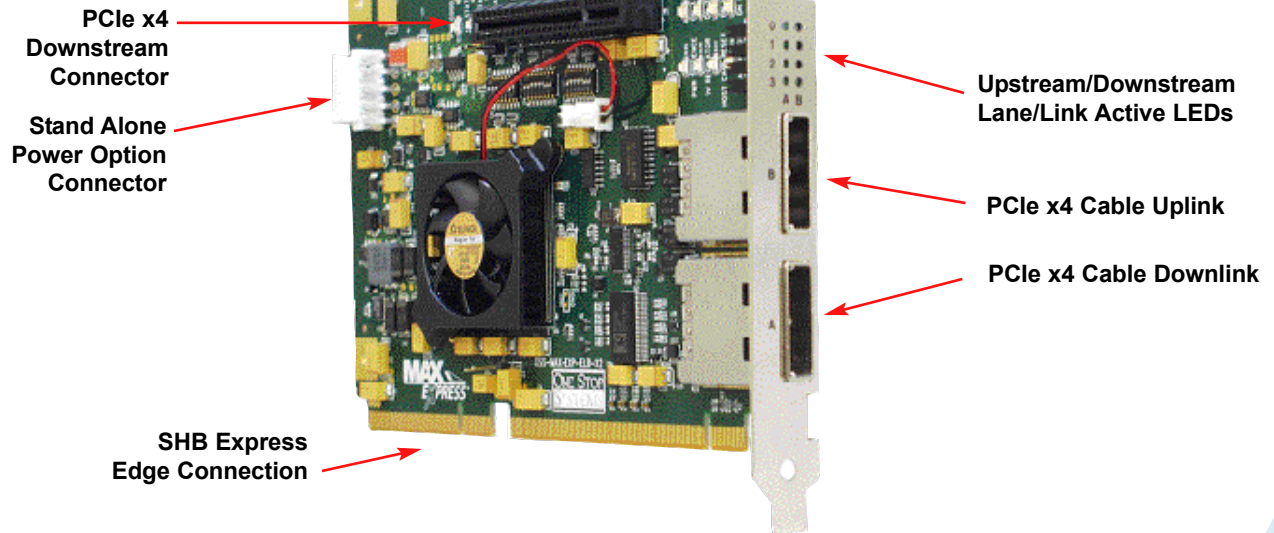


# SHB Expansion Link Board



The SHB Expansion Link Board (ELB) is the downstream cable link board and the primary fan-out switch to support multiple configurations of PCI/PCI-X or PCIe expansion slots. When implemented with the MAX Host Interface Board, an expansion sub-system, and a PCIe standard cable, a driverless, standards-based expansion system is achieved. A downstream PCIe x4 connector allows the ELB to act as a backplane for an add-in card. A standalone power option is also available.

## ELECTRICAL/MECHANICAL SPECIFICATIONS

**Form Factor:** PICMG 1.3 SHB Express system slot compliant

**Dimensions (H x L):** 4.375 x 6.6 in (111 x 168mm), 1 slot wide

**Switch:** PLX PEX8532, 32 lane switch

**External Interface:** Two x4 PCIe cable ports

**Downstream Interface:** One PCIe x4 downstream connector for an add-in card and 20 lanes of auto-configurable PCIe edge connectors. Five different configurations are possible.

Configuration signals from the backplane tell the EEPROM which of the five PCIe configurations to use:

- One x16 and one x4 links
- One x8 and three x4
- Two x8 and one x4 PCIe links
- Two x4, one x8 and one x4
- Five x4 links

**Front Panel Connector:** Molex 75586-0010

**Front Panel Indicators:**

- Bank of 4 upstream lane active indicators (green)
- Bank of 4 downstream link active indicators (green)

**Switch Control:**

Two banks of DIP switches for PEX8532 configuration

**Heat Sink:**

On-board fan header provided for optional heat sink fan

**Embedded Mode:** Power and x8 embedded connector for embedded applications

## POWER CONSUMPTION

10w typical

+12V @ .1, 3.3V @ 3.4A

## OPERATING ENVIRONMENT<sup>+</sup>

**Temperature Range:** 0° to 50°C (32° to 122°F)

**Relative Humidity:** 10 to 90% non-condensing

**Shock:** 30g acceleration peak (11ms pulse)

**Vibration:** 5-17 Hz 0.5" double amplitude displacement; 7-2000Hz, 1.5g acceleration

<sup>+</sup>Designed to meet UL 60950, FCC Class B, CE safety and emissions

## ORDERING OPTIONS

**OSS-ELB-SHB-x4:** SHB Expansion Link Board

**OSS-HIB2-x4:** Host Interface Board

**OSS-HIB2-x4-T:** Target Interface Board

## Cables

**OSS-CABLE-PCIe-x4-2M:** 2 meter x4 cable

**OSS-CABLE-PCIe-x4-3M:** 3 meter x4 cable

**OSS-CABLE-PCIe-x4-5M:** 5 meter x4 cable

**OSS-CABLE-PCIe-x4-7M:** 7 meter x4 cable

## WARRANTY

Two years



2235 Enterprise, Suite 110  
Escondido, CA 92029

877-438-2724

760-745-9883

760-466-1678 Fax

[www.onestopsystems.com](http://www.onestopsystems.com)