

RES2404-PTP-POE



28 Port 1G/10G High-End Rugged Ethernet Switch with POE

- ▶ Powerful 19" 1U fully managed non blocking L2/L3 switch
- ▶ Up to 24x 1G RJ45 ports plus 4x 10G SFP+ ports
- ▶ Wide temperature range, high shock and vibration robustness
- ▶ For demanding applications precision time protocol and power over ethernet

POSSIBILITIES START HERE



RES2404-PTP

High End Performance in 19 Inch Rack Format

The Rugged Ethernet Switch RES extends Kontron's existing Ethernet switch portfolio (ATCA, AMC, CompactPCI, VPX, etc.) by the requirements of standalone switches for harsh industrial and governmental applications. Using highest integration of Ethernet switch silicon the RES2404-PTP is specifically designed for working reliably under harsh environmental conditions.

The RES is a cost effective manageable Ethernet switch solution offering more capabilities than just Gigabit Ethernet. It is available in 2 versions:

- ▶ **RES2404-PTP:** 24x Gigabit Ethernet copper interfaces, supporting 10/100/1000BASE-T, 4x 1/10 Gigabit Ethernet SFP+ ports
- ▶ **RES2404-PTP-POE:** features of RES2404-PTP, additional 24 copper ports with Power over Ethernet

KEY FEATURES

- ▶ Fully managed Layer 2 / 3 non blocking Ethernet Switch, IPv6 support
- ▶ 24 Ports 10/100/1000Base-T RJ45
- ▶ 4x 10GBase-X SFP+ for direct attach copper or fiber
- ▶ Precision Time Protocol support for realtime applications
- ▶ Power over Ethernet with up to 150 W in total, 30 W max singleport

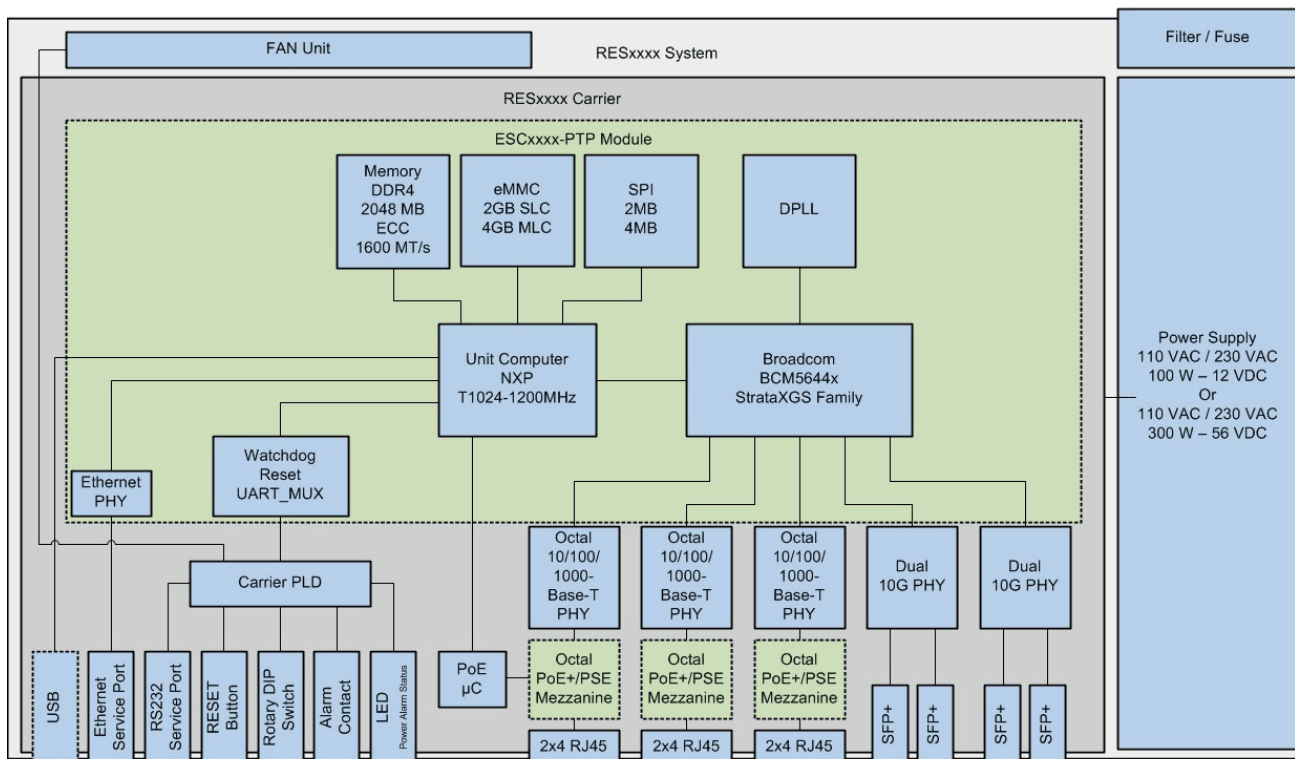
- ▶ DIP switches for configuration management
- ▶ SNMP, command line and web management interface
- ▶ 1U, 19 inch housing
- ▶ Power supply for 110/230 VAC
- ▶ Wide temperature range: -20 °C to +50 °C
- ▶ Designed to meet industrial, naval and military norms

Reliability

The robust mechanical design features including wide temperature range, electronics and power supplies sets the foundation for systems which require high availability and low total cost of ownership. Built-In test capabilities enable effective switch maintenance.

