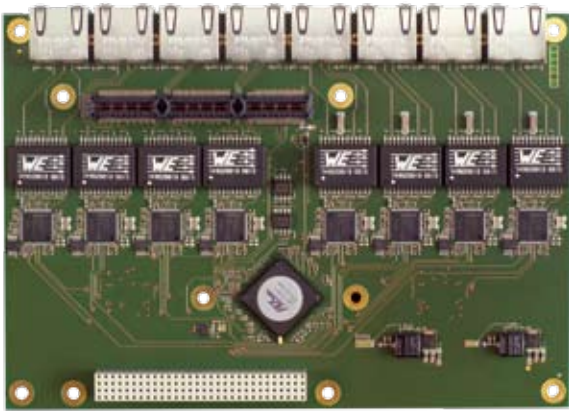


EXP-ETH8

EPIC Express
Eight Ethernet Ports



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	• MAC — 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 — 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	— 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

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

Controller Features

- Manageability
 - NC-SI for remote management core
 - SMBus advanced pass through interface
- Low Power
 - 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

- 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
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Operating Temperature	0 °C...+60 °C (commercial) -20 °C...+60 °C (industrial) -40 °C...+85 °C (extended)
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Supply Current	2.2 A @ 5 V 3.3 V @3.3 V
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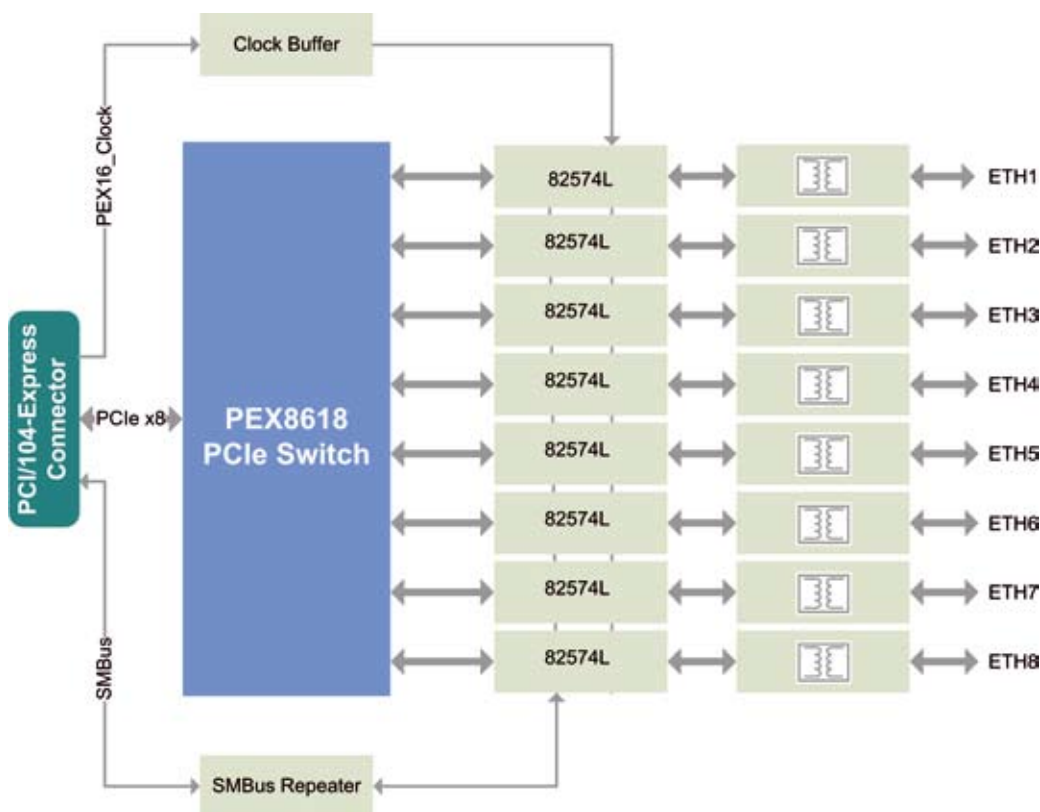
Supported OS	Windows 7, Windows XP, XP Embedded, Linux
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EXP-ETH8

EPIC Express

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