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FORTRESS1100

Easy Installation Guide

System FLASH BIOS

RJ45 Jack

RJ45 Jack

FAN4 Connector

VGA Connector

System FAN

JP5 VGA IRQ Jumper

370-pin CPU Socket with Voltage & Frequency Auto-detection supports Intel® Pentium™ III (Both Coppermine & Tualatin are supported)

168-pin DIMM Socket x 3 supports PC133 SDRAM maximum up to 3 GB

FAN3 Connector

VIA 694T (NB)

CPU FAN x 2

Slim-type Floppy Diskette drive

Low ESR Capacitors

VIA VT82C686B (SB)

IPMI ROM

FAN1 Connector

System FAN

JP3 CMOS Clear Jump

32 Bit PCI Slot x 2

ATX 20-pin Power Connector

Power supply Fan Sensor

100W PFC Switching Power supply

RAID Channel x2

USB Connector

Slim-type CD-ROM drive

CD-ROM Connector

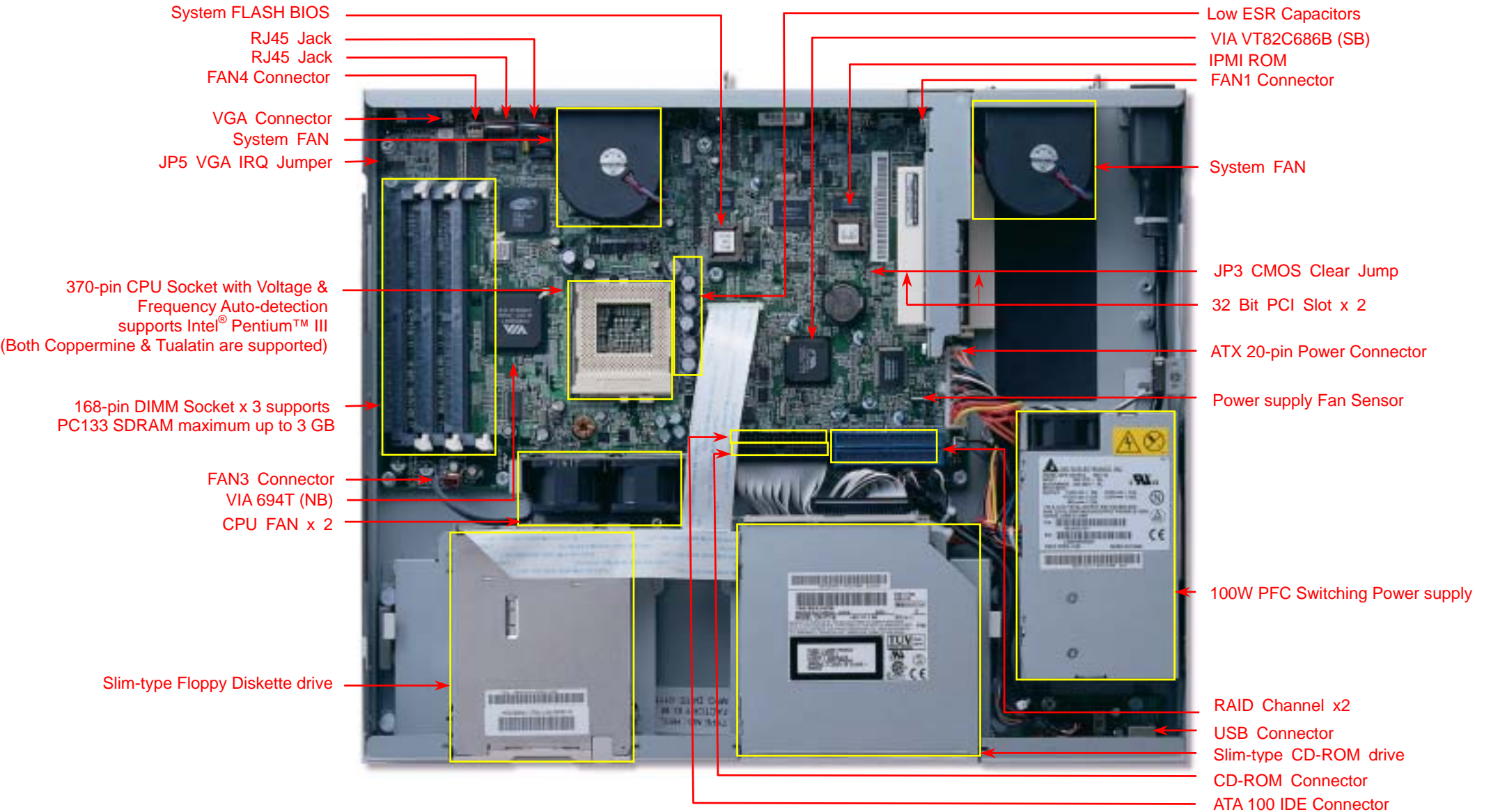ATA 100 IDE Connector

Before You Start

Everything you need to boot this motherboard is included in this Easy Installation Guide. For more information, a complete *Online User's Manual* can be found in the *Bonus Pack CD Disc*. Thanks for the help of saving our earth.

