3WXM4

A Celeron[™] Socket 370 Processor based Intel 810 Chipset motherboard (66/100MHz)

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Manual Revision 3.1 July 7, 1999 3WXM4 Features

FEATURES

3WXM4 Features:

- 3WXM4 is based on the Intel CeleronTM Processor operating at 300A

 466MHz (66MHz) or 100MHz FSB for feature processor on PPGA 370 socket. The board is configured by an Easy-Setting-Single-Jumper (E.S.S.J.) to match your CPU clock speed.
- CPU clock ratio from 3x~8x setting in BIOS.
- Designed with Intel's 810 chipset.
- Supports up to 512 MB of DRAM (minimum of 16 MB) on board, You can use 168-pin DIMM x 2. It will run Synchronous DRAM memory (SDRAM) at 100MHz.
- 64-bit system memory interface with optimized support for SDRAM at 100MHz.
- Integrated 2D & 3D Graphics Engine, H/W Motion Compensation Engine, 230MHz DAC and 4MB Display Cache
- AC'97 2.1 Audio CODEC onboard.
- Supports (3) 32 bit PCI slots, provides (2) independent high performance PCI IDE interfaces capable of supporting PIO Mode 3/4 and Ultra DMA 66 devices. The 3WXM4 supports (3) PCI Bus Master slots and a jumperless PCI INT# control scheme which reduces configuration confusion when plugging in PCI card(s).
- Supports ATAPI (e.g. CD-ROM) devices on both Primary and Secondary IDE interfaces.
- Designed with Winbond W83627HF LPC (Low Pin Count) I/O: (1) floppy port, (1) parallel port (EPP, ECP), and (2) serial ports (16550 Fast UART)

Features 3WXM4

- Includes a PS/2 mouse connector.
- Allows use of a PS/2 keyboard.
- Features Award Plug & Play BIOS. With 4MB(FWH) Flash Memory you can always upgrade to the current BIOS.
- 3WXM4 utilizes a Lithium battery which provides environmental protection and longer battery life.
- Supports the Universal Serial Bus (USB) connector. The onboard ICH (82801) chip provides the means for connecting PC peripherals such as; keyboards, joysticks, speaker, and mouse.
- Built-in ATX 20-pin power supply connector.
- Software power-down when using Windows® 95/98.
- Supports ring-in feature (remote power-on through external modem, allow system to be turned on remotely.
- Resume by Alarm Allow your system to turn on at a preselected time.
- Supports CPU Hardware sleep and SMM (System Management Mode).
- Supports Hot key, Any key or password Keyboard power ON function (KBPO).
- Supports the CPU, PWR and Chassis fan Auto stop in the sleep mode.
- Supports the System Power LED (PANEL) blinks in the sleep mode.
- Built-in WOL (Wake On Lan) Connector.
- Supports the AMR Connector for enables the software modem.

 The Modem Riser Card (MR) or Modem Codec (MC) must be secondary only on the 3WXM4.

Installation 3WXM4

3WXM4 Detailed Layout

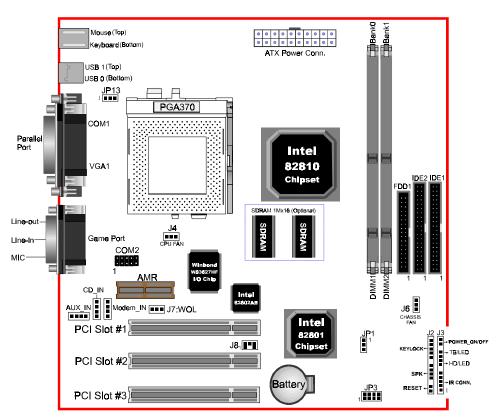


Figure 1

3WXM4 Installation

Easy Installation Procedure

Easy Installation Procedure

The following must be completed before powering on your new system:

Configure Jumpers to match your hardware System Memory Configuration Device Connectors

Configure Jumpers

The 3WXM4 designs all motherboards with the fewest jumpers to make your installation fast and easy.

