

# PCIe2-2711 - PCIe Gen2 Eight Slot Expansion System

- ◆ **160 Gb/s Host-to-Expansion System Bandwidth (PCIe Gen2, x16)**
- ◆ **Dual x16 Cable Interface**
- ◆ **Eight Full Length PCIe Gen2 x16 Slots Supporting Double-Width GPUs**
- ◆ **3240W/2180W N+1 Redundant Power Supply Option (5U Chassis)**
- ◆ **1250W Power Supply Option (4U Chassis)**
- ◆ **Eight 6 + 2 Pin and Eight 6 Pin PCIe Power Connectors**
- ◆ **One or Three Meter Expansion Cable**
- ◆ **Two PCIe x16 Host-Bus to Expansion Cable Adapters**



**PCI EXPRESS**



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PCI Express Expansion System  
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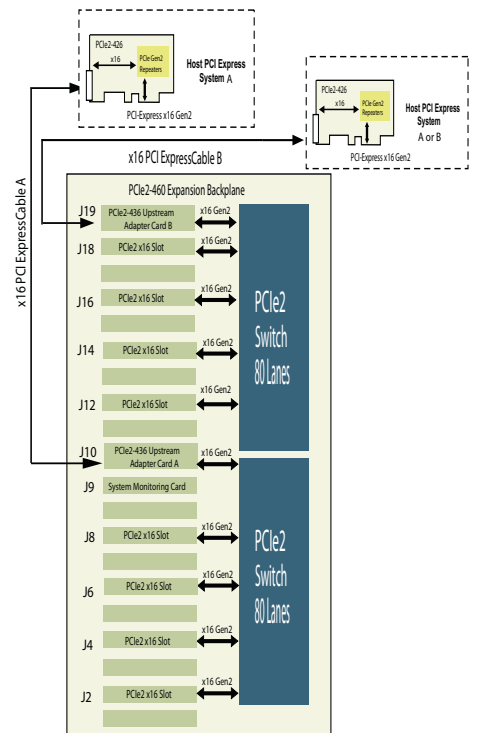
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Cyclone Microsystems' PCIe2-2711 Dual Host, Eight Slot PCI Express GPU Expansion System allows system developers to expand two host PCI Express Gen2 slot to eight additional PCI Express Gen2 slots via a Gen2 x16 (80 Gb/s) PCI Express cable. Alternatively, the two cables can be connected to separate host PCs, providing four x16 PCIe expansion slots per host PC. With extensive processing power now available on board level GPUs, the PCIe2-2711 supports the integration of up to eight double-width PCIe Gen2 boards like Nvidia's Tesla C2050/C2070 GPU Computing Engine.

The PCIe2-2711 Eight slot PCIe Gen2 GPU Express Expansion System is a turnkey system which includes a PCIe2-426 Host Bus to Expansion Cable Adapter, two x16 expansion cables and the PCIe2-460 eight slot expansion backplane mounted in an industrial 19-inch chassis. The system supports expansion cable lengths of either one or three meters.

The eight x16 PCIe slots are double-width spacing, providing ample room for eight full length, double-wide PCIe cards such as the latest generation of GPUs. Ample power for multiple GPUs is provided by either 3240W or 2180W N+1 redundant supplies housed in a 5U chassis. For lower-power requirements, a standard 1250W power supply option is available in a 4U chassis. All power supply configurations provide eight 6 + 2 pin PCIe power connectors. The 5U chassis provides an additional eight 6-pin PCIe power connectors to meet the additional external power requirements of PCIe Gen2 GPUs and graphics cards.



# PCIe2-2711 - PCIe Gen2 Eight Slot Expansion System

## PCIe2-426 PCIe Gen2 x16 Host Bus to Expansion Cable Adapter

- PCI Express Gen2 x16 Host Interface
- PCI Express Bus Repeaters to x16 Expansion Cable
- PCI Express Low Profile Card Format
- RoHS Compliant



## PCIe2-460/436 Eight-Slot PCI Express Expansion Backplane and Cable Adapter

- Dual x16 Gen2 Upstream Port (80 Gb/s each)
- Eight PCIe Gen2 x16 Slots
- Support for Dual PC Hosts
- ATX and EPS +12V PC Power Connectors
- RoHS Compliant



## 600-R2030 - 5U 19 Inch Rack Mount Chassis

- 3240 or 2180 Watt N+1 Redundant Power Supply
- 20 Full Length PCI Express ports
- Four Hot Swappable 90mm Fans (77 CFM Each)
- Eight 5.25" and One 3.5" External Drive Bay
- 19" x 8.75" x 27"
- 80 lbs. Weight
- Locking Drive Bay Door
- Eight 6 pin and eight 6+2 pin PCIe Power Connectors

