i915Gm-IE / i915Gm-I

RJ45 **Rear SUR** PS/2 Mouse SPP/EPP/ECP Parallel Port LAN Jack Connector Line-In Speaker Out **USB 2.0 Ports** Center/ Subwoofer MIC-In Side SUR **USB 2.0** COM 1 Port **VGA Port** Keyboard **Ports** Connector

Intel Gigabit LAN Chip (i915Gm-IE) Intel 10/100 Mbps LAN (i915Gm-I)

PCI Express x1 Slot

32-bit PCI Expansion Slots x2
Onboard HD Audio Codec

CD-IN Connector

Front Audio Connector

STBY LED

Game Port Connector

IrDA Connector

USB 2.0 Connector

Front USB 2.0 Connector

JP14 CMOS Data Clear Jumper

SYSFAN2 Connector

Case Open Connector

Front Panel Connector
DieHard BIOS Lite

Serial ATA Ports x4
Supports 150 MB/s Transfer Rate
COM2 Connector

Open

Resetable Fuse
JP28 PS2 KB/Mouse Wakeup
Jumper
4-pin 12V ATX Power Connector
SYSFAN1 Connector
Functional Polymer Capacitor

PCI Express x 16 Graphics Slot (8.0GB/s)

LGA 775 CPU Socket with Voltage and Frequency Auto-detection that supports Intel® FC-LGA4 CPU

CPUFAN Connector

Intel® 915G / ICH6 Chipsets that support 800 MHz FSB, DDR 400 and PCI Express x16

BOOT LED

184-pin DIMMsx4 support 128bit Dual Channel DDR400/333 Max. To 4GB

IDE Connector x 1 (ATA33/66/100 supported)

ATX Power Connector

FDD Connector

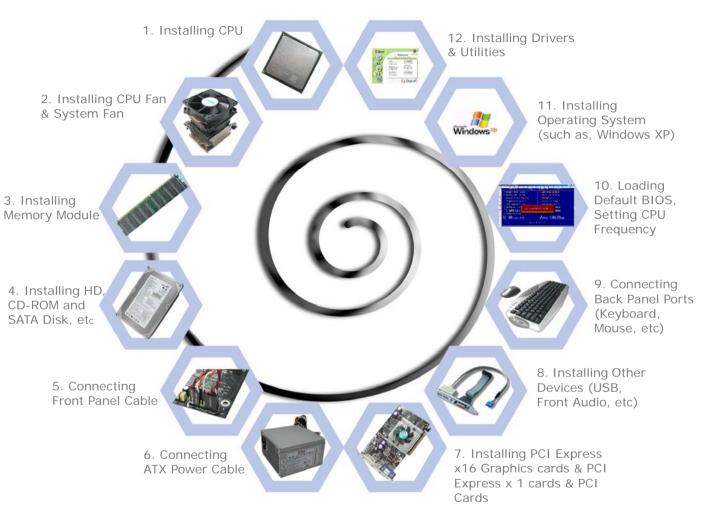
Before You Start

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. Thanks for the help of saving our earth.

Accessory Checklist

- Easy Installation Guide
- 80-Wire IDE Cable x 1
- Floppy Drive Cable x 1
- Serial ATA Cable x 1
- Serial ATA Power Cable x 1
- Bonus Pack CD x 1
- I/O Shield x 1

Installing By Yourself





DOC. NO: 1915GMIE-EG-E0408C











1. Installing CPU

This socket supports FC-LGA4 CPU, which is the latest CPU package developed by Intel. Other forms of CPU package are impossible to be fitted in.

CPU socket plate

Plastic cap

Socket Pin 1

CPU socket lever

Golden arrow

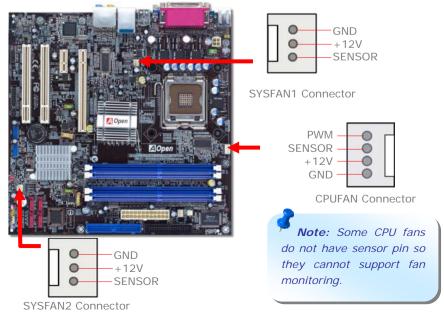
- 1. Pull CPU socket lever and plate up.
- 2. Remove plastic cap from CPU socket plate.
- 3. Locate Pin 1 in the socket and look for a golden arrow on the CPU upper interface. Match Pin 1 and golden arrow. Then insert the CPU into the socket.
- 4. Press down CPU socket plate and lever to finish CPU installation.

Warning: If you do not match the CPU socket Pin 1 and CPU golden arrow well, you may damage the CPU. And please don't touch CPU socket pins when installing CPU.

