RME13XC

RACKMOUNT OPENVPX DEVELOPMENT CHASSIS

BENEFITS

- Standard 16-slot, air-cooled, 6U VPX chassis for lab development

- Fan speed control reduces acoustic noise at low temperature

- Power supply configurations for +12V-centric and +5V-centric VPX modules

- Wide variety of 16-slot 6U OpenVPX backplanes available, including new Gen-3 10 Gbaud rated backplanes
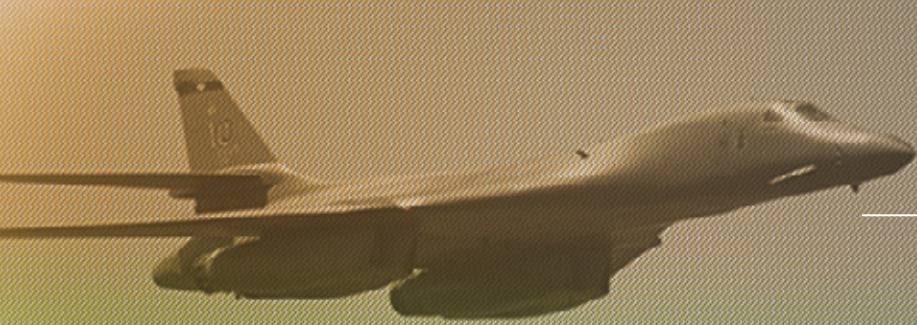
OVERVIEW

The RME13XC rackmount enclosure is a 13U high OpenVPX™ forced air-cooled development chassis meeting the latest ANSI/VITA specifications. The RME13XC provides cooling for up to 150W per slot. This enclosure supports up to 16-slots of 6U 1" pitch payload cards and rear transition modules. It supports two different OpenVPX backplanes with high-speed switch fabric support for Gen-2 up to 6.25 Gbaud or Gen-3 up to 10.3 Gbaud. 3300 watt power supply configurations are available for 12 V-centric applications.

FEATURES

- This extreme cooling rackmount-style chassis meets stringent ANSI/VITA 65 power and cooling requirements for 6U 150W OpenVPX modules

- Extreme cooling for 150W per slot per ANSI/VITA 65 OpenVPX

- >18 CFM per slot airflow with high pressure drop modules per ANSI/VITA 65 OpenVPX

- Front and rear slot blockers are required in unpopulated slots to maintain airflow in populated slots

- Airflow: lower front air intake, rear exhaust

- Fan speed control reduces acoustic noise at low temperature

- OpenVPX and VPX REDI™ designed to the latest ANSI/VITA 46.0, ANSI/VITA 46.3, ANSI/VITA 46.4, ANSI/VITA 46.6, ANSI/VITA 46.7, VITA 46.8-VDSTU, ANSI/VITA 46.10, ANSI/VITA 48.0, ANSI/VITA 48.1, ANSI/VITA 65, and VITA 68 OpenVPX specifications

- Supports full 6U 16-slot 1" pitch backplane with rear transition module support

- 16-slot 6U OpenVPX backplanes available

- Power supply configurations available for OpenVPX 12 V-centric and 5 V-centric module sets

- Remote voltage margining/current monitoring functionality available for some power configurations
- Custom configurations and system integration services available
- NEW! This chassis is now available with our new Gen-3 backplanes rated for 10.3 Gbaud!

TABLE 1: GENERAL SPECIFICATIONS

PHYSICAL	
Width	18.96" (rack flanges)
Height	22.69" (13U)
Depth	19.88"
Weight	90 lbs
CONSTRUCTION	
Extrusions	Aluminum 6061-T6
Top & Bottom	0.063" thick
Side Panels	0.125" thick
Card Guides	Molded plastic, Noryl N190X black
Tapped Strips	Carbon steel bar stock with zinc plating and supplementary chromate treatment
ESD Ground Clip	Beryllium copper, alloy C17400, 1/2 HT, with bright tin plating/MIL-T-10727
Fan Tray	x3 high performance 119 mm fans
POWER/ELECTRICAL	
AC Input	110/220 VAC 20 A or 30 A inlet (220 VAC for full power)
Backplane Connectors	MultiGig RT-2 per ANSI/VITA 46.0 (see note)
Connector Pitch	1.0" per ANSI/VITA 48.1
Transmission Rate	Gen-2 up to 6.25 Gbaud or Gen-3 up to 10.3 Gbaud

Note: Contact factory for alternate connectors such as RT2-R

TABLE 2: ENVIRONMENTAL SPECIFICATIONS

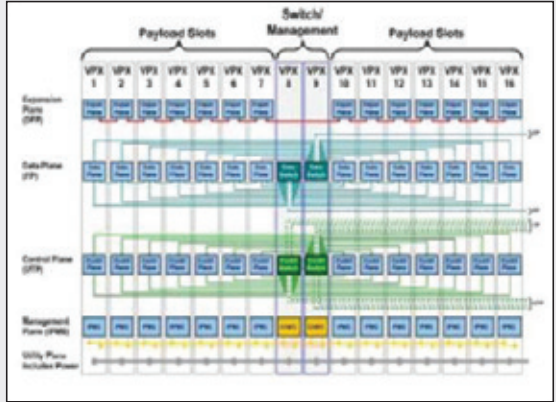| ENVIRONMENTAL	
Operating Temperature	0 to 55°C; derate each PS output 2.5%/°C above 50°C
Storage Temperature	-40 to +70°C
Altitude	0-20 kft MSL with derating above 5 kft
Humidity	0-95% non-condensing; conformal coating is not included
Cooling	>18 CFM per slot per VITA 65
Safety	Designed to meet UL60950; CSA 22.2 #234; TÜV EN60950
EMC	Designed to meet FCC Part 15, Subpart J, Class A; CISPR 22, Class A

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ACCESSORIES

099-923 - POWER MONITORING INTERFACE KIT (COMPUTER AND USB CABLE TO BE PROVIDED BY CUSTOMER)

AIR8-D6AV - FRONT SLOT BLOCKER

Cooling air will take the path of least resistance. In order to ensure adequate cooling, we recommend that Air Blockers be installed in all unused module slots. This ensures that the cooling air flows through the installed modules rather than bypassing the installed modules into empty slots or escaping through open faceplates. This is critical for high power modules to avoid overheating, and just installing a blank faceplate in unused slots is not sufficient to ensure adequate cooling.

