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- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

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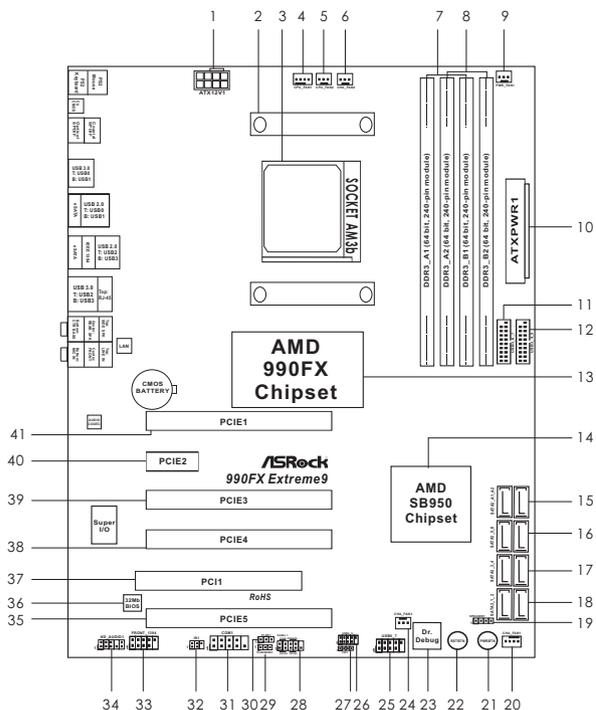
The Lithium battery adopted on this motherboard contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance.

"Perchlorate Material-special handling may apply, see [www.dtsc.ca.gov/hazardouswaste/perchlorate](http://www.dtsc.ca.gov/hazardouswaste/perchlorate)"

**ASRock Website:** <http://www.asrock.com>

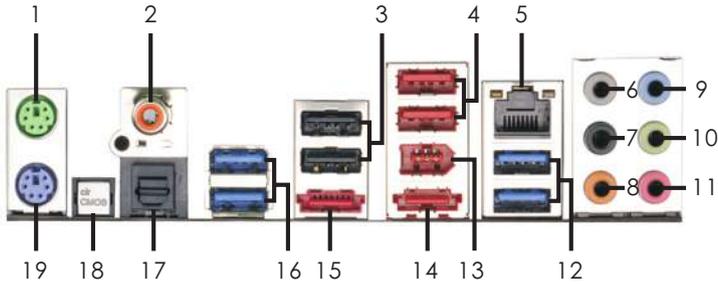
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# Motherboard Layout



- |    |   |    |  |
|----|---|----|--|
| 1  | ATX 12V Power Connector (ATX12V1)                                 | 21 | Power Switch (PWRBTN)                        |
| 2  | CPU Heatsink Retention Module                                     | 22 | Reset Switch (RSTBTN)                        |
| 3  | AM3+ CPU Socket   | 23 | Dr. Debug (LED)                              |
| 4  | CPU Fan Connector (CPU_FAN1)                                      | 24 | Chassis Fan Connector (CHA_FAN3)             |
| 5  | CPU Fan Connector (CPU_FAN2)                                      | 25 | USB 2.0 Header (USB6_7)                      |
| 6  | Chassis Fan Connector (CHA_FAN2)                                  | 26 | USB 2.0 Header (USB4_5)                      |
| 7  | 2 x 240-pin DDR3 DIMM Slots<br>(Dual Channel A: DDR3_A1, DDR3_B1) | 27 | Consumer Infrared Module Header (CIR1)       |
| 8  | 2 x 240-pin DDR3 DIMM Slots<br>(Dual Channel B: DDR3_A2, DDR3_B2) | 28 | System Panel Header (PANEL1)                 |
| 9  | Power Fan Connector (PWR_FAN1)                                    | 29 | Clear CMOS Jumper (CLR_CMOS1)                |
| 10 | ATX Power Connector (ATXPWR1)                                     | 30 | Power LED Header (PLED1)                     |
| 11 | USB 3.0 Header (USB3_6_7)   | 31 | Serial Port Connector (COM1)                 |
| 12 | USB 3.0 Header (USB3_4_5)   | 32 | Infrared Module Header (IR1)                 |
| 13 | Northbridge Controller  | 33 | Front Panel IEEE 1394 Header<br>(FRONT_1394) |
| 14 | Southbridge Controller  | 34 | Front Panel Audio Header (HD_AUDIO1)         |
| 15 | SATA3 Connector (SATA3_A1_A2)                                     | 35 | PCI Express 2.0 x16 Slot (PCIE5)             |
| 16 | SATA3 Connector (SATA3_5_6)                                       | 36 | SPI Flash Memory (32Mb)                      |
| 17 | SATA3 Connector (SATA3_3_4)                                       | 37 | PCI Slot (PCI1)                              |
| 18 | SATA3 Connector (SATA3_1_2)                                       | 38 | PCI Express 2.0 x16 Slot (PCIE4)             |
| 19 | Chassis Speaker Header (SPEAKER1)                                 | 39 | PCI Express 2.0 x16 Slot (PCIE3)             |
| 20 | Chassis Fan Connector (CHA_FAN1)                                  | 40 | PCI Express 2.0 x1 Slot (PCIE2)              |
|    |   | 41 | PCI Express 2.0 x16 Slot (PCIE1)             |

# I/O Panel



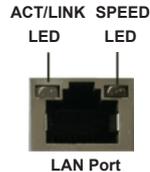
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|----------------------------|----------------------------------|
| 1 PS/2 Mouse Port (Green)  | 11 Microphone (Pink)             |
| 2 Coaxial SPDIF Out Port   | 12 USB 3.0 Ports (USB3_2_3)      |
| 3 USB 2.0 Ports (USB01)    | 13 IEEE 1394 Port (IEEE 1394)    |
| 4 USB 2.0 Port (USB23)     | *** 14 eSATA3 Connector (ESATA1) |
| * 5 LAN RJ-45 Port         | *** 15 eSATA3 Connector (ESATA2) |
| 6 Side Speaker (Gray)      | 16 USB 3.0 Ports (USB3_0_1)      |
| 7 Rear Speaker (Black)     | 17 Optical SPDIF Out Port        |
| 8 Central / Bass (Orange)  | 18 Clear CMOS Switch (CLRCBTN)   |
| 9 Line In (Light Blue)     | 19 PS/2 Keyboard Port (Purple)   |
| ** 10 Front Speaker (Lime) |                                  |

\* There are two LED next to the LAN port. Please refer to the table below for the LAN port LED indications.

## LAN Port LED Indications

Activity/Link LED	
Status	Description
Off	No Link
Blinking	Data Activity
On	Link

SPEED LED	
Status	Description
Off	10Mbps connection
Orange	100Mbps connection
Green	1Gbps connection



\*\* If you use 2-channel speaker, please connect the speaker's plug into "Front Speaker Jack". See the table below for connection details in accordance with the type of speaker you use.

## TABLE for Audio Output Connection

Audio Output Channels	Front Speaker (No. 10)	Rear Speaker (No. 7)	Central / Bass (No. 8)	Side Speaker (No. 6)
2	V	--	--	--
4	V	V	--	--
6	V	V	V	--
8	V	V	V	V

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To enable Multi-Streaming function, you need to connect a front panel audio cable to the front panel audio header. After restarting your computer, you will find "Mixer" tool on your system. Please select "Mixer ToolBox" , click "Enable playback multi-streaming", and click "ok".

Choose "2CH", "4CH", "6CH", or "8CH" and then you are allowed to select "Realtek HDA Primary output" to use Rear Speaker, Central/Bass, and Front Speaker, or select "Realtek HDA Audio 2nd output" to use front panel audio.

\*\*\* eSATA3 connector supports SATA Gen3 in cable 1M.

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# 1. Introduction

Thank you for purchasing ASRock **990FX Extreme9** motherboard, a reliable motherboard produced under ASRock's consistently stringent quality control. It delivers excellent performance with robust design conforming to ASRock's commitment to quality and endurance.

This Quick Installation Guide contains introduction of the motherboard and step-by-step installation guide. More detailed information of the motherboard can be found in the user manual presented in the Support CD.



Because the motherboard specifications and the BIOS software might be updated, the content of this manual will be subject to change without notice. In case any modifications of this manual occur, the updated version will be available on ASRock website without further notice. You may find the latest VGA cards and CPU support lists on ASRock website as well. ASRock website <http://www.asrock.com>

If you require technical support related to this motherboard, please visit our website for specific information about the model you are using. [www.asrock.com/support/index.asp](http://www.asrock.com/support/index.asp)

## 1.1 Package Contents

ASRock **990FX Extreme9** Motherboard (ATX Form Factor)

ASRock **990FX Extreme9** Quick Installation Guide

ASRock **990FX Extreme9** Support CD

1 x ASRock SLI\_Bridge\_2S Card

1 x ASRock 3-Way SLI-2S1S Bridge Card

6 x Serial ATA (SATA) Data Cables (Optional)

2 x Serial ATA (SATA) HDD Power Cables (Optional)

1 x I/O Panel Shield

1 x Front USB 3.0 Panel with 2.5" HDD/SSD Rack

4 x HDD Screws

6 x Chassis Screws

1 x Rear USB 3.0 Bracket



### **ASRock Reminds You...**

To get better performance in Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit, it is recommended to set the BIOS option in Storage Configuration to AHCI mode. For the BIOS setup, please refer to the "User Manual" in our support CD for details.

## 1.2 Specifications

<b>Platform</b>	<ul style="list-style-type: none"> <li>- ATX Form Factor</li> <li>- Premium Gold Capacitor design (100% Japan-made high-quality Conductive Polymer Capacitors)</li> <li>- Multiple Filter Cap (MFC) (Filter different noise by 3 different capacitors: DIP solid cap, POSCAP and MLCC)</li> </ul>
<b>CPU</b>	<ul style="list-style-type: none"> <li>- Support for Socket AM3+ processors</li> <li>- Support for Socket AM3 processors: AMD Phenom™ II X6 / X4 / X3 / X2 (except 920 / 940) / Athlon II X4 / X3 / X2 / Sempron processors</li> <li>- Supports 8-Core CPU</li> <li>- Supports UCC feature (Unlock CPU Core) (see <b>CAUTION 1</b>)</li> <li>- Digi Power Design</li> <li>- Advanced 12 + 2 Power Phase Design</li> <li>- Dual-Stack MOSFET (DSM)</li> <li>- Supports CPU up to 140W</li> <li>- Supports AMD's Cool 'n' Quiet™ Technology</li> <li>- FSB 2600 MHz (5.2 GT/s)</li> <li>- Supports Untied Overclocking Technology</li> <li>- Supports Hyper-Transport 3.0 (HT 3.0) Technology</li> </ul>
<b>Chipset</b>	<ul style="list-style-type: none"> <li>- Northbridge: AMD 990FX</li> <li>- Southbridge: AMD SB950</li> </ul>
<b>Memory</b>	<ul style="list-style-type: none"> <li>- Dual Channel DDR3 Memory Technology</li> <li>- 4 x DDR3 DIMM slots</li> <li>- Supports DDR3 2450(OC)/2100(OC)/1600/1333/1066 non-ECC, un-buffered memory (see <b>CAUTION 2</b>)</li> <li>- Max. capacity of system memory: 64GB (see <b>CAUTION 3</b>)</li> <li>- Supports Intel® Extreme Memory Profile (XMP) 1.3 / 1.2</li> <li>- Supports AMD Memory Profile (AMP)</li> </ul>
<b>Expansion Slot</b>	<ul style="list-style-type: none"> <li>- 4 x PCI Express 2.0 x16 slots (PCIe1 @ x16 mode; PCIe3 @ x4 mode; PCIe4/PCIe5: single at x16 (PCIe4) / x8 (PCIe5) or dual at x8/x8 mode)</li> <li>- 1 x PCI Express 2.0 x1 slot</li> <li>- 1 x PCI slot</li> <li>- Supports AMD Quad CrossFireX™, 3-Way CrossFireX™ and CrossFireX™</li> <li>- Supports NVIDIA® Quad SLI™, 3-Way SLI™ and SLI™</li> </ul>
<b>Audio</b>	<ul style="list-style-type: none"> <li>- 7.1 CH HD Audio with Content Protection (Realtek ALC898 Audio Codec)</li> <li>- Premium Blu-ray audio support</li> </ul>

