

# PCIe2-2710 - PCIe Gen2 Eight Slot Expansion System

- ◆ **80 Gb/s Host-to-Expansion System Bandwidth (PCIe Gen2, x16)**
- ◆ **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/ or Eight 6 Pin PCIe Power Connectors**
- ◆ **One or Three Meter Expansion Cable**
- ◆ **PCIe x16 Host-Bus to Expansion Cable Adapter**



Cyclone Microsystems  
2 Mountain View Drive  
Shelton, CT 06484  
Call (203) 786-5536  
information@cyclone.com

PCI Express Expansion System  
Data Sheet October 2011

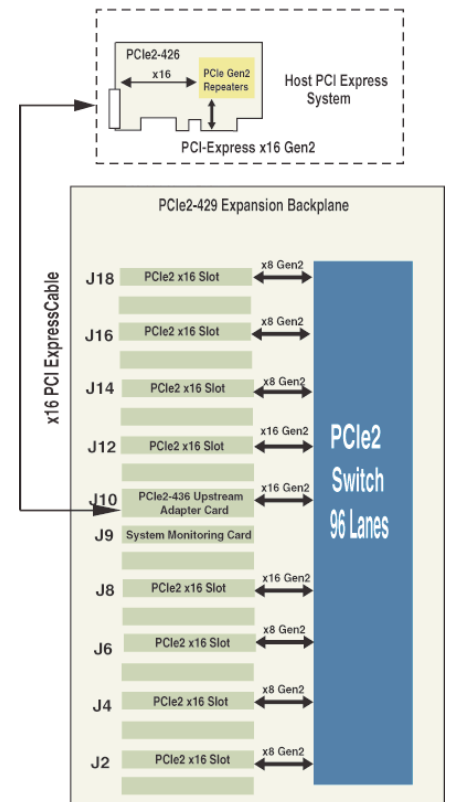
Copyright 2016 Cyclone  
Microsystems. All Rights  
Reserved. All specifications  
subject to change without  
prior notice.

All names mentioned herein are  
trademarks of their respective  
holders.

Cyclone Microsystems' PCI Express Expansion System allows system developers to expand one host x16 Gen2 PCI Express slot to an expansion chassis with eight additional PCI Express Gen2 slots via a x16 (80 Gb/s) cable. The expansion chassis' non-blocking ninety-six lane PCI Express Gen2 switch enables the coupling of cost-effective enterprise host PCs with high bandwidth, peer-to-peer capable I/O subsystems.

The Eight Slot PCI Express Gen2 Expansion System includes a host bus cable adapter, an expansion cable, and an expansion backplane mounted in an industrial 19-inch chassis. The PCIe2-426 PCI Express Gen2 x16 Host-Bus to Expansion Cable Adapter uses low latency bus repeaters to bridge from the host bus to a x16 expansion cable of either one or three meters. The cable connects to the Expansion Chassis and its PCIe2-429 Switched Expansion Backplane.

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-pin PCIe power connectors and eight 6+2 pin PCIe power connectors. The 5U chassis provides an additional eight 6-pin power connectors.



# PCIe2-2710 - 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



## PCIe2-429/436 Eight-Slot PCI Express Expansion Backplane and Cable Adapter

- x16 Gen2 Upstream Port (80 Gb/s)
- Two PCIe Gen2 x16 Slots
- Six PCIe Gen2 x8 Slots (Mechanical x16)
- ATX and EPS +12V PC Power Connectors
- RoHS Compliant
- Regulatory Compliance: UL Safety, FCC, CE Regulatory Certifications (Pending)



