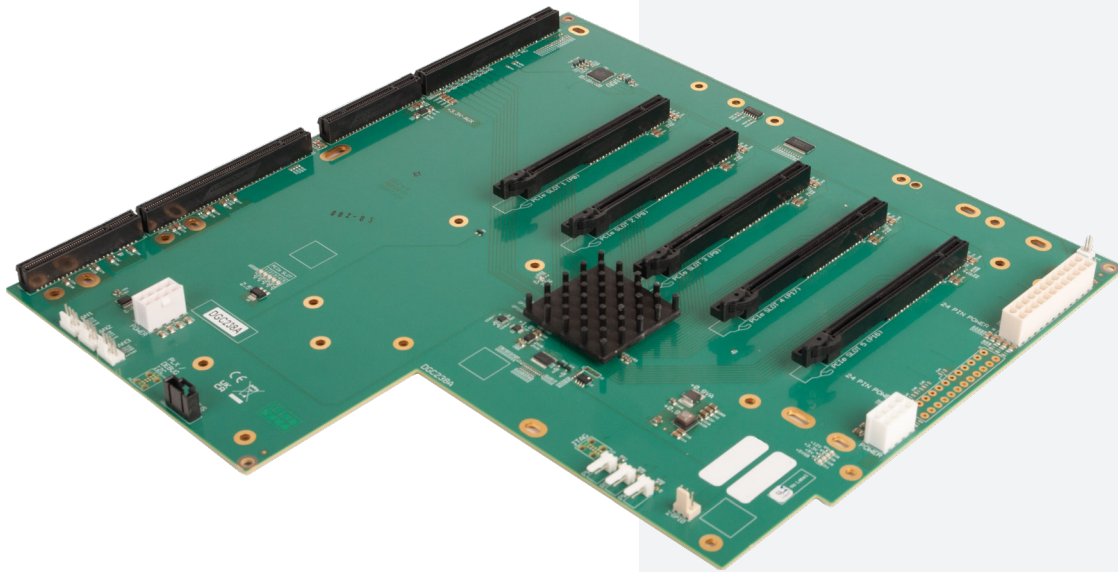


Express5-G3

5 Slot PCI Express Expansion Backplane



DESCRIPTION

The Datapath Express5-G3 backplane provides 5 x8 lane PCI Express slots, all implemented as x16 physical connectors. For high density and high performance display controller systems. The Express5-G3 can be used with a standard PICMG 1.3 SBC as a stand alone system or in combination with multiple backplanes to provide a PCI Express expansion system for a standard PC..

FEATURES

- 5 slot, Gen.3 PCI Express backplane
- 1 x PICMG 1.3 SBC slot
- Standard ATX form factor
- Support for multiple backplanes for large systems
- Supports 8GB/s full duplex links per slot
- 96 lane PCI Express 3.0 switch
- Provides headers for 3 fans

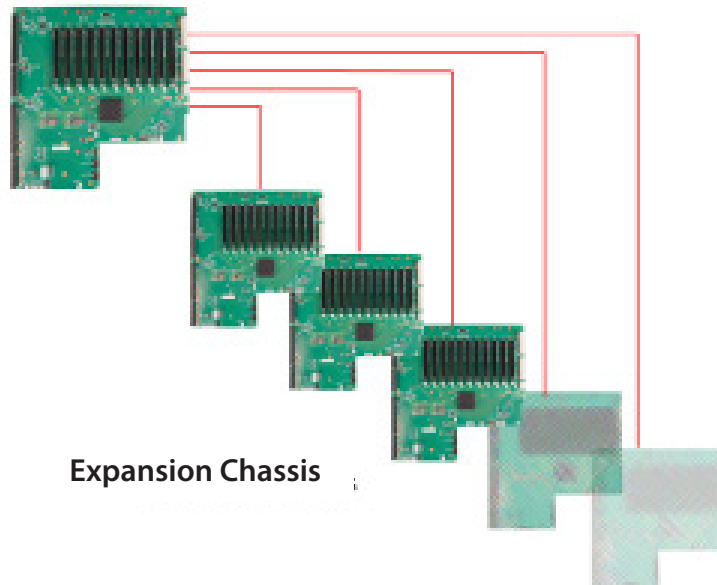
EXPANSION LINK - HLINK-G3, EXCABLE-G3 AND SLINK-G3

The SLINK-G3 card can be used instead of a PICMG 1.3 SBC to configure the Express5-G3 as an expansion backplane from a standard PC or from other Datapath backplanes. The cards are available with Gen.3 compatibility, fully supporting the Datapath Express5-G3 backplane.

