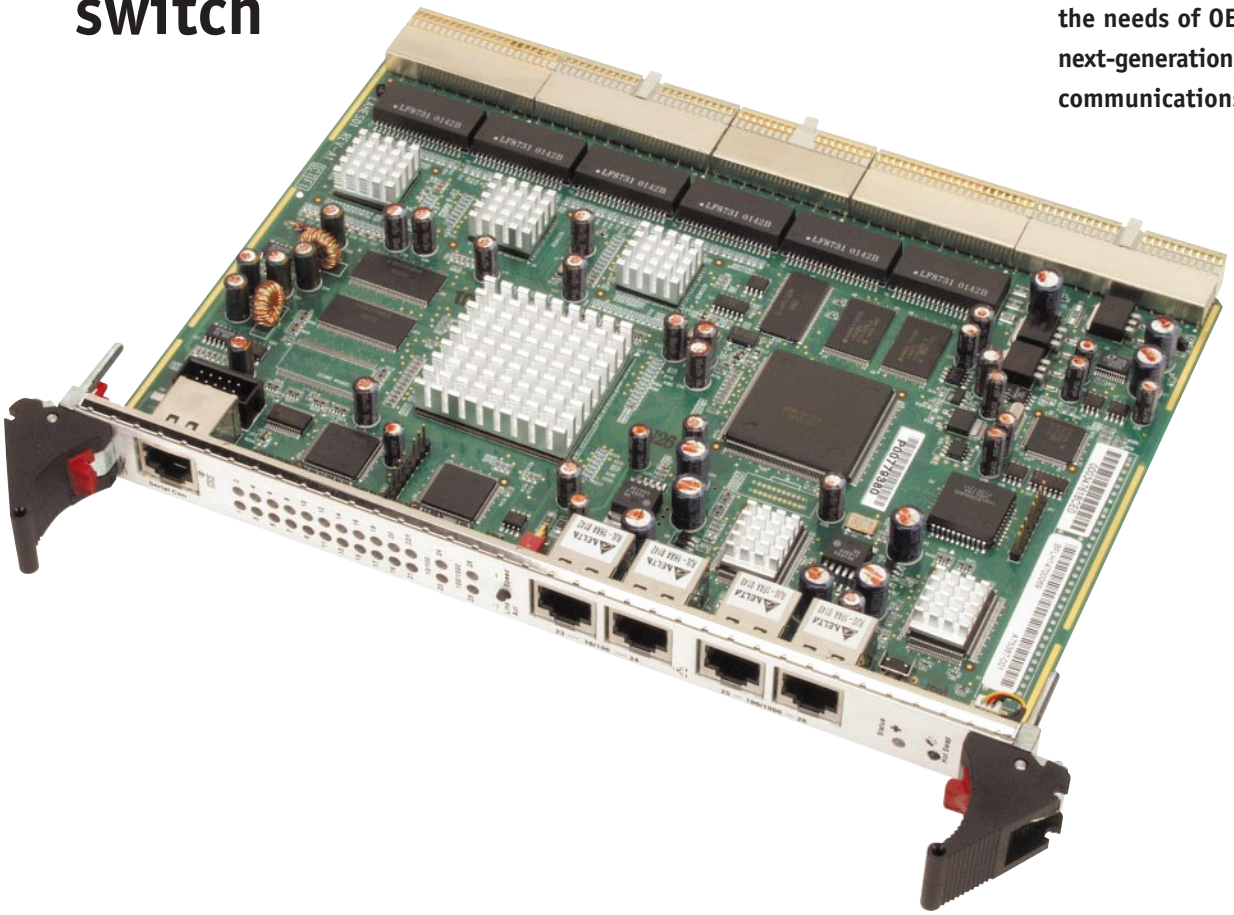
XL-ES24

CompactPCI Fast Ethernet switch



- As part of the XL family of high performance CompactPCI building blocks, the XL-ES24 is at once highly integrated and scalable; and specifically designed to meet the needs of OEMs developing next-generation Internet and voice communications networks.

High-performance, maximum density and ultra-fast connection speeds

Kontron's XL-ES24 CompactPCI Fast Ethernet switch is a 6U, high-performance, managed layer 2/3 switch which provides twenty-two 10/100 Mbps Ethernet ports for PICMG 2.16 compliance in-chassis switching duties. The XL-ES24 also comes complete with two front panel 10/100 RJ-45 ports and two Gigabit Ethernet ports for fast connection speeds and flexibility.