Management

The RES2400/2404 can be monitored via remote SNMP. A comprehensive command line and web interface provides easy management and remote configuration by either serial or network interface. Support for comprehensive Ethernet switching/forwarding features, VLANs, Quality of Service and IPv4/IPv6 routing and Multicast, make it an ideal switch for diverse applications requesting high reliability and availability.



► TECHNICAL INFORMATION

<p>INTERFACES</p>	<p>10 GIGABIT ETHERNET</p> <p>1 GIGABIT ETHERNET</p>	<p>4x 10GBase-X SFP+ transceiver cages, configurable for 1GBase-X operation using SFP optical transceivers or direct attach copper</p> <p>24x RJ45 ports providing 10/100/1000Base-T modes of operation Power and reset Switch Serial and Ethernet management ports Status LEDs</p>
<p>SWITCH CONTROLLER</p>		<p>Broadcom 10G/1G Ethernet Switch with up to 170Gb/s throughput PowerPC switch controller</p>
<p>MANAGEMENT</p>		<p>2x DIP switches for user configuration Layer 2/3 Management via SNMP Command Line (Telnet, SSH), web management console In-band - Out of band via Ethernet or RS232</p> <p>Power On Self Test, Dual boot images, Field upgradable software</p> <p>DHCP server, relay and Boot media support SNTP Client, diagnostic, multiple configuration support Alarm contacts, freely programmable</p> <p>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</p> <p>IPv4/IPv6 routing features: - ARP, ICMP, OSPF, RIP, VRRP, DVMRP</p> <p>Enhanced Features are: - IEEE1588v2 support (Precision Time Protocol) • MAC/Phy timestamping • single step PTP - Egress ACLs, IP ACL support, DiffServ - Auto VoIP - IGMP snooping & proxy support - Startup configuration configurable - Watchdog - Cable test</p>
<p>OPTIONS</p>		<p>PoE with 150 W max; 30 W per port max.</p>
<p>GENERAL</p>	<p>POWER</p> <p>DIMENSIONS</p> <p>WEIGHT</p> <p>MTBF</p> <p>TEMPERATURE RANGE</p> <p>HUMIDITY</p> <p>SHOCK VIBRATION</p>	<p>110/230 V, 45 W typ., RES2404-PTP-PoE max 200 W (typ, if max PoE power provided)</p> <p>19 inch, 1U Chassis 445 x 45 x 205 mm (WxHxD)</p> <p>2.5 kg</p> <p>RES2404-AC-PTP: 86386h MIL 30 °C; RES2404-AC-PTP-POE: 99249h MIL 30 °C</p> <p>-20 °C to +50 °C (non PoE); -20 °C to +55 °C (PoE version)</p> <p>93 % RH at 40 °C, non condensing (acc. to IEC 60068-2-78)</p> <p>15 G, 11 ms 10 to 300 Hz, 1 G</p>
<p>COMPLIANCY</p>	<p>SHOCK / VIBRATION / ENVIRONMENT</p> <p>EMC</p> <p>SAFETY</p>	<p>IEC 60068-2-1, IEC 60068-2-2 IEC 60068-2-6, IEC 60068-2-27, IEC 60068-2-29, IEC 60068-2-78</p> <p>EN 55022, EN 55024 EN 61000-4-2/-3/-4/-5/-6 /-11</p> <p>EN 60950-1, UL60950-1</p>

▶ ORDERING INFORMATION

ARTICLE	DESCRIPTION
RES2404-AC-PTP	28 port Rugged Ethernet Switch - Fully managed L2/L3 19 inch, 1U Rack Switch - 4x 10G SFP+, 24x 1G RJ45, PTP - 110/230 V AC, 45 W typ. - -20 °C to 50 °C operating temperature
RES2404-AC-PTP-POE	28 port Rugged Ethernet Switch - Fully managed L2/L3 19 inch, 1U Rack Switch - 4x 10G SFP+, 24x 1G RJ45 - 110/230 V AC, 45 W typ; 200 W max.if 150 W PoE provided - -20 °C to 55 °C operating temperature
OPTIONS	versions with reduced number of uplink ports and PoE ports available on project request

Due to our technological know-how and existing building blocks, we also realize your custom specific switch design regarding your special requirements.

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