## CPU

The Trimond HN440 ATX motherboard uses Intel's 440BX or 440ZX chipset, which are optimised for Pentium®II **100MHz Front Side Bus** processors, but which also support 66MHz Pentium®II CPUs. Celeron support is achieved by implementing an alternative microcode from the BIOS update disk. Please contact Mitsubishi if you require assistance with this. Processor core multipliers can be set using jumper block **J1**. Core voltage is set by the processor. Location of J1 shown below.

J1
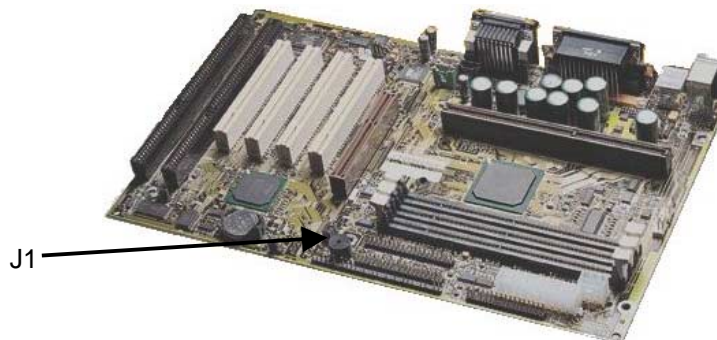
CPU speed jumper block J1 settings

Ratio	A	B	C	D	66 / 100 MHz frequency local bus
2 / 7	on	Off	off	on	233 / 350
1 / 4	on	On	on	off	266 / 400
2 / 9	on	Off	on	off	300 / 450
1 / 5	on	On	off	off	333 / 500
2 / 11	on	Off	off	off	366 / 550

RAM

Three DIMM sockets (two on 440ZX boards) accept 64-bit wide (72-bit with parity/ECC support) unbuffered **PC100 SDRAM** modules (or standard 66MHz SDRAM for 66MHz FSB Pentium®II CPUs) with **SPD** (serial presence detect). Please note that EDO memory is **NOT** supported.
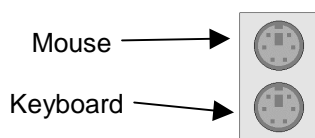
Populate DIMM sockets in the following order: **MM1**, MM2, MM3.

Supported sizes: **16MB**, **32MB**, **64MB**, **128MB**, **256MB**.
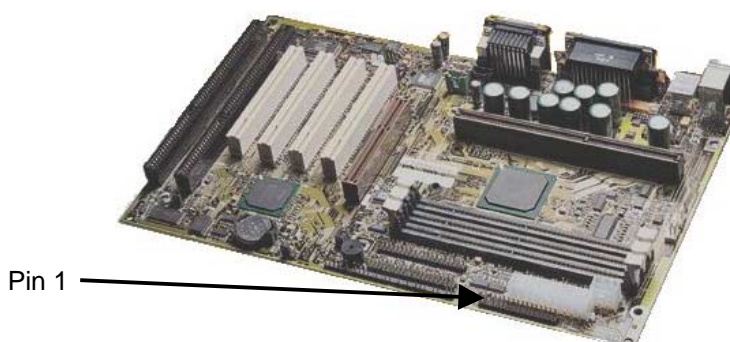
Approved vendors: Please see the current list at http://www.trimond.com/shared/reference.asp.

KEYBOARD & MOUSE
Orientation as shown.

Mouse

Keyboard

FLOPPY DISK CONNECTOR
Orientation as shown.

Pin 1

IDE CONNECTORS & CABLES
IDE cables must not exceed 12".

Orientations as shown.

Secondary IDE pin 1

Primary IDE pin 1
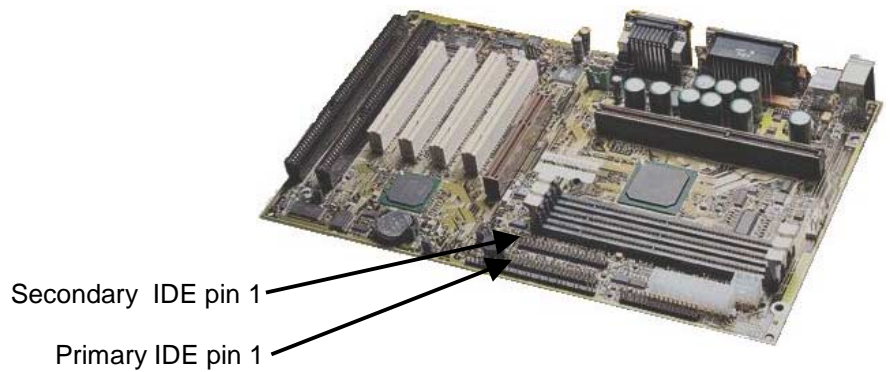
PSU
Trimond motherboards are designed to be connected to a **soft-switch PSU**, with 5V standby. If the 5V standby current is insufficient, the PSU may deregulate and possibly damage the motherboard. Ensure that at least **30mA** is available to the 5V standby output.