The following will describe all of the jumpers that you are required to set before moving on to step 2.

Note: The jumpers as depicted as shown (Figure 1) in their correct physical orientation.

JP1 CMOS Clear JP1 = 1-2 Normal (Default)= 2-3 Clear CMOS JP3 Rsd **CPU Speed Selection** 66MHz * Note: If CPU is S-Spec processor, than ignore the AUTO (Default) CPU ratio setting, otherwise the CPU ratio 100MHz **I** ■ setting in BIOS (Frequency/Voltage Control). Rsd: Reserved **Keyboard Power-ON Function** JP13 JP13 = 1-2 Enabled

= 2-3 Disabled (Default)

Installation 3WXM4

System Memory Configuration

Memory Layout

The 3WXM4 supports (2) 168-pin DIMMs (Dual In-line Memory Module). The DIMMs can be either EDO (Extended Data Out) or SDRAM (Synchronized DRAM).

- 100MHz system memory bus frequency. Even if the system host bus is 66MHz.
- 8MB to 256MB using 16MB/64MB technology (512MB using 128MB technology).
- 256MB Support Registered synchronous DRAM Memory Modules.
- We recommend to installed the "PC/100MHz SDRAM Spec.", using DIMM SDRAM must be 125MHz (-8ns) bus speed. If used 100MHz (-10ns) SDRAM may be critical timing for the motherboard.
- DIMM SDRAM may be 100MHz (-10ns) or 125MHz (-8ns) bus speed.

Figure 2 and Table 1 show several possible memory configurations using

DIMM 2	Bank 2/	
DIMM 1	Bank 0/	1 -Synchronous

Figure 2

Total Memory	DIMM 1 (Bank 0/1)	DIMM 2 (Bank 2/3)
= 256MB Maximum	SDRAM* 16MB, 32MB, 64MB, 128MB, 256MB X 1	None
= 512MB Maximum	SDRAM* 16MB, 32MB, 64MB, 128MB, 256MB X 1	SDRAM* 16MB, 32MB, 64MB, 128MB, 256MB X 1

^{*} SDRAM only supports 16, 32, 64, 128, 256MB DIMM modules.

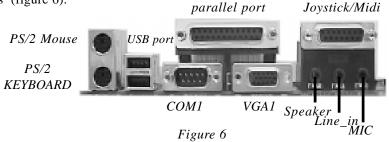
Table 1

3WXM4 Installation

Device Connectors

Please install the motherboard into the chassis.

Now that your motherboard is installed you are ready to connect all your connections (figure 6).



J2,J3: Chassis Panel Connector

• Keylock, Speaker, Reset, Sleep, Turbo LED and HDD LED

J4: CPU Fan Power

• A plug-in for the CPU Fan Power

J6: Chassis Fan Power

• A plug-in for the chassis Fan Power

J7: WOL (Wake On Lan) Connector

J8: SB-LINK Connector

• 5-PIN Header for PCI Sound Card.

PW2: ATX Power Connector

• 20-pin power connector

IDE1: Primary IDE Connector

IDE2: Secondary IDE Connector

FDD1: Floppy Controller Connector

CD-IN: CD Audio_IN Connector

• Pin1(CD_IN_Left), Pin2/Pin3(GND), Pin4(CD_IN_Right)

AUX_IN: Auxiliary Line_IN Connector

• Pin1(Left Line_IN), Pin2/Pin3(GND), Pin4(Right Line-IN)

MODEM_IN: Telephony Connector

• Pin1(Audio_in), Pin2/Pin3(GND), Pin4(Mic-out to Modem)

Installation 3WXM4

Device Connectors (continued)

(This is connected to the power button on the case. Using the Soft-Off by Pwr-BTTN feature, you can choose either Instant Off (turns system off immediately), or 4 sec delay (you need to hold the button down for 4 seconds before the system turns off). When the system is in 4 sec delay mode, there is a special feature to make the system to go into suspend mode when the button is pressed momentarily.)

