Express7-G3
7 Slot PCI express expansion backplane

DESCRIPTION
The Datapath Express7-G3 backplane provides four x8 lane PCI Express 3.0 slots typically intended for hosting input cards, and three x16 lane PCI Express 3.0 slots targeted for hosting output cards. The Express7-G3 can be used with a standard PICMG 1.3 single-board computer (SBC) as a stand-alone system or in combination with multiple backplanes to provide a PCI Express expansion system for a standard PC.

FEATURES
- 7 slot, Gen.3 PCI Express backplane
- Four x8 slots and three x16 slots
- 1 x PICMG 1.3 SBC slot for host CPU
- 12V power connectors to support high power graphics cards
- Standard ATX form factor
- Support for multiple backplanes for large systems
- Temperature sensors monitored by Datapath Wall Monitor software
- 96 lane PCI Express 3.0 switch
- Support for 2 x SATA connections
- Provides headers for (1, 2 or 3) fans

Engineering the world’s best visual solutions
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 Express7-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 Express7-G3 backplane.

CONNECTING MULTIPLE EXPRESS7-G3 BACKPLANES

**Star Configuration**
The four x8 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 Express7-G3 can be used to connect a mixture of multiple Datapath Express7-G3, Express9 and Express9-G3, and Express11-G3 backplanes.

System providing up to 14 PCI Express slots

**Daisy Chain Configuration**
The SLink-G3 card can be used instead of a PICMG 1.3 SBC to configure the Express7-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 Express7-G3 backplane.

System providing up to 19 PCI, Express slots Expansion Link - HLink-G3, ExCable- G3 and SLINK-G3
### Advanced graphics display technology

**EXPRESS7-G3 LAYOUT**

![Express7-G3 Layout](image)

### SPECIFICATION

<table>
<thead>
<tr>
<th>MAX POWER (WITHOUT SBC)</th>
<th>25W</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER REQUIREMENTS</td>
<td></td>
</tr>
<tr>
<td>Max current at +3.3V</td>
<td>&lt; 0.5A</td>
</tr>
<tr>
<td>Max current at +12V</td>
<td>&lt; 0.5A</td>
</tr>
<tr>
<td>Max current at +5V</td>
<td>&lt; 4A</td>
</tr>
</tbody>
</table>

### FORM FACTOR

- **PICMG1.3 Host SBC interface (x16 PCIe)**
- **3 x PCI Express (x16) expansion slot**
- **4 x PCI Express (x8) expansion slots**

### ATX PSU

- **1 x 24 pin power connector**
- **8 x 8 pin AUX power connectors**

### SATA PORTS

- **2 x ports via PICMG1.3 interface**

### USB PORT

- **2 x ports via PICMG1.3 interface (USB 2.0)**

### OPERATING TEMPERATURE

- **0 °C to 35 °C / 32 °F to 95 °F**

### STORAGE TEMPERATURE

- **-20 °C to 70 °C / -4 °F to 158 °F**

### RELATIVE HUMIDITY

- **5% to 90% non-condensing**

### MODELS AVAILABLE

- **Order Code:** Express7-G3
- **7 slot PCI Express Gen.3 Expansion Backplane**

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