VME215

12 / 24 Port 6U VME Managed Layer 2/3 Switch

VME215

Key Features

- VME compliant (only takes power from the VME bus)
- Managed Layer two and layer 3 switch
- 12 ports of 10/100/1000 via RJ-45 on the base board front panel
- IEEE 802.3-2005
- IEEE 802.3ad (Link aggregation)
- IEEE 802.1p (Prioritization)
- IEEE 802.1Q (VLAN tagging)
- IEEE 802.1Q (Spanning Tree Protocol)
- IEEE 802.1Q-2005 Multiple Spanning Tree Protocol (MSTP)

Benefits

- Supports Industrial Temperature
- Electrical, mechanical, software, and system-level expertise in house
- AS9100 and ISO9001 certified company
- Full system supply from industry leader

vadatech
THE POWER OF VISION

VME215

The VME215 is a 6U single slot VME module that has 12 ports of 10/100/1000 GbE via RJ-45 on its baseboard front panel.

The switch is managed via VadaTech Switch Management with SSH and SNMP for switch remote management and supports a rich set of features such as Link aggregation, Prioritization, VLAN, STP, MSTP, etc.

The module supports standard +5V power supply from backplane.

Daisy chain the Daisy chain the IACKI IN/OUT pins and daisy chain the bus grant in/out 0-3.
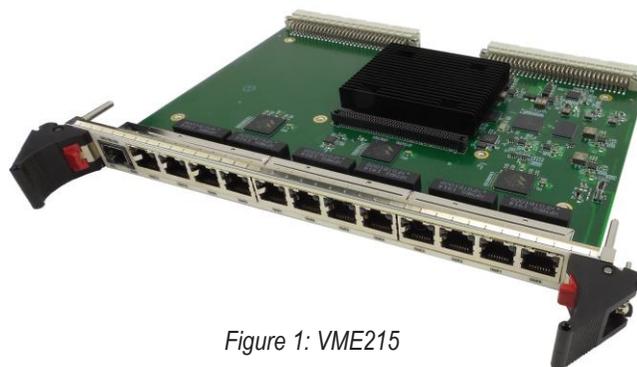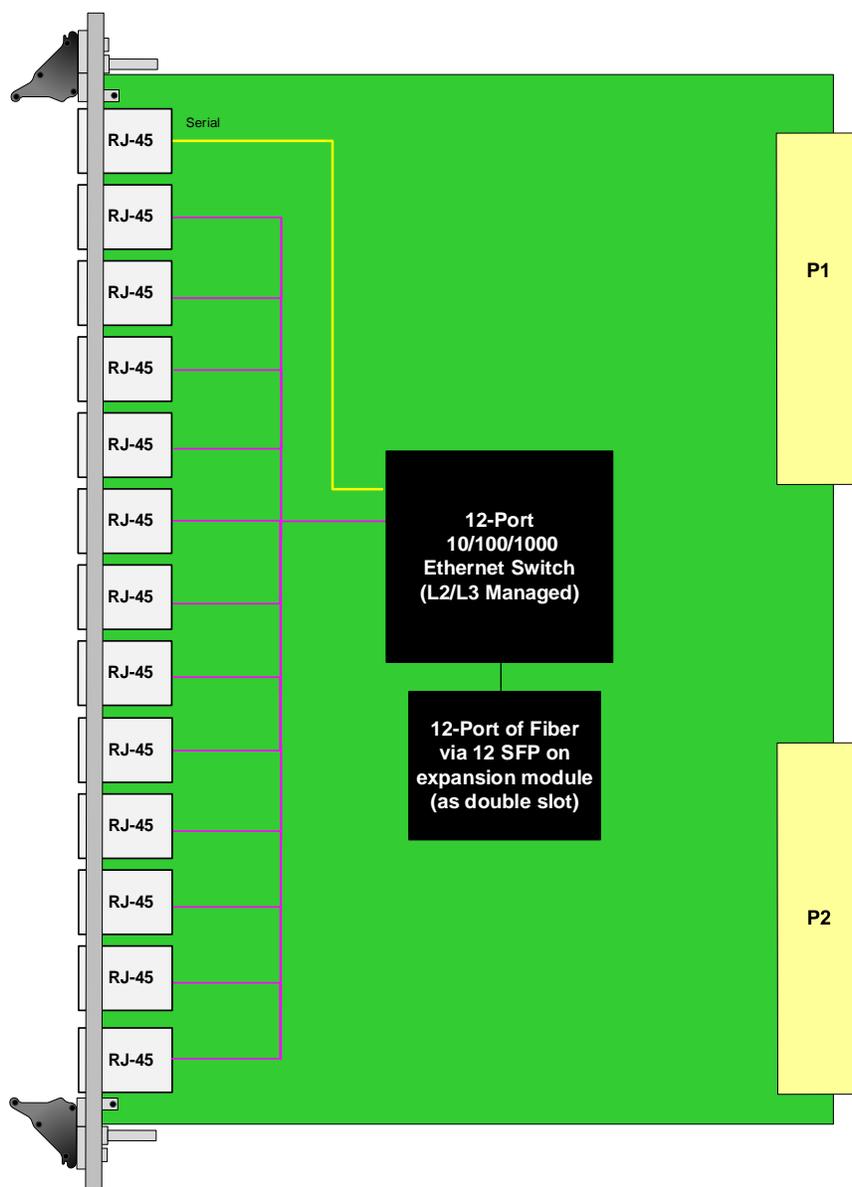

Figure 1: VME215

Block Diagram

Figure 2: VME215 Functional Block Diagram

Managed Layer Two, Layer Three GbE

Standard
- IEEE 802.3-2005
- IEEE 802.3ad (Link aggregation)
- IEEE 802.1p (Prioritization)
- IEEE 802.1Q (VLAN tagging)
- IEEE 802.1Q (Spanning Tree Protocol)
- IEEE 802.1Q-2005 Multiple Spanning Tree Protocol (MSTP)

SMSH Switch Management Shell

- Configuration Save / Load / Control

Ports Settings
- Set/Get port Mode
- BMC Port lookup
- SFP polling
- IPV6

MAC Settings
- MAC table
- Dynamic MAC address learning

L2 Switching
- Multicast/Multicast Forwarding
- Strom control
- Priority
- Mirroring
- Uplink Filter
- Link Aggregation
- Distribution function

VLAN
- VLAN management, learning, statistics, etc..