Note: It's strongly recommended by Intel to use thermal paste properly to avoid over-heat generated From Prescott CPU.

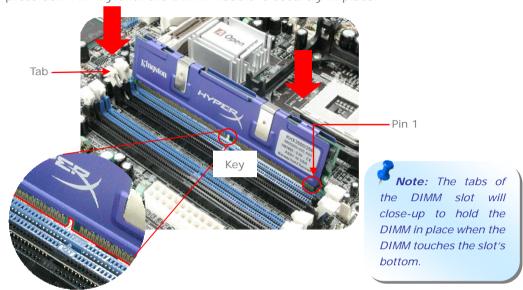
2. Installing CPU & System Fans

Plug in the CPU fan cable to the 4-pin CPUFAN connector. If you have chassis fan, you can also plug it in SYSFAN1 or SYSFAN2 connector.



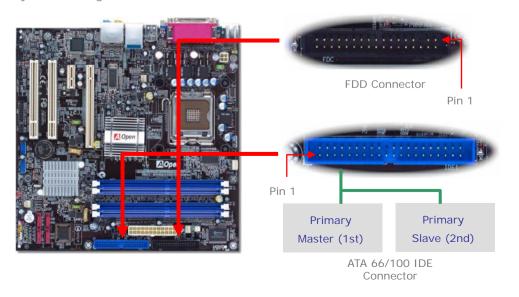
3. Installing Memory Modules

DIMM slots are designed in Navy Blue and Electronic Blue which are very easy to recognize. Insert the module straight down to the DIMM slot with both hands and press down firmly until the DIMM module is securely in place.



4. Connecting IDE and Floppy Cables

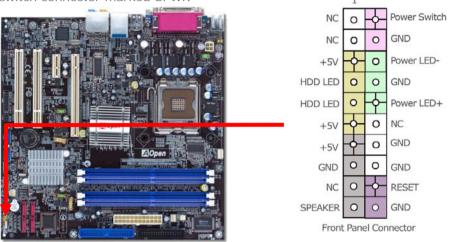
Connect 34-pin floppy cable and 40-pin, 80-wire IDE cable to floppy connector FDD and IDE connector. Be careful of the pin1 orientation. Wrong orientation may cause system damage.



5. Connecting Front Panel Cable

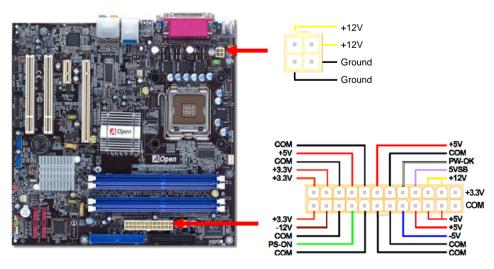
Attach the power LED, speaker, and reset switch connectors to the corresponding pins. If you enable "Suspend Mode" item in BIOS Setup, the ACPI & Power LED will keep flashing while the system is in suspend mode.

Locate the power switch cable from your ATX housing. It is 2-pin female connector from the housing front panel. Plug this connector to the soft-power switch connector marked *SPWR*



6. Connecting ATX Power Cable

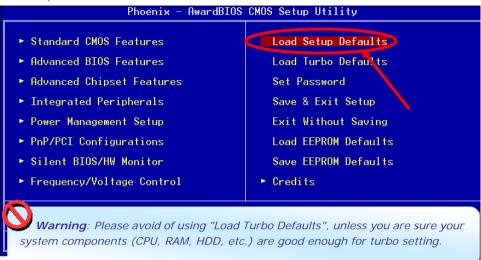
. This motherboard comes with a 24-pin ATX power connector and a 4-pin 12V ATX power connector as shown below. Make sure you plug in the right direction. We strongly recommend you to insert the 4-pin connector before connecting the 24-pin connector.



7. Power-on and Loading BIOS Setup



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



8. AOpen Bonus Pack CD and Ezinstali

You can use the autorun menu of Bonus CD disc. Choose the utility and driver from the icons at left side, and then click on the " \mathbf{GO} " button to complete installation automatically.



Setting CPU Voltage & Frequency

Setting CPU Core Voltage

This motherboard supports Voltage ID (VID) function to detect CPU voltage automatically during power-on and the range is from 0.8375V to 1.6V. It's not necessary to set CPU core voltage.

Setting CPU Frequency

This motherboard is CPU jumper-less design, you can set CPU frequency through 1MHz stepping CPU Overclocking in the BIOS. CPU Core Frequency = CPU FSB clock x CPU Ratio. However, all CPU now selling in the market belong to "Fixed Multiplier". That means users can not adjust the CPU Ratio but only change CPU FSB clock to achieve overclocking.

