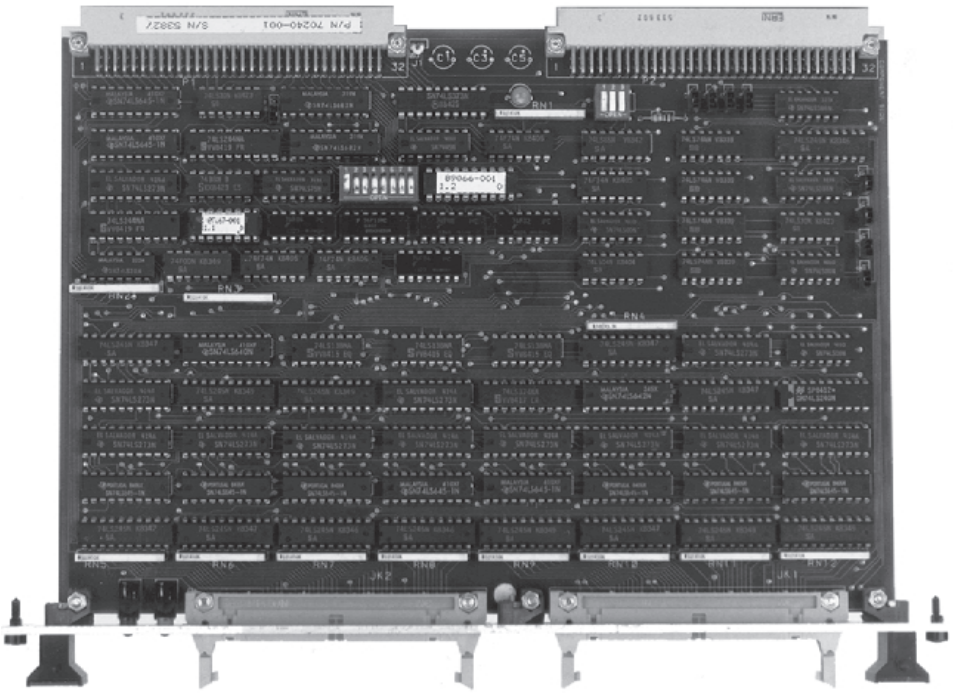
XVME-240
Digital Input/Output Module



Features

- 64 channels (8 ports) of bidirectional TTL I/O
- 8 channels of edge-selectable interrupt inputs with programmable mask
- 8 channels of flag outputs
- High density, low cost-per-channel

Applications

- Printers
- Interface to programmable controllers
- Thumbwheel switches
- Opto 22 I/O
- Computer interface
- Interface to other digital systems and subsystems
- Parallel port devices

Overview

The XVME-240 Digital Input/Output Module is an 80-channel, TTL-level, VMEbus-compatible I/O module. Sixty-four of these channels are arranged to form eight (byte-wide) bidirectional I/O ports. Each port can be separately programmed for either input or output by simply setting or clearing a single corresponding bit in the port direction register.

The XVME-240 provides eight interrupt input lines to allow externally-connected devices to generate VMEbus interrupts on any level. The user has the option to control whether the board will latch the interrupt input signals on the rising or falling edge. Each interrupt line is also maskable via a programmable interrupt mask register. In addition, the XVME-240 has eight flag output lines which can be employed as external interrupt acknowledge lines or as control signal lines to any externally-connected devices.

Hardware Specifications

Input Characteristics– any input

High-level input voltage (V_{ih})	2.0 V min., 5.5 V max.
Low-level input voltage (V_{il})	0.8 V max.
Low-level input current (I_{il})	0.2 mA max.

Output Characteristics

Channel Outputs

Low-level output voltage (V_{ol})
I_{ol} = 48 mA, 0.5 V max.
I_{ol} = 16 mA, 0.4 V max.

Low-level output current (I_{ol}) 48 mA max.

High-level output current (I_{oh})
V_{oh} = 2.4 V, 3 mA, max.
V_{oh} = 2.0 V, 15 mA, max.

Flag Outputs

Low-level output voltage (V_{ol})
I_{ol} = 24 mA, 0.5 V max.
I_{ol} = 12 mA, 0.4 V max.

Low-level output current (I_{ol}) 24 mA max.

High-level output current (I_{oh})
V_{oh} = 2.4 V, 3 mA, max.
V_{oh} = 2.0 V, 15 mA, max.

Power Requirements	+5 V, typ. 2.7A
All channels- High outputs	+5 V, typ. 3.6A
All channels- Low outputs	+5 V, typ. 2.7A

Environmental Specifications

Temperature

Operating	0º to 65ºC (32º to 149ºF)
Nonoperating	-40º to 85ºC (-40º to 185ºF)

Humidity

Operating	20 to 80% RH, non-condensing
Nonoperating	20 to 90% RH, non-condensing

Altitude

Operating	Sea level to 10,000 ft. (3048 m)
Nonoperating	Sea level to 40,000 ft (12192 m)

Vibration

Operating 5 to 2000 Hz
.015" (0.38 mm) peak-to-peak displacement
1.0 g (max.) acceleration

Nonoperating 5 to 2000 Hz
.030" (0.76 mm) peak-to-peak displacement
2.5 g (max.) acceleration

Shock

Operating 30 g peak acceleration
11 msec duration

Nonoperating 50 g peak acceleration
11 msec duration

VMEbus Compliance

- Complies with VMEbus Specification, IEEE 1014
- A24/A16:D16/D08(EO) DTB Slave
- Interrupter - I(1)-I(7)(STAT), RORA
- Interrupt vector - D08(O)(DYN)
- Utility signals - SYSFAIL
- Form Factor: DOUBLE
  233.7 mm × 160.0 mm (9.2" × 6.3")
- Conforms to Xycom Automation Standard I/O Architecture

Warranty Information

The XVME-240 carries a two-year parts and labor warranty.

Ordering Information

XVME-240	80-Channel Digital TTL I/O Module
XVME-920	OPTO 22, 16-Channel Digital Transition Kit
XVME-921	OPTO 22, 24-Channel Digital Transition Kit
XVME-920	OPTO 22, 32-Channel Digital Transition Kit

XYCOM AUTOMATION, INC.
750 North Maple Road
Saline, Michigan 48176-1292
Phone: (734) 429-4971
FAX: (734) 429-1010
Call toll-free: 1-800-AT-XYCOM
http://www.xycomautomation.com/

XYCOM CANADA, INC.
461 North Service Road West, Unit B36
Oakville, Ontario L6M 2V5 Canada
Phone: (905) 825-0281
FAX: (905) 825-0282

XYCOM AUTOMATION LTD.
NORTHERN EUROPE
21 Tenter Road, Moulton Park
Northampton NN3 6AX England
Phone: +44-1604-790-767
FAX: +44-1604-790-722

XYCOM AUTOMATION S.r.L.
SOUTHERN EUROPE
Via Chambery 93/107/U
10142 Torino, Italy
Phone: 39-011-770-5311
FAX: 39-011-770-53270