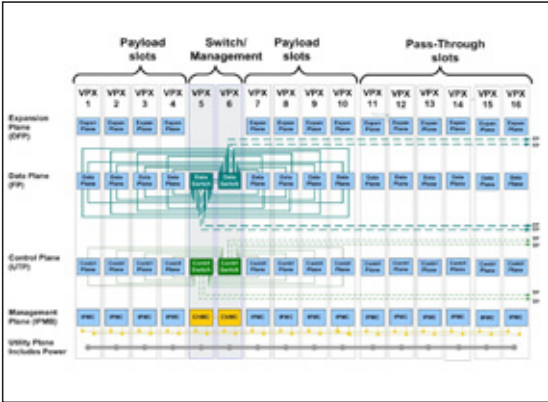## TABLE 3: ORDERING GUIDE (continued on next page)

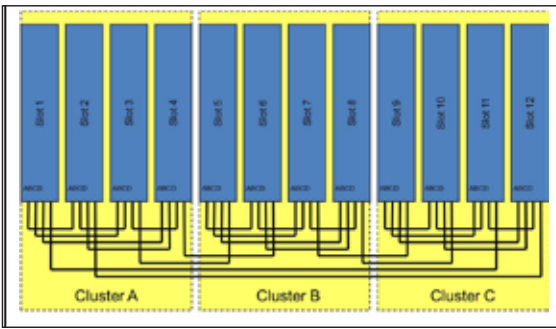| CHASSIS PART NUMBER	POWER SUPPLY	BACKPLANE	BACKPLANE DIAGRAM
RME13XC-1BOVP16C1	12 V-centric 3300W, 30A/220 VAC: +12V/VS1-VS2 @ 250A +5V/VS3 @ 150A +3.3VAUX @ 35A +12VAUX @ 17A -12VAUX @ 17A 24V (fans) @ 25A	Gen-2: 16-slot OpenVPX 6.25 Gbaud BKP6-CEN16-11.2.2.3 Central switch topology with 2x fat pipe data plane 2x ultra thin pipe control plane Dual fat pipe expansion plane	024-900-16-CEN1-01 Gen-2 6.25 Gbaud
NEW RME13XC-1BOVP16C13	12 V-centric 3300W, 30A/220 VAC: +12V/VS1-VS2 @ 250A +5V/VS3 @ 150A +3.3VAUX @ 35A +12VAUX @ 17A -12VAUX @ 17A 24V (fans) @ 25A	Gen-3: 16-slot OpenVPX 10.3 Gbaud BKP6-CEN16-11.2.2.4 Central switch topology with 2x fat pipe data plane 2x ultra thin pipe control plane Dual fat pipe expansion plane	024-900-16-C1G3-01 Gen-3 10.3 Gbaud

TABLE 3: ORDERING GUIDE (continued from previous page)

CHASSIS PART NUMBER	POWER SUPPLY	BACKPLANE	BACKPLANE DIAGRAM
NEW RME13XC-1BOVP16C23	12 V-centric 3300W, 30A/220 VAC: * +12V/VS1-VS2 @ 250A * +5V/VS3 @ 150A * +3.3VAUX @ 35A * +12VAUX @ 17A * -12VAUX @ 17A * 24V (fans) @ 25A	Gen-3: 16-slot OpenVPX 10.3 Gbaud BKP6-CEN16-11.2.24-4 Central switch topology with 4x fat pipe data plane and 6 pass-thru slots 2x ultra thin pipe control plane No expansion plane	24-900-16-C2G3-01 Gen-3 10.3 Gbaud

Note: Contact factory for other configurations.

TABLE 3: ORDERING GUIDE (continued on next page)

CHASSIS PART NUMBER	POWER SUPPLY	BACKPLANE	BACKPLANE DIAGRAM
NEW RME13XC-1BOVP12D1	12 V-centric 3300W, 30A/220 VAC: +12V/VS1-VS2 @ 250A +5V/VS3 @ 150A +3.3VAUX @ 35A +12VAUX @ 17A -12VAUX @ 17A 24V (fans) @ 25A	Gen-1: 12-slot OpenVPX 3.125 Gbaud partial mesh Distributed topology with 12-slot partial mesh data plane No control plane No expansion plane	024-900-12-DIS1-01 Gen-1 3.125 Gbaud

TABLE 3: ORDERING GUIDE (continued from previous page)

			024-900-16-X1G3-01 Gen-3 10.3 Gbaud
NEW	RME13XC-1BOVP16X13	12 V-centric 3300W, 30A/220 VAC: +12V/VS1-VS2 @ 250A +5V/VS3 @ 150A +3.3VAUX @ 35A +12VAUX @ 17A -12VAUX @ 17A 24V (fans) @ 25A	Gen-3: 16-slot OpenVPX 10.3 Gbaud Pass-thru - all fabric signals are connected to RTM	

Note: Contact factory for other configurations. Thermal report available upon request.

WARRANTY

This product has a one year warranty.

CONTACT INFORMATION

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