

XPand1205

3U VPX Development Platform for Up to Eight Conduction-Cooled Modules

- › Development platform for conduction-cooled modules
- › Forced-air-cooled sidewall heat exchangers
- › Supports eight 0.8 in. or 1.0 in. pitch conduction-cooled VPX modules
- › Standard VPX configurations available
- › Compatible with multiple VITA 65 OpenVPX™ slot profiles
- › Customizable with X-ES and third-party components
- › Rear Transition Module (RTM) support for maximum I/O flexibility
- › Front panel power and reset switches
- › Front panel power and reset LEDs
- › Up to 550 W of total simultaneous power
- › Up to 60 W per slot at 30°C ambient and 70°C rail
- › Two VITA 62 power slots
- › 12 V up to 50 A
- › 5 V up to 50 A
- › 3.3 V up to 80 A
- › ±12 V_AUX and 3.3 V_AUX
- › 110-240 VAC, 50/60 Hz power input



XPand1205

The XPand1205 is a low-cost, flexible development platform, supporting up to eight 0.8 in. or 1.0 in. pitch conduction-cooled VPX (VITA 48.2) modules. It provides 550 W of total simultaneous power, which can be distributed as up to 50 A on 12 V, up to 50 A on 5 V, and up to 80 A on 3.3 V. The heat from the internal conduction-cooled modules is conducted to sidewall exchangers, where it is dissipated to the ambient environment by forced-air cooling. This efficient thermal design allows up to 60 W of power dissipation per slot at 30°C ambient, while maintaining 70°C at the module's thermal interface.

X-ES platforms like the XPand1205 provide a feature-rich solution for system development. Rear Transition Modules (RTMs) provide maximum I/O flexibility and rapid system prototyping. Power and reset LEDs are provided for system status. A momentary push-button is provided for reset, and a switch is provided for DC power enable.

The XPand1205 is currently available for purchase in several rapid-development standard configurations. Custom configurations of modules, RTMs, and backplanes are also available utilizing X-ES and third-party components.

X-ES

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Extreme Engineering Solutions

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Form Factor

- 3U VPX (VITA 48.2) 0.8 in. or 1.0 in. pitch
- 3U VPX (VITA 46.10) RTM

Slots

- Eight 0.8 in. or 1.0 in. pitch RTM slots
- Eight 0.8 in. or 1.0 in. pitch payload slots
- Two 0.8 in. or 1.0 in. pitch power slots

Power

- 110-240 VAC, 50/60 Hz power input
- 550 W total simultaneous power
- Up to 50 A on 12 V
- Up to 50 A on 5 V
- Up to 80 A on 3.3 V
- Up to 8 A on ± 12 V_AUX
- Up to 8 A on 3.3 V_AUX

Cooling

- Up to 60 W per slot at 30°C ambient and 70°C rail

Physical Characteristics

- Dimensions: 11.5 in. (L) x 5.5 in. (W) x 16.5 in. (H)
- 20 lbs. with backplane and power supply

