Introduction *1*

The MS-6337 LE5 ATX mainboard is a high-performance computer mainboard based on Intel® 815EP chipset. The MS-6337 UMB (Universal Motherboard) is optimized to support the whole series of new generation Intel® Pentium® III (FC-PGA/FC-PGA2) processors for high-end business/personal desktop markets.

The Intel 815EP chipset contains two components: the 82815EP Memory Controller Hub (MCH) and the 82801BA I/O Controller Hub 2 (ICH2). The MCH integrates a 66/100/133-MHz, P6 family system bus controller , AGP (2X/4X) discrete graphics card, 100/133-MHz SDRAM controller, and a high speed accelerated hub architecture interface for communication with the ICH2. The ICH2 integrates an UltraATA/100 controller, 2 USB host controllers with a total of 4 ports, LPC interface controller, FWH interface controller, PCI interface controller, AC'97 digital link, integrated LAN controller, and a hub interface for communication with the MCH.

This chapter contains the following topics:

Mainboard Specifications

CPU
- Support Socket370 for the whole series of new generation Intel® Pentium® III(FC-PGA/FC-PGA2) processors.
- Support 500MHz, 550MHz, 600MHz, 633MHz, 667MHz, 700MHz, 733MHz, 800MHz, 866MHz, 933MHz, 1GHz, 1.1GHz, 1.13GHz and up to 1.2GHz.

Chipset
- Intel® 815EP chipset
  - 544 BGA
  - AGP 4x/2x universal slot
  - Support 66/100/133MHz FSB
- Intel® ICH2 chipset.
  - AC'97 Audio support
  - 2 full IDE channels, up to ATA100
  - Low pin count interface for SIO
  - USB controller 1.1

Main Memory
- Support three 168-pin DIMM sockets.
- Support a maximum memory size of 512MB SDRAM.

Slots
- One CNR (Communication Network Riser).
- One AGP (Accelerated Graphics Port) 2x/4x slot
- Six PCI 2.2 32-bit Master PCI Bus slots. All PCI slots can be used as master.
- Support 3.3v/5v PCI bus Interface.

On-Board IDE
- An IDE controller on the ICH2 chipset provides IDE HDD/CD-ROM with PIO, Bus Master and Ultra DMA 66/100 operation modes.
- Can connect up to two IDE devices.

On-Board Peripherals
- On-Board Peripherals include:
  - 1 floppy port supports 2 FDD with 360K, 720K, 1.2M, 1.44M and 2.88Mbytes.
  - 2 serial ports (COMA/COMB)

- 1 parallel port supports SPP/EPP/ECP mode
- 2 USB ports

Audio
- ICH2 chip integrated
- Support 2 channel audio

BIOS
- The mainboard BIOS provides "Plug & Play" BIOS which detects the peripheral devices and expansion cards of the board automatically.
- The mainboard provides a Desktop Management Interface (DMI) function which records your mainboard specifications.
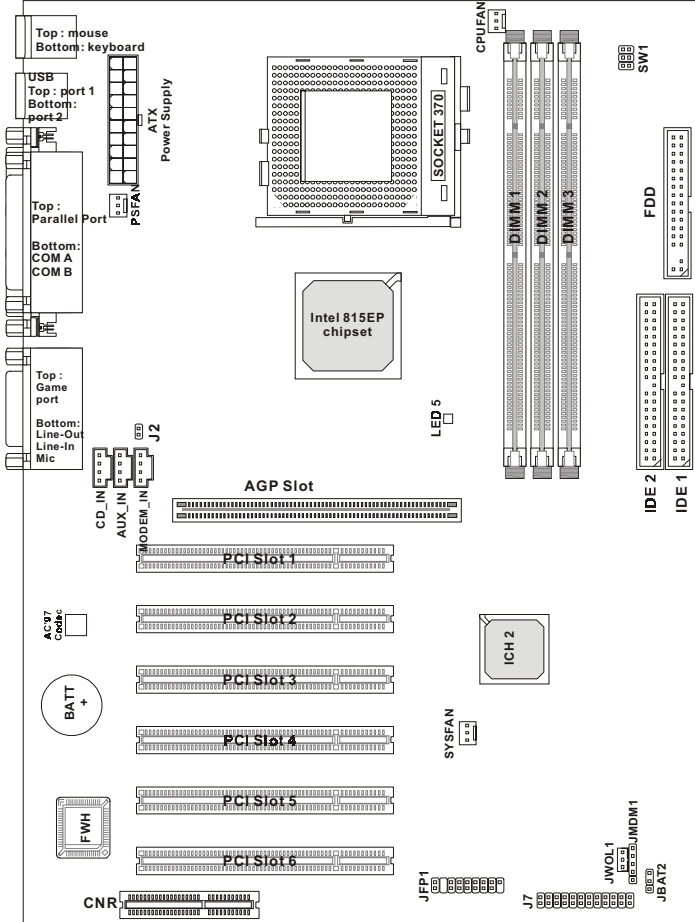
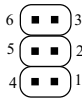## Dimension
- ATX Form Factor

Mounting
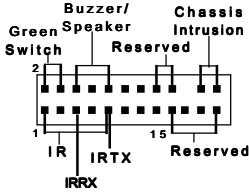- 6 mounting holes.