CONNECTING MULTIPLE BACKPLANES

Star Configuration

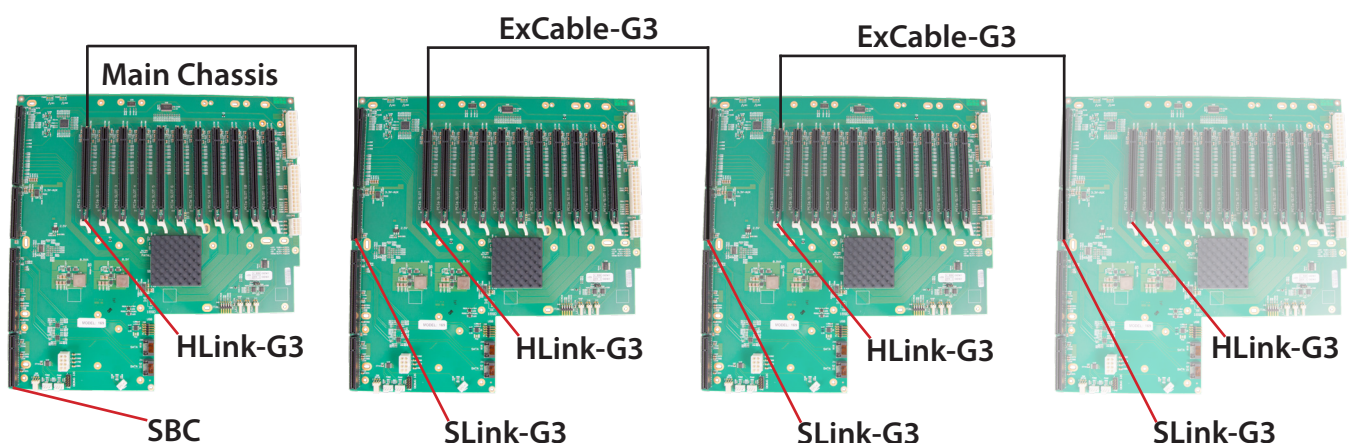
Main Chassis



All PCI Express slots in the master chassis (containing the SBC) can be populated with a HLink-G3 card. Each HLink-G3 is then connected to an expansion chassis using an ExCable-G3 and SLink-G3 card. This configuration provides a high number of available PCI Express slots supporting low latency. The Express5-G3 can also be used to connect a mixture of multiple Datapath Express5-G3 and Express11-G3 backplanes.

Each HLink and SLink card are factory installed into a system as a pair. When connecting systems please ensure that the cards labelled Link1 are joined using the ExCable, cards labelled Link2 are also joined together etc. In the event that this is not possible, please re-install the Datapath driver to reset the pairings.

