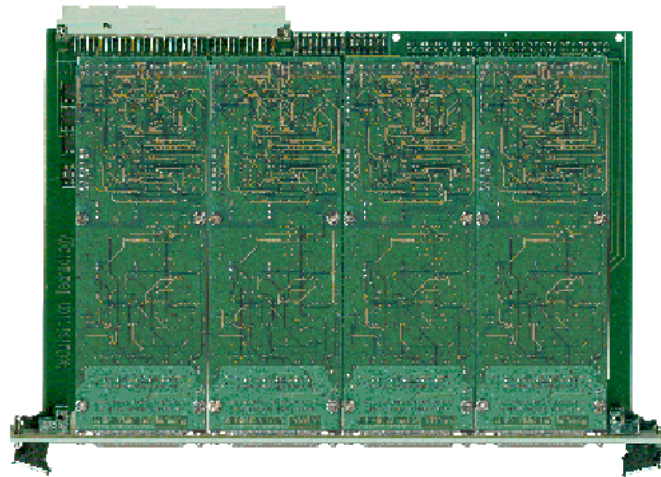


## 32 Channel ADC for VMEbus

By AcQ Inducom



The VME393 32-Channel Differential Input ADC VMEbus Board is very well suited to be used in applications in which autonomous signal conversion is an issue, as well as in standard mid-range applications. Enabled channels are scanned at maximum rate and conversion results are stored in shared memory. Input channels are grouped into 4 sections of 8 inputs each. Each section features a local DSP which performs all functionality and user specific functions can be added for customized operation.

This VMEbus board has a 6U form and is also available as 3U VMEbus board.

### Features:

- > 4x 100kSPS ADC with 16-bit or 12-bit resolution
- > Channels can be enabled/disabled individually
- > No potentiometers
- > 32 differential input channels
- > On-board filtering with 1kHz cut-off frequency
- > Analog front-end is optically isolated
- > On-board DC/DC converters for isolated power supply
- > Data acquisition handled by 4x TMS320C203 DSPs, transparent for user
- > Calibration data stored in EEPROM
- > Measurement values continuously updated in dual-ported SRAM
- > Update rate up to 50kHz

## VMEbus Interface

- \* The VMEbus slave interface of the VME393 is compliant with the VMEbus Specification Rev C.1.
- \* It supports standard or short addressing (A24/A16), D16/D08(E0) data transfer capabilities and configurable interrupt level (I(x)).

## Input Characteristics

- \* 32 differential inputs
- \* Optical isolation
- \* Uni-polar input range: 0 .. +5V / 0 .. +10V / 0 .. 20mA
- \* Bi-polar input range: -5V .. +5V / -10V .. +10V
- \* Input ranges are software programmable
- \* 2nd order input filter with 1kHz cut-off frequency

## Conversion Characteristics

- \* 12-bit or 16-bit conversion accuracy (see ordering information)
- \* Typical acquisition time of 10 microseconds per channel
- \* All enabled channels are converted continuously
- \* Conversion data can be read from shared memory by host Local DSP (TMS320C203) performs acquisitions sequences.
- \* User-specific features (e.g. running average) can be implemented on request

## Ordering Information

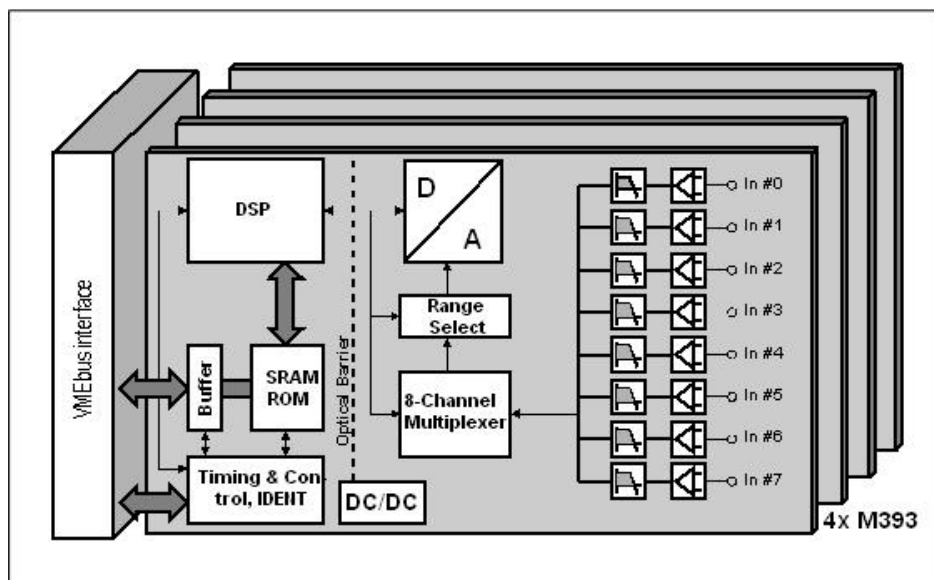
- \* **VME1393/T04** 3U 8ch analog input, diff. voltage inputs, 12-bit res., no DCDC
- \* **VME1393/T02** 3U 8ch analog input, diff. voltage inputs, 12-bit res., with DCDC
- \* **VME1393/T08** 3U 8ch analog input, diff. current inputs, 12-bit res., no DCDC
- \* **VME1393/T06** 3U 8ch analog input, diff. current inputs, 12-bit res., with DCDC
- \* **VME1393/T05** 3U 8ch analog input, diff. voltage inputs, 16-bit res., no DCDC
- \* **VME1393/T03** 3U 8ch analog input, diff. voltage inputs, 16-bit res., with DCDC

## Ordering Information

- \* **VME1393/T09** 3U 8ch analog input, diff. current inputs, 16-bit res., no DCDC
- \* **VME1393/T07** 3U 8ch analog input, diff. current inputs, 16-bit res., with DCDC
- \* **VME393/T04** 6U 32ch analog input, diff. voltage inputs, 12-bit res., no DCDC
- \* **VME393/T02** 6U 32ch analog input, diff. voltage inputs, 12-bit res., with DCDC
- \* **VME393/T08** 6U 32ch analog input, diff. current inputs, 12-bit res., no DCDC
- \* **VME393/T06** 6U 32ch analog input, diff. current inputs, 12-bit res., with DCDC

## Ordering Information

- \* **VME393/T05** 6U 32ch analog input, diff. voltage inputs, 16-bit res., no DCDC
- \* **VME393/T03** 6U 32ch analog input, diff. voltage inputs, 16-bit res., with DCDC
- \* **VME393/T09** 6U 32ch analog input, diff. current inputs, 16-bit res., no DCDC
- \* **VME393/T07** 6U 32ch analog input, diff. current inputs, 16-bit res., with DCDC
- \* **VME(1)393/SW** APIS based software
- \* **VME(1)393/MAN** manual on paper



AcQ  Inducom

Visit address  
Rijnstraat 20  
5347 KN Oss

Postal address  
P.O. Box 627  
5340 AP Oss

The Netherlands  
Phone +31 (0)412 64 19 22  
Fax +31 (0)412 62 26 40  
Internet [www.acq.nl](http://www.acq.nl)  
Email [info@acq.nl](mailto:info@acq.nl)

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