# AT-VME-DIO-32

# VME Bus Compatible Discrete I/O Board







- VME 6U Board
- Based on VME64x Architecture
- Available in three variants Commercial, Air-Cooled, Conduction-Cooled
- · Vibration, Shock resistant
- Complies with IEEE 1101.2 mechanical specifications
- Programmable Interrupter: 7 Levels
- Dimensions- 233.35 x 160mm

- Isolation and non-isolation options available
- Input Voltage: TTL and Open Collector
- Optional Two Asynchronous Channels of RS-232 or RS-422 or 1 each of RS-232/422 Serial Interfaces
- Programmable Baud Rates up to 115.2 k/Bauds
- Driver and high-level API libraries for Windows XP, Linux, RT-Linux, LynxOS 4.0 and VxWorks 5.5

## **OVERVIEW**

The AT family of 6U VME Discrete I/O boards are designed to provide users with a high degree of reliability and flexibility to meet inputoutput requirements. The AT-VME-DIO boards provide an economical method for isolation and interfacing of I/O signals to the VME
bus. Optical-relays, which are built-in, are provided for each I/O channel. These eliminate the expenses incurred due to the usage of
external relay panels. They are ideally suited for stringent military and airborne applications. On-board relays isolate all the inputs,
outputs and the VMEbus from each other against all sorts of transients emanating from ground loops etc. The AT-VME-DIO provides
16 channels of isolated inputs and 16 channels of isolated outputs. The voltage levels supported are TTL and Open Collector voltages.
Also available on the board are 2 serial asynchronous RS-422 channels. These have a programmable baud rate up to 115.2 k/ Bauds.

# Hardware

The AT-VME-DIO boards meet the VME 64x standard and are available in a 6U form factor. The boards are available in three variants - Commercial, Air-Cooled, Conduction-Cooled. It is designed to work in units meeting MIL-STD-461C for EMI/EMC and MIL-STD-810F for airborne applications. All the components used are of MIL grade quality as per airborne application requirements in the conduction-cooled version. Front panel and Rear I/O connectivity options are provided for commercial and air-cooled boards. Conduction-cooled boards are available with Rear I/O connectivity only.

# AT-VME-DIO-32

# VME Bus Compatible Discrete I/O Board

### PRODUCT SPECIFICATIONS

### Discrete I/O

- 16 Channels of Opto-Isolated Inputs
- 16 Channels of Opto-Isolated Outputs
- One opto-coupler / channel
- Minimum isolation of 500 V
- Non-isolated VME boards also available
- Voltage level: TTL Logic, Open Collector 0-48V
- Open Collector 0-48V
- Rear I/O Connectivity on P2

### Serial Interface - Optional

- 2 RS-232 or 2 RS-422 or 1 each of RS-232/422 Asynchronous Channels
- Programmable standard baud rates up to115.2 K/Bauds

### **Mechanical Format**

- Commercial/Development version- Standard VME
- Air-cooled version- As per ANSI/VITA 1-1994
- Conduction cooled version- As per IEEE 1101.2

### **Dimensions**

- Dimensions- 233mm x 160mm
- IEEE 1101.2 single-slot board with 0.8-inch centers

#### VME Interface

- VME 64x. 6U form factor
- A24/D16 interface

### **Power**

- Consumption: 2.25 watts
- 5V @ 450mA

### Interrupts

- Programmable interrupter 7 levels
- Samples & compares periodically the status of the I/O channels
- · For every change, VME bus interrupt is asserted

### **Software Support**

- Driver and high-level API libraries for Windows XP, Linux, RT-Linux, LynxOS 4.0 and VxWorks 5.5
- Virtual Instrument Panels for interactive control of Discrete I/O and UART features
- Self-test and built-in test features provided

### **Diagnostics**

- · Built-In-Test (BIT) of all on-board TTL chips
- Wrap around loops to verify correct board operation

### **Environmental**

	Air-Cooled	Conduction-Cooled
Operating	0°C to + 60°C	-40°C to + 85°C

### Ruggedization

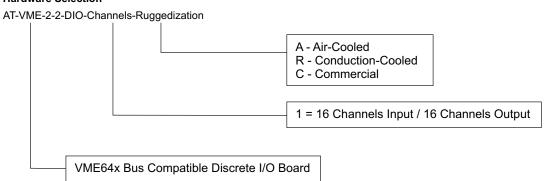
- Series 'C': Commercial/Development Version
- Series 'A': Air-Cooled Version
- · Series 'M': Military / Conduction-Cooled Version

### Warranty

· 1 Year limited warranty

# ORDERING INFORMATION

# Hardware Selection



- Contact sales for support for other Operating Systems
- Contact sales for configuration of front and rear I/O configuration
- Contact sales for environmental options



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