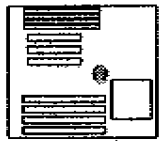
J11 : CPU /PCI clock frequency select

1-2	3-4	5-6	Host CLK (MHz)	PCICLK(MHz)
OPEN	SHORT	SHORT	40	20
SHORT	OPEN	OPEN	50	25
OPEN	SHORT	OPEN	60	30
SHORT	OPEN	SHORT	66.6	33.3



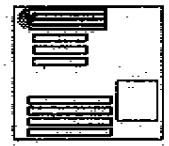
For Intel CPU:

CPU Speed	1-2	3-4	5-6	JP10
75MHz	SHORT	OPEN	OPEN	OPEN
90MHz	OPEN	SHORT	OPEN	OPEN
100MHz	SHORT	OPEN	SHORT	OPEN
120MHz	OPEN	SHORT	OPEN	1-2
133MHz	SHORT	OPEN	SHORT	1-2

PS1 : Power supply connector

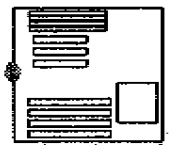
1	Power good
2	+5V
3	+12V
4	-12V
5	Ground
6	Ground

7	Ground
8	Ground
9	-5V
10	+5V
11	+5V
12	+5V



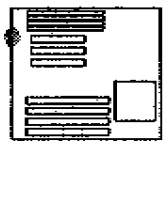
CN11 : Pine infra-red transceiver connector

1	Data in
2	Ground
3	Data out
4	VCC



CN10 : Pine PS/2 mouse connector

1	Data in
2	Ground
3	Clock
4	VCC

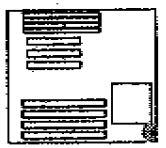


CN1 : Power LED & key-lock connector

1	+5V
2	NC
3	Ground
4	Key-lock
5	Ground

JP4 : Speaker connector

1	Speaker data
2	NC
3	Ground
4	+5V



JP1 : Reset connector

OPEN	Normal
SHORT	Reset

JP2 : Turbo switch connector

OPEN	Turbo speed (default)
CLOSE	Normal speed (soft-key disabled)