## 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-R2051 - 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

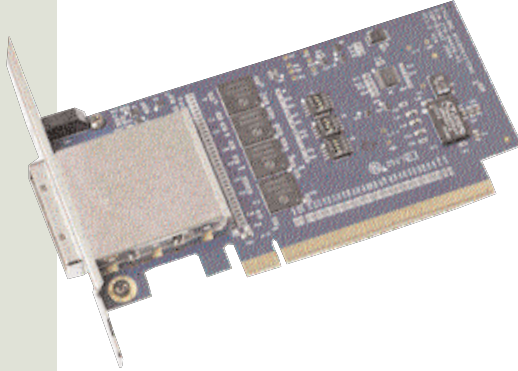
### PCIe2-429/436

Physical Dimensions	PCI-Express Card Short Length 5.6" x 2.5"	Custom Motherboard 16.1" x 10.5" 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	0.65A
<b>Maximum</b>	1.60A	15.65A
<b>+5V Typical</b>	-	0.20A
<b>Maximum</b>	-	0.20A
<b>+12V-1 Typical</b>	0A	-
<b>Maximum</b>	0A	10.80A
<b>+12V-2 Typical</b>	-	-
<b>Maximum</b>	-	16.2A
<b>+12V-3 Typical</b>	-	9.00A
<b>Maximum</b>	-	17.00A

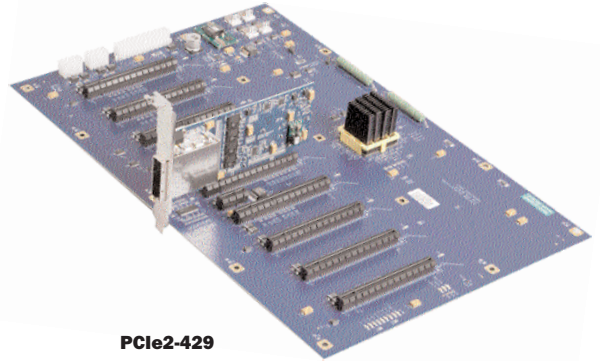
# PCIe2-2710 - PCIe Gen2 Eight Slot Expansion System

## PCIe2-2710 Component Boards

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



**PCIe2-429**  
PCI Express Expansion Backplane



## PCI Express Expansion Chassis



## PCIe2-2710 Eight Slot Expansion System Ordering Information

<b>600-2710-1-12-S</b>	PCI Express Expansion System, 1250 Watt/One Meter x16 Cable including PCIe2-426 PCI Express Host Bus to Expansion Cable Adapter 530-R2040 One Meter x16 PCIe Expansion Cable PCIe2-429/436 PCI Express Expansion Backplane 600-R2051 4U Rackmount Expansion Chassis w/1250W Power Supply	<b>600-2710-3-12-S</b>	PCI Express Expansion System, 1250 Watt/Three Meter Cable Including PCIe2-426 PCI Express Host Bus to Expansion Cable Adapter 530-R2041 Three Meter x16 PCIe Expansion Cable PCIe2-429/436 PCI Express Expansion Backplane 600-R2051 4U Rackmount Expansion Chassis w/1250W Power Supply
<b>600-2710-1-21-S</b>	PCI Express Expansion System, 2180 Watt/One Meter x16 Cable Including: PCIe2-426 PCI Express Host Bus to Expansion Cable Adapter 530-R2040 One Meter x16 PCIe Expansion Cable PCIe2-429/436 PCI Express Expansion Backplane 600-R2030 5U Rackmount Chassis 370-R1520 2180W N+1 Redundant Power Supply	<b>600-2710-3-21-S</b>	PCI Express Expansion System, 2180 Watt/Three Meter x16 Cable Including: PCIe2-426 PCI Express Host Bus to Expansion Cable Adapter 530-R2041 Three Meter x16 PCIe Expansion Cable PCIe2-429/436 PCI Express Expansion Backplane 600-R2030 5U Rackmount Chassis 370-R1520 2180W N+1 Redundant Power Supply
<b>600-2710-1-32-S</b>	PCI Express Expansion System, 3240 Watt/One Meter x16 Cable Including: PCIe2-426 PCI Express Host Bus to Expansion Cable Adapter 530-R2040 One Meter x16 PCIe Expansion Cable PCIe2-429/436 PCI Express Expansion Backplane 600-R2030 5U Rackmount Chassis 370-R1521 3240W N+1 Redundant Power Supply	<b>600-2710-3-32-S</b>	PCI Express Expansion System, 3240 Watt/Three Meter Cable Including: PCIe2-426 PCI Express Host Bus to Expansion Cable Adapter 530-R2041 Three Meter x16 PCIe Expansion Cable PCIe2-429/436 PCI Express Expansion Backplane 600-R2030 5U Rackmount Chassis 370-R1521 3240W N+1 Redundant Power Supply