Accessory Checklist

- ☑ **User Manual x 1**
- ☑ **IDE ATA Cable x 2**
- ☑ **Heat-sink x 1**
- ☑ **Screw Package (10 HDD Screws)**
- ☑ **Bonus Pack CD x 1**
- ☑ **This Easy Installation Guide x 1**
- ☑ **One set rubber feet (4)**
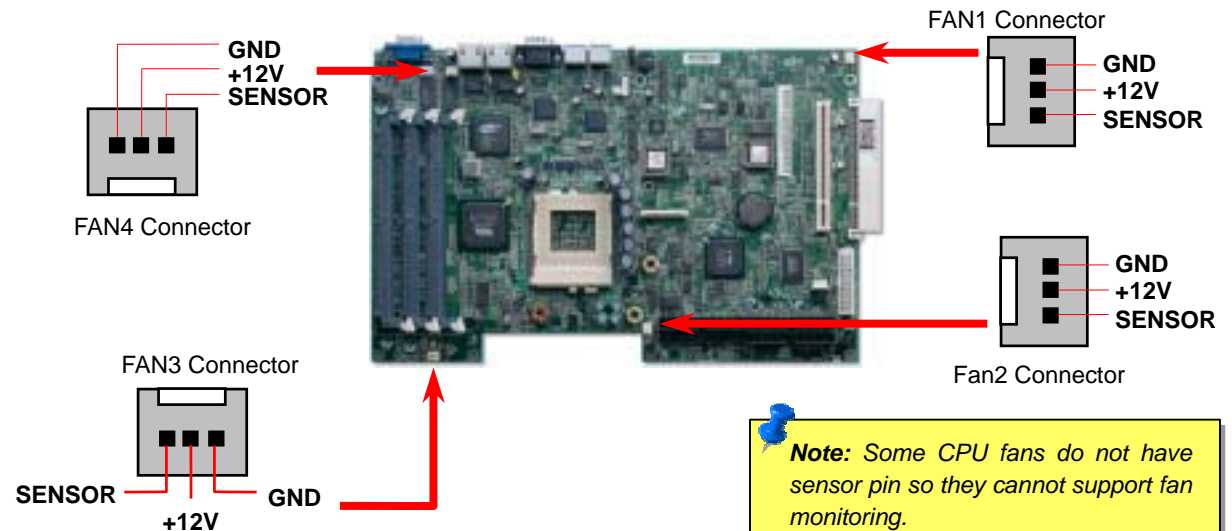
1. JP3 Clear CMOS

You can clear CMOS to restore system default setting. To clear the CMOS, follow the procedure below.

1. Turn off the system and unplug the AC power.
2. Remove ATX power cable.
3. Locate JP3 and short pins 2-3 for a few seconds.
4. Return JP3 to its normal setting by shorting pin 1 & pin 2.
5. Connect ATX power cable back.

Normal (default)   Clear CMOS
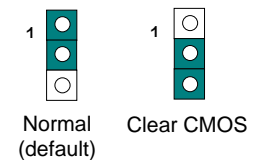
2. Installing CPU & System Fan

There are four system FAN connectors provided by Fortress1100 system. Each of them is a 3-pin connector, which brings the failure report, 12V power and ground. The system FAN is designed with redundancy to prevent thermal disaster caused by FAN failure.

GND
+12V
SENSOR

FAN4 Connector

FAN1 Connector

GND
+12V
SENSOR

GND
+12V
SENSOR

Fan2 Connector

FAN3 Connector

SENSOR   GND
+12V

Note: Some CPU fans do not have sensor pin so they cannot support fan monitoring.

