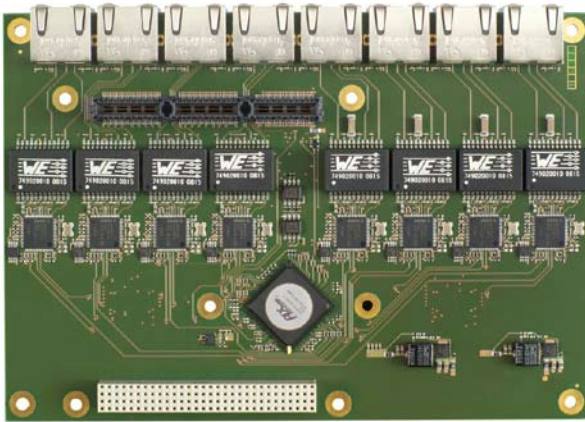


EXP-ETH8

EPIC Express
Eight Ethernet Ports



Features

8 independent Gigabit Ethernet ports

10/100/1000 Mb/s, Full duplex at all speeds

Configurable Rx and Tx FIFOs

PCI Express x8 interface

PCI Express base spec 1.1 compliant

Optionally, extended temperature range -40 °C...+85°C

Specifications

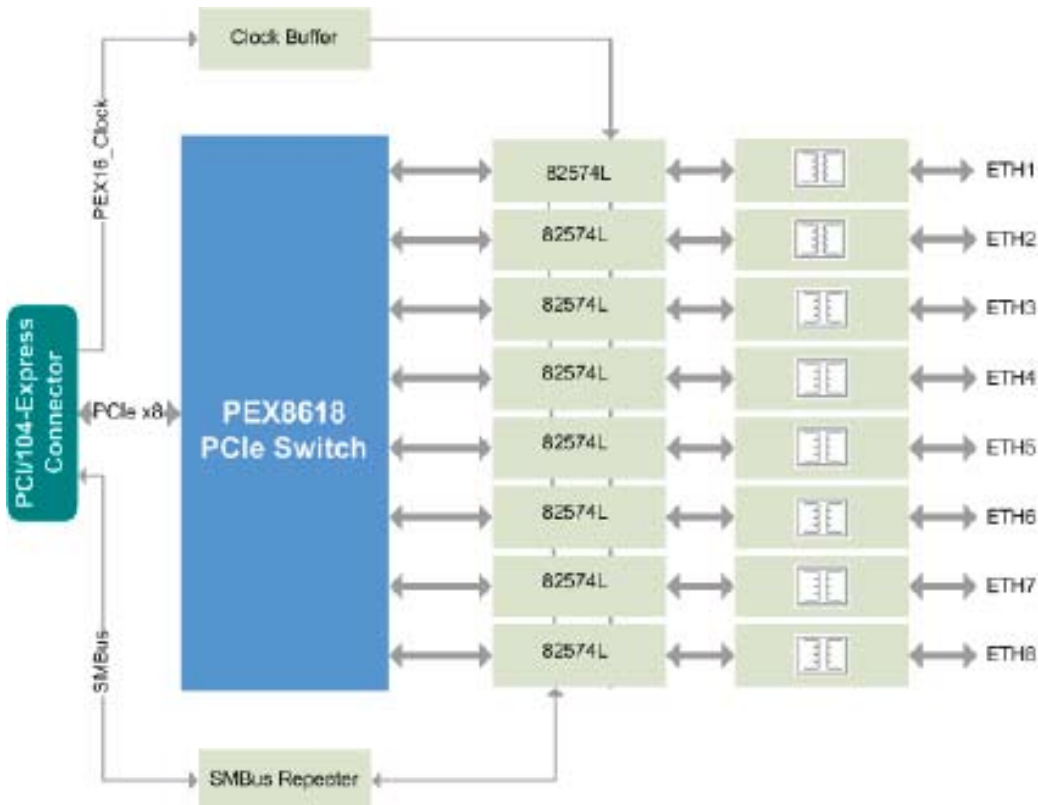
Board Format	EPIC Express 115.00 x 165.00 mm (4.528 x 6.496 inches)
Controller	8x Intel 82574L PCI Express x1 based GBIT Ethernet Controller
PCI Express Switch	PLX PEX8618
Ethernet	<ul style="list-style-type: none">• MAC<ul style="list-style-type: none">– Flow Control Support compliant with the 802.3X Specification– VLAN support 802.1Q compliant– MAC Address filters– filters; multicast hash filtering, broadcast filter– promiscuous mode– Statistics– MAC loopback• PHY<ul style="list-style-type: none">– Compliant with 802.3 802.3u 802.3ab– 802.3ab auto negotiation support– Full duplex at 10/100/1000 Mb/s– Half duplex at 10/100 Mb/s– Auto MDI, MDI-X crossover
Ethernet Features	<ul style="list-style-type: none">– TCP segmentation capability– Support up to 256 KB TCP segmentation (TSO v2)– Fragmented UDP checksum offload for packet reassemble– IPv4 and IPv6 checksum offload support– Split header support– Receive Side Scaling (RSS) with two hardware receive queues– 9 KB jumbo frame support– 40 KB packet buffer size

Controller Features	<ul style="list-style-type: none">• Manageability<ul style="list-style-type: none">– NC-SI for remote management core– SMBus advanced pass through interface• Low Power<ul style="list-style-type: none">– Magic Packet* wake-up enable with unique MAC address– ACPI register set and power down functionality supporting D0 and D3 states– Full wake up support (APM and ACPI 2.0)– Smart power down at S0 no link and Sx no link– LAN disable function
PCI Express	<ul style="list-style-type: none">– 64-bit address master support– Programmable host memory receive buffers (256 bytes to 16 KB)– Intelligent interrupt generation– Descriptor ring management hardware for transmit and receive software controlled reset– Message Signaled Interrupts (MSI and MSI-X)– Configurable receive and transmit data FIFO, programmable in 1 KB increments
Status LED	Yes, 2 activity leds per port
Operating Temperature	0°C...+60°C (commercial) -20°C...+60°C (industrial) -40°C...+85°C (extended)
Supply Current	2.2 A @ 5 V 3.3 V @3.3 V
Supported OS	Windows 7, Windows XP, XP Embedded, Linux

EXP-ETH8

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Eight Ethernet Ports

Block Diagram



Ordering Information

Ordering Number	Description
t14-0004-10	EPIC Express board with 8 Gigabit Ethernet ports

Note: t denotes the temperature range. Use 7 for commercial, 8 for industrial and 9 for extended temperature range