

High-Availability, 9U 19" Rack Mount Enclosure for 6U VME or VME64x with Current Monitoring

Features

- ◆ 2 to 17 backplane slots of legacy VME or VME64x with RuSH precision current monitor
- ◆ Up to 17-slot, 6Ux160MM, 1101.10/11 compatible front card cage
- ◆ 6Ux80MM, 1101.10/11 rear TM card cage
- ◆ Power and System Reset switches and RuSH display located at top/front of chassis
- ◆ Tool-less removable fan tray with washable optional air filter
- ◆ Front plug-in Power Supplies
- ◆ Redundant power to 500 Watts, Current shared power to 1000 watts
- ◆ Chassis handles and optional slides
- ◆ 3ea, 120+CFM, 12VDC ball bearing fans
- ◆ Air flow in lower front and out upper rear
- ◆ Fully assembled, wired and tested

Overview

The RME-6451 is the same product as Dawn's RME-6450 with current sense added as a standard option. Along with Voltage, Temperature, and Fan Speed, Current is measured and displayed for each voltage rail. If the current sense feature is not desired, order Dawn's RME-6450 chassis.

Dawn's RME-6451 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™** 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™** takes the necessary action to shut down system or overcome faults. **RuSH™** 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°C to +85°C

Operating Temperature: 0°C to +50°C

Flammability Rating: UL94-V0

Humidity: <95% non-condensing

MTBF: >100K Hours including fans

Ordering Information

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

P/N 11-1016451-XYZZ

X

System Power QTY-Watts-Size

- O** = 0 - 000W-NA
- A** = 1 - 250W- 3U
- B** = 2 - 250W- 3U
- C** = 3 - 250W- 3U
- D** = 4 - 250W- 3U
- E** = 1 - 500W- 6U
- F** = 2 - 500W- 6U

Y

Chassis Options

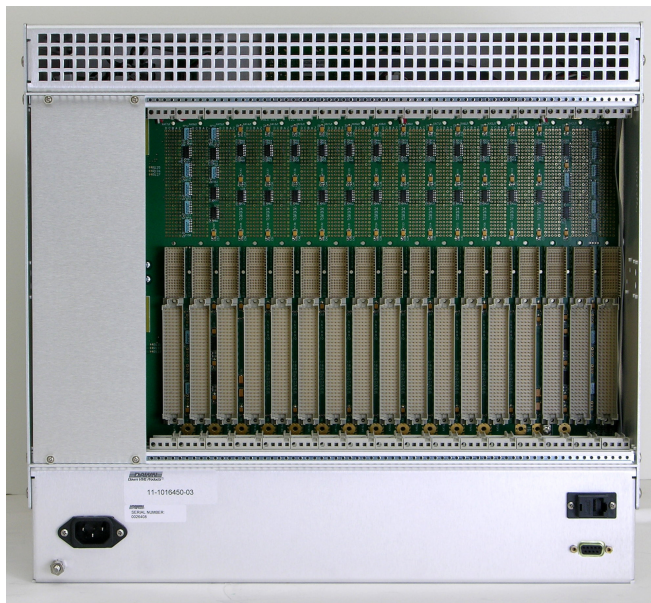
- 0** = No RuSH, No T/M, No Air Filter, No Slides
- 1** = No RuSH, No T/M, No Air Filter, Slides
- 2** = No RuSH, No T/M, Air Filter, No Slides
- 3** = No RuSH, No T/M, Air Filter, Slides
- 4** = No RuSH, T/M, No Air Filter, No Slides
- 5** = No RuSH, T/M, No Air Filter, Slides
- 6** = No RuSH, T/M, Air Filter, No Slides
- 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

ZZ

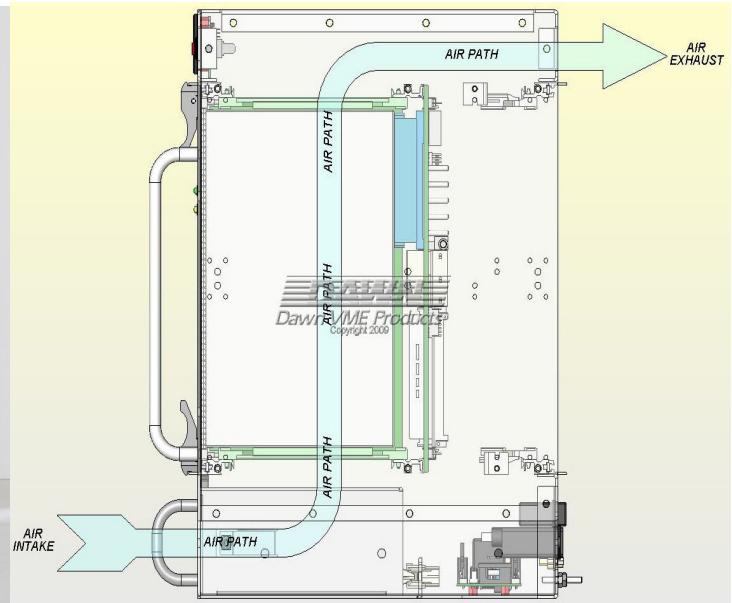
Backplane Options

- 02 - 17** = 2 to 17 Slots VME64x with J0
- 22 - 37** = 2 to 17 Slots VME64x without J0
- 42 - 57** = 2 to 17 Slots Legacy VMEbus

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