

Processor modules



Processor modules ME203 series

The processor modules of the ME203 series extend the range of the M1 controller family in terms of reduced power consumption and moderate cycle times. With an extremely slim design of only one module width, ME203 CPUs offer all the essential features of larger type series but with a lower power consumption.

Several networking and power supply options scale the module ideally for smaller applications. As fully-fledged M1 CPUs, ME203 processor modules are not only configured with the same tools as the high-end families MX and MPC, but are also fully code and application compatible, although they have less memory and fewer interfaces.

All modules have two serial interfaces and a front slot for one PC card. The optional Ethernet interface allows integration in 10 / 100 Mbit / s networks at full data rate. With the retentive program and data storage devices, also larger projects can be handled without the need for external media. In addition to the supply of the processor module, an integrated optional power supply provides 17 W for extra I/O modules.

- 80386 EX processor
- 2 serial interfaces
- Optional integrated power supply, 17 W / 24 V DC
- Optional CAN bus interface or Ethernet 100 Mbit 100 Mbit / s interface
- RAM 8 MB DRAM
- Data memory 512 kB SRAM, (battery backed)
- Integrated program memory
- Removable memory:
 - PC cards with 8 / 16 / 32 / 64 MB
- Battery backed real-time clock (RTC)
- Status displays for RUN, INIT and ERROR
- Watchdog

Item	Item no.
ME203/EN	00013177-00
ME203/EN*	00015985-00
ME203/CN	00013176-00
ME203/CNW	00013191-00
ME203/CN*	00016336-00

Processor modules

ME203 series				
Processor + memory				
CPU	Intel 80386 EX, 33 MHz			
SRAM (data memory)	512 kB (battery backed)			
DRAM (working memory)	8 MB			
PC card **	PCC201 / xx with 16 / 32 / 64 MB			
Boot FLASH	2 MB (reserved by system software)			
Program FLASH ***	8 MB			
Interfaces				
Serial (standard)	1x RS232 + 1x RS232 / 422 / 485, 64 byte FIFO			
Ethernet (optional)	1x 10/100 Mbit / s			
CAN (optional)	1x 10 k .. 1 Mbaud*			
Power supply				
External power supply module**	5 V, ±15 V via backplane			
Internal power supply module (optional)	Own supply and 17 W for I/Os modules: +5 V / 2 A, +15 V / 250 mA, -15 V / 200 mA supply voltage: 24 V DC (18 .. 34 V)			
Galvanic isolation	Supply to the system 500 V			
Additional features				
Watchdog				
Real-time clock with battery				
Status indication via 3 LEDs				
CPU-ID selectable with rotary hexadecimal switches				
Ambient conditions		Standard	Cold Weather (W)	ColdClimate (❄)
Operating temperature		-30 .. +60 °C fanless		
Rel. humidity operation		5 .. 95 % without condensation		5 .. 95 % with condensation
Storage temperature		-40 .. +85 °C		
Rel. humidity storage		5 .. 95 % without condensation	5 .. 95 % with condensation	
Execution variants				
ME203/EN		CPU module 386EX (33MHz); 8MB DRAM; 512kB SRAM; 8MB file-flash; 1x Eth100; 1x RS232; 1x RS232/422/485; integrated power supply 17W; PCC slot		
ME203/EN❄		Like ME203/EN; ColdClimate (❄)		
ME203/CN		CPU module 386EX (33MHz); 8MB DRAM; 512kB SRAM; 8MB file-flash; 1x CAN/CANopen; 1x RS232; 1x RS232/422/485; integrated power supply 17W; PCC slot		
ME203/CNW		CPU module 386EX (33MHz); 8MB DRAM; 512kB SRAM; 8MB file-flash; 1x CAN/CANopen; 1x RS232; 1x RS232/422/485; integrated power supply 17W; PCC slot; Cold Weather (W)		
ME203/CN❄		Like ME203/CN; ColdClimate (❄)		

* TCP / IP protocol can also be run via CAN

** not included in delivery

*** depending on the configuration, a part of the program memory is reserved for the system software