3. Installing Processor
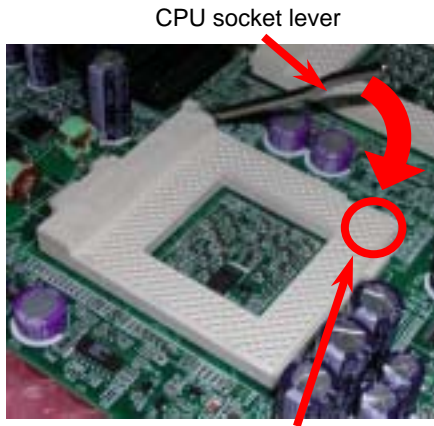
CPU socket lever

CPU Pin 1 and cut edge

1. Pull up the CPU socket lever and up to 90-degree angle.

2. Locate Pin 1 in the socket and look for a (golden) cut edge on the CPU upper interface. Match Pin 1 and cut edge. Then insert the CPU into the socket.

3. Press down the CPU socket lever and finish CPU installation.

> **Note:** If you do not match the CPU socket Pin 1 and CPU cut edge well, it may damage the CPU.

4. Supported CPU Type

Fortress1100 supports one Coppermine (up to 1 GHz with 256 L2 cache) or Tualatin (up to 1.26 GHz with 512K L2 cache) processor with external FSB up to 133 MHz.

Item	Frequency	128KB	256KB	512KB
Coppermine	800MHz	YES	YES	NO
Coppermine	866MHz	YES	YES	NO
Coppermine	933MHz	YES	YES	NO
Coppermine	1GHz	YES	YES	NO
Coppermine	1.13GHz	YES	YES	NO
Coppermine	1.26GHz	YES	YES	NO
Tualatin	1GHz	NO	YES	YES
Tualatin	1.13GHz	NO	YES	YES
Tualatin	1.20GHz	NO	YES	YES
Tualatin	1.26GHz	NO	YES	YES

5. Setting CPU Voltage & Frequency

Setting CPU Core Voltage

This motherboard supports CPU VID function. The CPU core voltage will be automatically detected and the range is from 1.05V to 1.825V. It is not necessary to set CPU Core Voltage

Setting CPU Frequency

This motherboard is CPU jumper-less design, the system can detect the CPU frequency automatically, and no jumpers or switches are needed.

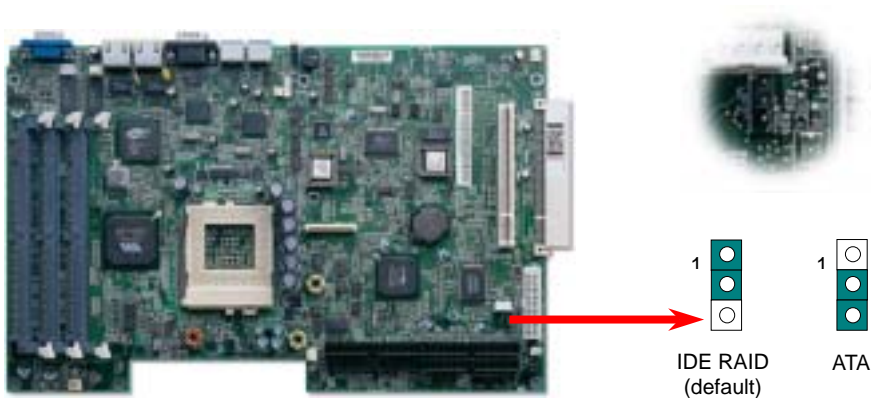*BIOS Setup > Frequency / Voltage Control > CPU Speed Setup*

*Core Frequency = CPU FSB Clock * CPU Ratio*

CPU	CPU Core Frequency	FSB Clock	Ratio
Pentium III 800E	800MHz	100MHz	8x
Pentium III 850E	850MHz	100MHz	8.5x
Pentium III 533EB	533MHz	133MHz	4x
Pentium III 600EB	600MHz	133MHz	4.5x
Pentium III 667EB	667MHz	133MHz	5x
Pentium III 733EB	733MHz	133MHz	5.5
Pentium III 800EB	800MHz	133MHz	6x
Pentium III 866EB	866MHz	133MHz	6.5
Pentium III 933EB	933MHz	133MHz	7x
Pentium III 1G	1GHz	133MHz	7.5x
Pentium III 1.13G	1.13GHz	133MHz	8.5x
Pentium III 1.26G	1.26GHz	133MHz	9x

