

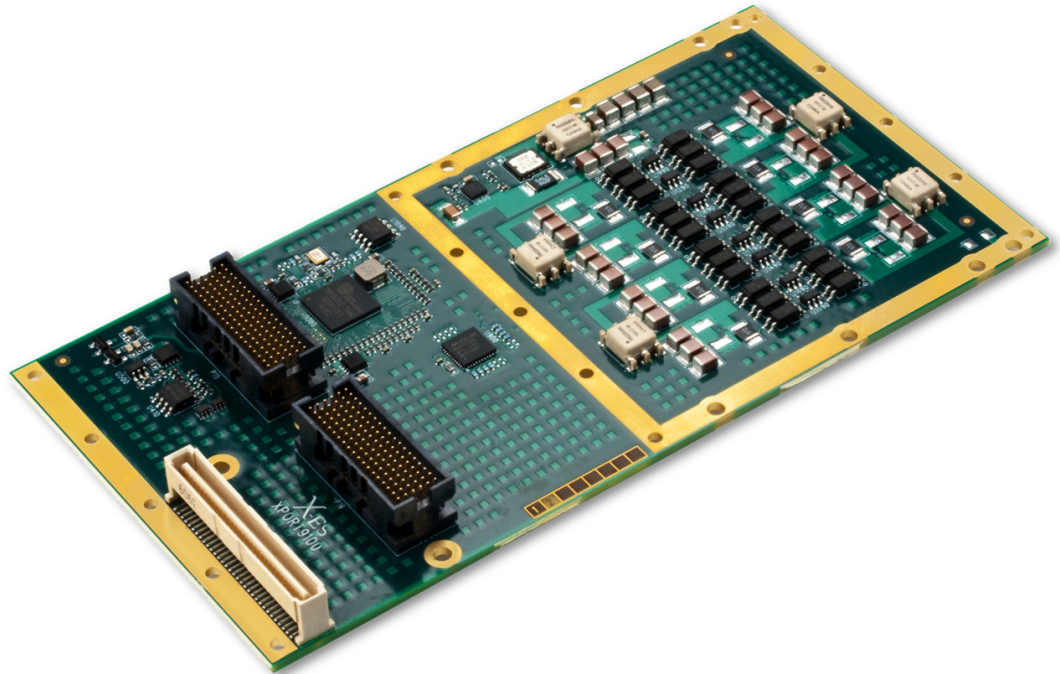
XPort9100

End of Life

Avionics-Level (+28 V) Eight-Channel Isolated GPIO XMC Module

Please see XPort9102

- ▶ Avionics-Level (+28 V) GPIO
- ▶ Conduction-cooled
- ▶ Each GPIO is configurable as either an input or an output
- ▶ Each I/O signal is optically isolated
- ▶ Each input may be configured to generate an interrupt
- ▶ Configurable weak pull-up
- ▶ +28 V power supply is boosted from XMC VPOWER
- ▶ The +28 V power supply provides an isolated output for each GPIO channel



XPort9100

The XPort9100 is a rugged, avionics-level GPIO XMC module.

The XPort9100 provides eight, independently-configurable GPIO channels, each optically isolated. Each output is open-drain and, when active, is clamped to the return line voltage. The output can support clamping a 0.3 A pull-up. Each input has a +3.5 V switching threshold.

The XPort9100 requires XMC VPOWER to be at +12 V. Please contact X-ES for +5 V VPOWER support.

X-ES

Extreme Engineering Solutions

...Always Fast

Extreme Engineering Solutions

9901 Silicon Prairie Parkway • Verona, WI 53593
 Phone: 608.833.1155 • Fax: 608.827.6171
 sales@xes-inc.com • <https://www.xes-inc.com>

GPIO

- Eight channels
- Optically isolated
- Configurable weak pull-up
- Output is 0.3 A clamping to return

Back Panel I/O

- x1 PCI Express interface out the P15 XMC connector
- Six GPIO lines on P16
- Two GPIO lines on P14

Software Support

- Wind River VxWorks
- Other OS support possible - contact X-ES

Physical Characteristics

- XMC form factor
- Dimensions: 144 mm x 74 mm, 10 mm stacking height

Environmental Requirements

Contact factory for appropriate board configuration based on environmental requirements.

- Supported ruggedization levels (see chart below): 5
- Conformal coating available as an ordering option

Power Requirements

- Maximum power consumption: 2 W

Ruggedization Level	Level 1	Level 3	Level 5
Cooling Method	Standard Air-Cooled	Rugged Air-Cooled	Conduction-Cooled
Operating Temperature	0 to +55°C ambient (300 LFM)	-40 to +70°C (600 LFM)	-40 to +85°C (board rail surface)
Storage Temperature	-40 to +85°C ambient	-55 to +105°C ambient	-55 to +105°C (maximum)
Vibration	0.002 g ² /Hz (maximum), 5 to 2000 Hz	0.04 g ² /Hz (maximum), 5 to 2000 Hz	0.1 g ² /Hz (maximum), 5 to 2000 Hz
Shock	20 g, 11 ms sawtooth	30 g, 11 ms sawtooth	40 g, 11 ms sawtooth
Humidity	0% to 95% non-condensing	0% to 95% non-condensing	0% to 95% non-condensing