If you wish to use a **hard-switch PSU**, it is necessary to change a flag in the manufacturer settings of the BIOS and provide current to the motherboard 5V standby connector. Please contact the Motherboard Division for full instructions.
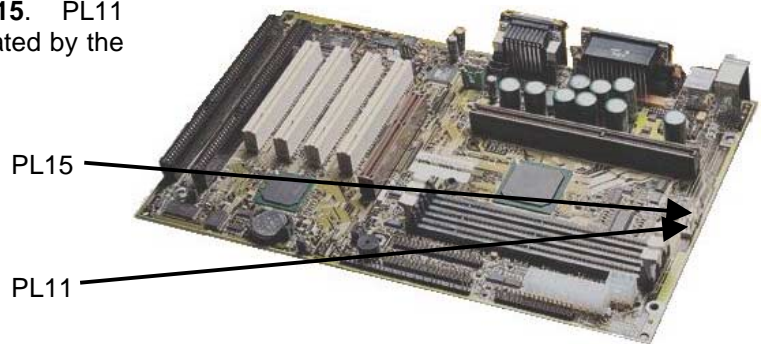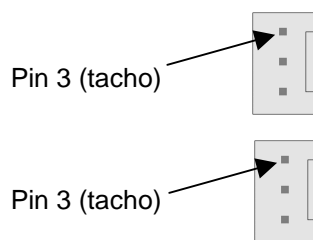
Connect the power on/off lead to "PWR ON" on **PL2**.
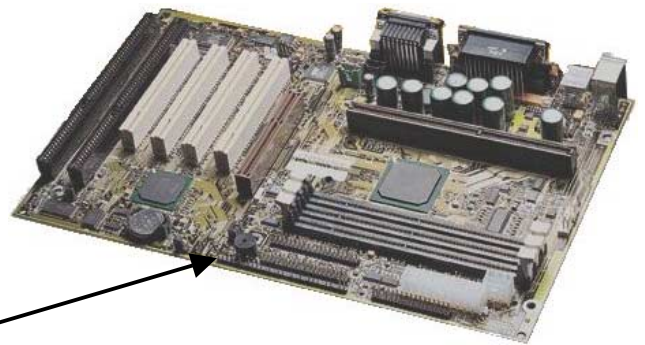
COOLING
Two fan connectors are available: **PL11** & **PL15**. PL11 provides **full-speed** fan operation. PL15 is regulated by the power management software (Windows 98/ACPI).

Pin 3 (tacho)

PL15

Pin 3 (tacho)

PL11

PHOENIX BIOS & CMOS
BIOS updates are available from our web site. Please see *Documentation & Drivers* below for further details.

The port 80 codes for Phoenix BIOS 4.0 Rel 6.1 can be obtained from our web site:

http://www.trimond.com/shared/reference.asp

CMOS may be cleared using PL1. Remove AC mains. Move jumper from left to right pins for 3 seconds. Move jumper to original position.

PL1
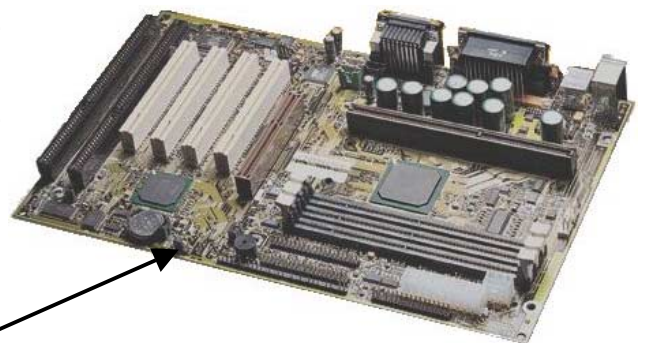
DOCUMENTATION & DRIVERS
Supporting documentation, drivers and BIOS updates are available from our web site as follows:

http://www.trimond.com

- Click on the "Products" left menu item
- Click on HN440 in the product table
- Click on the "Motherboard Resources" link