CPU

The Trimond PH440 NLX motherboard uses Intel's 440BX chipset, which is optimised for Pentium®II **100MHz Front Side Bus** processors, but which also supports 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
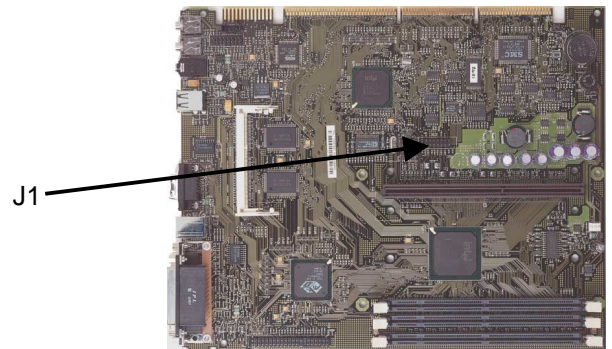
CPU speed jumper block J1 settings

Ratio	A	B	C	D	66 / 100 MHz frequency local bus
3.5	**on**	off	off	**on**	233 / 350
4	**on**	**on**	**on**	off	266 / 400
4.5	**on**	off	**on**	off	300 / 450
5	**on**	**on**	off	off	333 / 500
5.5	**on**	off	off	off	366 / 550

RAM

Three DIMM sockets 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.

NLX RISER (if supplied)

Keyed connectors for floppy drive, primary and secondary IDE channels are clearly marked.

JP11 provides the pin-outs for the power-switch, front panel LEDs and PC-speaker, as follows:

JP11

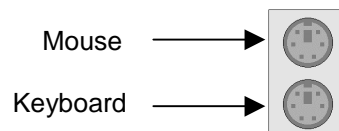| Pins	Designation
1 & 2	Speaker
3 & 4	HD activity LED[1]
5 & 6	Power LED[2]
7 & 8	ON/OFF switch

[1] Pin 3 - LED cathode, pin 4 - VCC.

[2] Pin 5 - yellow cathode, pin 6 - green cathode. Bi-directional LED supported.
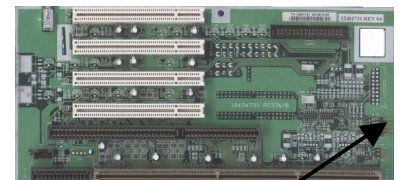
KEYBOARD & MOUSE

Orientation as shown.

Mouse ⟶

Keyboard ⟶

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.

The power connector located on the NLX riser.

COOLING

PL3 is a three-pin system tacho-fan connector. Variable speed is supported by ACPI-aware operating systems e.g. Windows 98.

JP9 on the riser (if supplied) provides an additional fan connector.

PL3

JP9
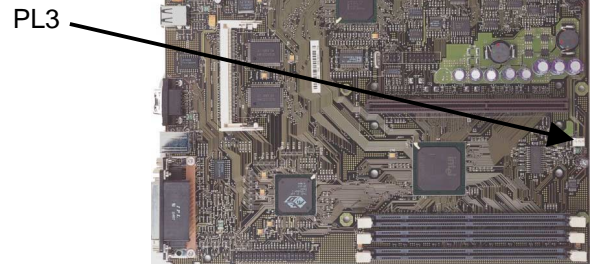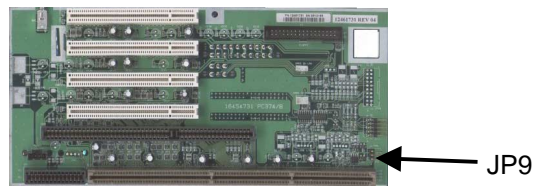
PHOENIX BIOS & CMOS

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 **J8**. Remove AC mains. Move jumper from left to right pins for 3 seconds. Return jumper to original position.
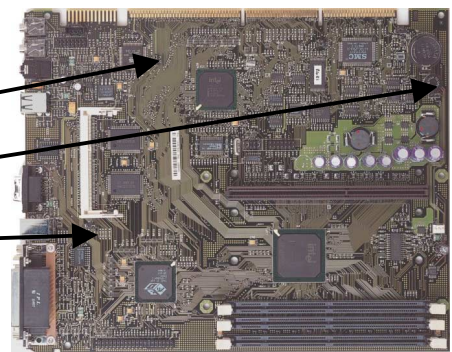
J8
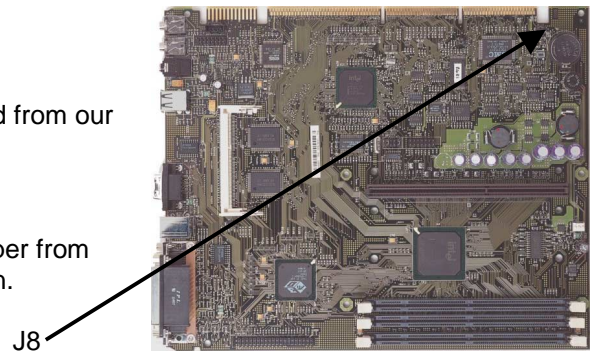
VIDEO & AUDIO JUMPERS

Jumpers to selectively disable onboard audio and video are as follows:

ESS audio enable (1-2) / disable (2-3) - J6

Motherboard mini-speaker enable (1-2) / disable (2-3) - J9

ATI video enable (1-2) / (2-3) disable - J5

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 PH440 in the product table
- Click on the "Motherboard Resources" link