> **Warning:** We strongly recommend you do not overclocking your CPU and system for get more system reliability.
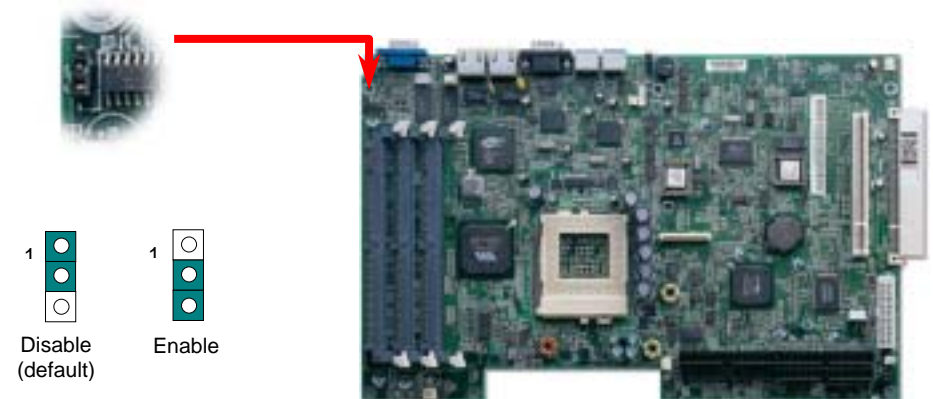
6. JP2 IDE RAID / ATA Controller Jumper

This jumper allows you to decide the system to support IDE RAID or ATA interface. The default setting is IDE RAID.

IDE RAID (default) ATA

7. JP4 Intrusion Alarm Cable

The system is equipped with an intrusion alarm device. Whenever the opening of the chassis triggers the sensor, the system will send out beep sound to inform you. The connector is equipped with a foolproof device.

Intrusion Alarm Cable Connector

8.JP5 VGA IRQ Jumper

This jumper allows you to enable or disable VGA sending IRQ to the system. The default setting is Disable.
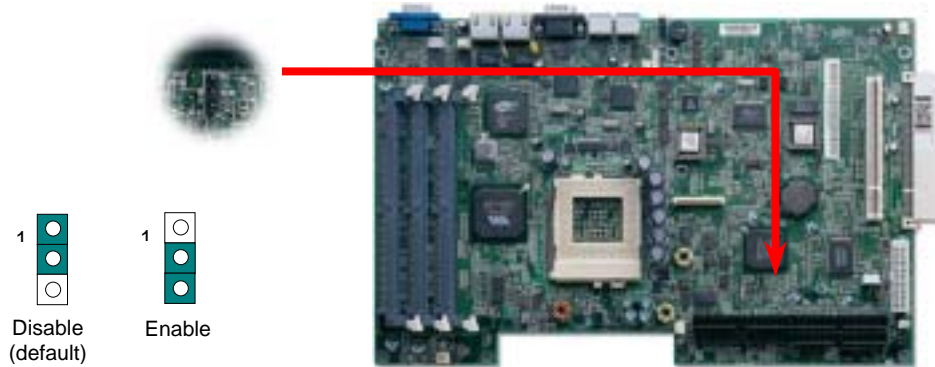
Disable (default) Enable
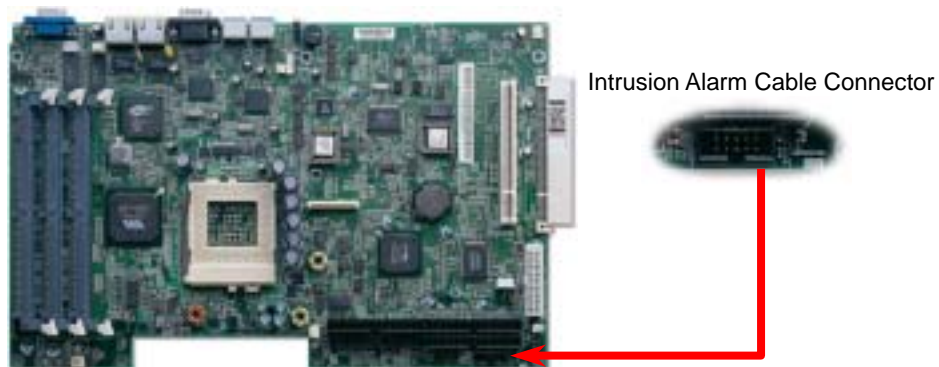
9. JP10 Power On By South Bridge or IPMI

This jumper allows you to decide to power on by south bridge or IPMI. The default setting is By IPMI.