Multicast Snooping
- Multicast Snooping
- Multicast Snooping Groups

RST Control
- Set/Get RSTP / RSTP Port

QoS
- Priority Mapping
- Early Drop Threshold at Ingress/Egress
- Priority Pause
- Port OQ Arbitration / Classification
- Port OQ DRR Quantum
- Port Ingress BW
- Strom control

Diagnostics
- Port Loopback
- Port PRBS

L3 Switching
- Host addressing
- L3 / L3 Multicast routing
- VRRP
- L3 Static Multicast
- DHCP

QinQ
- CVLAN

UFD
- Uplink Failure Detect Groups

ACL
- ACL / ACL UDF Location

VME215 – 12 Port VME Managed Layer 2/3 Switch

Specifications

Architecture		
Physical	Dimensions	Height: 6U
		6.366 x 9.187 (PCB size)
		Single slot on the base board
Type	Ethernet	GbE Switch
		12/24 Ports
		10/100/1000 per Port

Standards		
VME	Type	VME

Configuration		
Power	VME215	12 W Base Module
Environmental	Temperature	See ordering option J
		Storage Temperature: −40° to +90°C
	Vibration	1 G 5-500 Hz each axis
	Shock	30 Gs each axis
	Relative Humidity	5 to 95% non-condensing
Front Panel	Interface Connectors	RJ-45 on base board
	LEDs	Run/Fail, Link/Activity
	Mechanical	Hot-swap Ejector Handle
Software Support	Operating Systems	Independent

Other	
MTBF	MIL Hand book 217-F@ TBD hrs
Certifications	Designed to meet FCC, CE and UL certifications, where applicable; designed to meet UL-60950 where applicable; ESD design to standard specification, as applicable IEEE 1101.10.
Standards	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards; VadaTech is RoHS Compliant; Fabricated to pass UL94V-0;
Warranty	Per VadaTech T&Cs

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of OpenVPX, ATCA and MTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTMs), Power Modules, and more. The company also offers integration services as well as pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

Ordering Options

VME215 – AAB-BCC-GHJ

AA = Number of Fiber SX TXCVRs on expansion *		G = Additional 12 ports (24 ports total)
00 = No TXCVRs XX = Number of TXCVRs		0 = None 1 = 12x SFP cages for options AA/BB/CC 2 = 12 ports of GbE Copper via RJ-45
BB = Number of Fiber LX TXCVRs on expansion *		**H = P2**
00 = No TXCVRs XX = Number of TXCVRs		0 = P2 mounted ** 1 = None
CC = Number of Copper TXCVRs on expansion *		**J = Temperature Range and Coating**
00 = No TXCVRs XX = Number of TXCVRs		0 = Commercial (–5° to +55°C), No coating 1 = Commercial (–5° to +55°C), Humiseal 1A33 Polyurethane 2 = Commercial (–5° to +55°C), Humiseal 1B31 Acrylic 3 = Industrial (–20° to +70°C), No coating 4 = Industrial (–20° to +70°C), Humiseal 1A33 Polyurethane 5 = Industrial (–20° to +70°C), Humiseal 1B31 Acrylic 6 = Extended (–40° to +85°C), Humiseal 1A33 Polyurethane *** 7 = Extended (–40° to +85°C), Humiseal 1B31 Acrylic ***

Common Configuration: VME215-000-000-007

* Total number of Transceivers AA+BB+CC must not exceed 12; AA = BB = CC ≠ 00 available for G=1 only
** P2 is mounted for fit, there is no electrical signals routed to P2; Power is done through P1 only
*** Minimum CFM applicable (contact Sales for details)

Related Products

VME218

- VME 12/24 ports managed layer-2 switch
- 12 ports of 10/100/1000 via RJ-45 on the base board
- 12 ports via SFP (daughter module)

VME217

- VME 12/24 ports managed layer-2 switch
- 8 ports of 10/100/1000 via RJ-45 and 4 ports via SFP on the base board
- 12 ports via SFP (daughter module)

VPX005

- 3U OpenVPX Switch, 10/40 GbE, Integrated Health Mngt
- Full Layer 3 managed Ethernet switches
- Dual 100/1000/10G uplink on the front panel

Contact

VadaTech Corporate Office

198 N. Gibson Road, Henderson, NV 89014

Phone: +1 702 896-3337 | Fax: +1 702 896-0332

Asia Pacific Sales Office

7 Floor, No. 2, Wenhu Street, Neihu District, Taipei 114, Taiwan

Phone: +886-2-2627-7655 | Fax: +886-2-2627-7792

VadaTech European Sales Office

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR

Phone: +44 2380 016403

info@vadatech.com | www.vadatech.com

Choose VadaTech

We are technology leaders
- First-to-market silicon
- Constant innovation
- Open systems expertise

We commit to our customers
- Partnerships power innovation
- Collaborative approach
- Mutual success

We deliver complexity
- Complete signal chain
- System management
- Configurable solutions

We manufacture in-house
- Agile production
- Accelerated deployment
- AS9100 accredited

vadatech
THE POWER OF VISION