



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 the Intel 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 design 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 Specialty

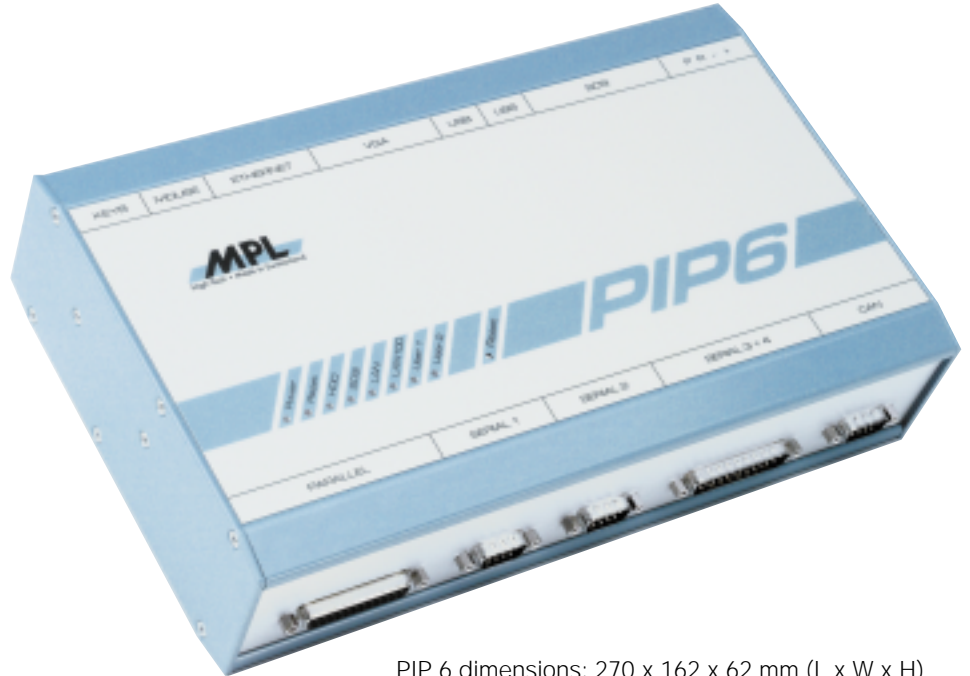
is the low power consumption in despite of the fact having Pentium class with MMX™-Technology. With on-board features such as RS232/422/485, USB, CAN, LAN a 8–28 VDC Power Supply, the PIP6 maintains many standard PC capabilities.

Other unique features include:

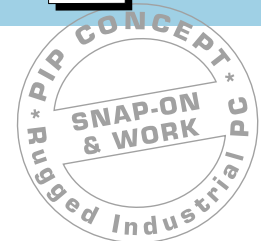
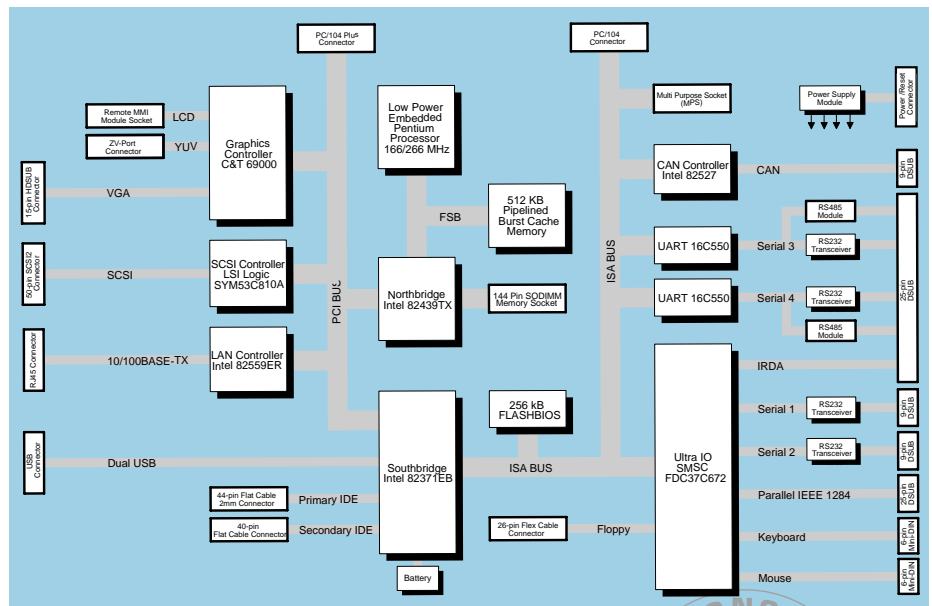
- Fanless operation
- Complete shock and vibration versions
- Multi purpose socket for Disk-On-Chip, SRAM, FLASH or EPROM
- Customer specific versions
- Space for HDD, Floppy, PC/104...

