

XPand1203

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
- › OpenVPX™ standards-based
- › 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 40 A
- › 5 V up to 40 A
- › 3.3 V up to 20 A
- › ±12 V_AUX and 3.3 V_AUX
- › 110-240 VAC, 50/60 Hz power input



XPand1203

The XPand1203 is a low-cost, flexible, development platform. This platform supports 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 40 A on 12 V, up to 40 A on 5 V, and up to 20 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, including the XPand1203, 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 XPand1203 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.



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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 40 A on 12 V
- Up to 40 A on 5 V
- Up to 20 A on 3.3 V
- Up to 2 A on -12 V
- 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

