

High-Tech Power in a Box

General Description

The PIP6 is a highly integrated and robust Packaged Industrial PC with the low Power Pentium Processor out of Intel's Embedded Program. The PIP6 represents a unique solution for today's demanding industrial needs. The PIP IPCs are available in various options and features. All are built into a special designed compact EMI and RFI sealed aluminum chassis. The PIP family has the ability to be operated under extreme as well as under normal conditions without the need of fans.

The PIP6 Specialties

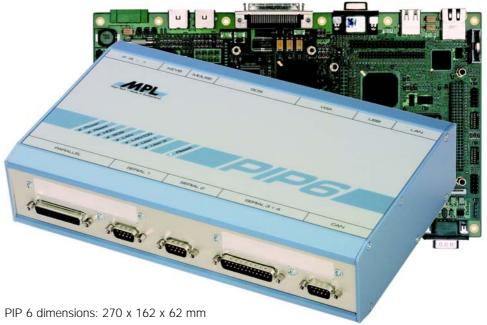
is the low power consumption in despite of the fact having Pentium class with MMX $^{\text{TM}}$ -Technology. With on-board features such as RS232/422/485, USB, CAN, LAN, a 8–28 VDC Power Supply, the PIP6 maintains standard PC capabilities.

Other unique features include:

- Fanless operation
- Complete shock and vibration versions
- Multi purpose socket for SRAM, FLASH or EPROM
- Customer specific versions
- Space for HDD, Floppy, PC/104...

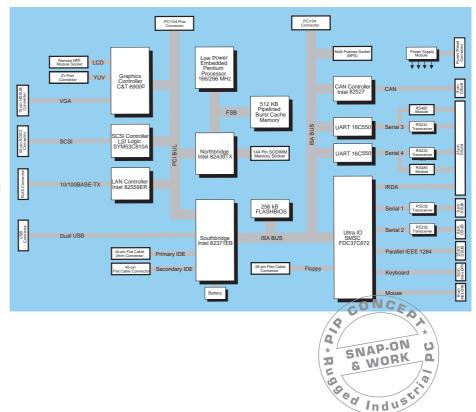
These Key Features

and more make the PIP6 to the ideal solution for any application where a high quality, rugged, small size, low power, long availability or an expandable IPC solution is needed. The PIP IPCs are being used in medicine, transportation systems, telecom or any other industrial application.



Weight: 2.2 kg, rugged aluminum housing with best

EMI/RFI protection (inside chromated, externally powder coated or eloxated)





Technical Features PIP6

Electrical		
Processor	Intel Low Power Embedded Pentium MMX™	166/266 MHz selectable clock frequency
	"Tillamook", 64-Bit data bus	16 kbytes write-back cache
Chip Set	Intel 430TX with 66 MHz host speed	512 kB pipeline burst 2 nd level cache
BIOS	Award BIOS, in 256 kB Flash BIOS ROM	easy updateable
Memory	Up to 256MB SDRAM	144-pin SO-DIMM module socket for one module
Multi Purpose Socket	Supports SRAM, FLASH, EPROM	28 & 32-pin DIL, up to 512kB memory size
RTC	Backed with on-board battery, field exchangeable	CMOS setup can be saved in EEPROM
Graphic	Resolution up to 1280 x 1024	15-pin DSUB, refresh rate up to 85 Hz
	flexible panel support for STN and TFT	50-pin remote MMI module socket
4 x Serial Ports	2 ports can be modified optionally to RS422/485	2 x 9-pin D-SUB and
	half & full duplex, electrically fully isolated	1 x 25-pin D-SUB connector
2 x USB Interface	USB 1.0 (up to 12 Mb/s)	2 x Type A connectors
SCSI Interface	ASPI, SCAM and Fast SCSI compatible, bootable	50-pin SCSI-2 connector
Ethernet	10BaseT /100BaseTX	RJ45
	Fast 10/100Mbit/s	support IEEE802.3 auto negotiation
Parallel Port	Configurable as LPT13, SPP, EPP, ECP (IEEE1284)	25-pin D-SUB connector
E-IDE Port	PIO mode 4, bus master IDE, Ultra DMA/33	44-pin header & 40-pin header
FDD Port	One port for up to 2 drives	Connection for internal or external device
CAN Bus	Opto isolated CAN Bus interface (CAN Spec. 2.0)	9-pin D-SUB connector
Expansion	Full 16-bit PC/104 and 32-bit PC/104+ interface	
Speaker Port	Easy connection of speaker	Available over 4-pin header
Keyboard	PS/2 keyboard interface	6-pin mini DIN connector
Mouse	PS/2 mouse interface	6-pin mini DIN connector
Watchdog	Distinct keyed write sequence	Programmable timeouts
Indicator	6 activity LED's + 2 user definable	Power, Reset, HDD, SCSI, LAN, LAN100
Reset Button	On chassis (protected) and a remote reset button	

Physical / Power		
Chassis	Rugged chromated aluminum with EMI protection	DIN-rail, flange mounting, no ventilation holes
Size & Weight	270 x 162 mm, with PIPPCI 440 x 162 mm	Height depending on needs 62/83/120 mm / 2.2kg
Power	8 – 28VDC input range	Consumption typically < 9 Watt
Temperature range	-20°C up to +60°, optional -40° up to +75°C	No fan, no openings, values at full CPU load
Humidity	5% - 95% non condensing	Optional coating available

Standard Compliance

The PIP6 is designed to meet or exceed the most common standards. Particular references are:		
EMC	EN 55022, EN 55024, EN 61000, MIL-STD-461E	
Shock & Vibration	EN 60068	
Environmental & Safety	EN 50155, MIL-STD-810-F, EN 60601, EN 60950	

CE, EN 60945, IACS E10 Approval Lists

PIP6 versions

- PIP6-1 fully equipped in standard temperature range
- Extended temperature range
- Coated
- PIP6-Cx depopulated (less features) and/or other color, customer label...





Internal PIP Expansions, Options and Operating Systems

- Over the PC/104 & PC/104-Plus
 - Digital & Analog I/O's
 - Fieldbus (CAN, PROFIBUS...)
 - Or any other PC/104 Module
- · Hard Disks, Flash Disks, CF
- CD-ROM, PCCARD
- · PCI and PMC expansions
- 6,5" LCD and Touch built in PIP-chassis
- 12" 19" Panel PCs in special aluminum or stainless steel case (fanless, IP65/NEMA4)
- · Operating systems: PIP's are 100% PC/AT compatible therefore any PC operating system (Windows, LINUX, RTOS ...) can be used





