



## ***MODEL ADC/DAC***

### ***“VME” INDIVIDUAL ADC’s, DAC’s, COUNTER’s, 16 BIT RESOLUTION, DAUGHTER BOARD***

#### ***DESCRIPTION:***

The **JOERGER ENTERPRISES, INC.** Model ADC/DAC is a daughter card to be used with a stripped VME-M motherboard. It offers a sophisticated VME array that interfaces to the VME64 data bus. The module is controllable via a front panel JTAG input connector. This allows the module to be set for its application. This configuration provides a VME module but without the cost of the daughter card array's and memory. It is meant for applications that do not require these features. The VME array does have internal memory that can be programmed for an application. This module offers:

Twelve Independent 16 bit ADC's, 250khz max clock rate, +/- 5 and +/- 10 volt input ranges selectable

Four Independent 16 bit DAC's, +/- 10 volt output, 10usec, resets to zero, re-readable

Three 16 bit up/down/presetable counters

Provides module identification, serial number, model type and options

#### ***ANALOG TO DIGITAL CONVERTER***

12 individual ADC's are provided. Each channel's input is buffered and the data is held in sample and hold amplifiers. The input range of the module can be set for +/- 5 or +/- 10 volts. Resolution is 16 bits and an external reference is used to provide 6 ppm/°C stability. SNR is 85db typical. The maximum sampling speed is 250khz. The clock speed is programmable selected.

#### ***APPLICATIONS:***

Instrumentation and Control Systems

Multi-Axis Positioning Systems

Power Line Monitoring Systems

#### ***DIGITAL TO ANALOG CONVERTER***

4 individual DAC's are provided. Resolution is 16 bits and each output is buffered. The output range is +/- 10 volts. Maximum conversion speed is 10useconds, data is reset to zero and the input data can be re-read for verification.

## ***APPLICATIONS:***

Process Control  
Closed-Loop Servo Control  
Motor Control  
Data Acquisition Systems  
DAC-Per Pin programmers

## ***COUNTERS AND I/O CONTROL***

A FPGA is provided on the card. It is programmed from the front panel JTAG input. It can accept I/O inputs from the VME array and the rear P2 connector. Control and clock are available from the VME array. These include front panel signals, clocks and the module control bus. There are 5 I/O inputs from the front panel input connector. The array is programmed as an UP, DOWN, PRESET counter. It is arranged as 3, 16 bit counters. These can be coupled to provide 48 bit capability. However the array is programmable. This means that a user can program it to satisfy their requirements.

## ***APPLICATIONS:***

3, 16 bit counters  
Operating modes: UP, DOWN and PRESET  
I/O capability

**CONNECTOR:** 26 pin 3M 1552 series ribbon connector

**POWER REQUIREMENTS:** + 3.3V, +5V, +12V, -12V

**SIZE:** Single width daughter card

work/datasheets/ADCDAC.doc

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