Mainboard Layout

MS-6337LE5 ATX Mainboard

Jumpers & Connectors

SW1

6 ■ ■ 3
5 ■ ■ 2
4 ■ ■ 1

Overclocking is operating a CPU/Processor beyond its specified frequency. SW1 jumper is used for overclocking.

J7

Buzzer/ Speaker
Green Switch
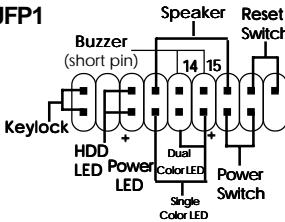Chassis Intrusion
Reserved
2
1
15
IR IRTX Reserved
IRRX

J7 is a Front Panel Connector.

Speaker Output
Short 6-8 pin to activate AC97_SPKR
Short 8-10 pin to activate onboard Buzzer.

JFP1

Speaker Reset Switch
Buzzer (short pin)
14 15
Keylock
HDD LED
+ Power LED
Dual Color LED
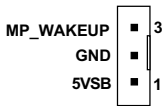+ Power Switch
Single Color LED

The case connector block JFP1 allows you to connect to the Power Switch, Reset Swtich, Speaker, Power LED, and HDD LED on the case.

LED5

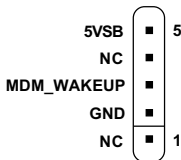LED 5 indicates the DIMM power. When LED 5 is powered on, do not attempt to insert or remove the DIMM module.

JWOL1

MP_WAKEUP ■ 3
GND ■
5VSB ■ 1

This connector allows you to connect to a LAN card with Wake On LAN function. You can wake up the computer via remote control through a local area network.
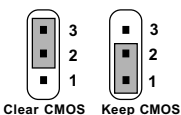
JMDM1

5VSB ■ 5
NC ■
MDM_WAKEUP ■
GND ■
NC ■ 1

This connector allows you to connect to a modem card with Wake On Ring function. The connector will power up the system when a signal is received through the modem card.

J2

■
■

J2 is used to check the AGP chipset temperature on AGP card. This function is reserved upon request.
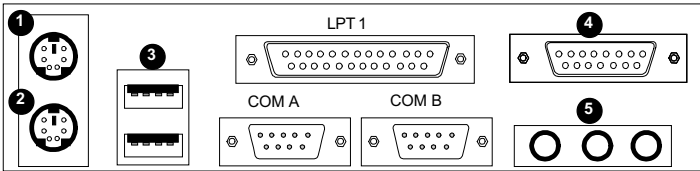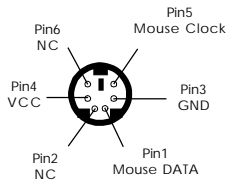
JBAT2

3
2
1
Clear CMOS

3
2
1
Keep CMOS

A battery must be used to retain the mainboard configuration in CMOS RAM. Short 1-2 pins of JBAT2 to store the CMOS data.

Back Panel

```
    1                        LPT 1                    4
                    ┌─────────────────────┐
        3           │ ................... │     ○ ........... ○

    2                COM A        COM B             5
                    ┌──────┐    ┌──────┐
                    │......│    │......│      ○  ○  ○
```
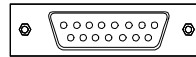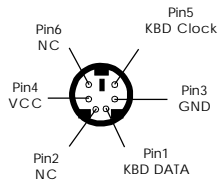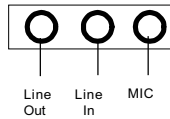
1 **Mouse Connector**

```
                 Pin5
                 Mouse Clock
   Pin6
   N C

   Pin4                      Pin3
   V C C                     GND

       Pin2          Pin1
       N C           Mouse DATA
```

4 **Joystick/MIDI**

```
   ○ ........... ○
```

2 **Keyboard Connector**

```
                 Pin5
                 KBD Clock
   Pin6
   N C

   Pin4                      Pin3
   V C C                     GND

       Pin2          Pin1
       N C           KBD DATA
```

5 **Audio Ports**

```
    ○    ○    ○

   Line  Line  MIC
   Out   In
```

3 **USB Ports**

```
   ┌────────┐
   │ ▭▭▭▭ │────── USB Port 1

    1  2  3  4

   │ ▭▭▭▭ │────── USB Port 2
   └────────┘
```
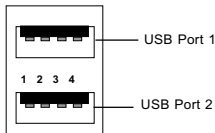
PIN	SIGNAL
1	VCC
2	-Data
3	+Data
4	GND