



XVME-244

Digital I/O Module

FEATURES

Outputs

- 32 optically-isolated digital output channels
- Outputs to 30 V and 400mA
- 300 VDC optical isolation group-to-group and 1000 V group-to-VMEbus
- Hardware initialization of outputs at power-up
- Outputs are software-readable
- Transient protection on all outputs

Inputs

- 32 digital input channels
- Input voltage range 10-35 VDC
- Input debouncing circuitry
- 35 VDC reverse bias protection
- 300 VDC optical isolation group-to-group and 1000 V group-to-VMEbus

APPLICATIONS

Outputs

- Control valves
- Solid-state relays
- Alarm interface
- Indicator lamps

Inputs

- Push buttons or panel switches
- Limit switches
- Proximity switches
- Alarm trips
- Photo detector switches

The XVME-244 Digital I/O Module is an isolated 64-channel, digital I/O module designed for use in VMEbus systems. Thirty-two input channels and thirty-two output channels are provided, arranged in groups of eight, optically-isolated from the others and from the VMEbus circuitry.

The 64 I/O channels are arranged to form eight, byte-wide I/O registers. The I/O registers are addressed consecutively, allowing the input and output channels to be accessed as either bytes or words. To add to the integrity of the system, default initialization disables all outputs both during system power-up and during a software reset or SYSFAIL.

This module is ideally suited for interfacing to pushbutton or relay contacts. It contains input debouncing circuitry which eliminates the effects of contact bounce from such inputs.

The XVME-244 provides four filtered inputs for those applications where filtering is desired for a particular input. One filtered input is provided for each input group as a read-only register containing the state of the filtered input. These registers may be accessed as bytes or as 16-bit words.

X Y C O M
V M E

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PRODUCT SPECIFICATIONS AND RATINGS

Environmental

	Operating	Non-operating
Thermal	0° to 65° C (32° to 149° F)	-40° to 85° C (-40° to 185° F)
Humidity	20% to 80% RH, non-condensing	20% to 90% RH, non-condensing
Shock	30g peak acceleration, 11 msec duration	50g peak acceleration, 11 msec duration
Vibration 5-2000 Hz	.015" (.38 mm) peak-to-peak displacement, 1g maximum acceleration	.030" (.76 mm) peak-to-peak displacement, 2.5g maximum acceleration
Altitude	Sea level to 10,000 ft.(3048 m)	Sea level to 40,000 ft.(12192 m)

Hardware

Output	
Channels	32 (four groups of eight)
Output Configuration	Current sourcing outputs
Power Supply Voltage Range	10-15 or 15-30V DC, jumper-selectable
On-state output voltage	V _{supply} -0.8V minimum
Turn-on time	10 μsec maximum
Turn-off time	120 μsec maximum
Output transient protection	Reverse-voltage protection and transient suppression provided

Input	
Channels	32 (four groups of eight)
Input Voltage Range	<ul style="list-style-type: none">• -35 to +35V DC• Logic 1: 10 to 35V DC• Logic 0: -35 to 3V DC
Isolation	<ul style="list-style-type: none">• Any I/O group to any I/O group: 300V DC• Any I/O group to VMEbus: 1000V DC
Maximum Input Frequency	2.8 KHz
Debounce Time	12±3 ms
Propagation Delay	<ul style="list-style-type: none">• Off-to-on: 30 μsec• On-to-off: 175 μsec

VME Compliance

- Complies with VMEbus Specification, IEEE 1014, Rev. C.1
- A16:D16/D08(E0) DTB Slave
- Utility signals - SYSFAIL

- Form factor: DOUBLE 233.7 mm × 160.0 mm (9.2" × 6.3")
- Conforms to XycomVME Standard I/O Architecture

ORDERING INFORMATION

Order Number	Description
XVME-244	64-Channel Digital I/O Module

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