



# XVME-9630/60

## VMEbus 3U/6U, Nonintelligent, IP Carrier Cards

### FEATURES

- 6U VMEbus card holds four IP modules
- 3U model holds two modules
- Standard IP module interface
- Front panel connectors for field I/O signals
- Supports two interrupt channels per IP
- Provides individually isolated and filtered +5V, +12V, and -12V DC power lines to each IP module
- Accepts other manufacturers' IP modules
- Locking front panel connectors

### BENEFITS

- Full IP module data access enables convenient software configuration and control of the IP modules.
- Front panel LEDs simplify debugging with a visual indication of successful IP accesses.
- Front panel connectors provide ribbon cable access to field I/O without interference from boards in adjacent slots.

The XVME-9630 and XVME-9660 are nonintelligent slave boards that interface IP modules to the VMEbus. The full-height (6U) board holds four IP modules, and the half-height (3U) board holds two. All field I/O connections are made to the carrier board.

### Operation

Xycom Automation's carrier boards provide full data access to the IP module's I/O, ID and memory spaces. With full access to the programmable registers, you can easily configure and control the operation of the IP modules from the VMEbus.

Up to two interrupt requests are supported for each IP module. The VMEbus interrupt level is software programmable.

Individual passive filters on each IP module power supply line provide optimum filtering and isolation between the IP modules and the carrier board.

# PRODUCT SPECIFICATIONS AND RATINGS

## Environmental

|           | Operating                   | Nonoperating                |
|-----------|-----------------------------|-----------------------------|
| Thermal   | 0 to 70°C                   | -25 to 85°C                 |
| Humidity  | 5% to 95% RH, noncondensing | 5% to 95% RH, noncondensing |
| Isolation | Nonisolated                 | Nonisolated                 |

## Physical

|                        |  |
|------------------------|--|
| Power Supply           | <ul style="list-style-type: none"><li>• +5V (<math>\pm 5\%</math>): 275mA maximum</li><li>• <math>\pm 12V</math> (<math>\pm 5\%</math>): 0mA (not used)</li><li>• Plus IP module load</li></ul>  |
| Physical dimensions    | <ul style="list-style-type: none"><li>• XVME-9630: 3.937 in. (100.0mm) x 6.299 in. (160.0mm)</li><li>• XVME-9660: 9.187 in. (233.3mm) x 6.299 in. (160.0mm)</li></ul>  |
| Connectors (XVME-9630) | A, B (carrier field I/O): 50 pin male headers <ul style="list-style-type: none"><li>• A: Right angle pins, 3M 2550-5002UB (or equiv.), no ejector latches</li><li>• B: Straight pins, 3M 2550-6002UB (or equiv.), no ejector latches</li></ul> |
| Connectors (XVME-9660) | A-D (carrier field I/O): 50 pin male header x2 stacked "condo" type, 3M 3433-D303 with ejector latches   |

## IP Compliance (ANSI/VITA 4)

- Meets IP specifications per ANSI/VITA 4-1995
- I/O space and ID space supported.
- Memory space: supports 1MB to 8MB per IP module
- Interrupts: supports two interrupt requests per IP module and interrupt acknowledge cycles, D16/D08(O)
- Supports single or double size IP modules
- 32-bit IP modules not supported

## VME Compliance

- Meets VME specifications per revision C.1 dated October 1985, IEC 821-1987 and IEEE 1014-1987.
- Data transfer bus: A24/A16:D16/D08(E0) DTB slave; supports Read-Modify-Write cycles.

- VMEbus access time: 500nS typical (all carrier board registers); measured from the falling edge of DSx\* to the falling edge of DTACK\*. 750nS typical (IP registers with no wait states). IP register access time will increase by the number of wait states multiplied by 125nS (the period of the 8MHz clock).

### VMEbus Address Modifier Codes:

- Short I/O space: Base address is hardware jumper selectable. Occupies 1K byte. Responds to both address modifiers 29H & 2DH in the VMEbus short I/O space for carrier board registers and IP I/O and ID PROM spaces.
- Standard address space: Responds to both address modifiers 39H & 3DH in the VMEbus standard address space when such accesses to IP memory are enabled via programmable registers on the carrier board. Base addresses and sizes of IP memory are programmable from 1 MB to 8 MB.
- Interrupts: Creates I(1-7) programmable request levels (up to two requests sourced from each IP module). D16/D08(O) interrupter (interrupt vectors come from IP modules). Supports Carrier registers are for control and status monitoring. Interrupt release mechanism is Release on Register Access (RORA) type.

## ORDERING INFORMATION

| Order Number | Description                        |
|--------------|------------------------------------|
| XVME-9630    | 3U carrier. Holds two IP modules.  |
| XVME-9660    | 6U carrier. Holds four IP modules. |

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