Product Name: GraphiteVPX/GbE Managed Carrier Ethernet Switch

Part Numbers: VPG200 Series



GraphiteVPX/GbE Managed Ethernet Switch

Connect Tech's GraphiteVPX/GbE Managed Ethernet Switch provides Carrier Grade Ethernet switching capabilities in a small 3U embedded form factor.

Excellent for demanding applications with rugged environments and extreme temperatures, the GraphiteVPX/GbE Managed Ethernet Switch is also a highly reliable way to communicate with 10/100/1000 Base-T devices in an embedded system. Powered by the latest generation Carrier Ethernet Switch engine, the Vitesse 7429 features an embedded MIPS 32-bit CPU, 1Gb external memory and DMA-based frame extraction and insertion support timing over packet, Ethernet OAM, and performance monitoring.

Available in models with VPX backplane and/or 4 port RJ45 on the front panel connectors, making this embedded Ethernet switch ideal for any type of environment.



Hardware Specifications

Ethernet Switch Engine	Vitesse VSC7429 Carrier Grade Ethernet Switch Chipset (VPG201)	
	A powerful embedded RISC 32-bit CPU, with DDR2 external memory and DMA-based frame extraction and insertion supports timing over packet, Ethernet OAM, and performance monitoring.	
Memories	1Gb SDRAM 128Mb Flash	
Ports	20 x GbE (10/100/1000 Ethernet) Ports -16 to VPX backplane - 4 to front panel IO	
Connectors	VPX backplane and/or 4 port RJ45 on the front panel	
Layer 2 Switching	 802.1Q VLAN switch with 8K MACs and 4K VLANs Push/pop up to two VLAN tags IPv4/IPv6 multicast Policing with storm control and MC/BC protection RSTP and MSTP support Hardware and software-based learning Link aggregation (IEEE 802.3ad) Independent and shared VLAN learning (IVL, SVL) Jumbo frame support 	
Management Access	Web Interface RS-232 Serial Interface (CLI) Software API	
Indicator LEDs	2 LEDs per port (available on RJ-45 and through external connector) Power Rail LEDs Status LEDs	
Input Voltage	5V only (VS3) and 3.3V Aux required	
Power Consumption	23W Max	
Dimensions	1" Pitch VITA 65 Compliant 3U VPX form factor. L x W = 160mm x 100mm.	
Operating Temp	-40°C to +85°C (chipset rated to +125°C junction temperature)	

FEATURES

hipset (VPG201) 2 external memory and rts timing over packet,	✓ Conduction cooled or Air cooled Heatsink option	
	 ✓ 20 x GbE (10/100/1000 Ethernet)Ports -16 to VPX backplane, 4 to front panel IO 	
nel	✓ Web GUI or CLI Management	
	✓ Carrier Grade Ethernet Switching	
	✓ Available with RJ-45 Front panel for easy interfacing	
	✓ Supports 3U OpenVPX profile: MOD3-SWH-16T-16.4.7-1	
xternal connector)	✓ Extended Temperature Range -40°C to +85°C	
W = 160mm x 100mm.	-	



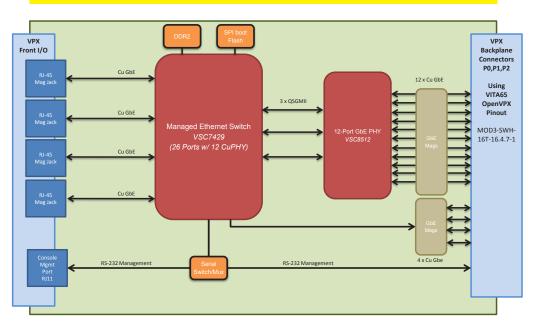
GraphiteVPX/GbE Managed Ethernet Switch

Software S	Specifications	Software S	Specifications Continued
Port control QoS	Port Speed/Duplex Mode/Flow Ctrl Port Frame Size (Jumbo frames) Port State (administrative status) Port Status (link monitoring) Port Statistics (MIB counters) Port VeriPHY (cable diagnostics) Traffic Classes (8 active priorities)	Synchronizatio Power Saving	Cold start Cool start ActiPHY PerfectReach EEE Power Management LED Power Management
	Port Default Priority QoS User Priority Input priority mapping QoS Control List (QCL Mode) Storm Control for UC, MC and BC Port policers Global/VCAP (ACL) policers Port egress shaper Queue egress shapers TRTCM (two rate three color market) Scheduler mode (Strict or Weighted Fair Queuing)	Management	Thermal Protection DHCP Client HTTP Server CLI - Console Port Industrial Standard CLI Industrial Standard Configuration Management access filtering HTTPS System Syslog Software Upload via web SNMP v1 / v2c / v3 Agent
L2 Switching Auto MAC addr. Learning/Ageing MAC Addresses – Static Virtual LAN Private VLAN – Static Port Isolation – Static	MAC Addresses – Static Virtual LAN Private VLAN – Static		SNMP multiple trap destinations IEEE 802.1AB-2005 Link Layer Discovery – LLDP Configuration Download/Upload - XML Configuration Download/Upload - Industrial Standard Loop detection restore to default Symbolic Register Access
	Rapid Spanning tree – RSTP, STP Loop Guard Link Aggregation – Static Link Aggregation – LACP IGMPv2 snooping Port Mirroring (Ingress and Egress Mirroring)	MIBs	RFC 1213 MIB II RFC 1215 TRAPS MIB RFC 4188 Bridge MIB RFC 3635 Ethernet-like MIB RFC 3411 SNMP Management Frameworks IEEE 802.1 MSTP MIB
L3 Switching Security	IPv4 Unicast: RIPv1/RIPv2 Port-Based 802.1X Multiple 802.1X Web & CLI Authentication ACLs for filtering/policing/port copy		IEEE 802.1AB LLDP-MIB (LLDP MIB included in a clause of the STI RFC 3621 LLDP-MED Power (POE) (No specific MIB for POE+ exist Private MIB framework

RoHS

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3U VPX Extended RTM is available for Engineering integration. (Part # RTG002)



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