JP3 : External power management connector

OPEN	Normal (default)
SHORT	External PM interrupt

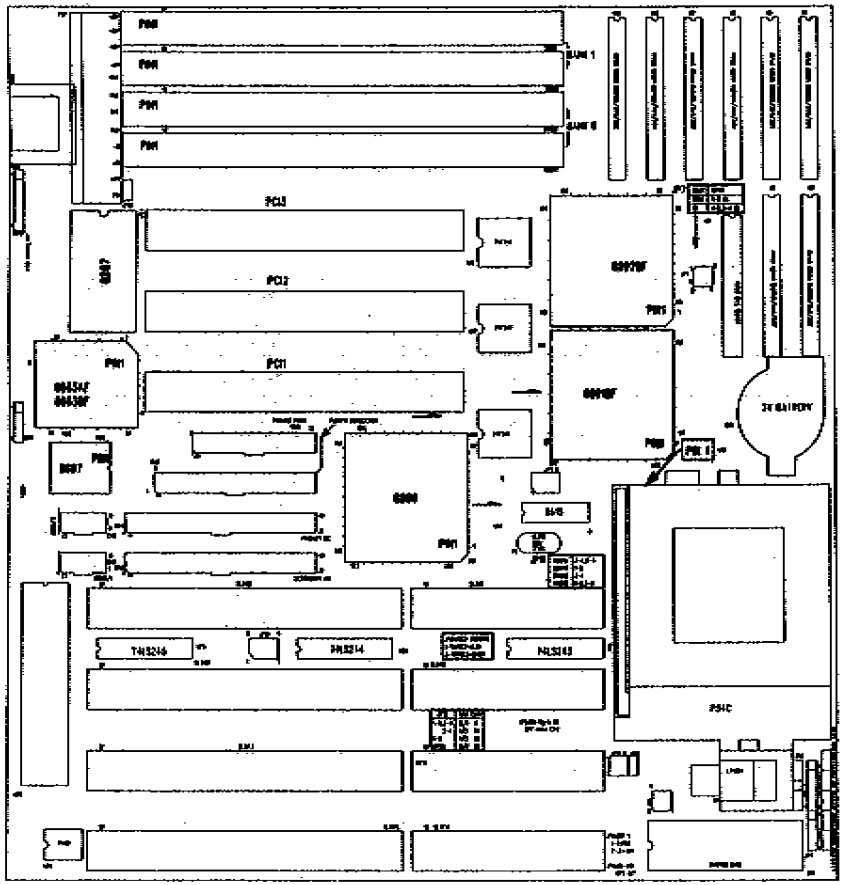
LED1 : IDE LED connector

1	Cathode
2	Anode

LED2 : Turbo LED connector

1	Anode
2	Cathode

1.5 Board Layout



1.6 Jumpers & Connectors

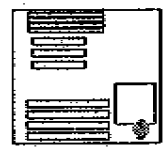
Jumpers / Connector	Description
JP9	CPU write back/write through select
JP5	Intel, Cyrix CPU select
JP10	CPU to host clock frequency select
JP7	L2 cache size select
JP11	CPU/PCI clock frequency select
PS1	Power supply connector
CN8	Keyboard connector
CN11	Pine infra-red transceiver connector
CN10	Pine PS/2 mouse connector
CN6	COM 1 connector
CN7	COM 2 connector
CN3	FDC connector
CN2	Printer connector
CN5	Secondary IDE connector
CN4	Primary IDE connector
CN1	Power LED & key-lock connector
JP4	Speaker connector
JP1	Reset connector
JP2	Turbo switch connector
JP3	External power management connector
LED1	IDE LED connector
LED2	Turbo LED connector

JP9 : CPU write back/write through select

OPEN	Write back (default)
SHORT	Write through

JP10 : CPU to host clock frequency select

JP10	Intel	Cyrix
1-2,3-4	2.5X	1X
3-4	3X	2X
1-2	2X	3X
OPEN(default)	1.5X	4X

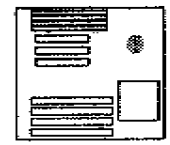


JP5 : Intel, Cyrix CPU select

OPEN	Intel CPU (default)
SHORT	Cyrix CPU

JP7 : L2 cache size select

Cache size	JP7
256K	OPEN
512K	1-2
1M	1-2,3-4



ISA master & DMA activity
IDE activity
Floppy activity
Keyboard activity

1.3 Checklist

Please check your PT-730C package to ensure that it contains the following items :

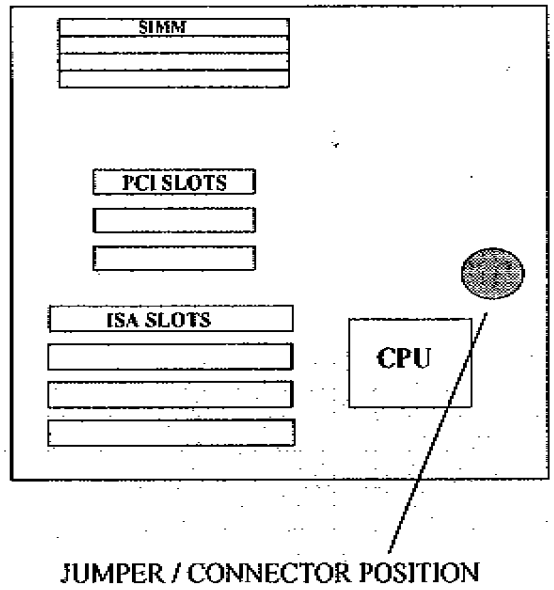
- 1 x PT-730C Main Board
- 1 x PT-730C User Manual
- 2 x 40 way flat cables
- 1 x FDC flat cable
- 1 x DB9 flat cable and one DB25 flat cable with a bracket (for COM ports)
- 1 x DB25 flat cable with a bracket (for printer port)
- 1 x PS/2 mouse cable with a bracket

If any of these items are missing or damaged, please contact your local dealer or sales representative for assistance.