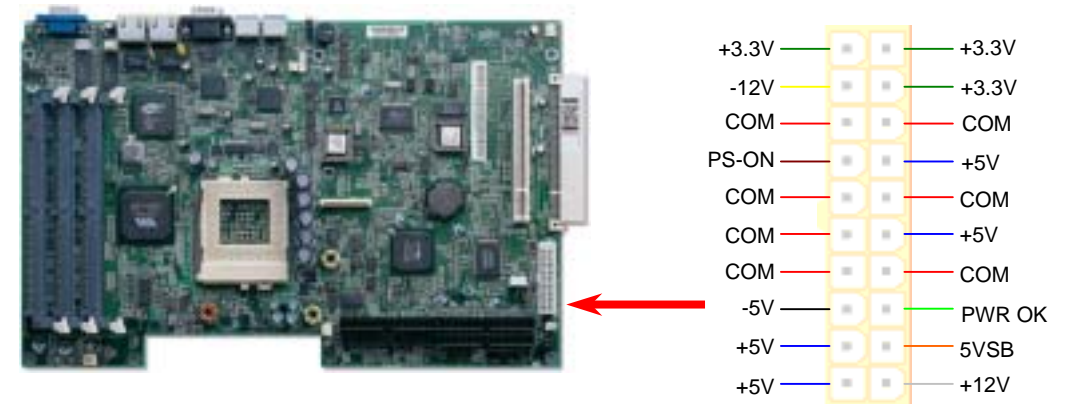BY South Bridge Enable By IPMI (Default)
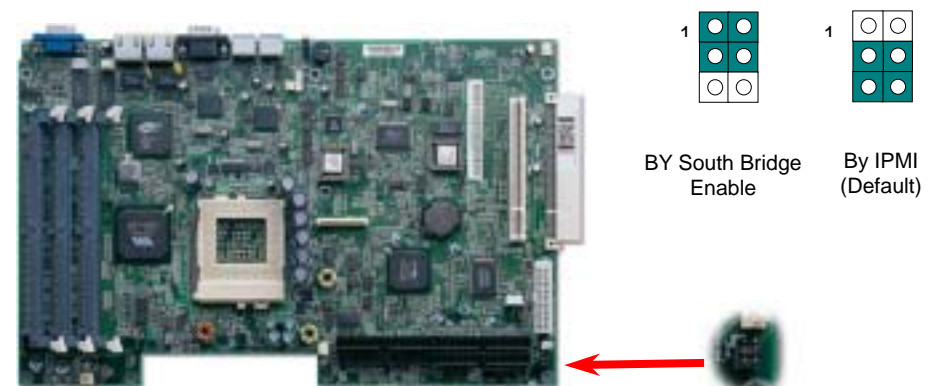
10. JP11 BIOS Restore Function

This jumper allows you to enable or disable the BIOS restore function. The default setting is Disable.

Disable
(default)

Enable

11. Connecting IDE and Floppy Cables

The system comes with a slim-type CD-ROM drive and a slim-type floppy disk drive. Connect 40-pin, 80-wire IDE cable to IDE connector. A slim-type floppy disk drive is connected with a special design cable. Be careful of the pin1 orientation. Wrong orientation may cause system damage.

Floppy drive connector

ATA 100 IDE connector

RAID primary channel
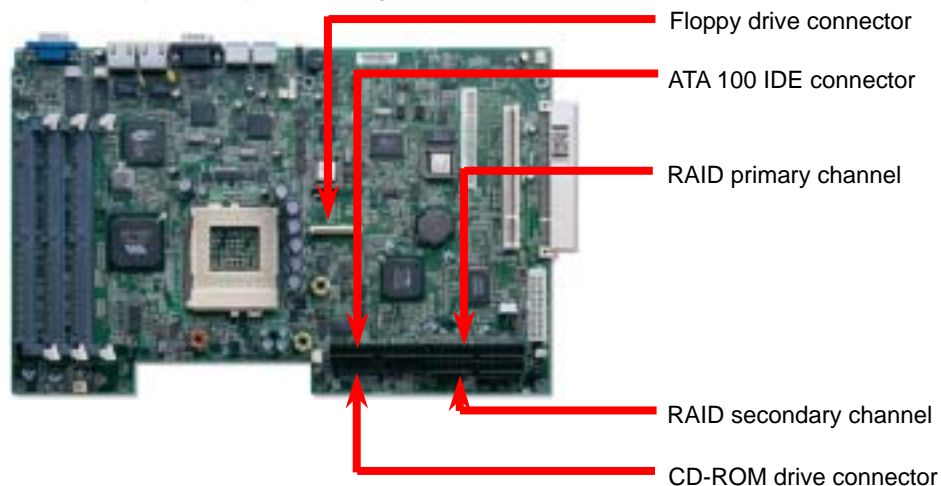
RAID secondary channel

CD-ROM drive connector

12. Connecting ATX Power Connector

The ATX power supply uses 20-pin connector shown below. The connector is equipped with a foolproof device. Make sure you plug in the right direction.

