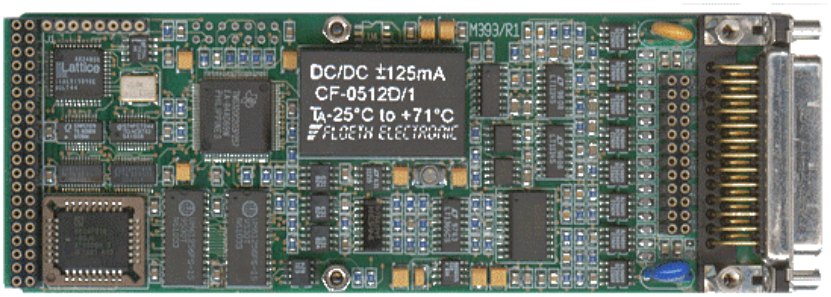
## M393

# 12-/16-bit ADC M-module with 8x Differential inputs




The M393 8-Channel Differential Input ADC M-module 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. A local TMS320C203 DSP provides processing capabilities to scan all channels at maximum rate, perform gain/offset compensation and store conversions results in dual-ported memory.
The M393 is available in two versions, either with voltage inputs or current inputs. The current input module has an input range of 0-20mA. The voltage input module has a programmable input range which gives great flexibility for applications in data acquisition systems that need to be able to convert a wide variety of analog voltages.

**Features:**

> 100kSPS ADC with 16- or 12-bit resolution
> Software programmable input ranges
> No potentiometers
> 8 Differential input channels
> Onboard filtering with 1kHz cut-off frequency
> Analog front-end optically isolated
> Optional onboard DC/DC converter for isolated power supply
> Features local TMS320C203 DSP
> Calibration data stored in local EEPROM
> Conversion results continuously updated in dual-ported memory
> Up to 50kHz output update rate

## M-module Compliancy

* A08/D16 (8-bit address and 16-bit data)
* INTA (software-end-of-interrupt)
* IDENT (identification EEPROM)

## Measurement

* M393 can be fitted to perform either 12- or 16-bit conversion (see ordering information)
* All enabled channels are converted at a programmable rate.
* Conversions results are stored in dual-ported memory
* Additional functionality can be implemented on request

## Analog Inputs

* 8 differential input channels available
* Inputs accept either voltage or current signals
* Inputs are optically isolated from the system
* 2-pole filter with 1kHz cut-off frequency per channel

## Input Range

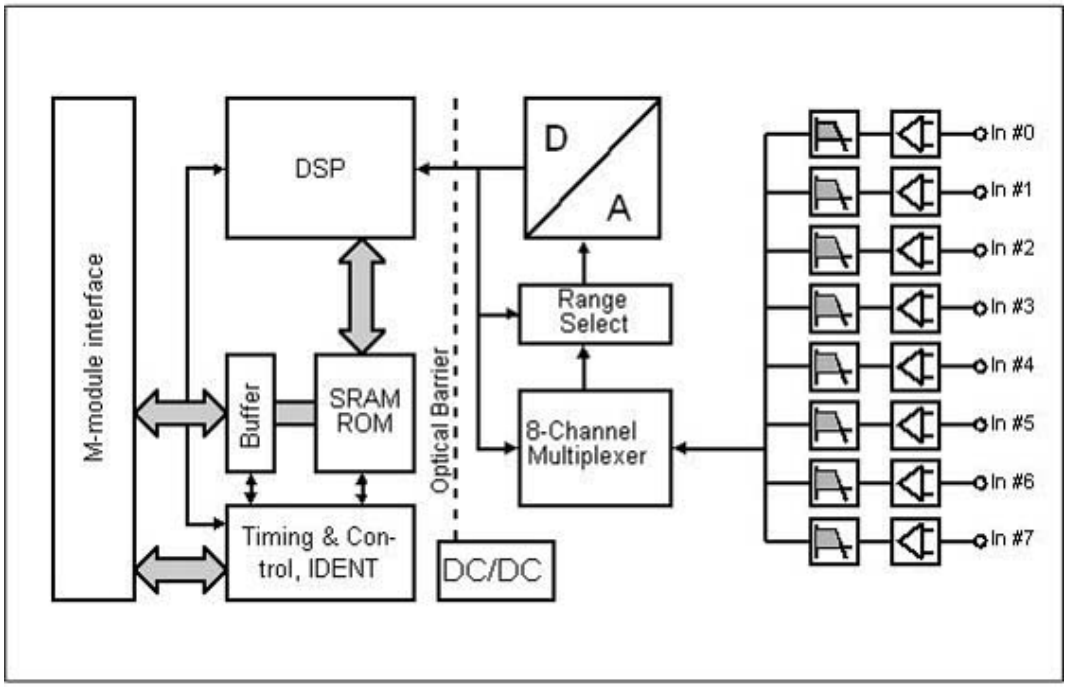
* Voltage inputs: Uni-polar (5V, 10V) and Bi-polar +/-5V, +/-10V)
* Current inputs:- 0..20mA

## Ordering Information

* **M393/T04** 12-bit ADC with 8x Differential Voltage Inputs M-module, without DCDC
* **M393/T02** 12-bit ADC with 8x Differential Voltage Inputs M-module, with DCDC
* **M393/T08** 12-bit ADC with 8x Differential Current Inputs M-module, without DCDC
* **M393/T06** 12-bit ADC with 8x Differential Current Inputs M-module, with DCDC
* **M393/T05** 16-bit ADC with 8x Differential Voltage Inputs M-module, without DCDC

## Ordering Information

* **M393/T03** 16-bit ADC with 8x Differential Voltage Inputs M-module, with DCDC
* **M393/T09** 16-bit ADC with 8x Differential Current Inputs M-module, without DCDC
* **M393/T07** 16-bit ADC with 8x Differential Current Inputs M-module, with DCDC
* **M393/SW** APIS based software
* **M393/MAN** manual on paper

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