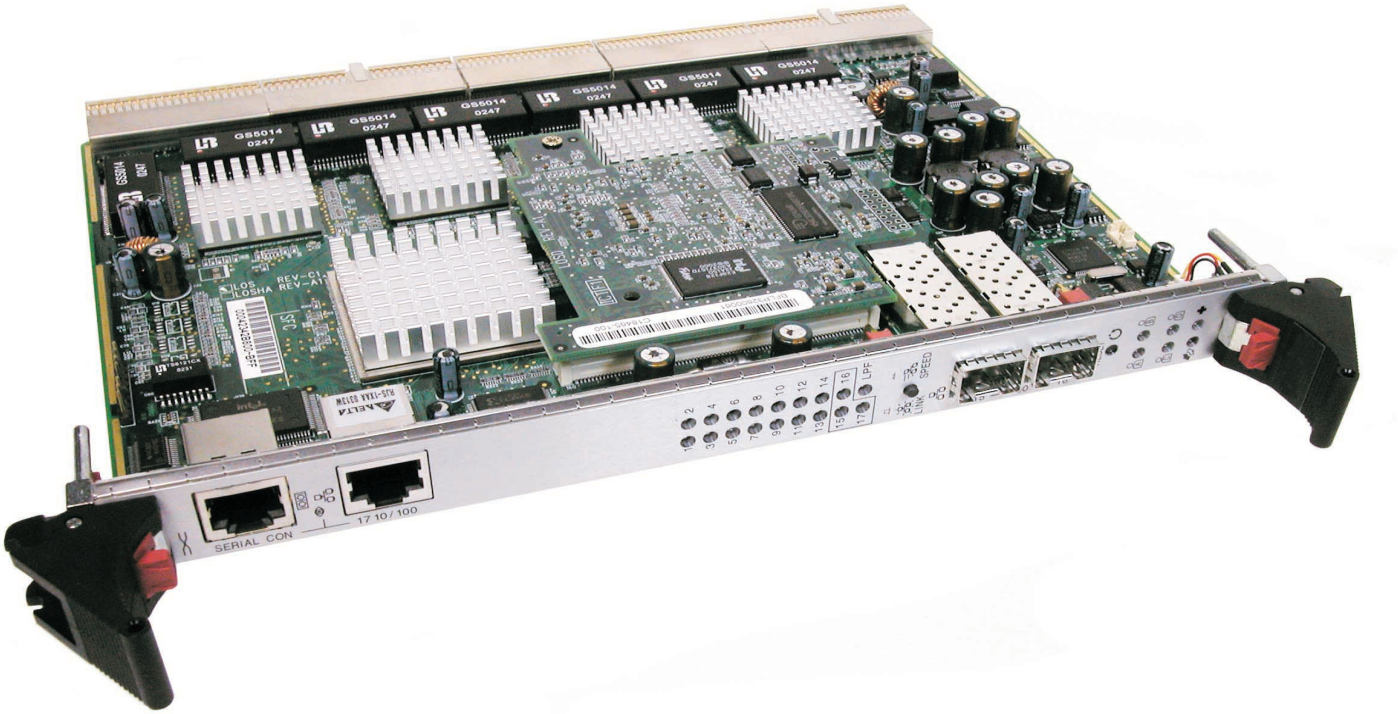
CP6920

16-port Gigabit Ethernet switch (PICMG 2.16 compliant)



The Kontron CP6920 switch is part of Kontron's line of building blocks designed to meet the needs of OEMs developing next-generation datacom and voice communications networks. It delivers 16 Gigabit Ethernet ports in a 6U CompactPCI form factor. This CompactPCI switch is available in either a standard Layer 3 version or an enhanced Layer 3 version with high availability software stack. The high availability software package enables switch-to-switch failover for continuous network availability, while auto-configuration complements the hot swap capability for ease of service.

Optimized for use in popular 14-node slot systems, the switch is designed to meet the slot, power and cooling budgets of 10U chassis, such as Kontron's XL-VHDS as well as smaller chassis like Kontron's XL-LP41 and XL-LP42. Chassis management is achieved through IPMI support, with integrated temperature and voltage sensors for added reliability. The single-chip Intel IXE5416 Media Switch handles an array of functions, including hardware-based wire-speed L2 switching and L3 routing, L2 and L3 Class of Service, and multicast support.

- 14 Gigabit Ethernet ports to the backplane
- Two fiber SFP ports
- Layer 3 routing
- VLAN's support
- IPMI support
- High Availability software (optional)
- Linux-based open platform for applicatio-specific code add-ons

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Specifications
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Ethernet Ports

- 14 10/100/1000 backplane ports
- 2 GbE fiber front-panel SFP ports
- 1 10/100 Mbps front-panel out-of-band management port RJ-45
- 1 100 Mbps backplane out-of band inter-switch fabric link

Hardware

- 64 MB SDRAM
- 32 MB flash
- Ethernet port link, speed, and activity LEDS for each port
- Power and hot swap, health, status LEDs
- RS-232 serial port on the front panel and to backplane
- IPMB port to the backplane
- Reset switch

Layer 2 Switching Features

- 32 Gbps non-blocking switching fabric
- Auto-negotiation for 10/100/1000 Mbps speed
- Jumbo frames support (9K)
- 802.3ad link aggregation
- 802.1D Spanning Tree
- 802.1Q, port-based VLANs
- Broadcast storm control
- IEEE 802.3x flow control (full-duplex)
- Back pressure flow control (half-duplex)
- GVRP, GMRP
- IGMPv2 Snooping

Layer 3 Routing Features

- Hardware-based Layer 3 wire-speed routing
- DVMRP
- Default initialization scripts for L2/L3 operation
- RIPv1/v2
- DHCP/BootP relay
- OSPF

Trafic Classification and Priority Queues

- 802.1p
- Destination or source MAC address
- Destination or source IP address

Additional features included in the HA version of the XL-ESG16 switch:

High Availability Support

- OpenArchitect/HA Suite from ZNYX* Networks
- Switch-to-switch failover
- Automatic reconfiguration after hot swap
- Active/active or active/standby capable
- VRRP

Management Functions

- IPMI support
- RS-232 port for out-of-band management system and diagnosis
- Telnet console
- SNMPv1, SNMPv3
- RMON – statistics, history, alarm and event groups
- Web-based management
- TFTP/FTP
- BootP/DHCP client
- IP filtering on management interface
- Password enabled
- Two copies of OpenArchitect* image in flash
- Port mirroring
- Ability to run customized Linux applications

The XL-ESG switch is designed to be compliant with the following CompactPCI specifications:
PICMG* 2.0 R3.0, PICMG 2.16, PICMG 2.1 R2.0, PICMG 2.9, R1.0, PICMG 2.10, R1.0

Power Requirements Typical

- Supply Voltage, Vcc +5VDC +5%, -3%
- Supply Current, Vcc=5.0VDC 6.15A
- Supply Voltage, V3.3V +3.3VDC +5%, -3%
- Supply Current, V3.3V=3.3VDC 9.13A
- Supply Voltage, V12.0V +12VDC ±5%
- Supply Current, V12V=12.0VDC 660mA
- Less than 69W power consumption

Mechanical

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

Environmental

- Operating temperature (requires 300 LFM airflow): 5° C to 55° C
- Storage temperature: -40° C to +70° C
- Non-condensing relative humidity: less than 95% at 40° C
- Designed for NEBS Level 3
- MTBF > 80K hrs

Emission (EMI) Certifications

- FCC Class A _ CE Mark
- ICES _ VCCI

Safety Certifications

- UL/CUL
- IEC60950/EN60950

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