## 600-2050 - 4U 19 Inch Rack Mount Enclosure

- 1250 Watt Power Supply
- 20 Full Length PCI Express Ports
- Four Hot Swappable 90mm Fans (77 CFM Each)
- Three 5.25" and One 3.5" Internal Drive Bays
- 19" x 7" x 27"
- 50 lbs Weight
- Locking Drive Bay Door
- Eight 6+2 pin PCIe Power Connectors

### Environmental

### PCIe2-426

### PCIe2-

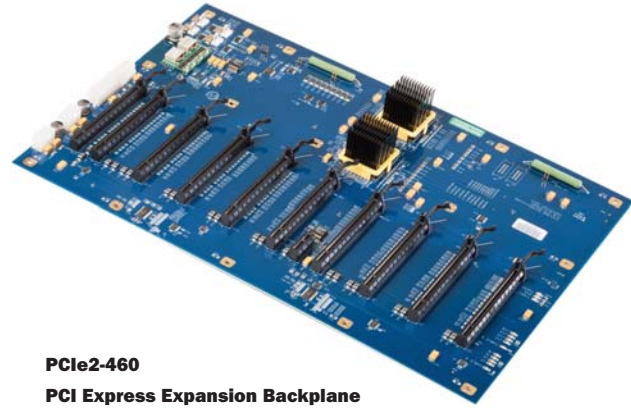
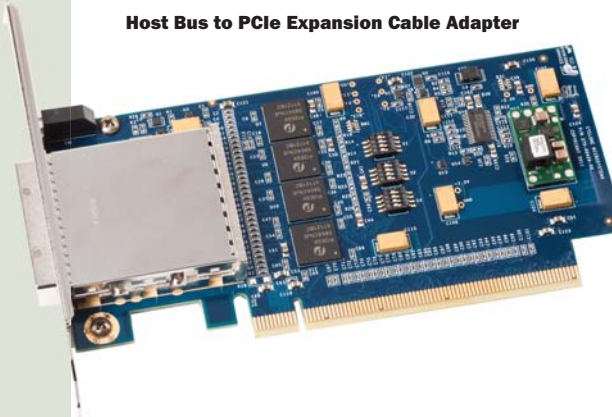
### 429/436

| Environmental                     | PCIe2-426                                       | PCIe2-429/436   |
|-----------------------------------|---|---|
| <b>Physical Dimensions</b>        | PCI-Express Card<br>Short Length<br>5.6" x 2.5" | Custom Motherboard 16.1" x 10.5"<br>ATX 24 pin Power Supply Connector 28 pin EPS Connectors |
| <b>Operating Temperatures</b>     | 0 to 55 Degrees Celsius                         | 0 to 55 Degrees Celsius   |
| <b>Relative Humidity</b>          | 0 - 95%   | 0 - 95%   |
| <b>Storage Temperatures</b>       | -55 to 125 Degree Celsius                       | -55 to 125 Degree Celsius   |
| <b>Power Requirements (Watts)</b> |   |   |
| <b>+3.3V Typical</b>              | 1.09A   | 2.5A  |
| <b>Maximum</b>                    | 1.60A   | 3.0A + 24A  |
| <b>+5V Typical</b>                | -   | 0.5A  |
| <b>Maximum</b>                    | -   | 1A  |
| <b>+12V-1 Typical</b>             | 0A  | 1A  |
| <b>Maximum</b>                    | 0A  | 2A +44A   |

# PCIe2-2711 - PCIe Gen2 Eight Slot Expansion System

## PCIe2-2711 Component Boards

**PCIe2-426**  
Host Bus to PCIe Expansion Cable Adapter



**PCIe2-460**  
PCI Express Expansion Backplane

## PCI Express Expansion Chassis



## PCIe2-2711 Eight Slot Expansion System Ordering Information

| Cyclone Part Numbers                    | Options  |
|---|--|
| <b>600-2711-QPPXYZ</b>                  |  |
| Q: Cable Length Option                  | 1: 1m Cable<br>3: 3m Cable   |
| PP: Power supply/Chassis Option         | 12: 1250W ATX Power Supply, 4U Chassis<br>21: 2180W N+1 Redundant Power Supply, 5U Chassis<br>32: 3240W N+1 Redundant Power Supply, 5U Chassis |
| X: Host Bus Adapter Panel Height Option | S: Standard Profile Panel<br>L: Low Profile Panel  |
| Y: Monitoring Board Option              | M: Cyclone PCIe Monitoring Board Installed<br>O: No Monitoring Board   |
| Z: PCIe Cable Width Option              | A: x16 PCIe Cabling<br>(Includes PCIe2-426, PCIe2-436 and x16 Cable)<br>B: x8 PCIe Cabling<br>(Includes PCIe2-425, PCIe2-439 and x8 Cable)     |

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