

XPand1007

Two-Slot 3U VPX Development Platform for Conduction-Cooled Modules with RTM I/O

- › Development platform for two conduction-cooled 3U VPX modules
- › Compatible with multiple OpenVPX™ profiles
- › Utilizes Rear Transition Modules (RTMs) for I/O access
- › Forced-air-cooled sidewall heat exchangers
- › Supports 0.8 in. or 1.0 in. pitch conduction-cooled VPX modules
- › Supports VITA 48.2 REDI
- › Standard VPX configurations in stock
- › Multiple backplane options
- › Customizable with X-ES and third-party components
- › Power and reset switches
- › Power and reset LEDs
- › Designed for lab use up to 30°C ambient
- › Input power via included VITA 62 power supply
- › Includes 120 V AC to 24 V DC XPM9001 power supply
- › Supports SOSA-aligned modules



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The XPand1007 system is a development platform for conduction-cooled 3U VPX cards. It supports up to two 0.8 in. or 1.0 in. 3U VPX boards and utilizes RTMs to simplify I/O access and support rapid system prototyping. The XPand1007 can be configured with multiple backplane options. Power and reset LEDs are provided for system status. Switches allow configuration for the included VITA 62 power supply, as well as reset and other I/O signals.

An included external XPM9001 power supply plugs into a standard 120 V wall outlet to produce 24 V DC to power an included VITA 62 supply. The VITA 62 power supply provides the DC power rails to the backplane for the VPX modules.

The XPand1007 routes heat from the conduction-cooled modules to sidewall heat exchangers, where it is quietly dissipated to the ambient environment by forced-air cooling.

The XPand1007 is currently available for purchase in several rapid-development standard configurations, including configurations aligned to Sensor Open System Architecture (SOSA) profiles. 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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VPX Slot Features

- Two 3U VPX-REDI (VITA 48.2) 0.8 in. or 1.0 in. pitch slots
- Two 3U VPX (VITA 46.10) RTM slots
- One 3U VPX VITA 62 power supply slot
- Configurable I/O (NVMRO, geographical addresses, SYSCON) via DIP switches
- VBAT supplied by VITA 62 supply, battery, or external power source

Power

- Included 120 V AC to 24 V DC XPM9001 power supply

Physical Characteristics

- Dimensions: 11.9 in. (L) x 5.6 in. (W) x 9.3 in. (H)
- 10 lbs. with backplane

Backplane Options

- XTend4933: Dual Fat Pipe (DFP) interconnects on J1
- XTend4945: I/O slot isolation with full I/O pass-through to RTM slots
- XTend4947: SOSA Payload / Compute Intensive profile SLT3-PAY-1F1U1S1S1U1U4F1J-14.6.13-n expansion plane routed between slots with other I/O passed through to RTM. Modules targeting SLT3-PAY-1F1U1S1S1U1U2F1H-14.6.11-n are compatible if no aperture is present on payload card. (Additional build options available to accommodate apertures; contact factory for more information.)
- Aperture access unavailable on backplanes targeting slot profiles with aperture support

