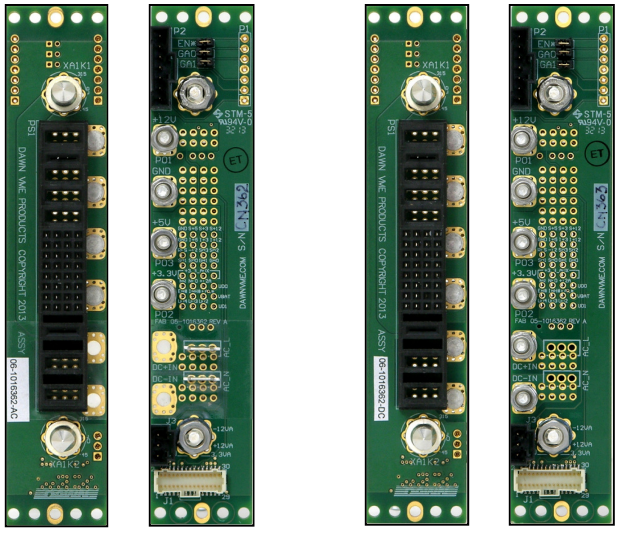
Power Supply Docking Board: PSD-6362

VITA 62 Compliant 3U Power Docking Board

Used for adding Power Supply Backplane to VPX System

Features

- 500W power capability per unit
- Design allows for up to 4 per system to support high current applications
- Power connector and Studs provided for connecting power to backplane
- Separate assemblies support AC or DC operation
- Jumper options for GA and EN
- Single Connector (J1) monitors all power, control, and communications
- Fully assembled and tested



AC Version **DC Version**

Overview

Dawn's PSD-6362 Power Supply docking board provides all necessary features and functionality required to add a 3U power backplane to a VPX system. The board mounts on 1 inch pitch within any 3U chassis conforming to the VITA VPX Standard. Plug-in power supply docking is provided via a VITA 62 connector and guide pins keyed appropriately to accept AC or DC input. Six channels of power may be wired between connectors for 3.3V_AUX, +12V_AUX, and -12V_AUX, and studs for the main power channels PO1, PO2, and PO3. Bus bars may be used to connect docking boards in parallel for up to 4 power supplies per system. A single connector (J1), intended for monitoring, is provided to access all power, control, and communications provided by the VITA 62 standard. Current share and Remote Voltage sense are provided in a separate connector. Option pins are provided to set individual board geographical address (GA) and forced enable (EN). Mounting hardware through the center hole electrically connects backplane to chassis ground.

Technical Specifications

Mechanical

Compatibility: VITA 46, VITA 62, VITA 65,
Material: FR-370HR Laminate RoHS, copper clad
Finish: Green Matte Finish LPI Soldermask
Plating: Copper/Electroless Nickel/Immersion Gold
Vita 62 Keying: AC Version Key 1=270^0, Key 2=45^0
DC Version Key 1=0^0, Key 2=0^0
Dimensions: 5.057" L x .980" W x 1.625" H
Weight: .192 Lb./ .085 Kg.

Electrical

Maximum Power: 500W per VITA 62 Standard
AC Input: 90 – 265 VAC 50 – 400 Hz
DC Input: 28VDC or 48VDC
PO1-PO3 Outputs: Up to 500W via 6 x 32 Studs
Auxiliary Outputs: via Molex 70543 3-pin connector
IShare/Sense: via Molex 70543 7-pin connector
Monitor Output: Molex 501190-3017 30-pin connector

Environmental

Flamibility: UL94VO
Storage Temperature: -40^{0}C to +105^{0}C
Operating Temperature: -40^{0}C to +105^{0}C, except J1 monitor connector rated at -40^{0}C to +85^{0}C
Humidity: <95% non-condensing

Mating Connectors

J1: Onboard Molex 501190-3017 mates with Molex 501189-3010 and crimp contacts Molex 501193-3000
J3: Onboard Molex 70543-0002 mates with Molex 50-57-9403 and crimp contacts Molex 16-02-0102
P2: Onboard Molex 70543-0006 mates with Molex 50-57-9407 and crimp contacts Molex 16-02-0102
PS1: Onboard Tyco 1-6450869-4 mates with Tyco 6450849-7
K1,K2: Onboard Guide Pin Tyco 1-1469491-3 mates with Tyco 1-1469492-1

