



3WXA 3WXA4 3WXA4Y

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

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FEATURES

3WXA/4/4Y Features:

- 3WXA/4/4Y is based on the Intel Celeron™ 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, Digital Video Out Port (Optional) and 4MB Display Cache (3WXA4/3WXA4Y only).
- AC'97 2.1 Audio CODEC onboard.
- Supports (5) 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 3WXA/4/4Y supports (5) 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)
- 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.
- 3WXA/4/4Y 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.
- Built-in YAMAHA YMF744 PCI Sound Onboard (3WXA4Y only).
- Ture Full Duplex playback and Capture with different Sampling Rate (3WXA4Y only).
- Maximum 64-voice XG capital Wave table (3WXA4Y only).
- Synthesizer including GM Compatibility (3WXA4Y only).
- Supports OPL3, Sound Blaster Pro, MPU401 UART mode and Joystick function(3WXA4Y only).
- Supports TV-Out and Flat Panel Connector (optional), provides TV-Out, Flat Panel Card. You can use TV or LCD Monitor or CRT Monitor for best choice.

3WXA/4/4Y Detailed Layout

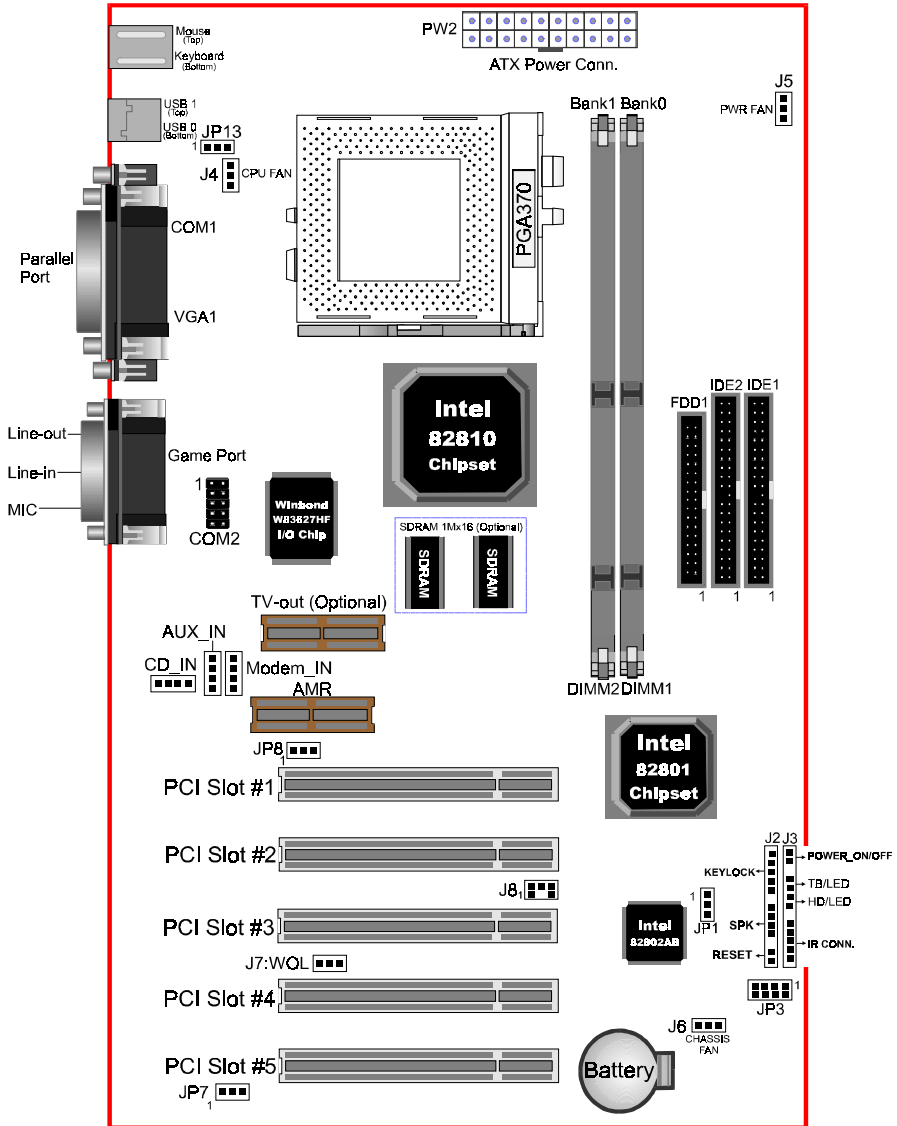


Figure 1

Easy Installation Procedure

Easy Installation Procedure

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

1. **Configure Jumpers to match your hardware**
2. **System Memory Configuration**
3. **Device Connectors**

Configure Jumpers

The 3WXA/4/4Y 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.