+3.3V		+3.3V
-12V		+3.3V
COM		COM
PS-ON		+5V
COM		COM
COM		+5V
COM		COM
-5V		PWR OK
+5V		5VSB
+5V		+12V

13. Installing DIMM Sockets

This motherboard supports Advanced ECC memory Controller, 168-pin PC100 / PC133 SDRAM, Virtual Channel Memory (VCM), and ESDRAM up to 3GB.

Dimm3
Dimm2
Dimm1
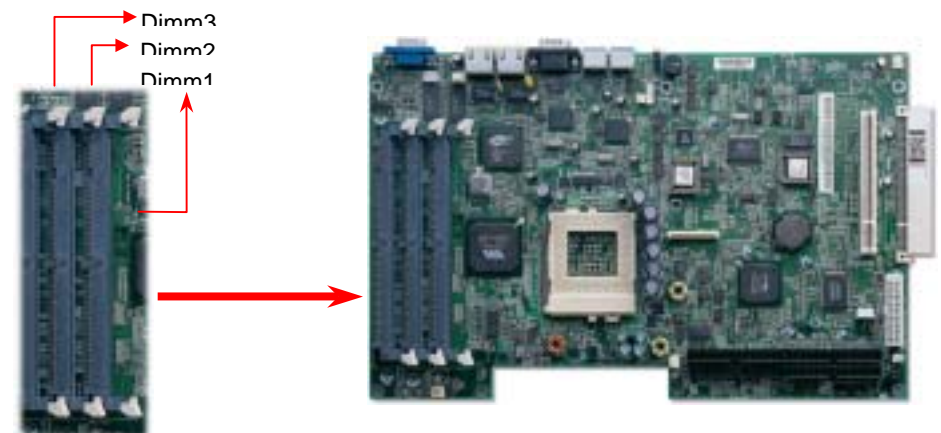
14. Support 10/100 Mbps LAN Onboard

On the strength of Intel 82550 PHY on board, which is a highly-integrated Platform LAN Connect device, it provides 10/100M bps Ethernet for office and home use, the Ethernet RJ45 connector is located on the back panel. The green LED indicates the link mode, it lights when linking to network and blinking when transferring data. The orange LED indicates the transfer mode, and it lights when data is transferring in 100Mbps mode. To enable or disable this function, you may simply adjust it through BIOS.

Green/ACT

Orange/Speed
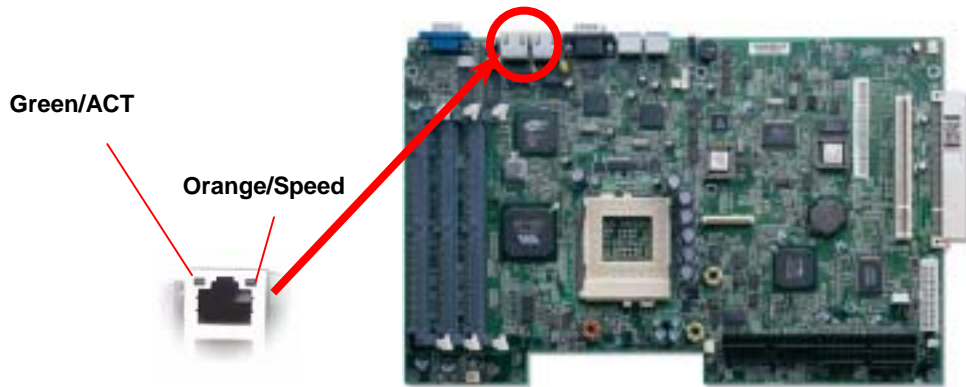
15. PCI Bus Slots

The Fortress1100 has two 32-bit / 33 MHz PCI bus slots with a riser card. The riser card provides an easy way to plug the PCI card in the system.