<b>LAN</b>	<ul style="list-style-type: none"> <li>- PCIE x1 Gigabit LAN 10/100/1000 Mb/s</li> <li>- Intel® 82583V</li> <li>- Supports Wake-On-LAN</li> <li>- Supports PXE</li> </ul>
<b>Rear Panel I/O</b>	<p>I/O Panel</p> <ul style="list-style-type: none"> <li>- 1 x PS/2 Mouse Port</li> <li>- 1 x PS/2 Keyboard Port</li> <li>- 1 x Coaxial SPDIF Out Port</li> <li>- 1 x Optical SPDIF Out Port</li> <li>- 4 x Ready-to-Use USB 2.0 Ports</li> <li>- 4 x Ready-to-Use USB 3.0 Ports</li> <li>- 2 x eSATA3 Connectors</li> <li>- 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED)</li> <li>- 1 x IEEE 1394 Port</li> <li>- 1 x Clear CMOS Switch with LED</li> <li>- HD Audio Jack: Side Speaker/Rear Speaker/Central/Bass/Line in/Front Speaker/Microphone</li> </ul>
<b>SATA3</b>	<ul style="list-style-type: none"> <li>- 6 x SATA3 6.0 Gb/s connectors by AMD SB950, support RAID (RAID 0, RAID 1, RAID 0+1, JBOD and RAID 5), NCQ, AHCI and "Hot Plug" functions</li> <li>- 2 x SATA3 6.0 Gb/s connectors by ASMedia ASM1061, support NCQ, AHCI and "Hot Plug" functions</li> </ul>
<b>USB 3.0</b>	<ul style="list-style-type: none"> <li>- 4 x Rear USB 3.0 ports by Etron EJ188H, support USB 1.1/2.0/3.0 up to 5Gb/s</li> <li>- 2 x Front USB 3.0 headers (support 4 USB 3.0 ports) by Etron EJ188H, support USB 1.1/2.0/3.0 up to 5Gb/s</li> </ul>
<b>Connector</b>	<ul style="list-style-type: none"> <li>- 8 x SATA3 6.0Gb/s connectors</li> <li>- 1 x IR header</li> <li>- 1 x CIR header</li> <li>- 1 x COM port header</li> <li>- 1 x IEEE 1394 header</li> <li>- 1 x Power LED header</li> <li>- 2 x CPU Fan connectors (1 x 4-pin, 1 x 3-pin)</li> <li>- 3 x Chassis Fan connectors (1 x 4-pin, 2 x 3-pin)</li> <li>- 1 x Power Fan connector (3-pin)</li> <li>- 24 pin ATX power connector</li> <li>- 8 pin 12V power connector (Hi-Density Power Connector)</li> <li>- Front panel audio connector</li> <li>- 2 x USB 2.0 headers (support 4 USB 2.0 ports)</li> </ul>

	<ul style="list-style-type: none"> <li>- 2 x USB 3.0 headers (support 4 USB 3.0 ports)</li> <li>- 1 x Dr. Debug (7-Segment Debug LED)</li> <li>- 1 x Power Switch with LED</li> <li>- 1 x Reset Switch with LED</li> </ul>
<b>BIOS Feature</b>	<ul style="list-style-type: none"> <li>- 32Mb AMI UEFI Legal BIOS with GUI support</li> <li>- Supports "Plug and Play"</li> <li>- ACPI 1.1 Compliance Wake Up Events</li> <li>- Supports jumperfree</li> <li>- SMBIOS 2.3.1 Support</li> <li>- CPU, VCCM, NB, SB Voltage Multi-adjustment</li> </ul>
<b>Support CD</b>	<ul style="list-style-type: none"> <li>- Drivers, Utilities, AntiVirus Software (Trial Version), CyberLink MediaEspresso 6.5 Trial, Google Chrome Browser and Toolbar</li> </ul>
<b>Hardware Monitor</b>	<ul style="list-style-type: none"> <li>- CPU Temperature Sensing</li> <li>- Chassis Temperature Sensing</li> <li>- CPU/Chassis/Power Fan Tachometer</li> <li>- CPU/Chassis Quiet Fan</li> <li>- CPU/Chassis/Power Fan Multi-Speed Control</li> <li>- Voltage Monitoring: +12V, +5V, +3.3V, Vcore</li> </ul>
<b>OS</b>	<ul style="list-style-type: none"> <li>- Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit compliant</li> </ul>
<b>Certifications</b>	<ul style="list-style-type: none"> <li>- FCC, CE, WHQL</li> <li>- ErP/EuP Ready (ErP/EuP ready power supply is required)</li> </ul>

\* For detailed product information, please visit our website: <http://www.asrock.com>

### WARNING

Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS, applying Untied Overclocking Technology, or using third-party overclocking tools. Overclocking may affect your system's stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense. We are not responsible for possible damage caused by overclocking.

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## **CAUTION!**

1. ASRock UCC (Unlock CPU Core) feature simplifies AMD CPU activation. As long as a simple switch of the UEFI option “AS-Rock UCC”, you can unlock the extra CPU core to enjoy an instant performance boost. When UCC feature is enabled, the dual-core or triple-core CPU will boost to the quad-core CPU, and some CPU, including quad-core CPU, can also increase L3 cache size up to 6MB, which means you can enjoy the upgrade CPU performance with a better price. Please be noted that UCC feature is supported with AM3/AM3+ CPU only, and in addition, not every AM3/AM3+ CPU can support this function because some CPU's hidden core may be malfunctioned.
2. Whether 2450/2100MHz memory speed is supported depends on the AM3/AM3+ CPU you adopt. If you want to adopt DDR3 2450/2100 memory module on this motherboard, please refer to the memory support list on our website for the compatible memory modules.  
ASRock website: <http://www.asrock.com>
3. Due to the operating system limitation, the actual memory size may be less than 4GB for the reservation for system usage under Windows® 8 / 7 / Vista™. For Windows® 64-bit OS with 64-bit CPU, there is no such limitation. You can use ASRock XFast RAM to utilize the memory that Windows® cannot use.

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## 1.3 Unique Features

### **ASRock Extreme Tuning Utility (AXTU)**

ASRock Extreme Tuning Utility (AXTU) is an all-in-one tool to re-tune different system functions in a user-friendly interface, which includes Hardware Monitor, Fan Control, Overclocking, OC DNA, IES and XFast RAM. In Hardware Monitor, it shows the major readings of your system. In Fan Control, it shows the fan speed and temperature for you to adjust. In Overclocking, you are allowed to overclock CPU frequency for optimal system performance. In OC DNA, you can save your OC settings as a profile and share it with your friends. Your friends then can load the OC profile to their own system to get the same OC settings. In IES (Intelligent Energy Saver), the voltage regulator can reduce the number of output phases to improve efficiency when the CPU cores are idle without sacrificing computing performance. In XFast RAM, it fully utilizes the memory space that cannot be used under Windows® OS 32-bit CPU.

### **ASRock Instant Boot**

ASRock Instant Boot allows you to turn on your PC in just a few seconds, provides a much more efficient way to save energy, time, money, and improves system running speed for your system. It leverages the S3 and S4 ACPI features which normally enable the Sleep/Standby and Hibernation modes in Windows® to shorten boot up time. By calling S3 and S4 at specific timing during the shutdown and startup process, Instant Boot allows you to enter your Windows® desktop in a few seconds.

### **ASRock Instant Flash**

ASRock Instant Flash is a BIOS flash utility embedded in Flash ROM. This convenient BIOS update tool allows you to update system BIOS without entering operating systems first like MS-DOS or Windows®. With this utility, you can press the <F6> key during the POST or the <F2> key to enter into the BIOS setup menu to access ASRock Instant Flash. Just launch this tool and save the new BIOS file to your USB flash drive, floppy disk or hard drive, then you can update your BIOS only in a few clicks without preparing an additional floppy diskette or other complicated flash utility. Please be noted that the USB flash drive or hard drive must use FAT32/16/12 file system.

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### **ASRock APP Charger**

If you desire a faster, less restricted way of charging your Apple devices, such as iPhone/iPad/iPod Touch, ASRock has prepared a wonderful solution for you - ASRock APP Charger. Simply install the APP Charger driver, it makes your iPhone charge much quickly from your computer and up to 40% faster than before. ASRock APP Charger allows you to quickly charge many Apple devices simultaneously and even supports continuous charging when your PC enters into Standby mode (S1), Suspend to RAM (S3), hibernation mode (S4) or power off (S5). With APP Charger driver installed, you can easily enjoy the marvelous charging experience.

### **ASRock XFast USB**

ASRock XFast USB can boost USB storage device performance. The performance may depend on the properties of the device.

### **ASRock XFast LAN**

ASRock XFast LAN provides a faster internet access, which includes the benefits listed below. LAN Application Prioritization: You can configure your application's priority ideally and/or add new programs. Lower Latency in Game: After setting online game's priority higher, it can lower the latency in games. Traffic Shaping: You can watch Youtube HD videos and download simultaneously. Real-Time Analysis of Your Data: With the status window, you can easily recognize which data streams you are transferring currently.

### **ASRock XFast RAM**

ASRock XFast RAM is a new function that is included into ASRock Extreme Tuning Utility (AXTU). It fully utilizes the memory space that cannot be used under Windows® OS 32-bit CPU. ASRock XFast RAM shortens the loading time of previously visited websites, making web surfing faster than ever. And it also boosts the speed of Adobe Photoshop 5 times faster. Another advantage of ASRock XFast RAM is that it reduces the frequency of accessing your SSDs or HDDs in order to extend their lifespan.

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### **ASRock Crashless BIOS**

ASRock Crashless BIOS allows users to update their BIOS without fear of failing. If power loss occurs during the BIOS update process, ASRock Crashless BIOS will automatically finish the BIOS update procedure after regaining power. Please note that BIOS files need to be placed in the root directory of your USB disk. Only USB2.0 ports support this feature.

### **ASRock OMG (Online Management Guard)**

Administrators are able to establish an internet curfew or restrict internet access at specified times via OMG. You may schedule the starting and ending hours of internet access granted to other users. In order to prevent users from bypassing OMG, guest accounts without permission to modify the system time are required.

### **ASRock Internet Flash**

ASRock Internet Flash searches for available UEFI firmware updates from our servers. In other words, the system can auto-detect the latest UEFI from our servers and flash them without entering Windows® OS.

### **ASRock UEFI System Browser**

ASRock UEFI system browser is a useful tool included in graphical UEFI. It can detect the devices and configurations that users are currently using in their PC. With the UEFI system browser, you can easily examine the current system configuration in UEFI setup.

### **ASRock Dehumidifier Function**

Users may prevent motherboard damages due to dampness by enabling "Dehumidifier Function". When enabling Dehumidifier Function, the computer will power on automatically to dehumidify the system after entering S4/S5 state.

### **ASRock Easy RAID Installer**

ASRock Easy RAID Installer can help you to copy the RAID driver from a support CD to your USB storage device. After copying the RAID driver to your USB storage device, please change "SATA Mode" to "RAID", then you can start installing the OS in RAID mode.

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### **ASRock Fast Boot**

With ASRock's exclusive Fast Boot technology, it takes less than 1.5 seconds to logon to Windows® 8 from a cold boot. No more waiting! The speedy boot will completely change your user experience and behavior.

### **ASRock X-Boost**

ASRock's X-Boost Technology is a smart auto-overclocking function and is brilliantly designed to unlock the hidden power of your CPUs. Simply press "X" when turning on the PC, X-Boost will automatically overclock the relative components to get up to 15.77% performance boost! With the smart X-Boost, overclocking CPU can become a near one-button process.

\* The functionality of "Unlock CPU Cores" feature might vary by different processors.

### **ASRock Restart to UEFI**

Windows® 8 brings the ultimate boot up experience. The lightning boot up speed makes it hard to access the UEFI setup. ASRock Restart to UEFI technology is designed for those requiring frequent UEFI access. It allows users to easily enter the UEFI automatically when turning on the PC next time. Just simply enable this function; the PC will be assured to access the UEFI directly in the very beginning.

### **Turbo 50 / Turbo 60 Overclocking**

Simply click the Turbo 50 / Turbo 60 button in UEFI, the system performance will boost up to 50% or 60% increase by automatically overclocking CPU, Memory frequency and all related voltage settings.

### **ASRock Good Night LED**

ASRock Good Night LED technology can offer you a better environment by extinguishing the unessential LED. By enabling Good Night LED in BIOS, the Power / HDD / LAN LED will be switched off when system is on. Not only this, Good night LED will automatically switch off Power and Keyboard LED when the system enters into Standby / Hibernation mode as well.

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## 2. Installation

This is an ATX form factor motherboard. Before you install the motherboard, study the configuration of your chassis to ensure that the motherboard fits into it.

### Pre-installation Precautions

Take note of the following precautions before you install motherboard components or change any motherboard settings.



Before you install or remove any component, ensure that the power is switched off or the power cord is detached from the power supply. Failure to do so may cause severe damage to the motherboard, peripherals, and/or components.

1. Unplug the power cord from the wall socket before touching any component.
2. To avoid damaging the motherboard components due to static electricity, NEVER place your motherboard directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before you handle components.
3. Hold components by the edges and do not touch the ICs.
4. Whenever you uninstall any component, place it on a grounded anti-static pad or in the bag that comes with the component.
5. When placing screws into the screw holes to secure the motherboard to the chassis, please do not over-tighten the screws! Doing so may damage the motherboard.

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## 2.1 CPU Installation

- Step 1. Unlock the socket by lifting the lever up to a 90° angle.
- Step 2. Position the CPU directly above the socket such that the CPU corner with the golden triangle matches the socket corner with a small triangle.
- Step 3. Carefully insert the CPU into the socket until it fits in place.

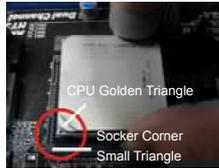


The CPU fits only in one correct orientation. DO NOT force the CPU into the socket to avoid bending of the pins.