The XL-ES24 offers maximum density and improves reliability while minimizing external wiring. Console access is enabled through an RS-232 serial cable to configure SNMP, Telnet, CLI and RMON management functionalities; and the XL-ES24 features an easy-to-use browser/Web-based management console – routing and switching at full wire speed utilizing non-blocking architecture.

Features include:

- Layer 2/3 switching functions
- PICMG 2.16 compliant for in-chassis switching
- Twenty two, 10/100 Fast Ethernet ports to midplane connectors
- Two 10/100 RJ-45 ports
- Two 100/1000 RJ-45 ports
- Full wire speed on all ports
- VLAN configuration distribution
- Hot-swappable with LED indication
- Status LEDs for Ethernet port link, speed and activity

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XL-ES24 - Technical Specifications

Layer 2 Switching Functions
- 10BASE-T/100BASE-TX/1000BASE-T port functions
- 22 10/100 Fast Ethernet ports to the mid-plane connectors
- 2 10/100 Fast Ethernet ports (RJ-45) on the front panel
- 2 100/1000BASE-T Ethernet ports (R-J45) on the front panel
- Auto-negotiation function for 10M/100M or 100M/1000M speed, duplex (full and half) and flow-control
- Auto polarity and auto MDI/MDI-X
- Back pressure flow control support in half-duplex mode
- IEEE 802.3x-compliant flow control support in full-duplex
- 8.8 Gbps switching fabric capacity
- Store and forward packet forwarding mode
- 8000 entry MAC address forwarding table
- Multicast and broadcast storm control function
- Port mirroring
- Link aggregation
- 802.1D Spanning Tree
- 802.1Q tagged VLAN
- GVRP (GARP VLAN registration protocol) for automatic VLAN configuration distribution
- 802.1p priority (four priority queues)
- IGMP snooping with broadcast control

Layer 3 Switching Functions
- Wire speed IP forwarding rate
- Hardware-based Layer 3 IP switching
- 2000 entry IP address forwarding table
- RIP-I/II routing protocol
- IPv4
- IGMPv2
- PIM dense mode
- DVMRPv3
- IP multi-netting
- IP fragmentation
- Path MTU discovery
- 802.1D frame
- DHCP/BootP relay

Traffic Classification and Prioritization
- Based on 802.1p priority bits
- Based on IP source and destination address
- Four priority queues

Management Capabilities
- RS-232 port for out-of-band management and system diagnosis
- Telnet remote control console
- SNMPv1 agent
- RMON 4 groups—statistics, history, alarm, event
- Manageable via IPMI (Q2,02)
- Web-based
- TFTP
- IP filtering on management interface
- DHCP client
- Password-enabled

Mechanical
- Measures 9.2" x 6.3" (233.35 mm x 160 mm)
- Width: 0.8" (1 slot - 4HP)
- Connector: IEC-1076-4-101 (J1-J5)

Electrical
- Less than 35W power consumption
- 3.3V, 5.0V, 12V supplies

Power Requirements	Typical
Supply Voltage, Vcc	+5VDC +5%, -3%
Supply Current, Vcc=5.0VDC	4A
Supply Voltage, V3.3V	+3.3VDC +5%, -3%
Supply Current, V3.3V=3.3VDC	6A
Supply Voltage, V12.0V	+12VDC ±10%
Supply Current, V12V=12.0V	20mA

Environmental
- Operating Temperature (requires 200 LFM airflow): 0° to 50° C
- Storage Temperature: -25° to +55° C
- Non-Condensing Relative Humidity: less than 95% at 40° C

Standards
- PICMG 2.16 R1.0 CompactPCI Packet Switching

Safety
- CE Certified
- UL/cUL 60950 Safety for Information Technology Equipment
- EN/IEC 60950 Safety for Information Technology Equipment
- CB Report Scheme CB Certificate and Report

Emissions Test Regulations
- FCC Part 15, Subpart B
- EN 55022
- CISPR 22
- Bellcore GR-1089

EN 50081-1 Emissions
- GR-1089-CORE Sections 2 and 3
- EN 55022 Class A Radiated
- EN 55022 Power Line Conducted Emissions
- EN 61000-3-2 Power Line Harmonic Emissions
- EN 61000-3-3 Power line Fluctuation and Flicker

EN 55024 Immunity
- GR-1089-CORE Sections 2 and 3
- EN 61000 4-2 Electro-static Discharge (ESD)
- EN 61000 4-3 Radiated Susceptibility
- EN 61000 4-4 Electrical Fast Transient Burst
- EN 61000 4-5 Power Line Surge
- EN 61000 4-6 Frequency Magnetic Fields
- EN 61000 4-11 Voltage dips, Variations, & Short Interruptions

Warranty
- 2 years

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