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 and expandable IPC solution is needed. The PIP product can be used in medicine, transportation systems, telecom or any other industrial application.



PIP 6 dimensions: 270 x 162 x 62 mm (L x W x H)
Weight: 2.2 kg, rugged aluminum housing with best EMI/RFI protection (inside chromated, externally powder coated or eloxated)



Technical Features PIP 6

Electrical

Processor	Intel Low Power Embedded Pentium MMX™ "Tillamook", 64-Bit data bus	166/266MHz selectable clock frequency 16kbytes write-back cache
Level 2 Cache	512 kB Pipelined Burst Cache Memory	
Chip Set	Intel 430TX with 66MHz host speed	512kB pipeline burst 2 nd level cache
BIOS	Award BIOS, in 256 kB Flash BIOS ROM	easy updateable
SDRAM	144-pin SO-DIMM module socket for one module	Up to 128MB SDRAM
FLASH	DiskOnChip 2000 and/or IDE Flash Disk	bootable
RTC	backed with on-board battery, field exchangeable	CMOS setup can be saved in EEPROM
SVGA Interface	C&T69000 video accelerator resolution up to 1280 x 1024 flexible panel support for STN and TFT	15-pin DSUB refresh rate up to 85 Hz 50-pin remote MMI module socket*
4 x Serial Ports	2 ports can be modified optionally to RS422/485 half & full duplex, electrically fully isolated	2 x 9-pin D-SUB and 1 x 25-pin D-SUB connector
2 x USB Interface	USB 1.0 ports	2 x Type A connectors
Parallel Port	configurable as LPT1...3, SPP, EPP, ECP (IEEE1284)	25-pin D-SUB connector
E-IDE Port	PIO mode 4, bus master IDE	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	9-pin D-SUB connector
Expansion	full 16-bit PC/104 and 32-bit PC/104+ interface	
Speaker Port		internal 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	

On-board option

SCSI Interface	ASPI, SCAM and Fast SCSI compatible, bootable	50-pin SCSI-2 connector
Ethernet	10BaseT /100BaseTX Fast 10/100Mbit/s	RJ45 support IEEE802.3 auto negotiation

Physical / power

Chassis	rugged chromated aluminum with best EMI protection	DIN-rail, wall mounting, desk
Size & Weight	270 x 162 x 62 mm (L x W x H) standard size / 2.2 kg	10.6 x 6.4 x 2.4 inch / 4.85 pounds
Power	On boards high efficiency switching regulator	8 – 28VDC supply power
Power consumption	typically < 9Watt	266MHz, 64MB SDRAM, HDD & Floppy
Temperature Range	0°C up to +60° optional -40° up to +75°C	no fan or openings in housing
Humidity	10% - 90%non condensing	Optional coating available
Shock & Vibration	complies with EN60068-2-6 and EN60068-2-27	Optional
Approval Lists	CE, (EMI)EN50081-2, EN 50082-2	test data available for review

PIP6 versions

- with LAN & SCSI
- without SCSI
- customer specific

Expansions & options

- Over the PC/104 & PC/104+
 - Digital I/O's
 - Analog I/O's
 - Fieldbus
 - Or any other PC/104 Module
- Hard Disks
- Flash Disks
- Internal Floppy
- PCMCIA slots
- 6.4" TFT panel (built in chassis)
- Touch screen (built in chassis)
- *LCD Display connections
 - DLP for up to 1 m
 - DLS (LSVD) up to 15 m
 - REMMI-T (PanelLink) up to 15 m
- Remote MMI option for operation distances up to 15 m with connectors for RS232 mouse & keyboard and UBS
- 100% PC/AT compatible therefore any PC operating system (Windows, LINUX, RT, OS ...) can be used

For further requirements contact MPL

MPL AG is an ISO 9001 certified company



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