(Users do the overclocking at their own risk!!)

BIOS Setup > Frequency / Voltage Control > CPU Speed Setup

CPU Ratio	8x, 10x 24x, 25x, 26x, 27x, 28x
CPU FSB (Adjustment manually)	FSB = 100MHz-400MHz by 1MHz Stepping CPU Overclocking

Processor Number	Processor Frequency	FSB	CPU Ratio	Cache
5 Series				
580	4.00G	800MHZ	20x	1MB L2
570	3.80G	800MHZ	19x	1MB L2
560	3.60G	800MHZ	18x	1MB L2
550	3.40G	800MHZ	17x	1MB L2
540	3.20G	800MHZ	16x	1MB L2
530	3.00G	800MHZ	15x	1MB L2
520	2.80G	800MHZ	14x	1MB L2
3 Series				
350	3.20G	533MHZ	24x	256K L2
345	3.06G	533MHZ	23x	256K L2
340	2.93G	533MHZ	22x	256K L2
335	2.80G	533MHZ	21x	256K L2

Note: With CPU speed changing rapidly, there might be faster CPU on the market by the time you received this installation guide. This table is kindly for your references only.

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

Note: Intel 915G chipset support Prescott processor. Prescott processor could detect the clock ratio automatically; you may not be able to adjust the clock ratio in BIOS manual.

Warning: Intel 915G chipset support maximum 800MHz (200MHz*4) system bus; higher clock setting may cause serious system damage.

JP14 Clear CMOS

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

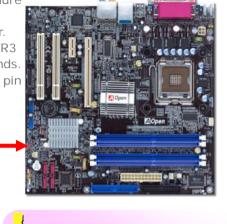
- 1. Turn off the system and unplug the AC power.
- 2. Remove ATX power cable from connector PWR3
- 3. Locate JP14 and short pins 2-3 for a few seconds.
- 4. Return JP14 to its normal setting by shorting pin 1 & pin 2.
- Connect ATX power cable back to connector PWR3.

Pin 1

Clear CMOS

Normal

(default)

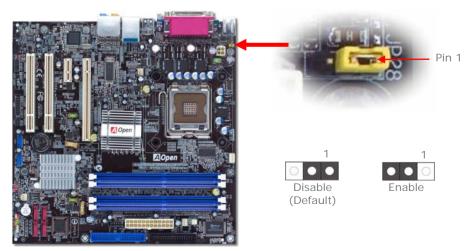


Tip: When should I Clear CMOS?

- 1. Boot fails because of overclocking..
- 2. Forget password...
- 3. Troubleshooting...

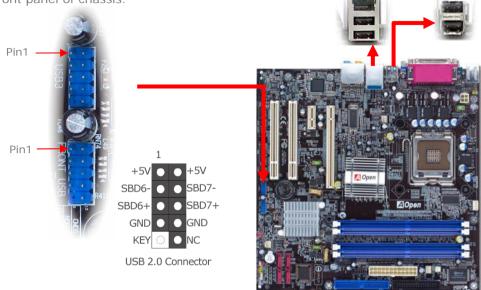
JP28 Keyboard/Mouse Wakeup Jumper

This motherboard provides keyboard / mouse wake-up function. You can use JP28 to enable or disable this function, which could resume your system from suspend mode with keyboard or mouse. The factory default setting is "Disable" (1-2), and you may enable this function by setting the jumper to 2-3.



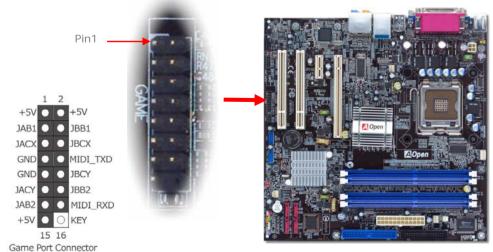
USB 2.0 Connectors

This motherboard provides eight USB 2.0 ports to connect USB devices, such as mouse, keyboard, modem, printer, etc. There are four ports on the back panel. You can use proper cables to connect the Front USB connector to USB modules or front panel of chassis.



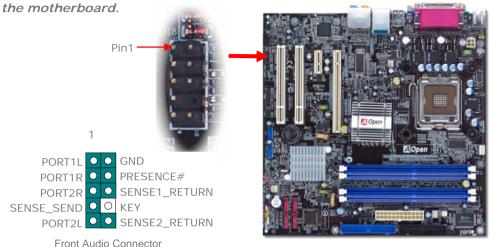
Game port

This motherboard comes with a game port (Joystick-Midi) for you to connect any midi devices or joysticks. To use this function you have to have a joystick module and connect it with a game port cable to this port on the motherboard.



