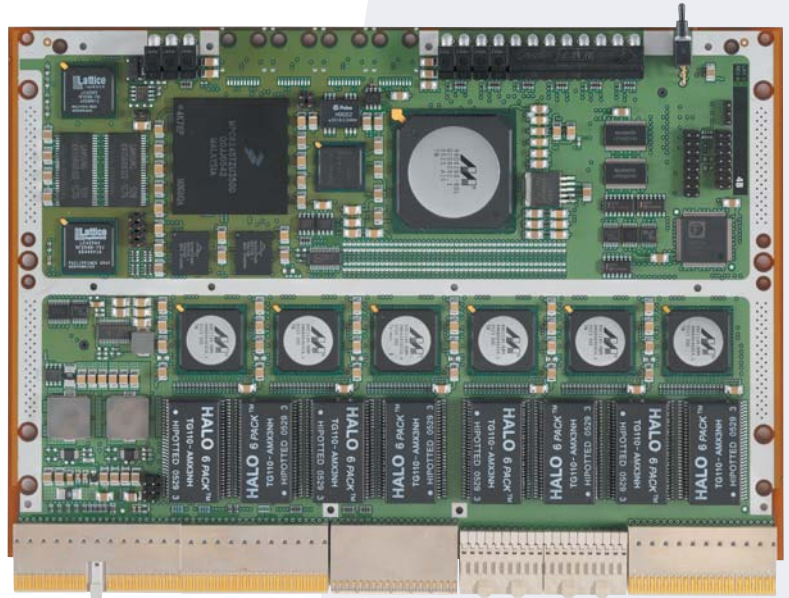


CPX24

24-Port Gigabit Ethernet Switch

- 24-port fully managed Gigabit Ethernet switch
- 10 Gigabit uplink ports for expansion
- Layer 2/3 switching with advanced support for VLANs, QoS and IPv6
- PICMG2.16 compliant
- 88 Gbits/sec non-blocking switch fabric with full wirespeed performance
- Configuration through Web interface
- Expands to 48-port non-blocking solution
- Unmanaged version also available
- Air- and conduction-cooled



CPX24 is a fully managed (Layer 2/3) Gigabit Ethernet switch designed to meet the most demanding requirements for network switching in tactical applications. This Gigabit switch is available in both air- and conduction-cooled formats and features a non-blocking shared memory architecture. This provides 88 Gbits/sec* core offering full wire speed performance with minimal latency on all ports simultaneously.

