

## Dialogic Blue OneSpan Single PCI Express E1/T1/PRI interface, Software Echo Cancellation, Low Profile Form Factor



Product Name: Dialogic Blue OneSpan Single PCI Express E1/T1/PRI interface, Software Echo Cancellation, Low Profile Form Factor

Manufacturer: -

Model Number: 306-420

Availability: In Stock

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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. 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. Features

- Supports a variety of standard APIs
- Low Profile PCIe form factor
- Supports most of the signaling stacks in use today
- Feature set well suited for use with the Asterisk telephony server
- Plug-and-play
- Compatible with Dialogic® Diva® Media Boards

### Benefits

- Usable in many environments
- Uses space efficiently (half the length and height of a standard PCIe board)
- Compatible with major PBXs and phone lines worldwide
- Brings Dialogic® technology to the Asterisk market
- Easy to install and operate
- Facilitates upgrading to a more powerful Diva Media Board for increased scalability or extended feature set

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

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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. Technical Specifications

- 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
- 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.
- Volts: 3.3 and 5
- Required accessories: 1 shielded RJ-45/RJ-45 cable
- Product Order Code Description
- Dialogic®; Blue®; Telephony Board OneSpan-24/30-S-LP 306-420 PCI Express

### 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

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:

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- Supported operating systems: Linux and Windows®; (planned for Q4 2010)
- M-adapter 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

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

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- 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  $\mu$ -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. 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
- Country-specific approvals: Global product approvals
- Warranty: Warranty information

**Price: £386.50**