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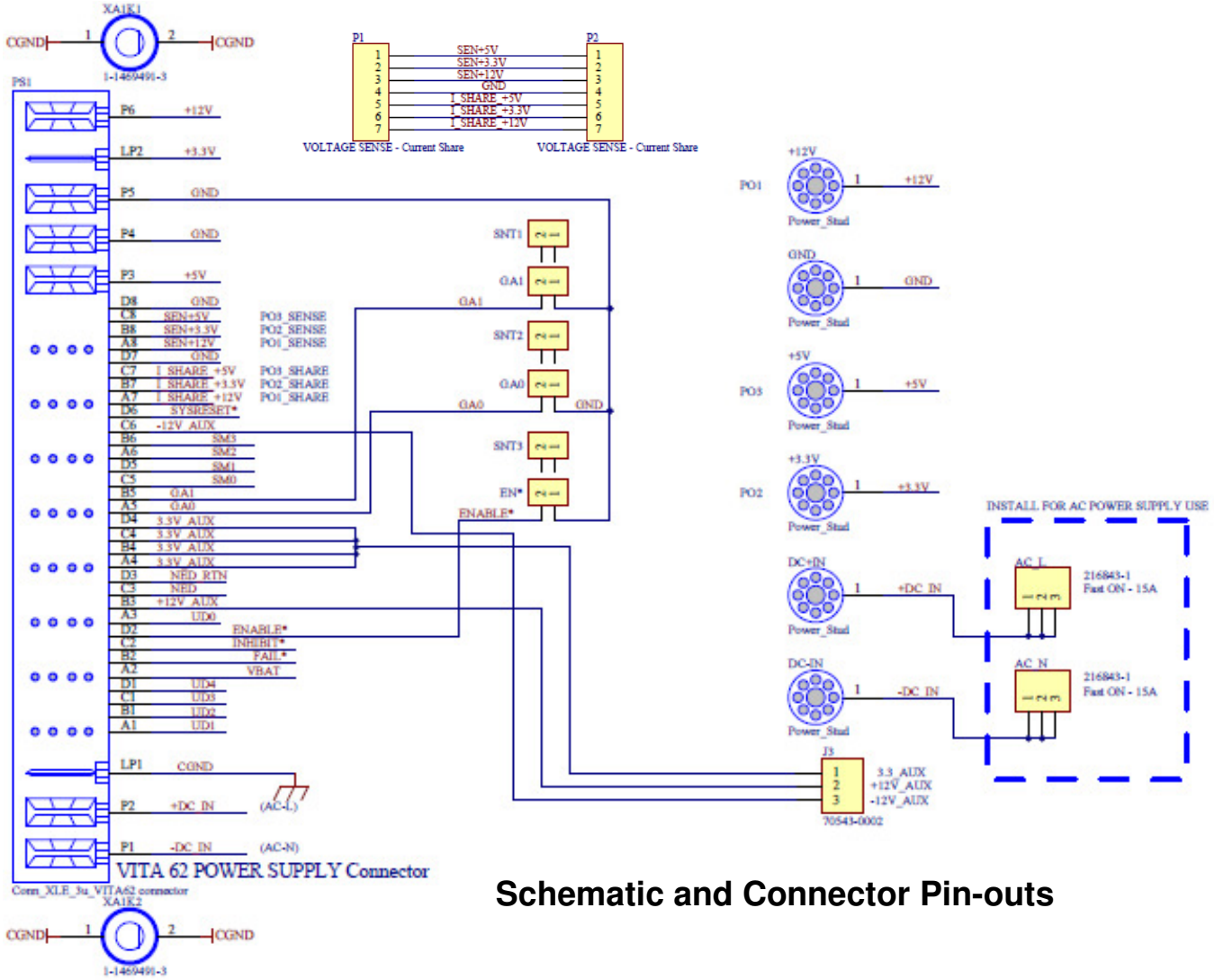
Ordering Information

For AC applications, Order P/N 06-1016362 – **AC**
For DC applications, Order P/N 06-1016362 – **DC**



Schematic and Connector Pin-outs

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.
- Supported Platforms Include: cPCI 2.1, cPCI 2.16, PIXIE, VME, VME64, VME64x, VXS(Vita 41), VPX(Vita 46), VPX Redi, Open VPX(Vita 65)