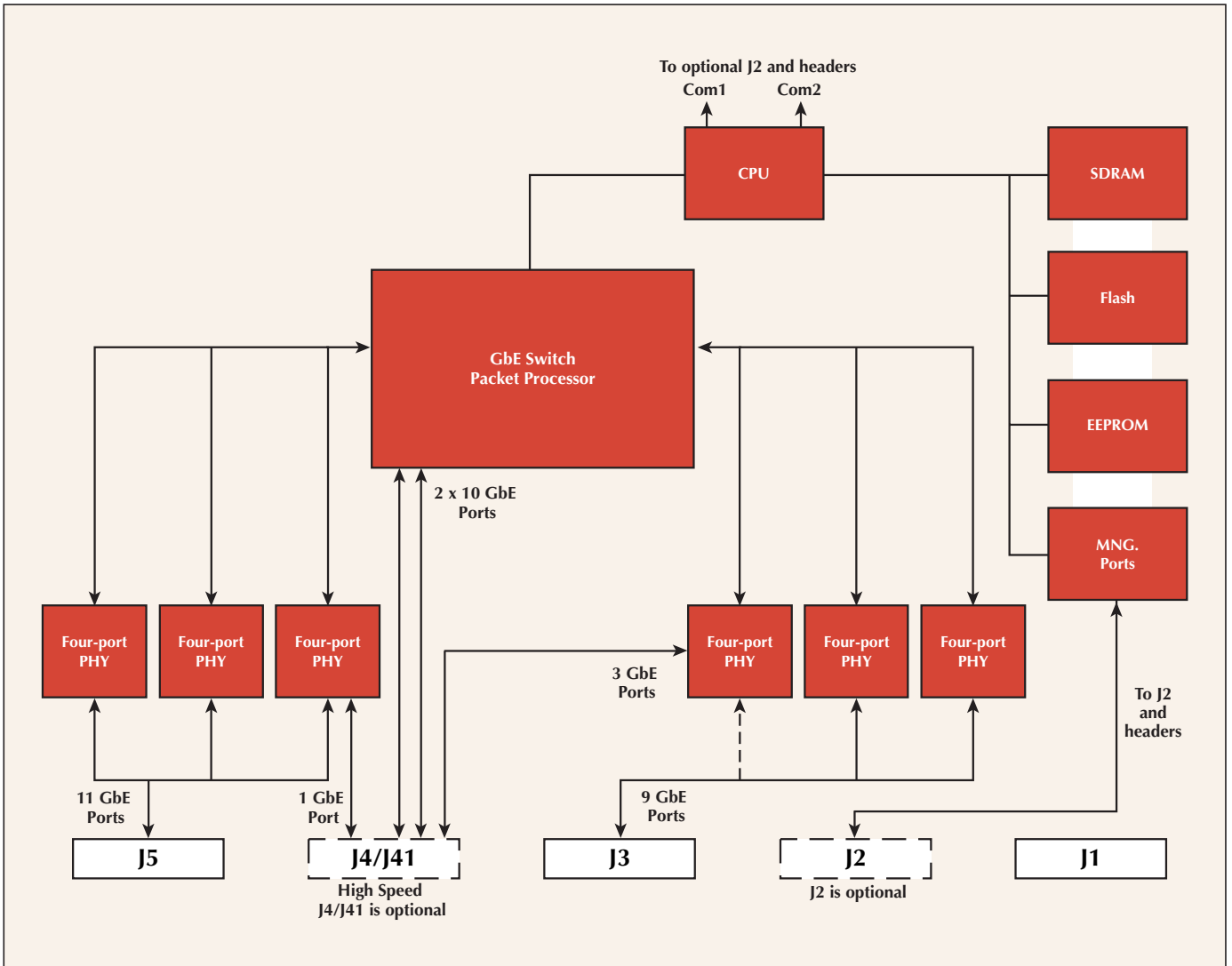
CPX24 has comprehensive management capabilities that include VLANs, Link Aggregation, Spanning Tree, IPv4, IPv6, Traffic Policing, Quality of Service (QoS), Guaranteed Bandwidth and SNMP. The CPX24 can be expanded to a 48-port non-blocking solution by connecting two CPX24s together via the integral 10 Gigabit uplink ports.

CPX24 provides optional optical expansion through a mix of on-board optics and separate Optical Expansion Board (OXB20). All twenty-four ports can be converted to optical outputs to give twenty-four ports of Gigabit, either 1000 Base-SX or 1000 Base-LX, and two ports of 10 Gigabit, either 10G Base-SR or 10G Base-LR. Onboard built-in test (BIT) ensures the CPX24 can be easily linked with other Radstone boards to provide integrated system level health monitoring and diagnostics.

* 48Gbits/sec from 24x Gbit ports + 10Gbits/sec in each direction from 2x 10Gbit ports.



FEATURES	BENEFITS
24x 10/100/1000 Mbps/sec ports routed to rear cPCI connectors	Rear I/O connection at Gigabit speeds
2x 10 Gbit Ethernet ports optionally available	Expandable to 48-port solution. Expandable to dual 10G optical expansion board
20x 10/100/100 Mbps/sec ports compliant to PICMG2.16	Fits in standard PICMG2.16 cPCI backplane
PowerPC Management Processor	Enables CPX24 to be set up for specific customer configurations
Up to 88 Gbits/sec non-blocking switch with full wire speed performance	Network performance not 'bottlenecked' by the switch
Store and forward switching architecture	Lowest possible latency
8000 MAC address table	Automatically learns network connections
User controllable built-in test (BIT)	Ease of integration with other Radstone boards
6U cPCI form factor	Maximum number of ports to rear connectors
Bandwidth Provisioning	Guaranteed bandwidth for real-time services