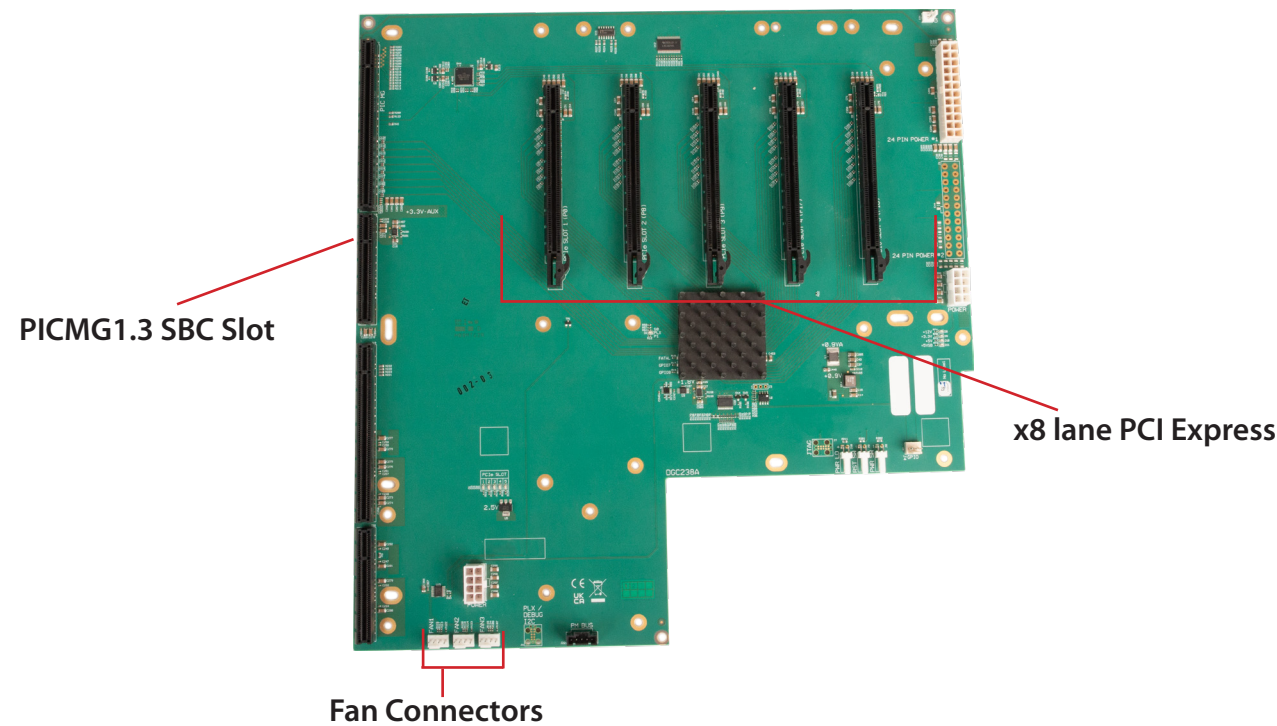
Daisy Chain Configuration



Multiple Express5-G3 or Express11-G3 can also be daisy chained. For larger systems Datapath recommends a Star Topology as illustrated above.

If using both an Express 11-G3 and an Express 5-G3 in an extended system, Datapath recommends using the Express 11 within the "main chassis" and the Express 5 in the "Expansion Chassis". In order to maximize available bandwidth, we also recommend using a single Express 11-G3 backplane in a single chassis rather than 2 x Express 5 backplanes in two chassis.

Express5-G3 LAYOUT



All PCI Express slots use a physical x16 connector and therefore will accept any PCI Express board type

SPECIFICATION

MAX POWER (WITHOUT SBC)

25W

POWER REQUIREMENTS

Max current at +3.3V < 0.5A

Max current at +12V < 0.5A

Max current at +5V < 1.5A

FORM FACTOR

PICMG1.3 Host SBC interface (x8 PCIe)

5 x PCI Express (x8) expansion slot

ATX PSU

4 x 24 pin power connectors –

One 24 pin ATX power connector

2 x 8 pin AUX power connectors–

One eight pin 12V AUX power connector

USB PORT

2 x ports via PICMG1.3 interface

OPERATING TEMP

0° to 35°C/32° to 95°F

STORAGE TEMP

-20° to 70°C/-4° to 158°F

RELATIVE HUMIDITY

5% to 90% non-condensing

MODELS AVAILABLE

Order Code: Express5-G3

5 slot PCI Express Gen.3 Expansion backplane PCIe 3.0 Switch

We are continuously developing the technology used within our product ranges delivering outstanding innovative solutions, therefore the specification may change from time to time.

Datapath UK and Corporate Headquarters
Bemrose House, Bemrose Park,
Wayzgoose Drive, Derby,
DE21 6XQ, United Kingdom
☎ +44 (0) 1332 294 441
✉ sales-uk@datapath.co.uk

www.datapath.co.uk

Datapath North America
2490 General Armistead Avenue,
Suite 102, Norristown,
PA 19403,
USA
☎ +1 484 679 1553
✉ sales-us@datapath.co.uk

Datapath Japan
Axon Hamamatsucho,
1-1-23 Shibadaimon,
Minato-ku,
Tokyo-to,
105-0012, Japan
✉ sales-jp@datapath.co.uk

