

The Dialogic® DSI SS7LDH4 Network Interface Board offers SS7 network connectivity to service nodes handling low volumes of signaling traffic (for example, 200 calls per second or less), and its half-sized PCI Express form factor helps reduce deployment costs. These characteristics, in addition to the ability to choose a bundle of circuit protocols in capacities suitable for small configurations, can help businesses meet the price points needed for success in a highly competitive segment of the market.

The DSI SS7LDH4 can deliver cost-effective signaling functionality for value-added services, such as call completion, prepaid calling, and call routing applications.



Features

2 or 4 low-speed MTP links

Board and protocol license packages

Half-length, PCI Express form factor

Development package of programming aids, configuration tools, and run-time management and monitoring facilities

Benefits

Provides a choice of densities

Allows the purchase of a capacity that helps make a solution more price-competitive in low traffic markets

Permits the use of lower-cost rack-mount servers designed for small footprint peripherals

Enables rapid development of robust, scalable applications

The DSI SS7LDH4 supports the Dialogic® DSI SS7 Stack, allowing API-level compatibility with applications developed for other Dialogic® DSI SS7 Boards, including the Dialogic® DSI SPCI Network Interface Boards. Application development for the SS7LDH4 is accelerated by a comprehensive suite of test utilities, sample code, and user-part programming guides.

Easy Migration for Existing Signaling Applications

Existing signaling-only applications that are currently deployed with DSI SPCI Network Interface Boards and that use Dialogic® DSI APIs or the Dialogic® Global Call API for SS7 can be executed with minimal configuration changes on systems configured with the DSI SS7LDH4.

Technical Specifications

Digital interfaces	4 T1, E1 (software selectable on a per trunk basis) High impedance selectable for monitoring Selectable synchronization source from any line interface
Telecom clock management	Configurable LT (clock slave) or NT (clock master) mode Internal and external loop back capability
Pulse mask	T1 ANSI T1.403 E1 ITU-T G.703
Data rate	T1 1544 kbps \pm 50 ppm E1 2048 kbps \pm 50 ppm
Frame format	T1 D3/D4 and ESF E1 and E1-CRC4
Line codes	HDB3, B8ZS
Connector type	RJ-48C
Maximum boards/system	16
Host interface	PCI Express compatible as a 1-lane that can be installed in 1, 4, 8, or 16 lane PCI Express slots Bus speed 1 x PCI-Express lane (2.5 Gbps, full-duplex)
Capacity	
Channelized links	2 or 4 channelized 64 kbps MTP Low Speed Links (LSL) High impedance monitoring of 4 or 8 uni-directional links
Protocol execution	MTP2 onboard, higher levels on host
Network protocol execution	SS7 (MTP1 & MTP2)
HDLC monitoring	Passive monitoring of HDLC format data links including, SS7, LAPB, LAPD, ISDN, and DPNSS
Platform	
Form factor	x1 standard height, half-length board
Dimensions	
Length:	16.8 cm (6.6 in) maximum
Height:	11.1 cm (4.3 in) maximum
Power Requirements	
+12 VDC power	0.25 A max
+3.3 VDC power	1.8 A max
Power dissipation	8.94 W max

Technical Specifications (continued)

Equipment Type GEMP

Environmental Requirements

Operating temperature 0°C to +55°C
Air flow 1.5 Mbps (300 LFM)
Storage temperature -20°C to +70°C
Relative humidity 8% to 80% non-condensing
Altitude 0 to 15,000 ft

Safety and EMC

Canada ICES-003 Class A, CSA 60950-1 2nd Ed.
Europe EN60950:2006 w/A11:2009, CISPR 22 Ed 5.2b:2006 Class A, EN55022:2006 w/A1:2007 Class A, EN55024: 1998 w/A1:2001, A2:2003
United States FCC Part 15 Class A, UL 60950-1 2nd Ed.
CB Scheme IEC 60950-1 2nd Ed.

Telecommunications

United States TIA-968-B
Canada CS-03 Issue 9
Europe TBR 12 and 13

Approvals, Compliance, and Warranty

Hazardous substances RoHS compliance information at <http://www.dialogic.com/rohs>
Country-specific approvals Global product approvals at <http://www.dialogic.com/declarations>
Warranty Warranty information at <http://www.dialogic.com/warranties>

System Software Requirements

The Dialogic® DSI SS7LDH4 Network Interface Board is supported by the SS7 Development Package (DevPak) for Linux and Solaris. Contact your Dialogic sales representative for the status of Windows support. See the application note at <http://www.dialogic.com/systemreleases> for details about the operating systems currently supported. DevPaks contain device drivers and the tools for developing complex multichannel applications, including a native SS7 API that allows full access to the SS7 messages.

Additional Components

Documentation, test utilities, and example code can be downloaded from the Dialogic web site at http://www.dialogic.com/products/signalingip_ss7components/download/dsi-network-interface-boards.htm.

Dialogic® DSI SS7 Stack layers compatible with the DSI SS7LDH4 are available at http://www.dialogic.com/products/signalingip_ss7components/download/dsi-interface-protocol-stacks.htm.

Ordering Information

Dialogic® Product	Order Code	Description
SS7LDH4Q	310-944	PCI Express, 4 T1/E1, 4 LSL
SS7SBLDISUP1K	G01-051	License, 2 LSL (MTP2, MTP3), 1,024 CICs (ISUP)
SS7SBLDISUP2K	G02-051	License, 4 LSL (MTP2, MTP3), 2,048 CICs (ISUP)
SS7SBLDISUP4K	G03-051	License, 4 LSL (MTP2, MTP3), 4,096 CICs (ISUP)
SS7LDL2C1KQ	310-945	SS7LDH4Q Board & SS7SBLDISUP1K License
SS7LDL4C2KQ	310-946	SS7LDH4Q Board & SS7SBLDISUP2K License
SS7LDL4C4KQ	310-947	SS7LDH4Q Board & SS7SBLDISUP4K License



www.dialogic.com

Dialogic Inc.
926 Rock Avenue
San Jose, California 95131
USA

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