Specification

Ethernet	IEEE 10/ 100 /1000 Base-T and two 10 Gbit XAUI	
Compliance	IEEE 802.3-2002	
Architecture	Shared memory, store-and-forward	
Auto Learning	8000 MAC addresses	
Ports	Twenty-four 1000 Base-T ports and two 10 Gbit XAUI ports. Additional 10/100 management port	
Fiber Ports (optional)	Four onboard Gigabit ports (LC type connector) 1000 Base-SX/LX Twenty Gigabit ports via OXB20 (LC type connector) 1000 Base-SX/LX Two 10 Gigabit ports (SC type connector) 10G Base-SR or 10G Base-LR	
Onboard CPU	Freescale PowerPC™ processor (300 MHz) 128 MBytes SDRAM 32 MBytes Flash	
Management Features	IEEE 802.3ac — VLAN tagging IEEE 802.3ad — Link Aggregation IEEE 802.1S /W/D Spanning Tree IPv4 and IPv6 traffic policing	Access control lists SNMP V1, V2c and V3 Jumbo Ethernet frames Packet prioritization Diffserve, DSCP or VLAN tag
Dimensions	160mm x 233mm	
Power	5V DC less than 60W (20W + 1.6 IG channel)	
Environment	Ruggedization Levels 1-5	

Standard Ordering Information Continued on next page.

Standard Ordering Information

Sales Code	Description
PICMG2.16/VITA31 Compliant Switches	
CPX24-x000y	ruggedization levels 1-5, No 10G expansion, 20 port copper, J2 not fitted
CPX24-x010y	ruggedization levels 1-3, No 10G expansion, 20 port copper + 4 on-board SX optics ² , J2 not fitted
Gigabit Ethernet on copper	
CPX24-x131y	ruggedization levels 1-5, Dual 10G copper expansion ^{1,3} , 24 port rear I/O copper ³ , J2 fitted
CPX24-x001y	ruggedization levels 1-5, No 10G expansion, 20 port rear I/O 1G copper, J2 fitted
Gigabit Ethernet on fiber	
CPX24-x141y	ruggedization levels 1-3, Dual 10G copper expansion ^{1,3} , 24 SX optics ^{2,4} , 24, J2 fitted
CPX24-x161y	ruggedization levels 4-5, Dual 10G copper expansion ^{1,3} , 20 off-board SX optics ⁴ , J2 fitted
CPX24-x041y	ruggedization levels 1-3, No 10G expansion, 24 SX optics ^{2,4} , J2 fitted
CPX24-x061y	ruggedization levels 4-5, No 10G expansion, 20 off-board SX optics ⁴ , J2 fitted
Gigabit Ethernet on copper & fiber	
CPX24-x111y	ruggedization levels 1-3, Dual 10G copper expansion ^{1,3} , 20 copper + 4 on-board SX optics ² , J2 fitted
CPX24-x011y	ruggedization levels 1-3, No 10G expansion, 20 copper + 4 on-board SX optics ² , J2 fitted

Where x=build level; y=software option

Software option	
y=0	Unmanaged switch
y=1	Managed switch

Notes

- 1) Allows 2 or more CPX24 boards to be used in a stack configuration
- 2) On-board SX optics are front I/O only
- 3) Requires compatible backplane with high-speed connector
- 4) Includes CPX24OXB optics board to be fitted in adjacent slot

Software support & maintenance	
CPX24SW-LVL71M	Annual support & maintenance for LVL7 management software
CPX24SW-BIT1M	Annual support & maintenance for built in test



USA
Telephone: +1 (800) 368-2738
E-mail: sales@radstone.com

EUROPE
Telephone: +44 (0) 1327 359444
E-mail: sales@radstone.co.uk

ASIA
Telephone: +61 (0)7 5538 4442
E-mail: salesasia@radstone.com

Visit www.radstone.com for a full list of regional offices and contact details

