MSC-356

Pentium PICMG SBC
with VGA/LCD Interface

MiTAC

512-KB Level 2 Cache · ZIF socket 7 · Enhanced IDE Interface · Floppy Interface · Parallel Port · 72-pin SIMM sockets (max. 256-MB) · PS/2 Mouse Connector · Serial Port#1 · IrDA Connector · VGA CRT Connector · PS/2 Keyboard · Intel 82430TX PCI Chipset · PICMG Connector · USB Interface · AWARD Flash BIOS
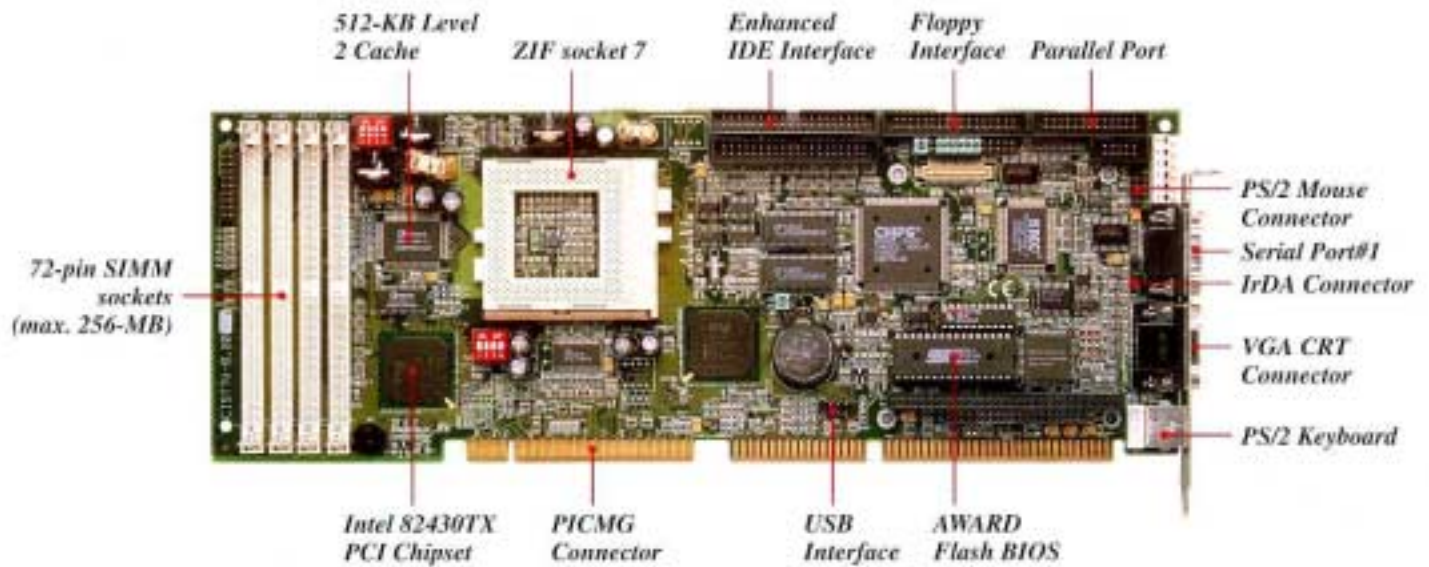
Introduction

The MSC-356 industrial CPU Card is based on Intel's 430TX chipset and is designed for harsh industrial environments. The MSC-356 is Microsoft PC97 compliance with power management functionality of ACPI (Advanced Configuration Power Interface). Advanced I/O functions include the improved disk I/O feature of Ultra DMA/33, and USB (Universal Serial Bus) headers for connections of up to 127 Plug and Play external peripherals.

This MSC-356 features a PGA Socket 7 which is compatible with various processors – Intel (P54C, P55C/MMX), AMD (K5, K6) and Cyrix/IBM (6x86, 6x86L, 6x86MX). Four onboard 72-pin SIMM sockets offer a maximum configuration of 256MB memory using Fast Page Mode (FPM) or Extended Data Output (EDO) DRAMs.

To protect your processor from overheating, the MSC-356 is equipped with an LM75 CPU temperature sensor to monitor your system for temperature. Other standard features include: SMC 37C669 multi-I/O chip, 16-level watchdog timer, on-board AT and ATX power connectors, on-board C&T 65550 VGA that supports CRT and LCD displays, and IrDA capability.

Features

- Supports Intel (P54C, P55C/MMX), Cyrix (6x86, 6x86L, 6x86MX), AMD (K5, K6), 90 – 233MHz.
- PICMG standard compliant with PC/104 bus interface.
- 512KB of Pipeline Burst level 2 cache memory.
- Four 72-pin SIMM sockets supports up to 256MB of either FPM or EDO DRAMs.
- AWARD PnP BIOS in single Flash ROM with VGA BIOS.
- Two integrated PCI-Bus Master EIDE interfaces capable of supporting up to four IDE disk drives in Master/Slave configuration. Supports Ultra DMA/33 devices with synchronous DMA transferring up to 33MB per sec.
- One integrated floppy diskette drive controller.
- Two serial ports with 16550 UARTs which configurable as two RS-232 ports or one RS-232 and one RS-422/485 ports.
- One multi-mode parallel port.
- 16-level watchdog timer.
- Supports two USB ports and IrDA connector for wireless communications.
- Supports heat sensor under CPU socket for temperature monitor and alert.
- On-board switching voltage regulator.
- 6-layer PCB design with high-noise immunity construction.

Specifications

Processor	Intel P54C, P55C/MMX, Cyrix (6x86, 6x86L, 6x86MX), AMD (K5, K6)
Processor Socket	ZIF Socket 7, 90MHz-233MHz
Chipset	Intel 82430TX PCI chipset
Bus Interface	PICMG (PCI/ISA)
Memory	Four 72-pin SIMM sockets supporting up to 256MB using FPM/EDO DRAM
Cache	On-board 512KB of Pipeline Burst SRAM
BIOS	Licensed PnP Flash AWARD BIOS
IDE Interface	Two Bus Mastering EIDE interface supporting up to four, Ultra DMA/33 storage devices
FDD Interface	Supports up to two floppy disk drives
Serial Port	Two serial ports with COM1 configured as RS-232 and COM2 jumper selectable as either RS-232, RS-422 or RS-485
Parallel Port	One ECP/EPP/SPP parallel printer port, BIOS configurable
Mouse	Mini-DIN PS/2 mouse connector
Keyboard	Mini-DIN PS/2 connector and 5-pin shrouded external keyboard connector
Speaker	Internal buzzer and external speaker connector

Watchdog Timer	16 level
Onboard VGA	C&T 65550 chip with 1MB memory (PCI Bus / supports LCD/CRT displays)
AT Power Connector	6-pin external power connector
All-In-One Features	Auto fan-off LM-75 CPU temperature sensor PC/104 extension Switching voltage regulator
PCB Layer	6-layers PCB design
Dimensions (L x H)	340 x 124 mm
Operating Temp.	0 ~ 60°C
Humidity	5% ~ 95%
Shock	30g, 11ms duration, half-sine shock pulse

Note: Specification is subject to change without notice.