



## PRELIMINARY

# MVME110 24-BIT Data Acquisition Module

## Specifications

- **Analog Inputs:** 8, 16 or 32
- **Input Impedance:** 10 kOhm
- **Full Scale Input:** 2.0 V pp differential\*
- **Input Signal BW:** 40 kHz max
- **Input Sample Rate:** 128 X Output Rate for BW < 22 kHz; 64 X Output Rate for BW > 22 kHz
- **Output Rate (Effective Sample Rate):** Max. 100 kHz/Ch.; Min. 2 kHz/Ch
- **Internal Sample Clock:** Programmable in steps of 20 Hz (at output frequency)
- **Dynamic Range:** > 110 dB in 128x oversampling mode; > 105 dB in 64x oversampling mode
- **Total Harmonic Distortion:** < -105 dB
- **Crosstalk:** < -105 dB
- **On-Board Storage:** 64 K Words
- **Output Word length:** 32 bits packed for 2 channels or 24 bits for 1 channel on both VME or VSB; 24 bits only on FPDP
- **VMEbus Interface:** A32/24/16 D32 BLT Slave; Vectored Interrupts
- **VSBbus Interface:** A32 D32 BLT Slave; Polled Interrupts

## VME Specifications

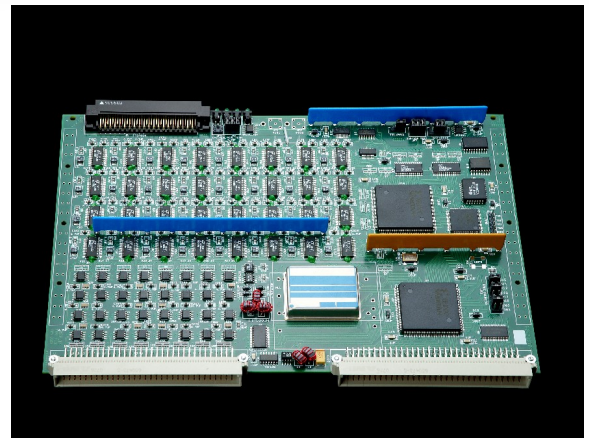
- Conforms with VME Specifications Revision C.1 IEEE Std. 1014-1987
- **Board size:** 6U

## Power Requirements

- **6.0 Amps @ +5 V**
- **0.42 Amps @ +12 V**
- **0.25 Amps @ -12 V**

## Environmental

- **Operating Temperature:** -20 to 85 °C
- **Storage Temperature:** -40 to 125 °C
- **Shock:** 25g, 11ms on all axis
- **Humidity:** 95% Rel. Humidity, non-condensing



The MVME110 Data Acquisition Module is a drop-in-replacement for the GE-IP ICS-110BL

## Features

The MVME110 data acquisition module has 32 channels with each providing 24-bit, 128kbps (improved over ICS-110BL) Analog-to-Digital Converters ADC, 64 bit FIFOs and can be accessed via, VME, FPDP or VSB interfaces.

- Conformal coating is standard on all units.
- Conduction-cooled version available

As with all Merlin Embedded DIR products, the MVME110 has the same, or better, functional performance than the product it is replacing. All Merlin Embedded products are backed by a 2-year warranty and 15 years of life-cycle support. The user will not have to take on any obsolescence issues when utilizing Merlin Embedded products.

## Merlin Embedded

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