

Chapter 1

Introduction

Overview

P5I430TX TITANIUM I green main board provides a highly integrated solution for fully compatible, high performance PC/ATX platforms, and supports Intel Pentium, Cyrix 6x86, 6x86MX(M2) and AMD K5, K6 microprocessors. It features Write-Back Secondary Cache memory for 256KB/512KB in size. Flexible main memory size can be installed from 8MB up to 256MB DRAMs, so as to give full play to the advantages of the Pentium, Cyrix 6x86, 6x86MX(M2) and AMD K5, K6 CPUs. The mainboard offers a wide range of interface to support integrated on-board IDE and on-board I/O function.

The current green function is compliant to ACPI specification and OS Directed Power Management.

Key Features

CPU	<ul style="list-style-type: none">- Supports Intel Pentium 75, 90, 100, 120, 133, 150, 166, 180, 200 MHz, Intel Pentium Processor with MMX technology.- Supports Cyrix 6x86 100MHz(P120 Plus), 110MHz(P133 Plus), 120MHz(P150 Plus), 133MHz(P166 Plus), 150MHz(P200 Plus)*, and Cyrix 6x86L CPUs- Supports AMD K5 PR75, PR90, PR100, PR120, PR133, PR166 and K6 PR166, PR200 CPUs- 2.8/2.9/3.2V circuit on board, ready for Pentium MMX and Pentium MMX compatible CPU support
Chipset	<ul style="list-style-type: none">- Intel's 82439 TX, PIIx4, 324 Pin BGA package chipset
Main memory	<ul style="list-style-type: none">- Supports 4x72 pin SIMM modules and 2x168 pin DIMM modules- 64-bit data path for flexible memory size expanded from 8MB up to 256MB DRAMs for SIMM socket- Supports Fast Page mode DRAM and EDO DRAM for SIMM socket <p>Supports from 8MB to 64MB 3.3V/unbuffered SDRAM DIMM or 3.3V/unbuffered EDO DIMM for DIMM slot</p>
Cache Memory	<ul style="list-style-type: none">- Provides 256KB/512KB L2 Pipelined Burst Cache or DRAM Cache on board

Introduction

	<ul style="list-style-type: none">- Provides 2 kinds of cache chips for user: 256KB/512KB cache on board
On-board IDE	<ul style="list-style-type: none">- Supports 2 PCI Bus Master (Bus Master works as DMA Mode 2 type) IDE ports- Supports PIO mode up to Mode 4 Timming- Supports “Ultra DMA/33” synchronous DMA mode transfers up to 33MBytes/sec- Supports 2 Fast IDE interfaces for up to 4 IDE devices e.g. IDE hard disks and CD ROMs drives
Green function	<ul style="list-style-type: none">- Supports Advanced Configuration and Power Interface (ACPI) specification and OS Directed Power Management.- Supports three green mode: Doze, Standby and Suspend
On-board I/O	<ul style="list-style-type: none">- 3 x ISA Slots and 4 x PCI Slots- Use NS Plug & Play IO chip PC87336/338- Supports up to two 3.5” or 5.25” floppy drives 360K/720K/1.2M/1.44M/2.88M format- Supports 120MB floppy drive- All I/O ports can be enabled or disabled in BIOS- Two high speed 16550 compatible UARTs (COM1/COM2/COM3/COM4 selectable) with 16-byte send/receive FIFOs and support MIDI mode- One parallel port at I/O address 378H/278H/3BCH with additional bi-direction I/O capability and multi-mode selection (SPP/EPP/ECP) (IEEE 1284 compliant)- Provides protection circuit to prevent damage to the parallel port when a connected printer is powered up or operated at a higher voltage- Supports PS/2 mouse and PS/2 keyboard (optional)- Supports IrDA TX/RX Header- Supports USB (Universal Serial Bus) in specification
BIOS	<ul style="list-style-type: none">- Licensed advanced AWARD BIOS. Supports Flash ROM BIOS, Plug and Play ready, DMI ready. Built-in NCR810 SCSI BIOS
Board size	<ul style="list-style-type: none">- 220mm x 250mm
Power supply	<ul style="list-style-type: none">- Standby Power supply support

-- This page is intentionally left blank --