1.4 PT-730C System Board Specifications

- IBM AT compatible.
- Supports DRAM memory from 8MB to 128MB.
- Supports EDO and Fast Page mode DRAM.
- Supports four singled-sided or doubled-sided SIMM modules in two banks.
- Supports Flash Memory BIOS.
- Supports mix mode cache memory from 256K to 1024K (write back or write through).
- Supports Cyrix M1 (6x86) CPU.
- 4 x 16-bit ISA slots; 3 x PCI slots (Master mode).
- I/O slot signal protector on: IRQ9, DRQ2, 0WS#.
- Green features to turn off HDD spin motor / stop the CPU clock & turn off VGA display signals.
- On-board enhanced bus master IDE controller supports up to 4 HDD (Mode 3 / Mode 4).
- On-board multi-I/O controller consists of a FDC; dual 16C550 compatible enhanced serial ports, supports IRDA or ASKIR infrared interface; a multi-mode high performance parallel port, supports SSP, EEP and ECP.
- Optional on-board PS/2 mouse interface.
- Windows' 95 compatible.
- Award BIOS, Green and Plug and Play.
- Board size 220 mm by 220 mm.

To assist you in locating the necessary jumpers in order to configure your system, the following graphical guide has been added.



JUMPER / CONNECTOR POSITION

Statements

"This is an ENERGY STAR™ compliant product."
The Environmental Protection Agency ENERGY STAR™ program defines that as an Ally of this program the specified manufacturer must produce systems, or system components which enable a computer system to operate and draw 30 watts or less of power in idle mode. Although the EPA do not endorse any particular product or service, the program is designed to offer a cooperative effort between the EPA and the component manufacturer (Ally) to provide energy saving products and education to customers."

"FCC Approval"
The PT-730C motherboard has been approved for FCC Class B when properly installed in a barebone configuration using the following case/power supply:

Brand	Model	FCC ID
Procase	PC-109 SM	JPJPINE429G1 09
Procase	PC-609 T/M	JPJPINE429G6 09
Procase	PC-709 T/M	JPJPINE429G7 09

FCC Notice:
Information to the User

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Should you experience interference to radio or television reception then the user is encouraged to try to correct this interference by one or more of the following measures:
Re-locate the receiving antenna.
Increase the separation between the equipment and receiver.
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
Consult the dealer or an experienced radio/TV technician for help and for additional suggestions.

The user may find the following booklet prepared by the Federal Communications Commission helpful:
"How to identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, DC20402, Stock No. 004-000-00345-4.

FCC Warning
The user is cautioned that changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Note : In order for the installation of this product to maintain compliance with the limits for a Class B device, shielded cables and power cord must be used.

1. Introduction

1.1 Overview

- The PT-730C offers 64-bit programming architecture compatible with the software base of 486 and 586 microprocessors. It is a reliable motherboard, using a UMC chipset and a multi-layer printed circuit board. The chipset consists of the UM8891BF (Host Bridge & Cache Memory Controller), UM8892BF (Write Buffer Data Path Controller), and UM8886BF (ISA Bridge & System I/O Controller), providing the most cost effective and high performance solution for a PCI PENTIUM computer system.
- The PT-730C is a PCI Local Bus motherboard. The four Master Mode PCI Local Bus slots fully comply with the PCI (Peripheral Component Interconnect) Local Bus Specification Rev. 2.0. The speed of I/O peripherals can be dramatically increased by connecting PCI compatible interface cards to the PCI Local Bus slots on the PT-730C. PINE is a member of PCI SIG (Special Interest Group).
- The PT-730C is a 'green' design mother-board which means if there is no system activity for a specific period of time (this period is software programmable), the PT-730C will slow down its original working frequency to zero. This will help to save power consumption, reduce energy related pollution and protect our environment.
- The PT-730C has the full compliment of I/O on-board: FDC, PCI local bus Enhanced IDE, printer port, COM ports, PS/2 mouse port and infra-red port as well.

1.1 Green PC Power Management

The Green PC mode is a state that minimizes power consumption. There are two different levels of Green PC modes :

- Standby mode. The spin motor of the HDD can be turned off.
- Inactive mode / Sleep Mode. The PT-730C can stop the CPU clock under this mode.

The PT-730C will be placed into Green PC mode as a result of one of the following events :
When the SMI header is connected to a momentary switch, pressing the switch will put PT-730C into Green mode.

Expiration of the internal Green PC Timer. The Green PC Timer is software programmable which, can configure in the "Power Management Setup" option of the BIOS CMOS setup. The power management feature will be *enabled* as default; however, the timing may differ due to production control. It is recommended that you re-adjust these timings according to your personal requirements/set-up.

Through system activity monitoring and management, the PT-730C will not go into Green PC mode if any of the following activity is detected:
PCI Master 0 activity
PCI Master 1 activity
PCI Master 2 activity
LPT port activity
COM port activity