Riser Card
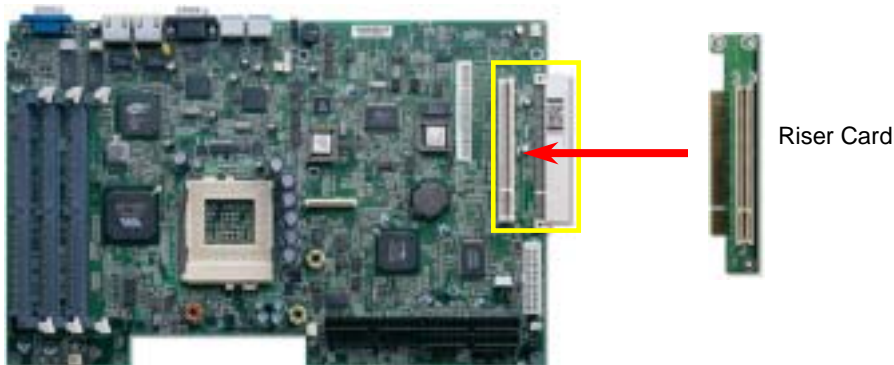
16. Back Panel

The picture shown below indicates the functions of all connectors on the real panel. The connectors are all different in their shape or color. They all have foolproof devices. Please make sure you plug in the right direction.

PS/2 Kevboard   RJ45 LAN Jack

System event
LED

ATX Power
Connector

PS/2 Mouse   COM1   VGA Connector
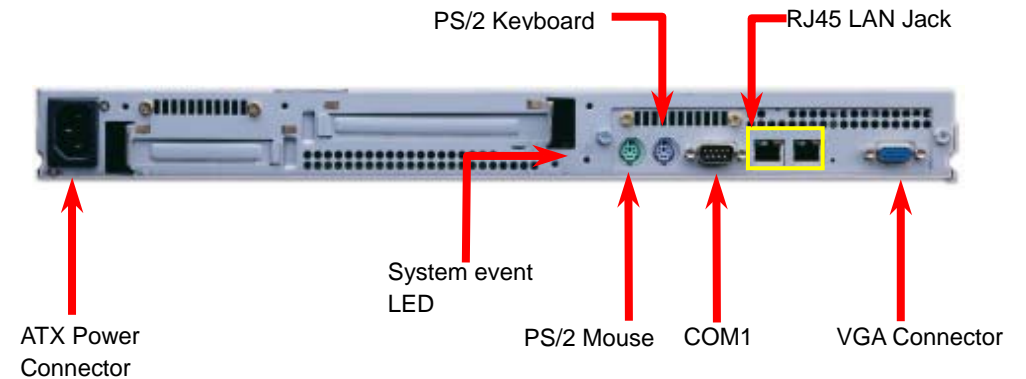
17.Front Panel

The picture shown below indicates the functions of LEDs of the front panel.   The system provides two USB ports on the front panel. Please make sure you plug in the right direction.

System health
LED

USB Ports

Hard Disk LED

Reset Button

Power LED

Power Button

18. Power-On and Load BIOS Setup

After you finish the setting of jumpers and connect correct cables. Power on and enter the BIOS Setup, press <Del> during POST (Power On Self Test). Choose "Load Default Setting" for recommended optimal performance.

Del

```
                    Setup Utility

                System Information
                Product Information
                Disk Drives
                Onboard Peripherals
                Power Management
                Boot Options
                Date and Time
                System Security
                IPMI Configuration

                Load Default Settings
                Abort Settings Change

                <ALT+H>  Key Help
```
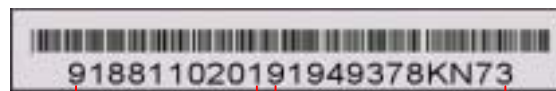
19. Part Number and Serial Number

