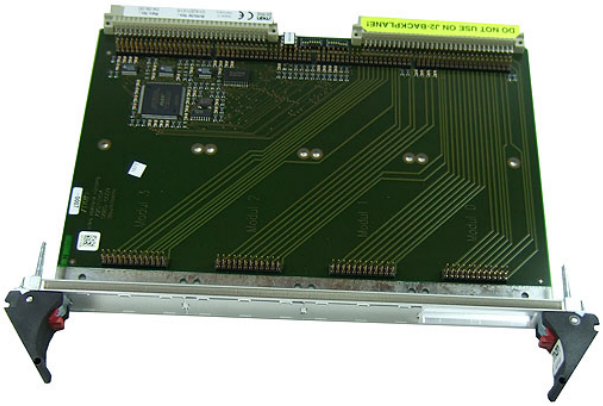
Embedded Solutions

A201S - 6U VMEbus M-Module™ Carrier Board



- **4 M-Module™ slots**
- **1 VMEbus slot**
- **VMEbus slave A16/A24/D16, interrupter**
- **-40 to +85°C screened versions**

The A201S is an M-Module™ carrier board for universal I/O on the VMEbus, allowing high flexibility in applications such as process and motion control, measuring and instrumentation, communication or special-purpose tasks. The M-Modules™ are screwed tightly on the carrier board, but the board needs only one slot on the VMEbus. Please note that since all three rows of the P2 connector are used for user I/O, board models with this connector are not compatible with VME64 backplanes.

An interrupt controller handles the M-Modules™ individually. In VMEbus D16 systems the I/O signals of the M-Modules™ can be accessed from P2/J2 inside the rack.

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Technical Data

Mezzanine Slots
- Four M-Module™ slots
- Compliant with M-Module™ standard
- Characteristics: D08, D16, A08, INTA, INTC

Interrupt Controller
- Interrupt handling individually for each M-Module™
- Functional compatibility with A201N

Peripheral Connections
- Via front panel
- Via 96-pin P2 connector (rear I/O)

VMEbus
- Only one slot required on the VMEbus
- Models with P2 connector not compatible with VME64 backplanes (row B of the P2 connector is used for user I/O)
- Slave D08(EO):D16:A16:A24
- Interrupter D08(O)

Electrical Specifications
- Supply voltage/power consumption: +5V (-3%/+5%), 320mA typ. (without M-Modules™)
- MTBF: 430,000h @ 50°C (derived from MIL-HDBK-217F)

Mechanical Specifications
- Dimensions: standard double Eurocard, 233.3mm x 160mm
- Front panel: aluminum with 2 handles, cut-outs for front connectors of 4 M-Modules™
- Weight: 220g

