26 PORT 1/10 GIGABIT MANAGED LAYER 2 & 3 COMPACTPCI® / VME ETHERNET SWITCH

- Fully managed layer 2 & 3 switching and routing
- Air or Conduction Cooled Version
- Versatile, complete rear I/O and uplink support
- DHCP server & boot media support
CP6924
26 PORT 1/10 GIGABIT MANAGED NON-BLOCKING
LAYER 2 & 3 COMPACTPCI® / VME ETHERNET SWITCH

The Kontron CP6924 is a non blocking fully managed L2/L3 10Gb Ethernet Switch and provides rich and versatile feature support by using highest integration of Ethernet switch silicon.

Bandwidth
The CP6924 is designed for future oriented applications requiring outstanding bandwidth and communication features. Up to 2 SFP+ front ports running at 10Gb/s full line speed and 4 Gigabit/s copper ports at the front gives flexibility and an intrinsic value for todays investments. The front copper ports can be switched to the backplane in a PICMG 2.16 arrangement. 20 additional rear ports according PICMG2.16 and VITA31.1 fulfill the requirement of CompactPCI® and VME systems with highest computing performance.

Reliability
The robust design features including hardware hot swap as well as complete SNMP management support sets the foundation for robust and reliable systems. Built-In test capabilities enable effective switch maintenance.

Management
The CP6924 can be monitored via SNMP, which also allows access to the devices connected to the backplane. A comprehensive command line interface provides easy management and remote configuration by either serial or network interface. Support for features like IP forwarding & multicast, routing & switching, Quality of Service, VLANs it is an ideal Switch for CompactPCI® and VME systems according PICMG2.16 and VITA311.

Memory
DDR2
1024 MB
## TECHNICAL INFORMATION

### COMPLIANCE

- CompactPCI® Core Specification PICMG 2.0 Rev. 3.0
- CompactPCI® HotSwap Specification PICMG 2.1 R 2.0
- CompactPCI® System Management PICMG 2.09 R 1.0
- CompactPCI® Packet Switching Backplane PICMG 2.16 R. 1.0
- VNE64x Packet Switching Backplane VITA 31.1
- Intelligent Platform Management Interface Specification V1.5
- ANSI/Vita 47-2005
- IEC 60668-2-6, IEC 60668-2-27, IEC 60668-2-29
- EN 60950, UL60950, LVD 73/23/ECC, Denan Law compliant

### INTERFACES

- **CP6924-RA-OC / CP6924-1-RA-OC:**
  - 2x 10GBase-X uplinks for SFP+ optical transceivers

- **CP6924-SA-OC-V / CP6924-1-SA-OC-V:**
  - 2x 1GbBase-X uplinks (SFP connector cages) for SFP optical transceivers

- **Common on CP6924-RA-OC / CP6924-1-RA-OC and CP6924-SA-OC-V / CP6924-1-SA-OC-V:**
  - 4x front Panel RJ45 connectors with 10/100/1000BASE-T support, switchable to rear IO according PICMG2.16 / VITA31.1
  - 20x 10/100/1000 Base-T link ports on backplane or RTM according PICMG2.16 / VITA31.1
  - 1x 10/100Base-T for Management (RJ45 connector)
  - 1x RS232 for Management (RJ45 connector and backplane)
  - Reset Switch
  - Status LEDs

- **CP6924-RC / CP6924-1-RC:**
  - 24x 10/100/1000 Base-T link ports on backplane or RTM according PICMG2.16 / VITA31.1
  - 1x 10/100Base-T for Management (RJ45 connector)
  - 1x RS232 for Management on rear IO
  - Reset Switch
  - Status LEDs

### CONTROLLER AND SWITCH

- Broadcom BCM56334 Ethernet Switch
- PowerPC APM PPC405Ex with 512 MB RAM, and CP6924-1 with 1 GB RAM
- NXP uController for IPMI

### MANAGEMENT

- Management via SNMP, Command Line (Telnet, SSH)
  - In-band
  - Out of band via Ethernet or RS232
- IPMI version 1.5, Power On Self Test
- DHCP server, relay and Boot media support
- Reliable software, field upgradable
- Dual boot images with roll-back capabilities
- Advanced management monitoring features
- Ethernet/Bridging protocols include
  - Link aggregation (802.3ad)
  - VLANs (802.1q)
  - QoS (IEEE 802.1p)
  - Spanning tree (802.1D, 802.1w)
  - Flow control (802.3x)
  - GARP/GVRP, GMRP
  - ARP, ICMP, OSPF, RIP, VRRP, DVMRP
- Enhanced Features are
  - Egress ACLs, IP ACL support
  - Auto VoIP
  - IGMP snooping & proxy support
  - Startup configuration configurable
  - Watchdog
  - Cable test

### GENERAL

#### POWER CONSUMPTION

- Max. 60 W
- 233.5 mm x 160 mm / 6U, approx. 800g
- 139.044h @ 30° C, based on MIL-HDBK-217 FN2, Ground Benign, Controlled
- 208.008 h @ 30°C, based on Bellcore Issue 6, Ground Benign, Controlled

#### DIMENSIONS, WEIGHT

- 233.5 mm x 160 mm / 6U, approx. 800g
- 139.044h @ 30° C, based on MIL-HDBK-217 FN2, Ground Benign, Controlled
- 208.008 h @ 30°C, based on Bellcore Issue 6, Ground Benign, Controlled

#### MTBF

- 233.5 mm x 160 mm / 6U, approx. 800g
- 139.044h @ 30° C, based on MIL-HDBK-217 FN2, Ground Benign, Controlled
- 208.008 h @ 30°C, based on Bellcore Issue 6, Ground Benign, Controlled

#### ENVIRONMENT

- CP6924-RA-OC / VITA 47, class EAC6, V2, –40 °C to +85 °C, forced air cooling required
- CP6924-RC / VITA 47, class ECC4, V3, –40 °C to +85 °C, conduction cooling required
- CP6924-SA-OC / VITA 31, high shock and vibration levels can be achieved when installed in a ruggedized system
- Humidity 93 % RH at 40 °C, non-condensing (acc. to IEC 60668-2-178)
### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>ARTICLE</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>CP6924-1-SA-OC-V</td>
<td>6U, single slot Gigabit Ethernet Switch with complete L2 management, 20x rear 1GbE, 4x front 1GbE switchable to rear I/O and 2x 1GbE SFP Uplinks, Forced Air Cooled, 0 °C to +60 °C</td>
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<tr>
<td>CP6924-1-RA-OC</td>
<td>6U, single slot Gigabit Ethernet Switch with complete L2/L3 management, 20x rear 1GbE, 4x front 1GbE switchable to rear I/O and 2x 10GbE SFP+ Uplinks, Forced Air Cooled, -40 °C to +85 °C</td>
</tr>
<tr>
<td>CP6924-1-RC-C</td>
<td>6U, single slot Gigabit Ethernet Switch with complete L2/L3 management, 24x rear I/O 1GbE, Rugged Conduction Cooled, -40 °C to +85 °C, Coating</td>
</tr>
<tr>
<td>CP-RIO6-923-12</td>
<td>6U, 4HP, rear transition module for PICMG2.16 switch, 12 ports (ports 12 to 23), RJ45, RS232 on RJ45</td>
</tr>
<tr>
<td>CP-RIO6-923-24</td>
<td>6U, 8HP, rear transition module for PICMG2.16 switch, 24 ports (ports F, 1 to 23), RJ45, RS232 on RJ45</td>
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