- Step 4. When the CPU is in place, press it firmly on the socket while you push down the socket lever to secure the CPU. The lever clicks on the side tab to indicate that it is locked.



**STEP 1:**  
Lift Up The Socket Lever



**STEP 2 / STEP 3:**  
Match The CPU Golden Triangle  
To The Socket Corner Small  
Triangle



**STEP 4:**  
Push Down And Lock  
The Socket Lever

## 2.2 Installation of CPU Fan and Heatsink

After you install the CPU into this motherboard, it is necessary to install a larger heatsink and cooling fan to dissipate heat. You also need to spray thermal grease between the CPU and the heatsink to improve heat dissipation. Make sure that the CPU and the heatsink are securely fastened and in good contact with each other. Then connect the CPU fan to the CPU FAN connector (CPU\_FAN1, see Page 2, No. 4 or CPU\_FAN2, see Page 2, No. 5). For proper installation, please kindly refer to the instruction manuals of the CPU fan and the heatsink.

## 2.3 Installation of Memory Modules (DIMM)

This motherboard provides four 240-pin DDR3 (Double Data Rate 3) DIMM slots, and supports Dual Channel Memory Technology. For dual channel configuration, you always need to install **identical** (the same brand, speed, size and chip-type) DDR3 DIMM pair in the slots. In other words, you have to install **identical** DDR3 DIMM pair in **Dual Channel** (DDR3\_A1 and DDR3\_B1; see p.2 No.7) or **identical** DDR3 DIMM pair in **Dual Channel** (DDR3\_A2 and DDR3\_B2; see p.2 No.8), so that Dual Channel Memory Technology can be activated. This motherboard also allows you to install four DDR3 DIMMs for dual channel configuration, and please install **identical** DDR3 DIMMs in all four slots. You may refer to the Dual Channel Memory Configuration Table below.

### Dual Channel Memory Configurations

	DDR3_A1 (Black Slot)	DDR3_A2 (Black Slot)	DDR3_B1 (Black Slot)	DDR3_B2 (Black Slot)
(1)	-	Populated	-	Populated
(2)	Populated	-	Populated	-
(3)*	Populated	Populated	Populated	Populated

- \* For the configuration (3), please install **identical** DDR3 DIMMs in all four slots.



1. Please install the memory module into DDR3\_A2 and DDR3\_B2 slots for the first priority.
2. If you want to install two memory modules, for optimal compatibility and reliability, it is recommended to install them either in the set of DDR3\_A1 and DDR3\_B1 slots, or in the set of DDR3\_A2 and DDR3\_B2 slots.
3. If only one memory module or three memory modules are installed in the DDR3 DIMM slots on this motherboard, it is unable to activate the Dual Channel Memory Technology.
4. If a pair of memory modules is NOT installed in the same Dual Channel, for example, installing a pair of memory modules in DDR3\_A1 and DDR3\_A2, it is unable to activate the Dual Channel Memory Technology .
5. It is not allowed to install a DDR or DDR2 memory module into DDR3 slot; otherwise, this motherboard and DIMM may be damaged.
6. If you adopt DDR3 2450/2100 memory modules on this motherboard, it is recommended to install them on DDR3\_A2 and DDR3\_B2 slots.

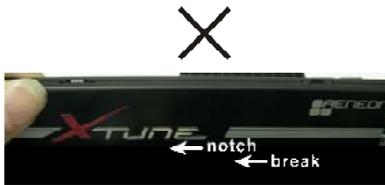
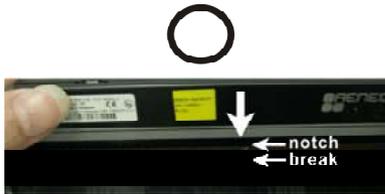
---

## Installing a DIMM



Please make sure to disconnect power supply before adding or removing DIMMs or the system components.

- Step 1. Unlock a DIMM slot by pressing the retaining clips outward.
- Step 2. Align a DIMM on the slot such that the notch on the DIMM matches the break on the slot.



The DIMM only fits in one correct orientation. It will cause permanent damage to the motherboard and the DIMM if you force the DIMM into the slot at incorrect orientation.

- Step 3. Firmly insert the DIMM into the slot until the retaining clips at both ends fully snap back in place and the DIMM is properly seated.

## 2.4 Expansion Slots (PCI and PCI Express Slots)

There is 1 PCI slot and 5 PCI Express slots on this motherboard.

**PCI Slot:** PCI slot is used to install expansion cards that have the 32-bit PCI interface.

**PCIe Slots:**

PCIE1 (PCIe x16 slot) is used for PCI Express x16 lane width graphics cards.

PCIE2 (PCIe x1 slot) is used for PCI Express cards with x1 lane width cards, such as ASRock Game Blaster, Gigabit LAN card, SATA card.

PCIE3 (PCIe x16 slot) is used for PCI Express x4 lane width graphics cards.

PCIE4 (PCIe x16 slot) is used for PCI Express x16 lane width graphics cards.

PCIE5 (PCIe x16 slot) is used for PCI Express x8 lane width graphics cards.

### PCIe Slot Configurations

	PCIE1	PCIE2	PCIE3	PCIE4	PCIE5
Single Graphics Card	x16	N/A	N/A	N/A	N/A
Two Graphics Cards in CrossFire™ or SLI™ Mode	x16	N/A	N/A	x16	N/A
Three Graphics Cards in 3-Way CrossFire™ or 3-Way SLI™ Mode	x16	N/A	N/A	x8	x8



1. In single VGA card mode, it is recommended to install a PCI Express x16 graphics card in the PCIE1 slot.
2. In CrossFire™ mode or SLI™ mode, please install the PCI Express x16 graphics cards in PCIE1 and PCIE4 slots. Both these two slots will work at x16 bandwidth.
3. In 3-Way CrossFire™ mode or 3-Way SLI™ mode, please install the PCI Express x16 graphics cards in PCIE1, PCIE4 and PCIE5 slots. PCIE1 will work at x16 bandwidth, while PCIE4 and PCIE5 slots will work at x8 bandwidth.
4. Please connect a chassis fan to the motherboard's chassis fan connector (CHA\_FAN1, CHA\_FAN2 or CHA\_FAN3) when using multiple graphics cards for better thermal environment.

---

## Installing an expansion card

- Step 1. Before installing the expansion card, please make sure that the power supply is switched off or the power cord is unplugged. Please read the documentation of the expansion card and make necessary hardware settings for the card before you start the installation.
- Step 2. Remove the system unit cover (if your motherboard is already installed in a chassis).
- Step 3. Remove the bracket facing the slot that you intend to use. Keep the screws for later use.
- Step 4. Align the card connector with the slot and press firmly until the card is completely seated on the slot.
- Step 5. Fasten the card to the chassis with screws.
- Step 6. Replace the system cover.

---

## 2.5 SLI™, 3-Way SLI™ and Quad SLI™ Operation Guide

This motherboard supports NVIDIA® SLI™, 3-Way SLI™ and Quad SLI™ (Scalable Link Interface) technology that allows you to install up to three identical PCI Express x16 graphics cards. Currently, NVIDIA® SLI™ technology supports Windows® XP / XP 64-bit / Vista™ / Vista™ 64-bit / 7 / 7 64-bit / 8 / 8 64-bit OS. NVIDIA® 3-Way SLI™ and Quad SLI™ technology support Windows® Vista™ / Vista™ 64-bit / 7 / 7 64-bit / 8 / 8 64-bit OS only. Please follow the installation procedures in this section.



### Requirements

1. For SLI™ technology, you should have two identical SLI™-ready graphics cards that are NVIDIA® certified. For 3-Way SLI™ technology, you should have three identical 3-Way SLI™-ready graphics cards that are NVIDIA® certified. For Quad SLI™ technology, you should have two identical Quad SLI™-ready graphics cards that are NVIDIA® certified.
2. Make sure that your graphics card driver supports NVIDIA® SLI™ technology. Download the driver from NVIDIA website ([www.nvidia.com](http://www.nvidia.com)).
3. Make sure that your power supply unit (PSU) can provide at least the minimum power required by your system. It is recommended to use NVIDIA® certified PSU. Please refer to NVIDIA® website for details.

### 2.5.1 Graphics Card Setup

#### 2.5.1.1 Installing Two SLI™-Ready Graphics Cards

- Step 1. Install the identical SLI™-ready graphics cards that are NVIDIA® certified because different types of graphics cards will not work together properly. (Even the GPU chips version shall be the same.) Insert one graphics card into PCIE1 slot and the other graphics card to PCIE4 slot. Make sure that the cards are properly seated on the slots.



- Step 2. If required, connect the auxiliary power source to the PCI Express graphics cards.

Step3. Align and insert the ASRock SLI\_Bridge\_2S Card to the goldfingers on each graphics card. Make sure the ASRock SLI\_Bridge\_2S Card is firmly in place.



ASRock SLI\_Bridge\_2S Card



Step4. Connect a VGA cable or a DVI cable to the monitor connector or the DVI connector of the graphics card that is inserted to PCIE1 slot.

### 2.5.1.2 Installing Three SLI™-Ready Graphics Cards

Step 1. Install the identical 3-Way SLI™-ready graphics cards that are NVIDIA® certified because different types of graphics cards will not work together properly. (Even the GPU chips version shall be the same.) Each graphics card should have two goldfingers for ASRock 3-Way SLI-2S1S Bridge Card connector. Insert one graphics card into PCIE1 slot, another graphics card to PCIE4 slot, and the other graphics card to PCIE5 slot. Make sure that the cards are properly seated on the slots.



Two Goldfingers



Step2. Connect the auxiliary power source to the PCI Express graphics card. Please make sure that both power connectors on the PCI Express graphics card are connected. Repeat this step on the three graphics cards.



---

Step3. Align and insert ASRock 3-Way SLI-2S1S Bridge Card to the goldfingers on each graphics card. Make sure ASRock 3-Way SLI-2S1S Bridge Card is firmly in place.



**ASRock 3-Way SLI-2S1S Bridge Card**



Step4. Connect a VGA cable or a DVI cable to the monitor connector or the DVI connector of the graphics card that is inserted to PCI E1 slot.

Please refer to the "User Manual" in our support CD for drivers installation and setup procedures.

\* SLI™ appearing here is a registered trademark of NVIDIA® Technologies Inc., and is used only for identification or explanation and to the owners' benefit, without intent to infringe.

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## 2.6 CrossFireX™, 3-Way CrossFireX™ and Quad CrossFireX™ Operation Guide

This motherboard supports CrossFireX™, 3-way CrossFireX™ and Quad CrossFireX™ feature. CrossFireX™ technology offers the most advantageous means available of combining multiple high performance Graphics Processing Units (GPU) in a single PC. Combining a range of different operating modes with intelligent software design and an innovative interconnect mechanism, CrossFireX™ enables the highest possible level of performance and image quality in any 3D application. Currently CrossFireX™ feature is supported with Windows® XP with Service Pack 2 / Vista™ / 7 / 8 OS. 3-way CrossFireX™ and Quad CrossFireX™ feature are supported with Windows® Vista™ / 7 / 8 OS only. Please check AMD website for AMD CrossFireX™ driver updates.



1. If a customer incorrectly configures their system they will not see the performance benefits of CrossFireX™. All three CrossFireX™ components, a CrossFireX™ Ready graphics card, a CrossFireX™ Ready motherboard and a CrossFireX™ Edition co-processor graphics card, must be installed correctly to benefit from the CrossFireX™ multi-GPU platform.
2. If you pair a 12-pipe CrossFireX™ Edition card with a 16-pipe card, both cards will operate as 12-pipe cards while in CrossFireX™ mode.

### 2.6.1 Graphics Card Setup

#### 2.6.1.1 Installing Two CrossFireX™-Ready Graphics Cards



Different CrossFireX™ cards may require different methods to enable CrossFireX™ feature. Please refer to AMD graphics card manuals for detailed installation guide.

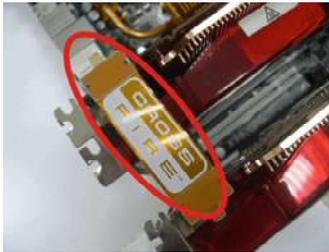
- Step 1. Insert one Radeon graphics card into PCIE1 slot and the other Radeon graphics card to PCIE4 slot. Make sure that the cards are properly seated on the slots.



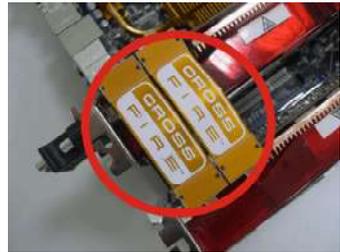
- 
- Step 2. Connect two Radeon graphics cards by installing CrossFire Bridge on CrossFire Bridge Interconnects on the top of Radeon graphics cards. (CrossFire Bridge is provided with the graphics card you purchase, not bundled with this motherboard. Please refer to your graphics card vendor for details.)



CrossFire Bridge



or



- Step 3. Connect the DVI monitor cable to the DVI connector on the Radeon graphics card on PCIE1 slot. (You may use the DVI to D-Sub adapter to convert the DVI connector to D-Sub interface, and then connect the D-Sub monitor cable to the DVI to D-Sub adapter.)