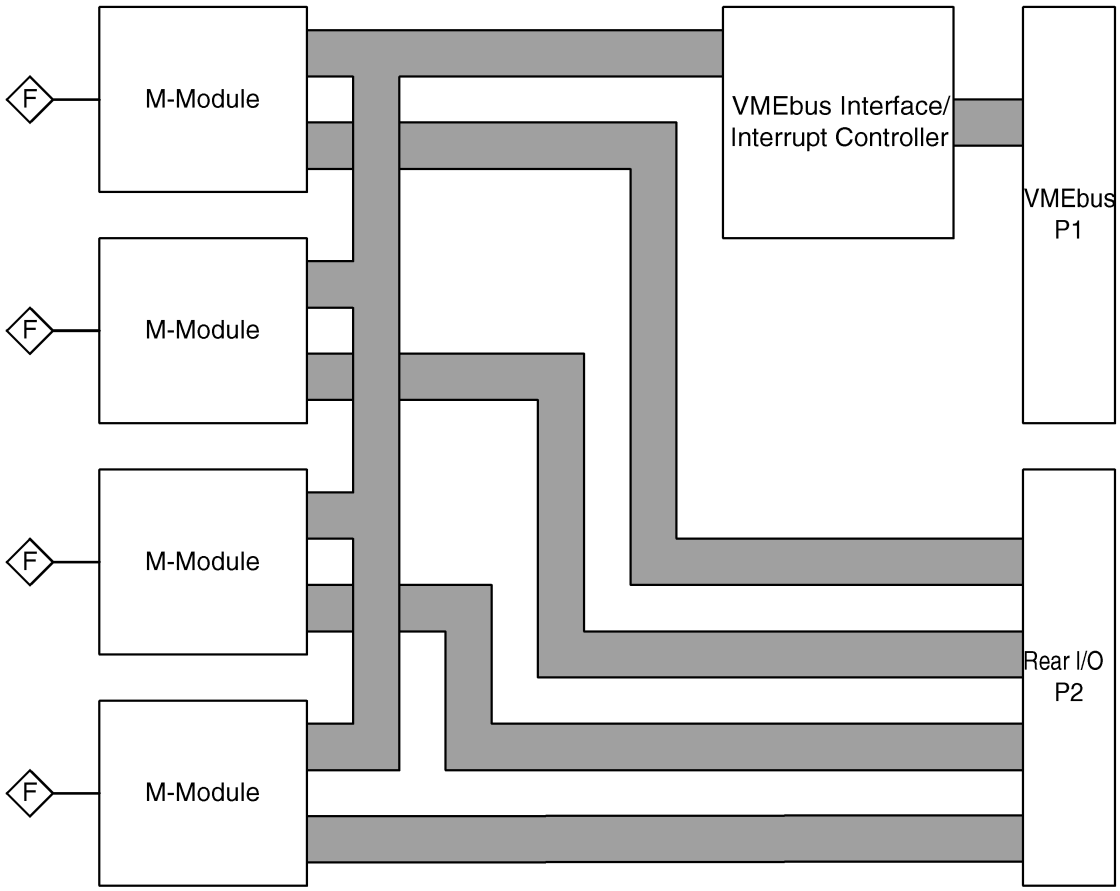
Environmental Specifications
- Temperature range (operation):
  - 0..+60°C or -40..+85°C
  - Airflow: min. 10m³/h
- Temperature range (storage): -40..+85°C
- Relative humidity range (operation): max. 95% without condensation
- Relative humidity range (storage): max. 95% without condensation
- Altitude: -300m to + 3,000m
- Shock: 15g/11ms
- Bump: 10g/16ms
- Vibration (sinusoidal): 2g/10..150Hz
- Conformal coating on request

Safety
- PCB manufactured with a flammability rating of 94V-0 by UL recognized manufacturers

EMC
- Tested according to EN 55022 (radio disturbance), IEC1000-4-2 (ESD) and IEC1000-4-4 (burst)

Software Support
- M-Module™ drivers for Windows®, VxWorks®, Linux, QNX®, OS-9® as supported

Diagram


F
M-Module
F
M-Module
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M-Module
VMEbus Interface/
Interrupt Controller
VMEbus
P1
Rear I/O
P2

Ordering Information

Standard Hardware

01A201S02	M-Module carrier board, on-board 16MHz-supply, with P2, -40..+85°C screened
01A201S09	M-Module carrier board, on-board 16MHz-supply, with P2, 0..+60°C
01A201S11	M-Module carrier board, on-board 16MHz-supply, without P2, -40..+85°C screened
01A201S12	M-Module carrier board, on-board 16MHz-supply, without P2, 0..+60°C
01A201S15	M-Module carrier board, on-board 16MHz-supply, ELMA ejectors, with P2, -40..+85°C screened
01A201S16	M-Module carrier board, on-board 16MHz-supply, ELMA ejectors, with P2, 0..+60°C
01A201S17	M-Module carrier board, on-board 16MHz-supply, ELMA ejectors, without P2, -40..+85°C screened
01A201S18	M-Module carrier board, on-board 16MHz-supply, ELMA ejectors, without P2, 0..+60°C

Miscellaneous

05M000-01	M-Module cable, 2m, 21-pin VG receptacle to pig tail, for connection to VMEbus P2 mating connector (05M000-02), for wiring of M-Module I/O signals via P2
05M000-02	VMEbus P2 connector for cable connection of 4 21-pin M-Module cables (05M000-01) for mounting in VMEbus enclosure without J2 backplane, consisting of 96-pin shroud and receptacle
05M000-15	Front-panel cover for M-Module cut-outs at front panels, snap-in, 10 pcs
05M000-17	25 mounting screw sets to fix M-Modules on carrier boards

Documentation

20A201S00	A201S User Manual

For the most up-to-date ordering information and direct links to other data sheets and downloads, see the A201S online data sheet under » www.men.de.

Embedded Solutions

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