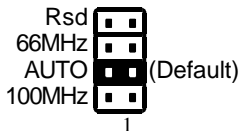
JP1



CMOS Clear

JP1 = 1-2 Normal (Default)
= 2-3 Clear CMOS

JP3



CPU Speed Selection

* Note: If CPU is S-Spec processor, than ignore the CPU ratio setting, otherwise the CPU ratio setting in BIOS (Frequency/Voltage Control).

Rsd: Reserved

JP7



On Board PCI Sound (Default for 3WXA4Y)

JP7 = 1-2 Enabled PCI Sound (Default)
= 2-3 Disabled PCI Sound

* Note: In the BIOS setting, "AC97 Audio" of "Integrated Peripherals" must be changed from "Enabled" to "Disabled" as well to come with JP7 setting (at "2-3" position). (refer to page 4-14).



On Board AC'97 Codec Audio
 JP8 = 1-2 Enabled (Default for 3WXA/3WXA4)
 = 2-3 Disabled

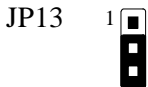
AC'97/MR Configuration Table

JP8	3WXA	3WXA4
1-2	AC'97 Onboard (Primary) MR or MC (Secondary)	AC'97 Onboard (Primary) MR or MC (Secondary)
2-3	Disabled Onboard AC'97 MR or MC or AMC (Primary)	Disabled Onboard AC'97 MR or MC or AMC (Primary)

3WXA4Y	
None	MR or MC or AMC must be (Primary) only

- * Audio Codec'97 (AC'97)
- ** Audio Codec (AC)
- *** Modem Codec (MC)
- **** Audio/Modem Codec (AMC)
- ***** Modem Riser Card (MR)

Note: In the BIOS setting, "AC97 Audio" of "Integrated Peripherals" must be changed from "Enabled" to "Disabled" as well to come with JP8 setting (at "2-3" position). (refer to page 4-14).



Keyboard Power-ON Function
 JP13= 1-2 Enabled
 = 2-3 Disabled (Default)

System Memory Configuration

Memory Layout

The 3WXA/4/4Y 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

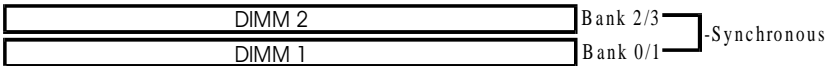


Figure 2

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

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).

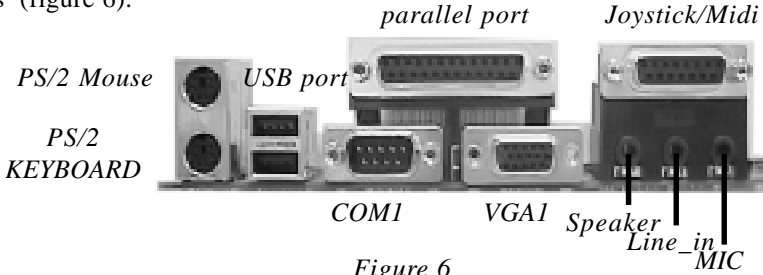


Figure 6

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

J5: Power Supply Fan Monitoring

- A plug-in for the Power supply so that BIOS can monitor the RPM's

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

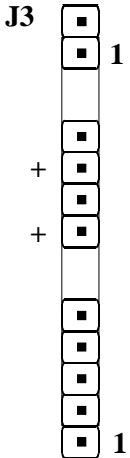
- Pin1(Left Line_IN), Pin2/Pin3(GND), Pin4(Right Line-IN)

MODEM_IN: Telephony Connector

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

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.)



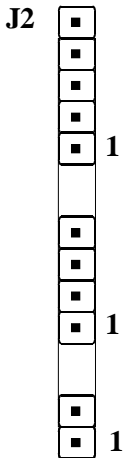
Power On/Off

Turbo LED indicator - LED ON when higher speed is selected

IDE LED indicator - LED ON when Onboard PCI IDE Hard disks is activate

IR Connector

- 1. VCC
- 2. NC
- 3. IRRX
- 4. GND
- 5. IRTX



Power LED - Power LED connector

- 1. Power LED(+)
- 2. N/C
- 3. GND
- 4. KeyLock
- 5. GND

Speaker - Connect to the system's speaker for beeping

- 1. Speaker
- 2. N/C
- 3. GND
- 4. GND

Reset - Closed to restart system.