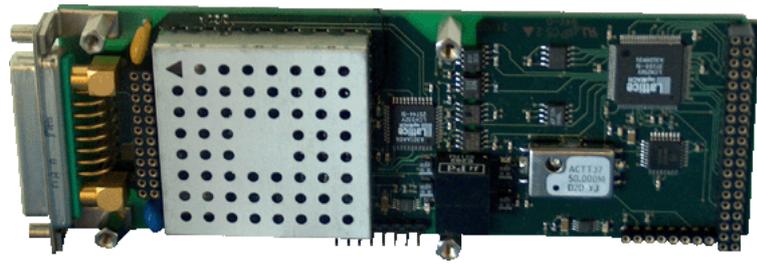


# Universal Timer/Counter M-module

By AcQ Inducom



The M385 is a programmable universal timer/counter M-module with two signal inputs. The frequency range is up to 250MHz (M385/250M) or up to 100MHz (M385/100M). The timer/counter is a register based device and can be programmed via a provided ANSI-C library. The analog input conditioning is software programmable with respect to trigger levels, sensitivity and input coupling. The M385 is designed for automated test and measurement applications and can be programmed to perform several measurements.

#### Features:

- > Bandwidth of 250MHz (M385/100M: 100MHz)
- > Timer/counter with two input signals
- > Input voltage range of 10V pk-pk
- > Optical isolation
- > Programmable input conditioning
- > 32-bit timer with 200MHz (M385/100M: 100MHz) timebase
- > 32-bit counter
- > A08D16 M-module interface
- > INTA software-end-of-interrupt
- > EEPROM for module ID and calibration data
- > Extensive software support: APIS based, LabView and LabWindows CVI

## M-module Compliancy

- \* A08D16 (8-bit address and 16-bit data)
- \* INTA (software end-of-interrupt)
- \* IDENT (identification EEPROM)

## Measurement Functions

- \* Frequency measurement
- \* Period measurement
- \* Time interval measurement
- \* Frequency ratio measurement
- \* Rise- and fall-time measurement
- \* Pulse width measurement
- \* Voltage measurements
- \* Totalize gated by hardware function
- \* Totalize gated by software function

## Inputs Conditioning

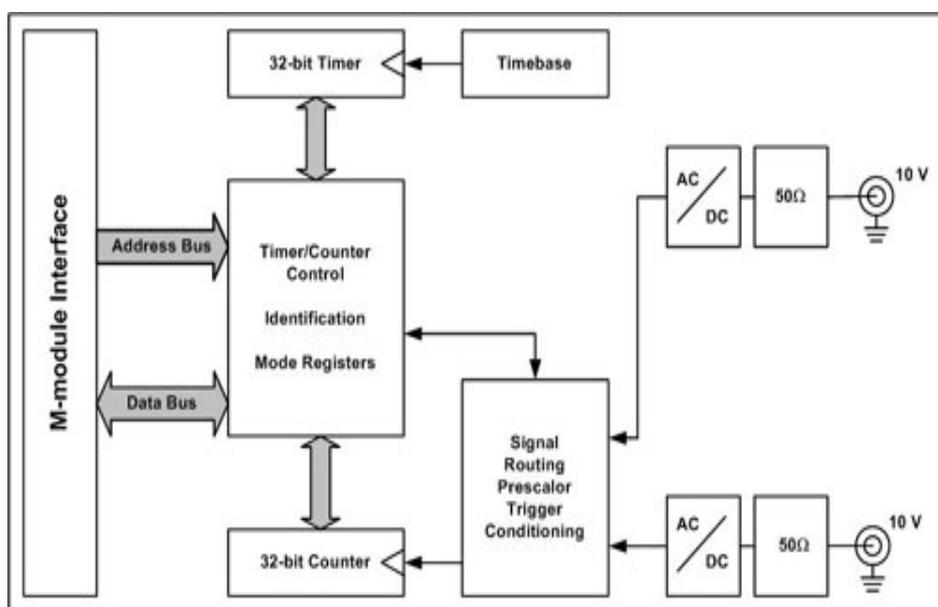
- \* Programmable AC/DC coupling
- \* Bandwidth DC coupled input: dc to 250MHz(BR>)
- \* Bandwidth AC coupled input: 10Hz to 250MHz(BR)
- \* Dynamic range: 10V pk-pk
- \* Input impedance: 50W
- \* Input sensitivity: 35mV rms, 100mV pk-pk
- \* Trigger level: programmable from -5V to +5V in steps of 2.5mV
- \* Trigger hysteresis: programmable from 10mV to 60mV in steps of 5mV

## Counter, Timer and Timebase

- \* The M385 has one 32-bit counter, clocked by either input
- \* The M385 has one 32-bit timer, clocked by a 200 MHz timebase. (M385/100M: 100MHz)

## Ordering Information

- \* **M385/T01** M-module, 100 MHz
- \* **M385/T02** M-module, 250 MHz
- \* **M385/MC** mating connector
- \* **M385/SW** APIS based software, can be interfaced with LabWindows CVI
- \* **M385/LABVIEW** interface software and example virtual instruments
- \* **M385/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)

m385\_v5