The Part Number and Serial number are printed on bar code label. You can find this bar code label on the outside packing, on ISA/CPU slot or on component side of PCB. For example:
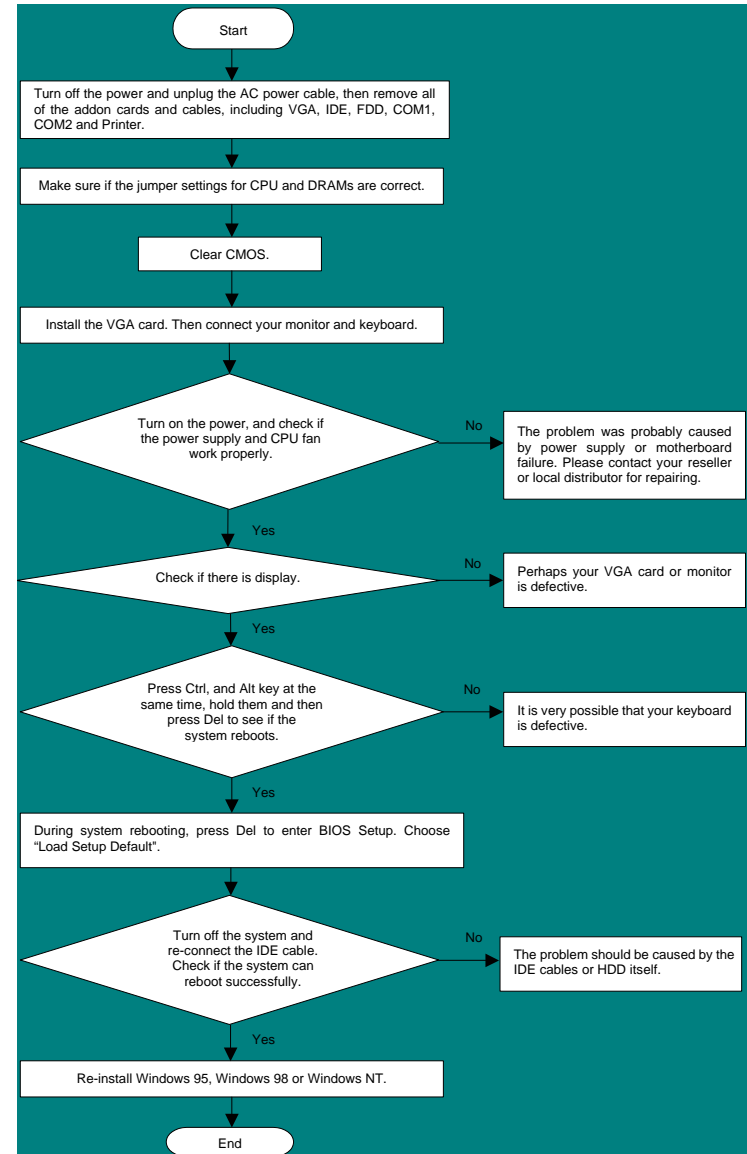
P/N:91.88110.201   S/N:91949378KN73

Part No.   Serial No.

9188110201 91949378KN73

Part No.   Serial No.

P/N: 91.88110.201 is part number, **S/N: 91949378KN73** is serial number.

Troubleshooting

If you encounter any trouble to boot you system, follow the procedures accordingly to resolve the problem.

Start

Turn off the power and unplug the AC power cable, then remove all of the addon cards and cables, including VGA, IDE, FDD, COM1, COM2 and Printer.

Make sure if the jumper settings for CPU and DRAMs are correct.

Clear CMOS.

Install the VGA card. Then connect your monitor and keyboard.

Turn on the power, and check if the power supply and CPU fan work properly. — No → The problem was probably caused by power supply or motherboard failure. Please contact your reseller or local distributor for repairing.

Yes

Check if there is display. — No → Perhaps your VGA card or monitor is defective.

Yes

Press Ctrl, and Alt key at the same time, hold them and then press Del to see if the system reboots. — No → It is very possible that your keyboard is defective.

Yes

During system rebooting, press Del to enter BIOS Setup. Choose "Load Setup Default".

Turn off the system and re-connect the IDE cable. Check if the system can reboot successfully. — No → The problem should be caused by the IDE cables or HDD itself.

Yes

Re-install Windows 95, Windows 98 or Windows NT.

End

Technical Support

Dear Customer,

Thanks for choosing AOpen products. To provide the best and fastest service to our customer is our first priority. However, we receive numerous emails and phone-calls worldwide everyday, it is very hard for us to serve everyone on time. We recommend you follow the procedures below and seek help before contact us. With your help, we can then continue to provide the best quality service to more customers.

Thanks very much for your understanding!

AOpen Technical Supporting Team

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Simplified Chinese	*http://www.aopen.com.cn/tech/contact/techcn.htm*

1 **Online Manual:** Please check the manual carefully and make sure the jumper settings and installation procedure are correct.
http://www.aopen.com/tech/download/manual/default.htm

2 **Test Report:** We recommend to choose board/card/device from the compatibility test reports for assembling your PC.
http://www.aopen.com/tech/report/default.htm

3 **FAQ:** The latest FAQ (Frequently Asked Questions) may contain a solution to your problem.
http://www.aopen.com/tech/faq/default.htm

4 **Download Software:** Check out this table to get the latest updated BIOS/utility and drivers.
http://www.aopen.com/tech/download/default.htm

5 **News Group:** Our support engineer or professional users on the news group probably had answered your problem.
http://www.aopen.com/tech/newsgrp/default.htm

6 **Contact Distributors/Resellers:** We sell our products through resellers and integrators. They should know your system configuration very well and should be able to solve your problem more efficiently and provide important reference for you if next time you want to buy something else from them.

7 **Contact Us**: Please prepare detail system configuration and error symptom before contacting us. The **part number**, **serial number** and **BIOS version** are also very helpful.