### 2.6.1.2 Installing Three CrossFire™-Ready Graphics Cards

- Step 1. Install the identical 3-Way CrossFire™-ready graphics cards that are AMD certified because different types of graphics cards will not work together properly. (Even the GPU chips version shall be the same.) Insert one graphics card into PCIE1 slot, another graphics card to PCIE4 slot, and the other graphics card to PCIE5 slot. Make sure that the cards are properly seated on the slots.

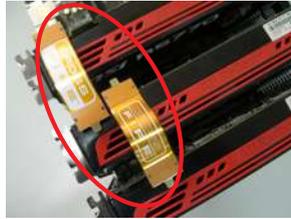


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Step 2. Use one CrossFire™ Bridge to connect Radeon graphics cards on PCIE1 and PCIE4 slots, and use the other CrossFire™ Bridge to connect Radeon graphics cards on PCIE4 and PCIE5 slots. (CrossFire™ Bridge is provided with the graphics card you purchase, not bundled with this motherboard. Please refer to your graphics card vendor for details.)



CrossFire™ Bridge



Step 3. Connect the DVI monitor cable to the DVI connector on the Radeon graphics card on PCIE1 slot. (You may use the DVI to D-Sub adapter to convert the DVI connector to D-Sub interface, and then connect the D-Sub monitor cable to the DVI to D-Sub adapter.)



Please refer to the “User Manual” in our support CD for drivers installation and setup procedures.

- \* CrossFireX™ appearing here is a registered trademark of AMD Technologies Inc., and is used only for identification or explanation and to the owners' benefit, without intent to infringe.
- \* For further information of AMD CrossFireX™ technology, please check AMD website for updates and details.

## 2.7 Jumpers Setup

The illustration shows how jumpers are setup. When the jumper cap is placed on pins, the jumper is “Short”. If no jumper cap is placed on pins, the jumper is “Open”. The illustration shows a 3-pin jumper whose pin1 and pin2 are “Short” when jumper cap is placed on these 2 pins.



Jumper	Setting						
Clear CMOS Jumper (CLR CMOS1) (see p.2, No. 29)	<table border="0"><tr><td><b>1_2</b></td><td><b>2_3</b></td></tr><tr><td></td><td></td></tr><tr><td>Default</td><td>Clear CMOS</td></tr></table>	<b>1_2</b>	<b>2_3</b>			Default	Clear CMOS
<b>1_2</b>	<b>2_3</b>						
							
Default	Clear CMOS						



Note: CLR CMOS1 allows you to clear the data in CMOS. The data in CMOS includes system setup information such as system password, date, time, and system setup parameters. To clear and reset the system parameters to default setup, please turn off the computer and unplug the power cord from the power supply. After waiting for 15 seconds, use a jumper cap to short pin2 and pin3 on CLR CMOS1 for 5 seconds. However, please do not clear the CMOS right after you update the BIOS. If you need to clear the CMOS when you just finish updating the BIOS, you must boot up the system first, and then shut it down before you do the clear-CMOS action.



The Clear CMOS Switch has the same function as the Clear CMOS jumper.

## 2.8 Onboard Headers and Connectors



Onboard headers and connectors are NOT jumpers. Do NOT place jumper caps over these headers and connectors. Placing jumper caps over the headers and connectors will cause permanent damage of the motherboard!

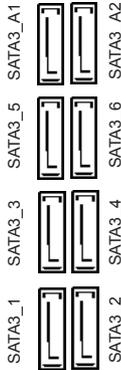
### Serial ATA3 Connectors

(SATA3\_1\_2: see p.2, No. 18)

(SATA3\_3\_4: see p.2, No. 17)

(SATA3\_5\_6: see p.2, No. 16)

(SATA3\_A1\_A2: see p.2, No. 15)



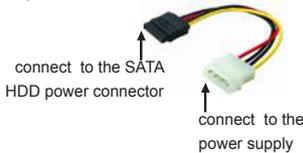
These eight Serial ATA3 (SATA3) connectors support SATA data cables for internal storage devices. The current SATA3 interface allows up to 6.0 Gb/s data transfer rate.

### Serial ATA (SATA) Data Cable (Optional)



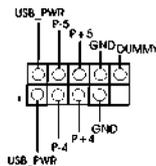
Either end of the SATA data cable can be connected to the SATA3 hard disk or the SATA3 connector on this motherboard.

### Serial ATA (SATA) Power Cable (Optional)



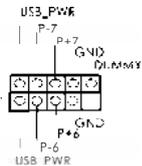
Please connect the black end of SATA power cable to the power connector on each drive. Then connect the white end of SATA power cable to the power connector of the power supply.

### USB 2.0 Headers (9-pin USB4\_5) (see p.2 No. 26)



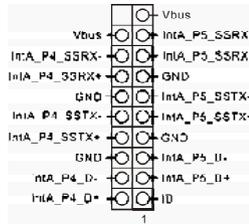
Besides four default USB 2.0 ports on the I/O panel, there are two USB 2.0 headers on this motherboard. Each USB 2.0 header can support two USB 2.0 ports.

(9-pin USB6\_7)  
(see p.2 No. 25)

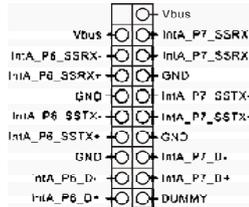


### USB 3.0 Headers

(19-pin USB3\_4\_5)  
(see p.2 No. 12)



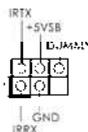
(19-pin USB3\_6\_7)  
(see p.2 No. 11)



Besides four default USB 3.0 ports on the I/O panel, there are two USB 3.0 headers on this motherboard. Each USB 3.0 header can support two USB 3.0 ports.

### Infrared Module Header

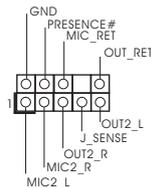
(5-pin IR1)  
(see p.2 No. 32)



This header supports an optional wireless transmitting and receiving infrared module.

### Front Panel Audio Header

(9-pin HD\_AUDIO1)  
(see p.2 No. 34)



This is an interface for the front panel audio cable that allows convenient connection and control of audio devices.



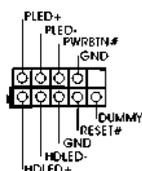
1. High Definition Audio supports Jack Sensing, but the panel wire on the chassis must support HDA to function correctly. Please follow the instruction in our manual and chassis manual to install your system.
2. If you use AC'97 audio panel, please install it to the front panel audio header as below:
  - A. Connect Mic\_IN (MIC) to MIC2\_L.

- B. Connect Audio\_R (RIN) to OUT2\_R and Audio\_L (LIN) to OUT2\_L.
- C. Connect Ground (GND) to Ground (GND).
- D. MIC\_RET and OUT\_RET are for HD audio panel only. You don't need to connect them for AC'97 audio panel.
- E. To activate the front mic.  
For Windows® XP / XP 64-bit OS:  
Select "Mixer". Select "Recorder". Then click "FrontMic".  
For Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit OS:  
Go to the "FrontMic" Tab in the Realtek Control panel. Adjust "Recording Volume".

### System Panel Header

(9-pin PANEL1)

(see p.2 No. 28)



This header accommodates several system front panel functions.



Connect the power switch, reset switch and system status indicator on the chassis front panel to this header according to the pin assignments below. Note the positive and negative pins before connecting the cables.

#### **PWRBTN (Power Switch):**

Connect to the power switch on the chassis front panel. You may configure the way to turn off your system using the power switch.

#### **RESET (Reset Switch):**

Connect to the reset switch on the chassis front panel. Press the reset switch to restart the computer if the computer freezes and fails to perform a normal restart.

#### **PLED (System Power LED):**

Connect to the power status indicator on the chassis front panel. The LED is on when the system is operating. The LED keeps blinking when the system is in S1 sleep state. The LED is off when the system is in S3/S4 sleep state or powered off (S5).

#### **HDLED (Hard Drive Activity LED):**

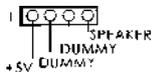
Connect to the hard drive activity LED on the chassis front panel. The LED is on when the hard drive is reading or writing data.

The front panel design may differ by chassis. A front panel module mainly consists of power switch, reset switch, power LED, hard drive activity LED, speaker and etc. When connecting your chassis front panel module to this header, make sure the wire assignments and the pin assignments are matched correctly.

### Chassis Speaker Header

(4-pin SPEAKER 1)

(see p.2 No. 19)



Please connect the chassis speaker to this header.

### Power LED Header

(3-pin PLED1)

(see p.2 No. 30)



Please connect the chassis power LED to this header to indicate system power status. The LED is on when the system is operating. The LED keeps blinking in S1 state. The LED is off in S3/S4 state or S5 state (power off).

### Chassis and Power Fan Connectors

(4-pin CHA\_FAN1)

(see p.2 No. 20)



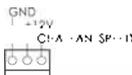
(3-pin CHA\_FAN2)

(see p.2 No. 6)



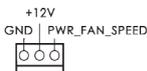
(3-pin CHA\_FAN3)

(see p.2 No. 24)



(3-pin PWR\_FAN1)

(see p.2 No. 9)

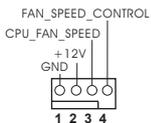


Please connect the fan cables to the fan connectors and match the black wire to the ground pin. CHA\_FAN1/2/3 fan speed can be controlled through UEFI or AXTU.

### CPU Fan Connectors

(4-pin CPU\_FAN1)

(see p.2 No. 4)



Please connect the CPU fan cable to the connector and match the black wire to the ground pin.



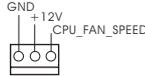
Though this motherboard provides 4-Pin CPU fan (Quiet Fan) support, the 3-Pin CPU fan still can work successfully even without the fan speed control function. If you plan to connect the 3-Pin CPU fan to the CPU fan connector on this motherboard, please connect it to Pin 1-3.

Pin 1-3 Connected ←

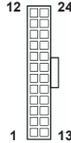
3-Pin Fan Installation



(3-pin CPU\_FAN2)  
(see p.2 No. 5)



**ATX Power Connector**  
(24-pin ATXPWR1)  
(see p.2 No. 10)



Please connect an ATX power supply to this connector.



Though this motherboard provides 24-pin ATX power connector, it can still work if you adopt a traditional 20-pin ATX power supply. To use the 20-pin ATX power supply, please plug your power supply along with Pin 1 and Pin 13.



20-Pin ATX Power Supply Installation

**ATX 12V Power Connector**  
(8-pin ATX12V1)  
(see p.2 No. 1)



Please connect an ATX 12V power supply to this connector.

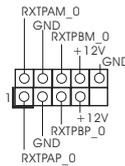


Though this motherboard provides 8-pin ATX 12V power connector, it can still work if you adopt a traditional 4-pin ATX 12V power supply. To use the 4-pin ATX power supply, please plug your power supply along with Pin 1 and Pin 5.



4-Pin ATX 12V Power Supply Installation

**IEEE 1394 Header**  
(9-pin FRONT\_1394)  
(see p.2 No. 33)

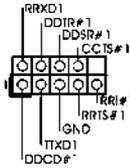


Besides one default IEEE 1394 port on the I/O panel, there is one IEEE 1394 header (FRONT\_1394) on this motherboard. This IEEE 1394 header can support one IEEE 1394 port.

## Serial port Header

(9-pin COM1)

(see p.2 No. 31)



This COM1 header supports a serial port module.

## Consumer Infrared Module Header

(4-pin CIR1)

(see p.2 No. 27)



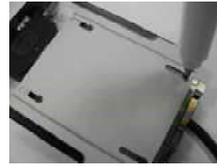
This header can be used to connect the remote controller receiver.

## The Installation Guide of Front USB 3.0 Panel

**Step 1** Prepare the bundled Front USB 3.0 Panel, four HDD screws, and six chassis screws.



**Step 2** Screw the 2.5" HDD/SSD to the Front USB 3.0 Panel with four HDD screws.



**Step 3** Install the Front USB 3.0 Panel into the 2.5" drive bay of the chassis.



**Step 4** Screw the Front USB 3.0 Panel to the drive bay with six chassis screws.



**Step 5** Plug the Front USB 3.0 cable into the USB 3.0 header (USB3\_4\_5 or USB3\_6\_7) on the motherboard.



**Step 6** The Front USB 3.0 Panel is ready to use.



---

## The Installation Guide of Rear USB 3.0 Bracket

**Step 1** Unscrew the two screws from the Front USB 3.0 Panel.



**Step 2** Put the USB 3.0 cable and the rear USB 3.0 bracket together.



**Step 3** Screw the two screws into the rear USB 3.0 bracket.



**Step 4** Put the rear USB 3.0 bracket into the chassis.



---

## 2.9 Smart Switches

The motherboard has three smart switches: power switch, reset switch and clear CMOS switch, allowing users to quickly turn on/off or reset the system clear the CMOS values.

---

**Power Switch**  
(PWRBTN)  
(see p.2 No. 21)



Power Switch is a smart switch, allowing users to quickly turn on/off the system.

---

**Reset Switch**  
(RSTBTN)  
(see p.2 No. 22)



Reset Switch is a smart switch, allowing users to quickly reset the system.