Front Audio Connectors

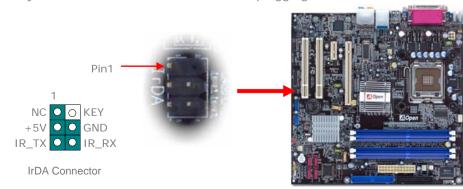
If the housing is designed with an audio port on the front panel, you'll be able to connect onboard audio to front panel through this connector. *Please be informed that to have front audio ports work properly, the front audio panel of the housing should be designed for High definition Audio jack. If the front audio panel is not designed for High Definition Audio jack, we strongly recommend you to connect the microphone to the back panel of*



IrDA Connector

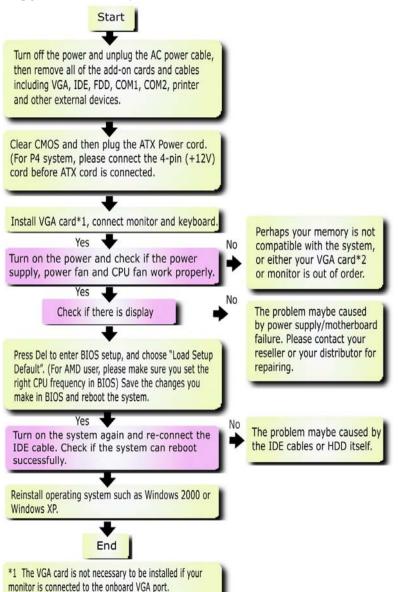
The IrDA connector can be configured to support wireless infrared module, with this module and application software such as Laplink or Windows Direct Cable Connection, user can transfer files to or from laptops, notebooks, PDA devices and printers. This connector supports both HPSIR (115.2Kbps, 2 meters) and ASK-IR (56Kbps).

Install an infrared module onto the IrDA connector and enable the infrared function from BIOS Setup, UART Mode, you can use this function. Please make sure you connect correct orientation when plugging IrDA module.





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



*2 If you connect to the onboard VGA port and no screen displays, then your onboard VGA device might have problem.

Model name and BIOS version

Model name and BIOS version can be found on upper left corner of first boot screen (POST screen). For example:



i915Gm-IE is model name of motherboard: R1.02 is BIOS version.

Register Your Motherboard

Thanks for choosing AOpen product, please register this motherboard at http://club.aopen.com.tw/productreg/ to become a Gold member of Club AOpen, and to ensure high service quality and priority from AOpen. You will also have a chance to play slot machine game to win prize from AOpen. Please prepare the following information before you start: Model Name, Part Number (P/N), Serial Number (S/N) and Purchase Date. The Part Number and Serial number are printed on bar code label. You can find this bar code label on the outside packing or on component side of PCB. For example:



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

Phoenix-Award BIOS ERROR Message			
Beep Sound	Message		
1 short(Beep)	System booting is normally.		
1 long - 1 short(Beep)	DRAM ERROR		
1 long - 2 short(Beep)	Display card or monitor connected error		
1 long - 3 short(Beep)	Keyboard Error		
Long(Beep) continuous	DRAM hasn't inset correctly.		



Technical Support

Dear Customer,

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Thanks very much for your understanding!

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Germany
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Online Manual: To download manual, please log on and then select your preferred language. Under "Type" directory, choose "Manuals" to go to our manual database. You can also find the manual and EIG in AOpen Bonus Pack. http://download.aopen.com.tw/downloads

Test Report: We recommend you to choose board/card/device from the compatibility test reports for assembling your PC. It may prevent incompatibility problems. http://english.aopen.com.tw/tech/report/default.htm



WHITTHEN.

FAQ: Here we list problems that users often encounter and FAQ (Frequently Asked Questions). You may select your preferred language after log on, and may be able to find a solution to your problem. http://club.aopen.com.tw/faq/

Download Software: After log on and having language selected, you may get the latest updated BIOS/utility and drivers you need under "Type" directory. In most case, newer versions of drivers and BIOS have solved earlier bugs or compatibility problems.

http://download.aopen.com.tw/downloads

eForum: AOpen eForum is provided to discuss our products with other users, in which your problem probably had been discussed before or will be answered. After log on, you may select your preferred language under "Multi-language". http://club.aopen.com.tw/forum

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.

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 efficiently and provide important reference for you.