



MA203 Digital Input Module

The MA203 is a digital input module that will sample and selectively store up to 16 bits of digital data along with a 31-bit time stamp at a rate up to 5 Mhz. The 31-bit time tag allows unique time tagging data. The module has the ability to store all data at the specified sample rate or selectively store input values based upon changes in state of one or more of the inputs. This technique provides extensive real-time data compression for certain digital input signals.

M Module Compliance

Complies with ANSI/VITA Std. 12-1996 for single MA Modules

Data Transfers: 16 bit

Interrupts: INTA & INTC

Triggers: TRIGA & TRIGB

Compatible with VXI, VME, PCI, cPCI and other M Module carriers.

Applications

- Acquisition of transient signals
- Realtime Data Compression
- Logic Analysis
- Event Counting

Ordering Information

Part Number 11028100-0001
+ AM104

Additional Information

User Manuals for C&H's VXI Based M Module carrier and this MA Module may be found on our Web Site: "<http://www.chtech.com>"

Specifications:

Number of Channels: 16

Sample Rate: up to 5Mhz

Input Debounce: 0 to 128 ms.
Software Selected

Input Polarity: Software Selected

Input Types: Plug in AM104s,
see below

Input Masking:
Any bit pattern programmable

Interrupts:

- Data Stored
- FIFO Half-Full
- FIFO Full
- Time-Stamp Rollover
- Preset Change Of State
- Preset Level Transition
- Preset Bit Pattern

Local Memory:

32K x 48(31 bit time tag)

Sampling Strobe:

- Internal: To 5 Mhz
- Front Panel: To 5 Mhz
- Backplane Trigger: To 5 Mhz
(Source & prescaler software programmable)

I/O Connector: 44-pin D-Sub or
24-pin peripheral

Temperature:

- Operating: 0°C to 50°C
- Storage: -40°C to 70°C

Power: +5V @ 400 mA
+12V @ 0 mA
-12V @ 20 mA

AM104 Signal Conditioning (See Separate Data Sheet)

- **Opt 1:** +5V Optocoupled*
- **Opt 2:** +28V Optocoupled*
- **Opt 3:** Contact Closure*
- **Opt 4:** +28V, pgm threshold**
*100 Khz max ** 5 Mhz max