Development Chassis: Series DEV-4135

DC-2 VPX Development System for 6U Boards

Featuring 5-Slot OpenVPX (Vita65) and VPX REDI (Vita48) Compliant Backplane

Features

- 5-Slots of VPX on 1" pitch with or without RTM connectors
- Connectors may be partially populated for cost savings
- Legacy wedge-lock or VITA48.2 style card guides available as an option
- Dawn's ***RuSH***™ System Health Monitor and Controller with LCD Display
- 5-Slot, 6Ux160mm, 1101.10 compatible front card cage
- 5-Slot, 3Ux80mm, 1101.11 compatible Rear Transition Module card cage
- Choice of 12H, 5VH or VEN Profile Power Supply (See rear side for supplies available)
- Performance Tested Cooling with 8 fans in Push/Pull
- Front mounted power switch
- Table top rubber feet
- Fully assembled, wired and tested
- Ready for Plug and Play

VPX REDI

Overview

Dawn's DC-2 VPX Development System for 6U boards represents the latest in state-of-the-art technology. It provides a capability of configuring up to a 5-Slot system that supports any mix of 6U convection or conduction cooled boards and 6U transition modules on 1.0 inch centers along with an advanced capability to support high current demands and corresponding high cooling requirements. Backplane profiles and topologies are or will be available to test any board configuration.

Power supply choices support 12H and 5VH based systems. Optional "VEN" power systems available for cost savings if desired. Cooling is delivered equally at each slot with up to 700 LFM across the boards with no dead spots.

This portable chassis is attractive and travels well between the bench top, the trade show, and your customers, allowing you to test and demo your new boards.

Chassis side panels are removable for side board access and probing. Air flow through board area provides adequate cooling for even high power boards.

Onboard ***RuSH***™ System Health Monitor and Controller provides for monitoring of system environmental conditions and control of power supply and fans. On-board RS-232 and RJ-45 Ethernet connections allow for local or remote access and system control. SNMP is available as an option.

When compared to VPX development systems available from other manufacturers, the DC-2 offers substantial additional features and at lower overall cost making it the best value in a VPX development system available today.

Specifications

Backplane Compliance

Dawn's VPX Backplanes are designed to be compliant with the following released standards and September 2010 state of draft specifications: VITA 46.0, VITA 46.1, VITA 46.3, VITA 46.4, VITA 46.6, VITA 46.7, VITA 46.9, VITA 46.10, VITA 46.11, VITA 48.0(REDI), VITA 48.1(REDI Air Cooling), Vita 48.2(REDI Conduction Cooling), VITA65(OpenVPX)

Mechanical

Compatibility: Rails and card guides, IEEE 1101-10/11 VITA46.0,.3,.4,.7,.9 / VITA48(REDI), VITA65(OpenVPX)
Material: Aluminum 5052-H32/6061-T6
Finish: Cardinal Industrial Finish: C241-BK01, Color: Black
Plating: Clear Alodine 1500
Dimensions: 20.0"H x 9.0"W x 11.75" D (With handle 22.0"H)
Weight: 23.95lbs. (Depends on Power Supply)

Electrical

Compliance: VPX electrically compliant with VITA46.1
Power Input: Standard IEC connector and 15A power cord
Power Supply: See rear for options. Choices support 12H, 5VH, and VEN profiles.
Power per Slot: >75W when using 12H or 5VH profile supply

Environmental

Storage Temperature: -20^{0}C to +85^{0}C
Operating Temperature: 0^{0}C to +50^{0}C
Humidity: <95% non-condensing
Cooling: RuSH Controlled, up to 25 CFM per slot @ .24 inches of H^2O at MSL

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Revision 09/01/11

Ordering Information

11-1014135 – **W X YZ**

W

Power Supply (Select Option based on current required)

Option	+3.3V	+5V	+12V	N12V	Profile	Replacement P/N
1	31	24	54	4	12H	50-1016142-1131
2	31	120	14	4	5VH	50-1016142-1311
3	35	40	20	5	VEN	50-1016142-1111
4	35	40	40	5	VEN	50-1016142-1121
5	35	80	20	5	VEN	50-1016142-1211
6	35	40	60	5	VEN	50-1016142-1131
7	35	80	40	5	VEN	50-1016142-1221

X

Reserved for Options

0 = None

YZ

Backplane Architecture

01 = BKP6-DIS05-11.2.16-n, 5 Payload Slots on 1" pitch in a distributed 5 Slot mesh where each slot is directly connected to every other payload slot. Includes RTM connectors at every slot. Dawn P/N 06-1117135 (Dawn Website Model VPX-7135)

02 = BKP6-DIS05-11.2.16-n with **no** RTM connectors

See Backplane Data Sheet for detailed information

Side View

Rear View

Other Products and Services Available from Dawn:

- Conceptualization, design and production of custom enclosures and backplanes.
- Conduction or Convection Cooled ATR Chassis Design and production
- Thermal Design and Analysis
- Microprocessor based sensor monitoring and control.
- Technologies Supported: cPCI 2.1, cPCI 2.16, PXI, VME, VME64, VME64x, VXI, VXS(Vita 41), VPX(Vita46), VPX REDI(VITA48), OpenVPX(Vita65)

OpenVPX VPX VPX REDI

About Dawn:

Dawn is a certified veteran owned small business based in Fremont, CA. serving the real time computer and embedded systems market.

Dawn specializes in conceptualization, design, and production of high-technology enclosures and backplanes for thousands of companies within the commercial, industrial, aerospace and defense markets. Our customers consist of Major OEM's, National Labs, Universities, aerospace and defense contractors, our competitors and the U.S. Government.

Our Quality Standards are designed and tuned to support the needs of the vast market we serve.

Dawn celebrated its 25th anniversary of business on February 19, 2010.