), 0.04 A @ 12 V (typical)
- Operating temperature: 10°C to 50°C
- Storage temperature: 0°C to 70°C
- Maximum tolerance in voltage fluctuation: according to the PCI Express specification

The Dialogic® Blue™ OneSpan-24/30-S-LP Telephony Board Inaugurates a New Product Line for Open Source Markets

Technical Specifications *(continued)*

Dialogic® Diva® System Release Software and Dialogic® Diva® SDK Software

To allow an easy upgrade from Dialogic® Blue™ Telephony Boards to Dialogic® Diva® Media Boards, which is a more powerful product line with a richer feature set, the Dialogic® Blue™ OneSpan-24/30-S-LP Telephony Board uses the Dialogic® Diva® System Release and Dialogic® Diva® SDK Software. Capabilities of the Diva System Release and Diva SDK include:

- Supported operating systems: Linux and Windows® (planned for Q4 2010)
- M-adaptor feature (patent pending): Combined Virtual Adapter, Internal Call Transfer, Explicit Call Transfer Emulation
- SNMP support
 - Windows: v2c
 - Linux: Net-SNMP v1, v2c, and v3
- Application interfaces
 - Microsoft® operating systems: Dialogic® Diva® API, Diva API for .NET, Diva Component API (VB.NET), COM Port, WAN Miniport, TAPI, CAPI 2.0, extended CAPI, VoIP (SIP/RTP)
 - Linux: Diva API, TTY, CAPI 2.0, extended CAPI, VoIP (SIP/RTP)

Note: The OneSpan-24/30-S-LP Telephony Board does not currently support Windows and other Microsoft® technology. Support is planned for Q4 2010.

Signaling

- DSS1 (Euro-ISDN), NI-1 (North America National ISDN 1), 5ESS (North America), 1TR6 (Germany), INS Net 64 (Japan), VN3 (France), CT1 (Belgium), QSIG
- Call progress analysis:
 - Busy tone detection
 - Ring back tone detection
 - Special Information Tone (SIT) detection
 - Fax/modem detection
 - Dial tone detection
- 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

The Dialogic® Blue™ OneSpan-24/30-S-LP Telephony Board Inaugurates a New Product Line for Open Source Markets

Technical Specifications *(continued)*

Media Processing

Because the OneSpan-24/30-S-LP Telephony Board is a “passive” board, most of the tasks required for the features listed below are executed on the host CPU. For information about the level of performance of the host CPU needed for various feature sets, contact Dialogic. [Local Dialogic contact information](#) is available online.

- Fax tone detection
- DTMF tone detection and transmission
- Collection of DTMF post-dial digits
- Host-based switching and conferencing (line interconnect)
- Host-based cross-board switching (line interconnect on multiple boards)
- Automatic Gain Control (AGC) for conferencing
- G.168 echo cancellation (up to 256ms, depending on host CPU performance)
- Real-time protocol (RTP/RTCP)
- Comfort Noise Generation (CNG) [voice codecs only]
- Voice Activity Detection (VAD) [voice codecs only]
- Dynamic anti-jitter buffer (reduces required buffer space)
- Audio tap
- Full-duplex voice, barge-in
- G.711 coding (a-Law and μ -Law)
- Call transfer emulation
- Clear Channel Data (transparent), HDLC, X.75/V.42bis, ISO8208, X.25
- SS7 MTP1/MTP2
- International protocol code support (ISDN, R2, T.1 RBS, Line Side E.1)

If you require features that are not available with the Dialogic® Blue™ OneSpan-24/30-S-LP Telephony Board (for example, high-density fax, high-density modem support, or high voice quality), you may want to use a Dialogic® Diva® Media Board instead. Information about [Diva Media Boards](#) is available on the Dialogic website.

Dialogic® Blue™ Telephony Boards

Datasheet

The Dialogic® Blue™ OneSpan-24/30-S-LP Telephony Board Inaugurates a New Product Line for Open Source Markets

Technical Specifications *(continued)*

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 www.dialogic.com/rohs

Country-specific approvals: Global product approvals at www.dialogic.com/declarations

Warranty: Warranty information at www.dialogic.com/warranties

Ordering Information

Dialogic® Blue™ Telephony Board	Order Code	Description
OneSpan-24/30-S-LP	306-420	PCI Express

www.dialogic.com

Dialogic Corporation

9800 Cavendish Blvd., 5th floor
Montreal, Quebec
CANADA H4M 2V9

Dialogic, Diva, and Dialogic Blue are registered trademarks or trademarks of Dialogic Corporation or its subsidiaries (“Dialogic”). Dialogic’s trademarks may be used publicly only with permission from Dialogic. Such permission may only be granted by Dialogic’s legal department at the address provided above. Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries. Other names of actual companies and product mentioned herein are the trademarks of their respective owners.

Dialogic encourages all users of its products to procure all necessary intellectual property licenses required to implement their concepts or applications, which licenses may vary from country to country. None of the information provided in this datasheet other than what is listed under the section entitled Technical Specifications forms part of the specifications of the product and any benefits specified are not guaranteed. No licenses or warranties of any kind are provided under this datasheet.

Any use case(s) shown and/or described herein represent one or more examples of the various ways, scenarios or environments in which Dialogic® products can be used. Such use case(s) are non-limiting and do not represent recommendations of Dialogic as to whether or how to use Dialogic products.

Dialogic may make changes to specifications, product descriptions, and plans, as well as to related documentation, at any time, without notice.

This document discusses one or more open source products, systems and/or releases. Dialogic is not responsible for your decision to use open source in connection with Dialogic products (including without limitation those referred to herein), nor is Dialogic responsible for any present or future effects such usage might have, including without limitation effects on your products, your business, or your intellectual property rights.