---

**Clear CMOS Switch**  
(CLRBTN)  
(see p.3 No. 18)



Clear CMOS Switch is a smart switch, allowing users to quickly clear the CMOS values.

---

## 2.10 Dr. Debug

Dr. Debug is used to provide code information, which makes troubleshooting even easier. Please see the diagrams below for reading the Dr. Debug codes.

Status Code	Description
00	Please check if CPU is installed correctly and then clear CMOS.
0d	Problem related to memory, VGA card and other devices. Please clear CMOS, re-install memory and VGA card, and remove other USB, PCI devices.
01 - 54 (except 0d), 5A- 60	Problem related to memory. Please re-install CPU and memory then clear CMOS. If the problem still exists, please install only one memory module or try using other memory modules.
55	Memory could not be detected. Please re-install memory and CPU. If the problem still exists, please install only one memory module or try using other memory modules.
61 - 91	Chipset initialization error. Please press reset or clear CMOS.
92 - 99	Problem related to PCI-E devices. Please re-install PCI-E devices or try installing them in other slots. If the problem still exists, please remove all PCI-E devices or try using another VGA card.
A0 - A7	Problem related to IDE or SATA devices. Please re-install IDE and SATA devices. If the problem still exists, please clear CMOS and try removing all SATA devices.
b0	Problem related to memory. Please re-install CPU and memory. If the problem still exists, please install only one memory module or try using other memory modules.
b4	Problem related to USB devices. Please try removing all USB devices.
b7	Problem related to memory. Please re-install CPU and memory then clear CMOS. If the problem still exists, please install only one memory module or try using other memory modules.
d6	VGA could not be recognized. Please clear CMOS and try re-installing the VGA card. If the problem still exists, please try installing the VGA card in other slots or using other VGA cards.
d7	Keyboard and mouse could not be recognized. Please try re-installing keyboard and mouse.
d8	Invalid Password.
FF	Please check if CPU is installed correctly and then clear CMOS.

---

## 2.11 Driver Installation Guide

To install the drivers to your system, please insert the support CD to your optical drive first. Then, the drivers compatible to your system can be auto-detected and listed on the support CD driver page. Please follow the order from up to bottom side to install those required drivers. Therefore, the drivers you install can work properly.

## 2.12 Installing Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit With RAID Functions

If you want to install Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit on your SATA3 HDDs with RAID functions, please refer to the document at the following path in the Support CD for detailed procedures:

..\ RAID Installation Guide

## 2.13 Installing Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit Without RAID Functions

If you want to install Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit OS on your SATA3 HDDs without RAID functions, please follow below procedures according to the OS you install.

### 2.13.1 Installing Windows® XP / XP 64-bit Without RAID Functions

If you want to install Windows® XP / XP 64-bit on your SATA3 HDDs without RAID functions, please follow below steps.

#### Using SATA3 HDDs without NCQ and Hot Plug functions (IDE mode)

##### STEP 1: Set up UEFI.

- A. Enter UEFI SETUP UTILITY → Advanced screen → Storage Configuration.
- B. Set the "SATA Mode" option to [IDE]. (For SATA3\_1 to SATA3\_6 ports.)  
Set the option "ASMedia SATA3 Mode" to [IDE]. (For SATA3\_A1 and SATA3\_A2 ports.)

**STEP 2: Install Windows® XP / XP 64-bit OS on your system.**

---

## 2.13.2 Installing Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit Without RAID Functions

If you want to install Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit on your SATA3 HDDs without RAID functions, please follow below steps.

### Using SATA3 HDDs without NCQ and Hot Plug functions (IDE mode)

#### STEP 1: Set up UEFI.

- A. Enter UEFI SETUP UTILITY → Advanced screen → Storage Configuration.
- B. Set the “SATA Mode” option to [IDE]. (For SATA3\_1 to SATA3\_6 ports.)  
Set the option “ASMedia SATA3 Mode” to [IDE]. (For SATA3\_A1 and SATA3\_A2 ports.)

**STEP 2: Install Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit OS on your system.**

### Using SATA3 HDDs with NCQ and Hot Plug functions (AHCI mode)

#### STEP 1: Set up UEFI.

- A. Enter UEFI SETUP UTILITY → Advanced screen → Storage Configuration.
- B. Set the “SATA Mode” option to [AHCI]. (For SATA3\_1 to SATA3\_6 ports.)  
Set the option “ASMedia SATA3 Mode” to [AHCI]. (For SATA3\_A1 and SATA3\_A2 ports.)

**STEP 2: Install Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit OS on your system.**

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### **3. BIOS Information**

The Flash Memory on the motherboard stores BIOS Setup Utility. When you start up the computer, please press <F2> or <Del> during the Power-On-Self-Test (POST) to enter BIOS Setup utility; otherwise, POST continues with its test routines. If you wish to enter BIOS Setup after POST, please restart the system by pressing <Ctl> + <Alt> + <Delete>, or pressing the reset button on the system chassis. The BIOS Setup program is designed to be user-friendly. It is a menu-driven program, which allows you to scroll through its various sub-menus and to select among the pre-determined choices. For the detailed information about BIOS Setup, please refer to the User Manual (PDF file) contained in the Support CD.

### **4. Software Support CD information**

This motherboard supports various Microsoft® Windows® operating systems: 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit. The Support CD that came with the motherboard contains necessary drivers and useful utilities that will enhance motherboard features. To begin using the Support CD, insert the CD into your CD-ROM drive. It will display the Main Menu automatically if "AUTORUN" is enabled in your computer. If the Main Menu does not appear automatically, locate and double-click on the file "ASRSetup.exe" from the BIN folder in the Support CD to display the menus.

---

# 1. Einführung

Wir danken Ihnen für den Kauf des **990FX Extreme9** Motherboard, ein zuverlässiges Produkt, welches unter den ständigen, strengen Qualitätskontrollen von ASRock gefertigt wurde. Es bietet Ihnen exzellente Leistung und robustes Design, gemäß der Verpflichtung von ASRock zu Qualität und Halbarkeit. Diese Schnellinstallationsanleitung führt in das Motherboard und die schrittweise Installation ein. Details über das Motherboard finden Sie in der Bedienungsanleitung auf der Support-CD.



Da sich Motherboard-Spezifikationen und BIOS-Software verändern können, kann der Inhalt dieses Handbuchs ebenfalls jederzeit geändert werden. Für den Fall, dass sich Änderungen an diesem Handbuch ergeben, wird eine neue Version auf der ASRock-Website, ohne weitere Ankündigung, verfügbar sein. Die neuesten Grafikkarten und unterstützten CPUs sind auch auf der ASRock-Website aufgelistet.

ASRock-Website: <http://www.asrock.com>

Wenn Sie technische Unterstützung zu Ihrem Motherboard oder spezifische Informationen zu Ihrem Modell benötigen, besuchen Sie bitte unsere Webseite:

[www.asrock.com/support/index.asp](http://www.asrock.com/support/index.asp)

## 1.1 Kartoninhalt

**990FX Extreme9** Motherboard (ATX-Formfaktor)

**990FX Extreme9** Schnellinstallationsanleitung

**990FX Extreme9** Support-CD

Ein ASRock SLI\_Bridge\_2S-Karte

Ein ASRock 3-Wege-SLI-2S1S-Brücke-Karte

Sechs Serial ATA (SATA) -Datenkabel (optional)

Zwei Serial ATA (SATA) -Festplattenstromkabel (optional)

Ein I/O Shield

Ein Vordere USB 3.0-Blende mit 2,5-Zoll-HDD/SSD-Rack

Vier Festplatte Schrauben

Sechs Gehäuses Schrauben

Ein USB 3.0-Blech an der Rückwand



### **ASRock erinnert...**

Zur besseren Leistung unter Windows® 8 / 8 64 Bit / 7 / 7 64 Bit / Vista™ / Vista™ 64 Bit empfehlen wir, die Speicherkonfiguration im BIOS auf den AHCI-Modus einzustellen. Hinweise zu den BIOS-Einstellungen finden Sie in der Bedienungsanleitung auf der mitgelieferten CD.

## 1.2 Spezifikationen

<b>Plattform</b>	<ul style="list-style-type: none"> <li>- ATX-Formfaktor</li> <li>- Hochwertiges Gold-Kondensatordesign (100 % hochwertige japanische Fertigung leitfähiger Polymerkondensatoren)</li> <li>- Multifilter-Kondensator (MFC) (Filtert unterschiedliche Störgrößen mit drei verschiedenen Kondensatoren: DIP-Festkondensator, POSCAP und MLCC)</li> </ul>
<b>CPU</b>	<ul style="list-style-type: none"> <li>- Unterstützung von Socket AM3+-Prozessoren</li> <li>- Unterstützung von Socket AM3-Prozessoren: AMD Phenom™ II X6 / X4 / X3 / X2 (außer 920 / 940) / Athlon X4 / X3 / X2 / Sempron-Prozessor</li> <li>- Acht-Kern-CPU-bereit</li> <li>- Unterstützt UCC (Unlock CPU Core)</li> <li>- Digi Power-Design</li> <li>- Erweitertes 12 + 2-Stromphasendesign</li> <li>- Dual-Stack-MOSFET (DSM)</li> <li>- Unterstützt CPU bis 140W</li> <li>- Unterstützt Cool 'n' Quiet™-Technologie von AMD</li> <li>- FSB 2600 MHz (5.2 GT/s)</li> <li>- Unterstützt Untied-Übertaktungstechnologie</li> <li>- Unterstützt Hyper-Transport- 3.0 Technologie (HT 3.0)</li> </ul>
<b>Chipsatz</b>	<ul style="list-style-type: none"> <li>- Northbridge: AMD 990FX</li> <li>- Southbridge: AMD SB950</li> </ul>
<b>Speicher</b>	<ul style="list-style-type: none"> <li>- Unterstützung von Dual-Kanal-Speichertechnologie</li> <li>- 4 x Steckplätze für DDR3</li> <li>- Unterstützt DDR3 2450(OC)/2100(OC)/1600/1333/1066 non-ECC, ungepufferter Speicher</li> <li>- Max. Kapazität des Systemspeichers: 64GB</li> <li>- Unterstützt Intel® Extreme Memory Profile (XMP)1.3/1.2</li> <li>- Unterstützt AMD Memory Profile (AMP)</li> </ul>
<b>Erweiterungssteckplätze</b>	<ul style="list-style-type: none"> <li>- 4 x PCI Express 2.0 x16-Steckplätze (PCI E1: x16-Modus; PCIE3: x4-Modus; PCIE4/PCIE5: Einzeln bei x16 (PCIE4) / x8 (PCIE5) oder dual im x8/x8-Modus)</li> <li>- 1 x PCI Express 2.0 x1-Steckplätze</li> <li>- 1 x PCI -Steckplätze</li> <li>- Unterstützt AMD™ Quad CrossFireX™, 3-Way CrossFireX™ und CrossFireX™</li> <li>- NVIDIA® Quad SLI™, 3-Way SLI™ und SLI™</li> </ul>
<b>Audio</b>	<ul style="list-style-type: none"> <li>- 7.1 CH HD Audio mit dem Inhalt Schutz (Realtek ALC898 Audio Codec)</li> </ul>

	<ul style="list-style-type: none"> <li>- Premium Blu-ray-Audio-Unterstützung</li> </ul>
<b>LAN</b>	<ul style="list-style-type: none"> <li>- PCIE x1 Gigabit LAN 10/100/1000 Mb/s</li> <li>- Intel® 82583V</li> <li>- Unterstützt Wake-On-LAN</li> <li>- Unterstützt PXE</li> </ul>
<b>E/A-Anschlüsse an der Rückseite</b>	<p>I/O Panel</p> <ul style="list-style-type: none"> <li>- 1 x PS/2-Mausanschluss</li> <li>- 1 x PS/2-Tastaturanschluss</li> <li>- 1 x Koaxial-SPDIF-Ausgang</li> <li>- 1 x optischer SPDIF-Ausgang</li> <li>- 4 x Standard-USB 2.0-Anschlüsse</li> <li>- 4 x Standard-USB 3.0-Anschlüsse</li> <li>- 2 x eSATA3-Anschlüsse</li> <li>- 1 x RJ-45 LAN Port mit LED (ACT/LINK LED und SPEED LED)</li> <li>- 1 x IEEE 1394 Port</li> <li>- 1 x CMOS löschen-Schalter</li> <li>- HD Audiobuchse: Lautsprecher seitlich / Lautsprecher hinten / Mitte/Bass / Audioeingang/ Lautsprecher vorne / Mikrofon</li> </ul>
<b>SATA3</b>	<ul style="list-style-type: none"> <li>- 6 x AMD SB950 SATA 3-Anschluss mit 6,0 Gb/s, unterstützt RAID-(RAID 0, RAID 1, RAID 0+1, JBOD und RAID 5), NCQ-, AHCI- und „Hot Plugging“-Funktionen</li> <li>- 2 x ASMedia ASM1061 SATA 3-Anschluss mit 6,0 Gb/s, unterstützt NCQ-, AHCI- und „Hot Plugging“-Funktionen</li> </ul>
<b>USB3.0</b>	<ul style="list-style-type: none"> <li>- 4 x USB 3.0-Ports an der Rückseite durch Etron EJ188H, unterstützt USB 1.1/2.0/3.0 mit bis zu 5 Gb/s</li> <li>- 2 x USB 3.0-Anschlüsse (unterstützt 4 USB 3.0-Ports) an der Vorderseite durch Etron EJ188H, unterstützt USB 1.1/2.0/3.0 mit bis zu 5 Gb/s</li> </ul>
<b>Anschlüsse</b>	<ul style="list-style-type: none"> <li>- 8 x SATA3 6,0 GB/s-Anschlüsse</li> <li>- 1 x Infrarot-Modul-Header</li> <li>- 1 x Consumer Infrarot-Modul-Header</li> <li>- 1 x COM-Anschluss-Header</li> <li>- 1 x IEEE 1394-Anschluss</li> <li>- 1 x Betriebs-LED-Header</li> <li>- 2 x CPUlüfter-Anschluss (1 x 4-pin, 1 x 3-pin)</li> <li>- 3 x Gehäuselüfter-Anschluss (1 x 4-pin, 2 x 3-pin)</li> <li>- 1 x Stromlüfter-Anschluss (3-pin)</li> <li>- 24-pin ATX-Netz-Header</li> </ul>

