

CERES-2402-PTP

Compact Embedded Rugged Ethernet Switch



26 Ports 1G/10G Ultra Rugged Ethernet Switch

- ▶ Fully managed non-blocking L2/L3 switch in a compact design
- ▶ Up to 24x 1G ports plus 2x 10G on 38999 type connectors
- ▶ Wide temperature range, high shock and vibration robustness
- ▶ IP65 and fanless operation
- ▶ Designed for In-Vehicle and C4I applications

POSSIBILITIES START HERE



CERES-2402-PTP

High-End Performance in a Compact Design

Kontron CERES-2402-PTP is a Compact Embedded Rugged Ethernet Switch specifically designed to build embedded high reliability network in harsh environments for defense applications. Providing a rich and versatile feature set of switching functions, Kontron CERES-2402-PTP is a deployable 26-port (24x 1GbE, 2x 10GbE) Layer 2/Layer 3 Ethernet fully managed switch packaged in a compact form factor.

Based on a switch fabric with an integrated QorIQ® management processor, Kontron CERES-2402-PTP can be monitored via SNMP over serial line or Ethernet Web based management and a comprehensive command line interface enable layer 2/3 management including full IPv6 support. The switch provides up to 44 Gbps of line-rate multi-layer forwarding, along with advanced network security, data, and video and voice services (on-request), all supported by embedded Fastpath Software. Others switching features like IP forwarding & Multicast, Routing & Switching, Quality of Service, VLANs etc. enable complex network routing. In addition,

the Precision Time Protocol IEEE1588v2 features enable precise timing synchronization and packet time stamping for time sensitive applications.

Its rugged and fanless design makes the whole system highly resistant to shock and vibrations while ensuring performance in extended temperature environments and long term availability. This allows the Kontron CERES-2402-PTP to meet the needs of a wide range of challenging environments such as in military / aerospace embedded market. The high speed network capability via the 10GbE links makes it ideal for applications such as situational awareness, imaging, and sensor data. Its optimized size, weight and power (SWaP) allow it to be used in areas where space and available power are restricted. Therefore, the Kontron CERES-2402-PTP is ideal for installation at the tactical network edge on-board unmanned air/maritime/ground vehicles, helicopters, fixed-wing aircraft, tactical ground vehicles, missile defense, and other SWaP-constrained platforms deploying Ethernet backbones.

▶ KEY FEATURES

- ▶ Fully managed Layer 2 / 3 non-blocking Ethernet Switch, IPv6 support
- ▶ 24 Ports 10/100/1000 Base-T
- ▶ 2 Ports 10GB Base-SR
- ▶ Precision Time Protocol support for real-time application
- ▶ SNMP, command line and Web management interface
- ▶ Compact high density rugged housing
- ▶ Power supply for 28 VDC according to MIL-STD-1275D
- ▶ Temperature range: -40 °C to +55 °C (up to +71 °C on request)
- ▶ MIL-STD-461 F and MIL-STD-810G

▶ TECHNICAL INFORMATION

INTERFACES	10 GIGABIT ETHERNET 1 GIGABIT ETHERNET	<ul style="list-style-type: none"> - 2x 10G Base-SR configurable in 1000 Base-SX on optical connector MIL-STD-38999 - 24x ports providing 10/100/1000 Base-T modes of operation - Serial and Ethernet management ports - Status LEDs
SWITCH CONTROLLER		Broadcom 10G/1G Ethernet Switch with up to 170Gb/s throughput PowerPC switch controller Embedded Fastpath Software version 8.3.1
MANAGEMENT		Layer 2/3 Management via SNMP Command Line (Telnet, SSH), web management console Serial RS232 service port, In-Band via any Gigabit Ethernet Port, optional out-of-band via Gigabit Ethernet service port Power On Self Test, Dual boot images, Field upgradable software DHCP server, relay and Boot media support SNTP Client, diagnostic, multiple configuration support Alarm contacts, freely programmable Ethernet/Bridging protocols include: <ul style="list-style-type: none"> - Link aggregation (802.3ad) - VLANs (802.1Q) - QoS (IEEE 802.1p) - Spanning tree (802.1D, 802.1w) - Flow control (802.3x) - GARP/GVRP, GMRP

▶ TECHNICAL INFORMATION

MANAGEMENT		<p>IPv4/IPv6 routing features:</p> <ul style="list-style-type: none"> - ARP, ICMP, OSPF, RIP, VRRP, DVMRP <p>Enhanced Features are:</p> <ul style="list-style-type: none"> - IEEE1588v2 support (Precision Time Protocol) <ul style="list-style-type: none"> - MAC/Phy time stamping - single step PTP - Egress ACLs, IP ACL support, DiffServ - Auto VoIP - IGMP snooping & proxy support - Startup configuration configurable - Watchdog - Cable test
GENERAL	<p>POWER DIMENSIONS WEIGHT TEMPERATURE RANGE SHOCK VIBRATION FIXATION OTHER STANDARDS COMPLIANCE</p>	<p>Integrated 28 VDC input power supply 351 x 144 x 59 mm 2,83 kg -40 °C to +55 °C (up to +71 °C on request) According to STANAG 4370 - AECTP 400 Wall Mounting MIL-STD-810G, MIL-STD-461F</p>

▶ ORDERING INFORMATION

ARTICLE	PART NO.	DESCRIPTION
CERES-2402-PTP	1068-3235	<p>26 port Compact Embedded Rugged Ethernet Switch</p> <ul style="list-style-type: none"> - Fully managed L2/L3, wall mounting - 2x 10G BASE-SR, 24x 1G BASE-T, PTP - 28 V DC, 50 W Max. - -40 °C to 55 °C operating temperature

▶ YOUR CONTACT

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