Dawn VME Products®

Rack Mount Enclosure: RME-6450 Series

Robust, Low Maintenance, High-Availability, 9U 19" Rack Mount Enclosure for 6U VME or VME64x

Features

♦ 2 to 17 backplane slots of legacy VME or VME64x
♦ 6Ux160MM, 1101.10/11 compatible card cage
♦ 6Ux80MM, 1101.10/11 rear TM card cage
♦ Front mounted power switch and RuSH display
♦ Front removable fan tray with washable air filter
♦ Front plug-in Power Supplies
♦ Redundant or current shared power to 1000 watts
♦ Chassis handles and slides
♦ 3ea, 120+CFM, 12VDC ball bearing fans
♦ Air flow in lower front and out upper rear
♦ Fully assembled, wired and tested

Overview

Dawn's RME-6450 is a robust, versatile and reliable chassis that meets your program requirements at minimal cost. Modular design achieves the goals of reliability, serviceability, and low maintenance.

The fan tray and power supplies are front removable and available as spare parts allowing a mean time to repair (MTTR) of less than 1 minute. High quality components are used throughout to achieve a calculated mean time between failures (MTBF) of 100K Hours including the fans.

Dawn's flagship *RuSH*^{TM} system health monitoring technology is used to protect your valuable investment in boards by monitoring critical voltage and temperature thresholds, and controlling fans to meet cooling requirements. Upon a catastrophic situation, *RuSH*^{TM} takes the necessary action to shut down system or overcome faults. *RuSH*^{TM} provides internet enabled remote control and error/status reporting.

Choices of plug-in power supplies offer power levels from 250 to 1000 Watts. Supplies may be operated in redundant or current share mode. Fan tray is removable without use of tools.

The chassis may be ordered with only the features required to minimize cost.

Technical Specification

Mechanical
Backplane Compatibility: ANSI/VITA 1.1-1997
PCB Material: IS410 RoHS compliant
PCB Design: 12-Layer, Ultra high performance, impedance controlled stripline
Power/Ground Planes: Multiple, 2 oz. copper
Signal: 1 oz. copper
Plating: ENIG "Gold"
Finish: LPI Green Solder mask over Immersion Gold

Chassis Compatibility: IEEE1101-10/11 rails/card guides.
Material: Aluminum 5052-H32 and 6061-T6
Finish: Brushed 220 Grit
Plating: Clear Alodine 1500
Dimensions: 9U (15.72") H x 19.0"W x 11.75" D
Weight: 21.5 lb less power supplies.
Weight 3U power supply: 1.8 lb.
Weight 6U power supply 3.7 lb.

Electrical
Power Input: Standard 3-prong 15A IEC power cord
Power Supply Input: 90-264VAC, 47-63Hz
Power Supply Output Max Load:
250W/3U: +3.3V@33A, +5V@33A, +12V@ 6A, -12V@1A
500W/6U: +3.3V@60A, +5V@60A, +12V@ 14A, -12V@4A
Max load is the continuous operating load of each rail.
Total loading from all rails not to exceed 250W for 3U and 500W for 6U supplies.
Power is de-rated to 90% of sum of current for multiple supplies.

Environmental
Storage Temperature: -20^0C to $+85^0$C
Operating Temperature: 0^0C to $+50^0$C
Humidity: <95% non-condensing
MTBF: >100K Hours including fans

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Ordering Information

(Please select from choices below to complete last 4 digits (-**XYZZ**) of part number)