	<ul style="list-style-type: none"> <li>- 8-pin anschluss für 12V-ATX-Netzteil (Hochdichter Netzanschluss)</li> <li>- Anschluss für Audio auf der Gehäusevorderseite</li> <li>- 2 x USB 2.0-Anschlüsse (Unterstützung 4 zusätzlicher USB 2.0-Anschlüsse)</li> <li>- 2 x USB 3.0-Anschlüsse (Unterstützung 4 zusätzlicher USB 3.0-Anschlüsse)</li> <li>- 1 x Dr. Debug (Debug-LED mit 7 Segmenten)</li> <li>- 1 x Netzschalter mit LED</li> <li>- 1 x Rücksetzschalter (Reset) mit LED</li> </ul>
<b>BIOS</b>	<ul style="list-style-type: none"> <li>- 32Mb AMIs Legal BIOS UEFI mit GUI-Unterstützung</li> <li>- Unterstützung für "Plug and Play"</li> <li>- ACPI 1.1-Weckfunktionen</li> <li>- JumperFree-Modus</li> <li>- SMBIOS 2.3.1</li> <li>- CPU, VCCM, NB, SB Stromspannung Multianpassung</li> </ul>
<b>Support-CD</b>	<ul style="list-style-type: none"> <li>- Treiber, Dienstprogramme, Antivirussoftware (Probeversion), CyberLink MediaEspresso 6.5-Testversion, Google Chrome Browser und Toolbar</li> </ul>
<b>Hardware Monitor</b>	<ul style="list-style-type: none"> <li>- CPU-Temperatursensor</li> <li>- Motherboardtemperaturerkennung</li> <li>- Drehzahlmessung für CPU/Gehäuse/Stromlüfter</li> <li>- CPU/Gehäuse-Lüftergeräuschdämpfung</li> <li>- Mehrstufige Geschwindigkeitsteuerung für CPU/Gehäuse/ Stromlüfter</li> <li>- Spannungsüberwachung: +12V, +5V, +3.3V, Vcore</li> </ul>
<b>Betriebssysteme</b>	<ul style="list-style-type: none"> <li>- Unterstützt Microsoft® Windows® 8 / 8 64-Bit / 7 / 7 64-Bit / Vista™ / Vista™ 64-Bit / XP / XP 64-Bit</li> </ul>
<b>Zertifizierungen</b>	<ul style="list-style-type: none"> <li>- FCC, CE, WHQL</li> <li>- Gemäß Ökodesign-Richtlinie (ErP/EuP) (Stromversorgung gemäß Ökodesign-Richtlinie (ErP/EuP) erforderlich)</li> </ul>

\* Für die ausführliche Produktinformation, besuchen Sie bitte unsere Website:

<http://www.asrock.com>

### 1.3 Einstellung der Jumper

Die Abbildung verdeutlicht, wie Jumper gesetzt werden. Werden Pins durch Jumperkappen verdeckt, ist der Jumper "gebrückt". Werden keine Pins durch Jumperkappen verdeckt, ist der Jumper "offen". Die Abbildung zeigt einen 3-Pin Jumper dessen Pin1 und Pin2 "gebrückt" sind, bzw. es befindet sich eine Jumper-Kappe auf diesen beiden Pins.



#### Jumper

#### Einstellung

CMOS löschen

(CLRCMOS1, 3-Pin jumper)  
(siehe S.2, No. 29)



Default-  
Einstellung



CMOS  
löschen

Hinweis: CLRCMOS1 erlaubt Ihnen das Löschen der CMOS-Daten. Diese beinhalten das System-Passwort, Datum, Zeit und die verschiedenen BIOS-Parameter. Um die Systemparameter zu löschen und auf die Werkseinstellung zurückzusetzen, schalten Sie bitte den Computer ab und entfernen das Stromkabel. Benutzen Sie eine Jumperkappe, um die Pin 2 und Pin 3 an CLRCMOS1 für 5 Sekunden kurzzuschließen. Bitte vergessen Sie nicht, den Jumper wieder zu entfernen, nachdem das CMOS gelöscht wurde. Bitte vergessen Sie nicht, den Jumper wieder zu entfernen, nachdem das CMOS gelöscht wurde. Wenn Sie den CMOS-Inhalt gleich nach dem Aktualisieren des BIOS löschen müssen, müssen Sie zuerst das System starten und dann wieder ausschalten, bevor Sie den CMOS-Inhalt löschen.



Der CMOS löschen-Schalter hat dieselbe Funktion wie der CMOS löschen-Jumper.

## 1.4 Integrierte Header und Anschlüsse



Integrierte Header und Anschlüsse sind KEINE Jumper. Setzen Sie KEINE Jumperkappen auf diese Header und Anschlüsse. Wenn Sie Jumperkappen auf Header und Anschlüsse setzen, wird das Motherboard unreparierbar beschädigt!

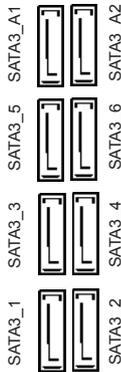
### Seriell-ATA3-Anschlüsse

(SATA3\_1\_2: siehe S.2 - No. 18)

(SATA3\_3\_4: siehe S.2 - No. 17)

(SATA3\_5\_6: siehe S.2 - No. 16)

(SATA3\_A1\_A2: siehe S.2 - No. 15)



Diese acht Serial ATA3- (SATA3-)Verbinder unterstützen SATA-Datenkabel für interne Massenspeichergeräte. Die aktuelle SATA3- Schnittstelle ermöglicht eine Datenübertragungsrate bis 6,0 Gb/s.

### Serial ATA- (SATA-) Datenkabel

(Option)



Jedes Ende des SATA Datenkabels kann an die SATA3 Festplatte oder das SATA3 Verbindungsstück auf dieser Hauptplatine angeschlossen werden.

### Serial ATA- (SATA-) Stromversorgungskabel

(Option)

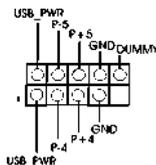


Verbinden Sie das schwarze Ende des SATA-Netzkabels mit dem Netzanschluss am Laufwerk. Verbinden Sie dann das weiße Ende des SATA-Stromversorgungskabels mit dem Stromanschluss des Netzteils.

### USB 2.0-Header

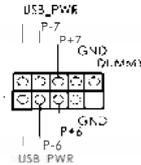
(9-pol. USB4\_5)

(siehe S.2 - No. 26)



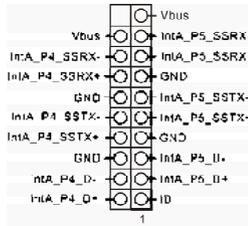
Zusätzlich zu den vier üblichen USB 2.0-Ports an den I/O-Anschlüssen befinden sich zwei USB 2.0-Anschlussleisten am Motherboard. Pro USB 2.0-

(9-pol. USB6\_7)  
(siehe S.2 - No. 25)



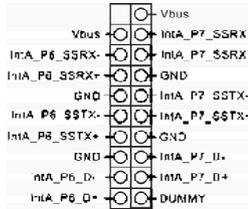
Anschlussleiste werden zwei  
USB 2.0-Ports unterstützt.

USB 3.0-Header  
(19-pol. USB3\_4\_5)  
(siehe S.2 - No. 12)

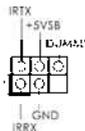


Neben vier Standard-USB  
3.0-Ports am E/A-Panel  
befinden sich zwei USB 3.0-  
Anschlussleisten an diesem  
Motherboard. Pro USB 3.0-  
Anschlussleiste werden zwei  
USB 3.0-Ports unterstützt.

(19-pol. USB3\_6\_7)  
(siehe S.2 - No. 11)

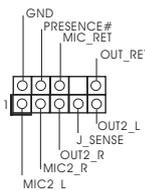


Infrarot-Modul-Header  
(5-pin IR1)  
(siehe S.2 - No. 32)



Dieser Header unterstützt ein  
optionales, drahtloses Sende-  
und Empfangs-Infrarotmodul.

Anschluss für Audio auf  
der Gehäusevorderseite  
(9-Pin HD\_AUDIO1)  
(siehe S.2 - No. 34)



Dieses Interface zu einem  
Audio-Panel auf der Vorder  
seite Ihres Gehäuses,  
ermöglicht Ihnen eine bequeme  
Anschlussmöglichkeit und  
Kontrolle über Audio-Geräte.



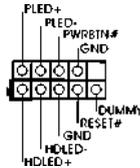
1. High Definition Audio unterstützt Jack Sensing (automatische Erkennung falsch angeschlossener Geräte), wobei jedoch die Bildschirmverdrahtung am Gehäuse HDA unterstützen muss, um richtig zu funktionieren. Beachten Sie bei der Installation im System die Anweisungen in unserem Handbuch und im Gehäusehandbuch.
2. Wenn Sie die AC'97-Audioleiste verwenden, installieren Sie diese wie nachstehend beschrieben an der Front-Audioanschlussleiste:

- A. Schließen Sie Mic\_IN (MIC) an MIC2\_L an.
- B. Schließen Sie Audio\_R (RIN) an OUT2\_R und Audio\_L (LIN) an OUT2\_L an.
- C. Schließen Sie Ground (GND) an Ground (GND) an.
- D. MIC\_RET und OUT\_RET sind nur für den HD-Audioanschluss gedacht. Diese Anschlüsse müssen nicht an die AC'97-Audioleiste angeschlossen werden.
- E. So aktivieren Sie das Mikrofon an der Vorderseite.  
Bei den Betriebssystemen Windows® XP / XP 64 Bit:  
Wählen Sie „Mixer“. Wählen Sie „Recorder“ (Rekorder). Klicken Sie dann auf „FrontMic“ (Vorderes Mikrofon).  
Bei den Betriebssystemen Windows® 8 / 8 64 Bit / 7 / 7 64 Bit / Vista™ / Vista™ 64 Bit:  
Wählen Sie im Realtek-Bedienfeld die „FrontMic“ (Vorderes Mikrofon)-Registerkarte. Passen Sie die „Recording Volume“ (Aufnahmelautstärke) an.

## System Panel-Header

(9-pin PANEL1)

(siehe S.2 - No. 28)



Dieser Header unterstützt mehrere Funktionen der Systemvorderseite.



Schließen Sie die Ein-/Austaste, die Reset-Taste und die Systemstatusanzeige am Gehäuse an diesen Header an; befolgen Sie dabei die nachstehenden Hinweise zur Pinbelegung. Beachten Sie die positiven und negativen Pins, bevor Sie die Kabel anschließen.

### **PWRBTN (Ein-/Ausschalter):**

Zum Anschließen des Ein-/Ausschalters an der Frontblende des Gehäuses. Sie können konfigurieren, wie das System mit Hilfe des Ein-/Ausschalters ausgeschaltet werden können soll.

### **RESET (Reset-Taste):**

Zum Anschließen der Reset-Taste an der Frontblende des Gehäuses. Mit der Reset-Taste können Sie den Computer im Falle eines Absturzes neu starten.

### **PLED (Systembetriebs-LED):**

Zum Anschließen der Betriebsstatusanzeige an der Frontblende des Gehäuses. Die LED leuchtet, wenn das System in Betrieb ist. Die LED blinkt, wenn sich das System im Ruhezustand S1 befindet. Die LED schaltet sich aus, wenn sich das System in den Modi S3/S4 befindet oder ausgeschaltet ist (S5).

### **HDLED (Festplattenaktivitäts-LED):**

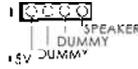
Zum Anschließen der Festplattenaktivitäts-LED an der Frontblende des Gehäuses. Die LED leuchtet, wenn die Festplatte Daten liest oder schreibt.

Das Design der Frontblende kann je nach Gehäuse variere. Ein Frontblendenmodul besteht hauptsächlich aus einer Ein-/Austaste, einer Reset-Taste, einer Betriebs-LED, einer Festplattenaktivitäts-LED, Lautsprechern, etc. Stellen Sie beim Anschließen des Frontblendenmoduls Ihres Gehäuses an diesem Header sicher, dass die Kabel- und Pinbelegung korrekt übereinstimmen.

