

# Low Power Communication and Control Single Board Computer



# MPL4083

The MPL4083 is a highly integrated all-CMOS single board computer with 3U form factor. Built around the MC68360 (QUICC) 32-bit controller based on the 68020. An integrated PLL circuit allows to select any frequency up to 25 or 33 MHz. Additional power saving options give full flexibility in power critical designs. Four 16-bit timers, two DMA channels and integrated modules like bus monitor, watch-dog and periodic interrupt timers are also part of the integration.

Implemented on the board are all major components used to build complete and sophisticated host systems. The MPL4083 can also be customized with the use of G-96 and/or M-modules for any extension need.

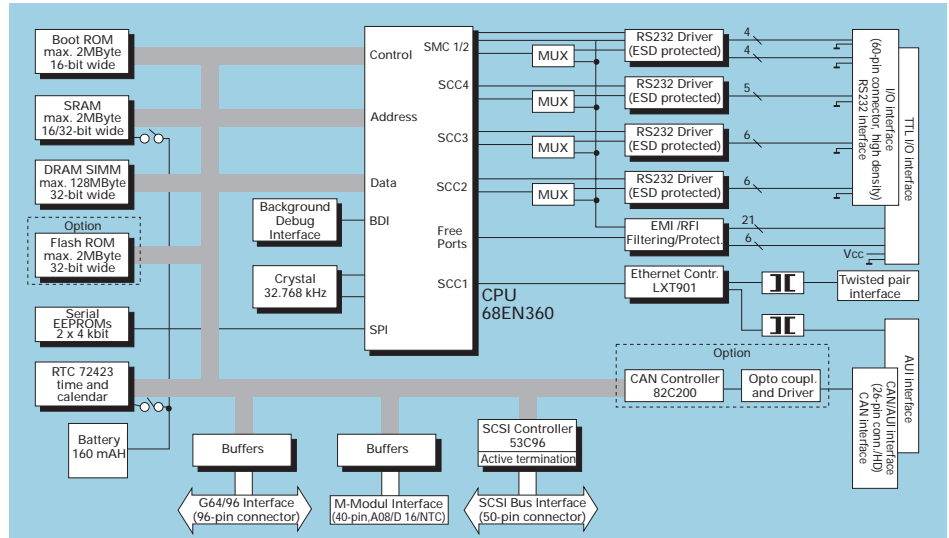
The key advantages are:

- Extreme low power consumption for its performance 2.5 W for 4.5 MIPS (25 MHz version)
- Extended temperature version for rugged applications
- Versatile single board solution with microprocessor, memory and peripherals
- Development and debugging tools

The fully CMOS architecture draws mere 500 mA on 5V. This makes the MPL4083 the ideal choice for low cost embedded-control applications like:

- High speed communication
- Industrial control
- Data acquisition / management
- medical Instruments
- power or space critical designs

For additional information please get in contact with us.



## Technical characteristics

<b>Processor:</b>	68EN360
<b>Processor speed:</b>	MPL4083: 25 MHz / 33 MHz
<b>Clocks/timers:</b>	Timers: Four 16-bit timer
	Clock/calendar: RTC with calendar, can be battery buffered (Y2k ready)
<b>Memory:</b>	<b>Equipped:</b> up to 2 MB SRAM, can be battery buffered up to 2 MB FlashROM Two 4kbit serial EEPROM
	<b>Not equipped:</b> Up to 128 MB DRAM on a 72 pin JEDEC SIMM socket Up to 2 MB Boot ROM (EPROM, EEPROM, FLASH) on a 32pin DIL socket
<b>Communication:</b>	<b>Serial ports:</b> 5 RS-232 serial ports up to 27 TTL level I/O's
	<b>SCSI:</b> SCSI-2 interface with active termination
	<b>Ethernet:</b> 10BaseT & AUI
	<b>CAN:</b> opto isolated CAN bus interface
<b>Expansions:</b>	<b>M-Module:</b> M-Module interface
	<b>G-96:</b> G-96 interface
<b>Mechanical:</b>	<b>Length x width:</b> 3U, 100 x 160mm (single Eurocard)
	<b>Overall height:</b> 18mm
<b>Environment:</b>	<b>Temp. range:</b> 0°C to 70°C
	<b>Extended range:</b> -25°C to +85°C
	<b>Relative humidity:</b> 10 – 90% non condensing
<b>Power:</b>	<b>Power requirements:</b> +5V only / typ. 500mA @ 25 MHz
	Power Management Features protection and filtering of I/O's and power lines
<b>EMC:</b>	<b>EMI / RFI:</b>

MPL AG is an ISO 9001 certified company



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