P/N 11-1016450-XYZZ

| **X**	**Y**	**ZZ**
System Power	**Chassis Options**	**Backplane Options**
QTY-Watts-Size	**0** = No RuSH, No T/M, No Air Filter, No Slides	**02 – 17** = 2 to 17 Slots VME64x with J0
0 = 0 – 000W-NA	**1** = No RuSH, No T/M, No Air Filter, Slides	**22 – 37** = 2 to 17 Slots VME64x without J0
A = 1 - 250W– 3U	**2** = No RuSH, No T/M, Air Filter, No Slides	**42 – 57** = 2 to 17 Slots Legacy VMEbus
B = 2 - 250W– 3U	**3** = No RuSH, No T/M, Air Filter, Slides	
C = 3 - 250W– 3U	**4** = No RuSH, T/M, No Air Filter, No Slides	
D = 4 - 250W– 3U	**5** = No RuSH, T/M, No Air Filter, Slides	
E = 1 - 500W– 6U	**6 =** No RuSH, T/M, Air Filter, No Slides	
F = 2 - 500W– 6U	**7** = No RuSH, T/M, Air Filter, Slides	
	8 = RuSH, No T/M, No Air Filter, No Slides	
	9 = RuSH, No T/M, No Air Filter, Slides	
	A = RuSH, No T/M, Air Filter, No Slides	
	B = RuSH, No T/M, Air Filter, Slides	
	C = RuSH, T/M, No Air Filter, No Slides	
	D = RuSH, T/M, No Air Filter, Slides	
	E = RuSH, T/M, Air Filter, No Slides	
	F = RuSH, T/M, Air Filter, Slides	

Backplane may have between 2 and 17 slots. Front and rear card cages have card guides provided in same positions as backplane connectors. Cage slots with no backplane connectors are blocked with air baffles and unused slots are covered with filler panels' at front and rear of chassis.
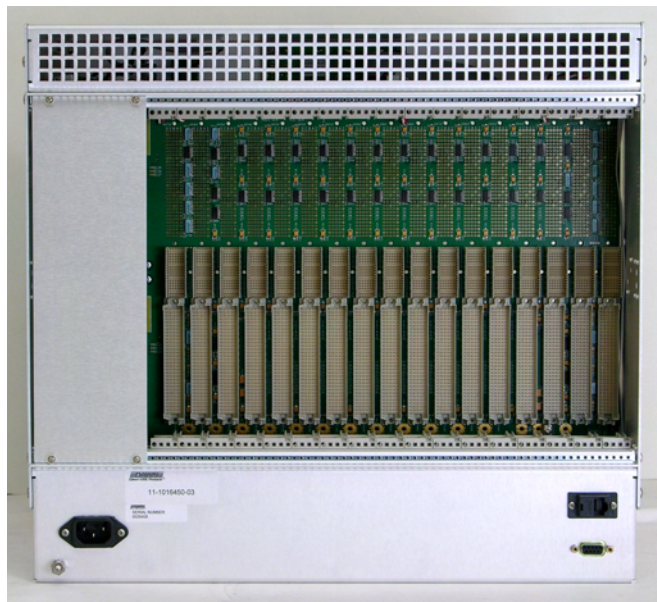
Rear View
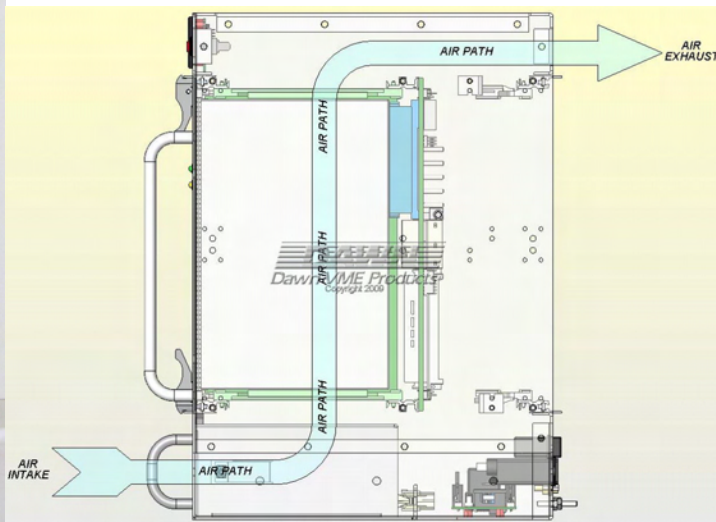
Side View

Other Products from Dawn:
Card cages for commercial, aerospace and military applications
Enclosure 3D solid model design and production from commercial to full rugged military
Custom and Standard product PCB design, layout, production
RuSH™ Rugged system health monitor
Backplanes for cPCI 2.1, cPCI 2.16, VME, VME64x, VXS, VPX, CUSTOM, Build to Print
Powered Enclosures for Development, Prototype, Production, Deployment
Prototype Boards, Extender Boards, Form Factor Extenders
Front Panels, Filler Panels, Custom Panels, Build to Print Panels
Build to print machining, fabrication and assembly