### Gehäuselautsprecher-Header

(4-pin SPEAKER1)

(siehe S.2 - No. 19)



Schließen Sie den Gehäuselautsprecher an diesen Header an.

### Betriebs-LED-Header

(3-pin PLED1)

(siehe S.2 - No. 30)



Bitte schließen Sie die Betriebs-LED des Gehäuses zur Anzeige des Systembetriebsstatus an diesem Header an. Die LED leuchtet, wenn das System in Betrieb ist. Die LED blinkt im S1-Zustand. Im S3-/S4- oder S5-Zustand (ausgeschaltet) leuchtet die LED nicht.

### Gehäuse- und Stromlüfteranschlüsse

(4-pin CHA\_FAN1)

(siehe S.2, No. 20)



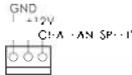
(3-pin CHA\_FAN2)

(siehe S.2, No. 6)



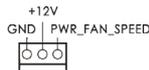
(3-pin CHA\_FAN3)

(siehe S.2, No. 24)



(3-pin PWR\_FAN1)

(siehe S.2, No. 9)

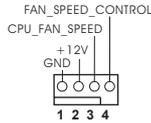


Verbinden Sie die Lüfterkabel mit den Lüfteranschlüssen, wobei der schwarze Draht an den Schutzleiterstift angeschlossen wird. CHA\_FAN1/2/3-Lüftergeschwindigkeit kann über UEFI oder AXTU gesteuert werden.

## CPU-Lüfteranschluss

(4-pin CPU\_FAN1)

(siehe S.2 - No. 4)



Verbinden Sie das CPU - Lüfterkabel mit diesem Anschluss und passen Sie den schwarzen Draht dem Erdungsstift an.



Obwohl dieses Motherboard einen vierpoligen CPU-Lüfteranschluss (Quiet Fan) bietet, können auch CPU-Lüfter mit dreipoligem Anschluss angeschlossen werden; auch ohne Geschwindigkeitsregulierung. Wenn Sie einen dreipoligen CPU-Lüfter an den CPU-Lüferanschluss dieses Motherboards anschließen möchten, verbinden Sie ihn bitte mit den Pins 1 – 3.

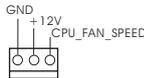
**Pins 1–3 anschließen** ◀

Lüfter mit dreipoligem Anschluss installieren



(3-pin CPU\_FAN2)

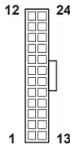
(siehe S.2 - No. 5)



## ATX-Netz-Header

(24-pin ATXPWR1)

(siehe S.2 - No. 10)



Verbinden Sie die ATX-Stromversorgung mit diesem Header.



Obwohl dieses Motherboard einen 24-pol. ATX-Stromanschluss bietet, kann es auch mit einem modifizierten traditionellen 20-pol. ATX-Netzteil verwendet werden. Um ein 20-pol. ATX-Netzteil zu verwenden, stecken Sie den Stecker mit Pin 1 und Pin 13 ein.

Installation eines 20-pol. ATX-Netzteils



## ATX 12V Anschluss

(8-pin ATX12V1)

(siehe S.2 - No. 1)



Bitte schließen Sie an diesen Anschluss die ATX 12V Stromversorgung an.



Obwohl diese Hauptplatine 8-Pin ATX 12V Stromanschluss zur Verfügung stellt, kann sie noch arbeiten, wenn Sie einen traditionellen 4-Pin ATX 12V Energieversorgung adoptieren. Um die 4-Pin ATX Energieversorgung zu verwenden, stecken Sie bitte Ihre Energieversorgung zusammen mit dem Pin 1 und Pin 5 ein.

Installation der 4-Pin ATX 12V Energieversorgung

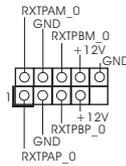


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### IEEE-1394 Header

(9-pin FRONT\_1394)

(siehe S.2 - No. 33)



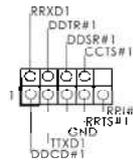
Außer einem vorgegebenem IEEE-1394 Port auf dem Ein-/Ausgabe Paneel, gibt es einen IEEE-1394 Header (FRONT\_1394) auf dieser Hauptplatine. Dieser IEEE-1394 Header kann einen IEEE-1394 Port unterstützen.

---

### COM-Anschluss-Header

(9-pin COM1)

(siehe S.2 - No. 31)



Dieser COM-Anschluss-Header wird verwendet, um ein COM-Anschlussmodul zu unterstützen.

---

### Consumer Infrared-Modul-Header

(4-pin CIR1)

(siehe S.2 - No. 27)



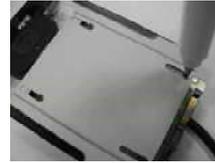
Dieser Header kann zum Anschließen Remote-Empfänger.

## Installationsanleitung der USB 3.0-Frontblende

**Schritt 1** Halten Sie die mitgelieferte USB 3.0-Frontblende, vier Festplattenschrauben und sechs Gehäuseschrauben bereit.



**Schritt 2** Montieren Sie die 2,5 Zoll-HDD/SSD mit vier Festplattenschrauben an der USB 3.0-Frontblende.



**Schritt 3** Installieren Sie die USB 3.0-Frontblende im 2,5 Zoll-Festplatteneinschub des Gehäuses.



**Schritt 4** Montieren Sie die USB 3.0-Frontblende mit sechs Gehäuseschrauben am Festplatteneinschub.



**Schritt 5** Schließen Sie das Kabel der USB 3.0-Frontblende am USB 3.0-Header (USB3\_4\_5 oder USB3\_6\_7) am Motherboard an.



**Schritt 6** Die USB 3.0-Frontblende ist nun einsatzbereit.



## Installationsanleitung zum USB 3.0-Blech an der Rückwand

**Schritt 1** Lösen Sie die beiden Schrauben am USB 3.0-Panel.



**Schritt 3** Fixieren Sie das USB 3.0-Blech mit Schrauben an der Rückwand.



**Schritt 2** Schließen Sie das USB 3.0-Kabel an das USB 3.0-Blech an.



**Schritt 4** Setzen Sie das USB 3.0-Blech an der Rückwand des Gehäuses ein.



---

## 1.5 Schnellschalter

Dieses Motherboard besitzt drei Schnellschalter: Netzschalter, Rücksetzschalter (Reset) und CMOS löschen-Schalter, mit denen Benutzer das System schnell ein-/ausschalten oder zurücksetzen oder die CMOS-Werte löschen können.

---

### Netzschalter

(PWRBTN)

(siehe S.2 - No. 21)



Der Netzschalter ist ein Schnellschalter, mit dem Benutzer das System schnell ein-/ausschalten können.

---

### Rücksetzschalter (Reset)

(RSTBTN)

(siehe S.2 - No. 22)



Der Rücksetzschalter (Reset) ist ein Schnellschalter, mit dem Benutzer das System schnell zurücksetzen können.

---

### CMOS löschen-Schalter

(CLRCBTN)

(siehe S.3 - No. 18)



Der CMOS löschen-Schalter ist ein Schnellschalter, mit dem Benutzer die CMOS-Werte schnell löschen können.

---

## 2. BIOS-Information

Das Flash Memory dieses Motherboards speichert das Setup-Utility. Drücken Sie <F2> oder <Del> während des POST (Power-On-Self-Test) um ins Setup zu gelangen, ansonsten werden die Testroutinen weiter abgearbeitet. Wenn Sie ins Setup gelangen wollen, nachdem der POST durchgeführt wurde, müssen Sie das System über die Tastenkombination <Ctrl> + <Alt> + <Delete> oder den Reset-Knopf auf der Gehäusevorderseite, neu starten. Natürlich können Sie einen Neustart auch durchführen, indem Sie das System kurz ab- und danach wieder anschalten.

Das Setup-Programm ist für eine bequeme Bedienung entwickelt worden. Es ist ein menügesteuertes Programm, in dem Sie durch unterschiedliche Untermenüs scrollen und die vorab festgelegten Optionen auswählen können. Für detaillierte Informationen zum BIOS-Setup, siehe bitte das Benutzerhandbuch (PDF Datei) auf der Support CD.

## 3. Software Support CD information

Dieses Motherboard unterstützt eine Reiche von Microsoft® Windows® Betriebssystemen: 8 / 8 64-Bit / 7 / 7 64-Bit / Vista™ / Vista™ 64-Bit / XP / XP 64-Bit. Die Ihrem Motherboard beigelegte Support-CD enthält hilfreiche Software, Treiber und Hilfsprogramme, mit denen Sie die Funktionen Ihres Motherboards verbessern können. Legen Sie die Support-CD zunächst in Ihr CD-ROM-Laufwerk ein. Der Willkommensbildschirm mit den Installationsmenüs der CD wird automatisch aufgerufen, wenn Sie die "Autorun"-Funktion Ihres Systems aktiviert haben.

Erscheint der Willkommensbildschirm nicht, so "doppelklicken" Sie bitte auf das File ASRSetup.exe im BIN-Verzeichnis der Support-CD, um die Menüs aufzurufen.

Das Setup-Programm soll es Ihnen so leicht wie möglich machen. Es ist menügesteuert, d.h. Sie können in den verschiedenen Untermenüs Ihre Auswahl treffen und die Programme werden dann automatisch installiert.

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# 1. Introduction

Merci pour votre achat d'une carte mère **990FX Extreme9**, une carte mère très fiable produite selon les critères de qualité rigoureux de ASRock. Elle offre des performances excellentes et une conception robuste conformément à l'engagement d'ASRock sur la qualité et la fiabilité au long terme.

Ce Guide d'installation rapide présente la carte mère et constitue un guide d'installation pas à pas. Des informations plus détaillées concernant la carte mère pourront être trouvées dans le manuel l'utilisateur qui se trouve sur le CD d'assistance.



Les spécifications de la carte mère et le BIOS ayant pu être mis à jour, le contenu de ce manuel est sujet à des changements sans notification. Au cas où n'importe quelle modification intervenait sur ce manuel, la version mise à jour serait disponible sur le site web ASRock sans nouvel avis. Vous trouverez les listes de prise en charge des cartes VGA et CPU également sur le site Web ASRock.

Site web ASRock, <http://www.asrock.com>

Si vous avez besoin de support technique en relation avec cette carte mère, veuillez consulter notre site Web pour de plus amples informations particulières au modèle que vous utilisez.

[www.asrock.com/support/index.asp](http://www.asrock.com/support/index.asp)

## 1.1 Contenu du paquet

Carte mère **990FX Extreme9** (Facteur de forme ATX)

Guide d'installation rapide **990FX Extreme9**

CD de soutien **990FX Extreme9**

Un carte 2S\_Pont\_ASRock SLI

Un carte 3S\_Pont\_ASRock SLI-2S1S

Six câbles de données de série ATA (SATA) (en option)

Deux câble d'alimentation de série ATA (SATA) HDD (en option)

Un I/O Panel Shield

Un Panneau USB 3.0 en face avant avec rack disque dur / SSD 2,5"

Quatre HDD vis

Six châssis vis

Un support arrière USB 3.0



### **ASRock vous rappelle...**

Pour bénéficier des meilleures performances sous Windows® 8 / 8 64 bits / 7 / 7 64 bits / Vista™ / Vista™ 64 bits, il est recommandé de paramétrer l'option BIOS dans Configuration de stockage en mode AHCI. Pour plus de détails sur l'installation BIOS, référez-vous au "Mode d'emploi" sur votre CD de support.

## 1.2 Spécifications

<b>Format</b>	<ul style="list-style-type: none"><li>- Facteur de forme ATX</li><li>- Design de condensateur Premium Gold (condensateurs polymère conducteur de qualité supérieure 100% fabriqués au Japon)</li><li>- Filtre Multiple (Multiple Filter Cap , MFC) (filtre différents bruits à l'aide de 3 différents condensateurs : Filtre solide DIP, POSCAP et MLCC)</li></ul>
<b>CPU</b>	<ul style="list-style-type: none"><li>- Prise en charge des processeurs sur socket AM3+</li><li>- Prise en charge des processeurs sur socket AM3: Processeur Phenom™ II X6 / X4 / X3 / X2 (sauf 920 / 940) / Athlon II X4 / X3 / X2 / Sempron d'AMD</li><li>- Prêt pour processeurs Huit-Core</li><li>- Supporte UCC (Unlock CPU Core)</li><li>- Conception Digi Power</li><li>- Conception 12 + 2 Power Phase</li><li>- MOSFET double-pile (Dual-Stack MOSFET, DSM)</li><li>- Supporte les processeurs jusqu'à 140W</li><li>- Supporte la technologie Cool 'n' Quiet™ d'AMD</li><li>- FSB 2600 MHz (5.2 GT/s)</li><li>- Prend en charge la technologie Untied Overclocking</li><li>- Prise en charge de la technologie Hyper Transport 3.0 (HT 3.0)</li></ul>
<b>Chipsets</b>	<ul style="list-style-type: none"><li>- Northbridge: AMD 990FXFX</li><li>- Southbridge: AMD SB950</li></ul>
<b>Mémoire</b>	<ul style="list-style-type: none"><li>- Compatible avec la Technologie de Mémoire à Canal Double</li><li>- 4 x slots DIMM DDR3</li><li>- Supporter DDR3 2450(OC)/2100(OC)/1600/1333/1066 non-ECC, sans amortissement mémoire</li><li>- Capacité maxi de mémoire système: 64GB</li><li>- Prend en charge le profil de mémoire extrême Intel® (XMP) 1.3/1.2</li><li>- Prend en charge le profil de mémoire AMD (AMP)</li></ul>
<b>Slot d'extension</b>	<ul style="list-style-type: none"><li>- 4 x slots PCI Express 2.0 x16 (PCIE1 à mode x16; PCIE3 à mode x4; PCIE4/PCIE5: simple à x16 (PCIE4) / x8 (PCIE5) ou double en mode x8/x8)</li><li>- 1 x slot PCI Express 2.0 x1</li><li>- 1 x slot PCI</li><li>- Prend en charge AMD™ Quad CrossFireX™, 3-Way</li></ul>

	<p>CrossFireX™ et CrossFireX™</p> <ul style="list-style-type: none"> <li>- Prend en charge NVIDIA® Quad SLI™, 3-Way SLI™ et SLI™</li> </ul>
<b>Audio</b>	<ul style="list-style-type: none"> <li>- 7,1 CH HD Audio avec protection de contenu (Realtek ALC898 Audio Codec)</li> <li>- Prise en charge de l'audio Premium Blu-ray</li> </ul>
<b>LAN</b>	<ul style="list-style-type: none"> <li>- PCIE x1 Gigabit LAN 10/100/1000 Mb/s</li> <li>- Intel® 82583V</li> <li>- Supporte du Wake-On-LAN</li> <li>- Support de PXE</li> </ul>
<b>Panneau arrière</b>	<p>I/O Panel</p> <ul style="list-style-type: none"> <li>- 1 x port souris PS/2</li> <li>- 1 x port clavier PS/2</li> <li>- 1 x Port de sortie coaxial SPDIF</li> <li>- 1 x Port de sortie optique SPDIF</li> <li>- 4 x ports USB 2.0 par défaut</li> <li>- 4 x ports USB 3.0 par défaut</li> <li>- 2 x Connecteurs eSATA3</li> <li>- 1 x port LAN RJ-45 avec LED (ACT/LED CLIGNOTANTE et LED VITESSE)</li> <li>- 1 x port IEEE 1394</li> <li>- 1 x interrupteur d'effacement du CMOS</li> <li>- Prise HD Audio: Haut-parleur latéral / Haut-parleur arrière / Central / Basses / Entrée Ligne / Haut-parleur frontal / Microphone</li> </ul>
<b>SATA3</b>	<ul style="list-style-type: none"> <li>- 6 x connecteurs 6,0 Gb/s AMD SB950 SATA3, prise en charge des fonctions RAID (RAID 0, RAID 1, RAID 0+1, JBOD et RAID 5), NCQ, AHCI et « Connexion à chaud »</li> <li>- 2 x connecteurs 6,0 Gb/s ASMedia ASM1061 SATA3, prise en charge des fonctions NCQ, AHCI et « Connexion à chaud »</li> </ul>
<b>USB 3.0</b>	<ul style="list-style-type: none"> <li>- 4 x ports USB3.0 à l'arrière par Etron EJ188H, prennent en charge USB 1.1/2.0/3.0 jusqu'à 5 Gb/s</li> <li>- 2 x barrette USB3.0 en façade (prend en charge 4 ports USB 3.0) par Etron EJ188H, prend en charge USB 1.1/2.0/3.0 jusqu'à 5 Gb/s</li> </ul>
<b>Connecteurs</b>	<ul style="list-style-type: none"> <li>- 8 x connecteurs SATA3, prennent en charge un taux de transfert de données pouvant aller jusqu'à 6.0Go/s</li> <li>- 1 x En-tête du module infrarouge</li> <li>- 1 x Barrette pour module à infrarouges grand public</li> <li>- 1 x En-tête de port COM</li> </ul>

	<ul style="list-style-type: none"> <li>- 1 x Connecteur IEEE 1394</li> <li>- 1 x LED di accensione</li> <li>- 2 x Connecteur pour ventilateur de CPU (1 x br. 4, 1 x br. 3)</li> <li>- 3 x Connecteur pour ventilateur de Châssis (1 x br. 4, 2 x br. 3)</li> <li>- 1 x Connecteur pour ventilateur de pouvoir (br. 3)</li> <li>- br. 24 connecteur d'alimentation ATX</li> <li>- br. 8 connecteur d'alimentation 12V ATX (Connecteur d'alimentation haut densité)</li> <li>- Connecteur audio panneau avant</li> <li>- 2 x En-tête USB 2.0 (prendre en charge 4 ports USB 2.0 supplémentaires)</li> <li>- 2 x En-tête USB 3.0 (prendre en charge 4 ports USB 3.0 supplémentaires)</li> <li>- 1 x Dr. Debug (LED de débogage à 7 segments)</li> <li>- 1 x interrupteur d'alimentation avec LED</li> <li>- 1 x interrupteur de réinitialisation avec LED</li> </ul>
<b>BIOS</b>	<ul style="list-style-type: none"> <li>- 32Mb AMI UEFI Legal BIOS avec support GUI</li> <li>- Support du "Plug and Play"</li> <li>- Compatible pour événements de réveil ACPI 1.1</li> <li>- Gestion jumperless</li> <li>- Support SMBIOS 2.3.1</li> <li>- CPU, VCCM, NB, SB Tension Multi-ajustement</li> </ul>
<b>CD d'assistance</b>	<ul style="list-style-type: none"> <li>- Pilotes, utilitaires, logiciel anti-virus (Version d'essai), CyberLink MediaEspresso 6.5 Trial, Google Chrome Browser et Toolbar</li> </ul>
<b>Surveillance système</b>	<ul style="list-style-type: none"> <li>- Détection de la température de l'UC</li> <li>- Mesure de température de la carte mère</li> <li>- Tachéomètre ventilateur CPU/Châssis/pouvoir Ventilateur</li> <li>- Ventilateur silencieux d'unité CPU/Châssis</li> <li>- Commande de ventilateur CPU/Châssis/pouvoir à plusieurs vitesses</li> <li>- Monitoring de la tension: +12V, +5V, +3.3V, Vcore</li> </ul>
<b>OS</b>	<ul style="list-style-type: none"> <li>- Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit</li> </ul>
<b>Certifications</b>	<ul style="list-style-type: none"> <li>- FCC, CE, WHQL</li> <li>- Prêt pour ErP/EuP (alimentation Prêt pour ErP/EuP requise)</li> </ul>

\* Pour de plus amples informations sur les produits, s'il vous plaît visitez notre site web:  
<http://www.asrock.com>

### 1.3 Réglage des cavaliers

L'illustration explique le réglage des cavaliers. Quand un capuchon est placé sur les broches, le cavalier est « FERME ». Si aucun capuchon ne relie les broches, le cavalier est « OUVERT ». L'illustration montre un cavalier à 3 broches dont les broches 1 et 2 sont « FERMEES » quand le capuchon est placé sur ces 2 broches.



#### Le cavalier

#### Description

Effacer la CMOS

(CLRCMOS1)

(voir p.2 fig. 29)



Paramètres  
par défaut



Effacer la  
CMOS

Remarque : CLRCMOS1 vous permet d'effacer les données du CMOS. Pour effacer et réinitialiser les paramètres du système à la configuration originale, veuillez éteindre l'ordinateur et débrancher le cordon d'alimentation de la prise de courant. Après 15 secondes, utilisez un couvercle de jumper pour court-circuiter les broches pin2 et pin3 de CLRCMOS1 pendant 5 secondes. Veuillez cependant ne pas effacer le CMOS immédiatement après avoir mis à jour le BIOS. Si vous avez besoin d'effacer le CMOS après avoir mis à jour le BIOS, vous devez allumer en premier le système, puis l'éteindre avant de continuer avec l'opération d'effacement du CMOS. Veuillez noter que le mot de passe, la date, l'heure, le profil par défaut de l'utilisateur, 1394 GUID et l'adresse MAC seront effacés seulement si la batterie du CMOS est enlevée.



Le commutateur Effacer CMOS présente la même fonction que le cavalier Effacer CMOS.

## 1.4 En-têtes et Connecteurs sur Carte



Les en-têtes et connecteurs sur carte NE SONT PAS des cavaliers. NE PAS placer les capuchons de cavalier sur ces en-têtes et connecteurs. Le fait de placer les capuchons de cavalier sur les en-têtes et connecteurs causera à la carte mère des dommages irréversibles!

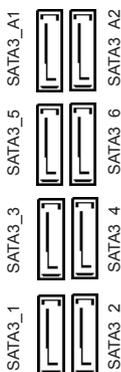
### Connecteurs Série ATA3

(SATA3\_1\_2: voir p.2 No. 18)

(SATA3\_3\_4: voir p.2 No. 17)

(SATA3\_5\_6: voir p.2 No. 16)

(SATA3\_A1\_A2: voir p.2 No. 15)



Ces huit connecteurs Série ATA3 (SATA3) prennent en charge les câbles SATA pour les périphériques de stockage internes. L'interface SATA3 actuelle permet des taux transferts de données pouvant aller jusqu'à 6,0 Gb/s.

### Câble de données Série ATA (SATA)

(en option)



Toute cote du câble de data SATA peut être connectée au disque dur SATA3 ou au connecteur SATA3 sur la carte mère.

### Cordon d'alimentation Série ATA (SATA)

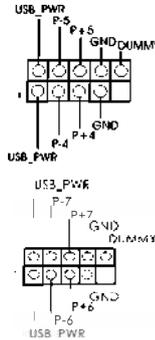
(en option)



Veuillez connecter l'extrémité noire du cordon d'alimentation SATA sur le connecteur d'alimentation sur chaque unité. Connectez ensuite l'extrémité blanche du cordon d'alimentation SATA sur le connecteur d'alimentation de l'unité d'alimentation électrique.

### En-tête USB 2.0

(USB4\_5 br.9)  
(voir p.2 No. 26)

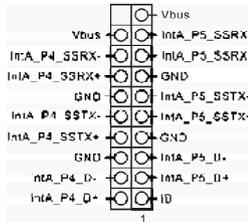


(USB6\_7 br.9)  
(voir p.2 No. 25)

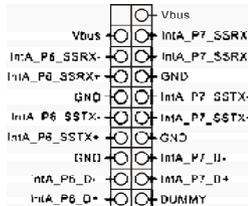
A côté des quatre ports USB 2.0 par défaut sur le panneau E/S, il y a deux embases USB 2.0 sur cette carte mère. Chaque embase USB 2.0 peut prendre en charge 2 ports USB 2.0.

### En-tête USB 3.0

(USB3\_4\_5 br.19)  
(voir p.2 No. 12)



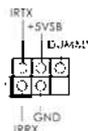
(USB3\_6\_7 br.19)  
(voir p.2 No. 11)



En plus des quatre ports USB 3.0 par défaut sur le panneau E/S, il y a deux embases USB 3.0 sur cette carte mère. Chaque embase USB 3.0 peut prendre en charge 2 ports USB 3.0.

### En-tête du module infrarouge

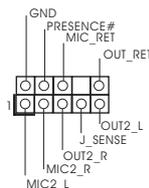
(IR1 br.5)  
(voir p.2 No. 32)



Cet en-tête supporte un module infrarouge optionnel de transfert et de réception sans fil.

### Connecteur audio panneau

(HD\_AUDIO1 br. 9)  
(voir p.2 No. 34)



C'est une interface pour un câble avant audio en façade qui permet le branchement et le contrôle commodes de périphériques audio.



1. L'audio à haute définition (HDA) prend en charge la détection de fiche, mais le fil de panneau sur le châssis doit prendre en charge le HDA pour fonctionner correctement. Veuillez suivre les instructions dans notre manuel et le manuel de châssis afin d'installer votre système.
2. Si vous utilisez le panneau audio AC'97, installez-le sur l'adaptateur audio du panneau avant conformément à la procédure ci-dessous :
  - A. Connectez Mic\_IN (MIC) à MIC2\_L.
  - B. Connectez Audio\_R (RIN) à OUT2\_R et Audio\_L (LIN) à OUT2\_L.
  - C. Connectez Ground (GND) à Ground (GND).
  - D. MIC\_RET et OUT\_RET sont réservés au panneau audio HD. Vous n'avez pas besoin de les connecter pour le panneau audio AC'97.
  - E. Pour activer le micro avant.

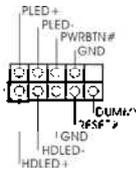
Pour les systèmes d'exploitation Windows® XP / XP 64 bits :  
Sélectionnez "Mixer". Sélectionnez "Recorder" (Enregistreur). Puis cliquez sur "FrontMic" (Micro avant).

Pour les systèmes d'exploitation Windows® 8 / 8 64 bits / 7 / 7 64 bits / Vista™ / Vista™ 64 bits :  
Allez sur l'onglet "FrontMic" (Micro avant) sur le Panneau de contrôle Realtek. Ajustez "Recording Volume" (Volume d'enregistrement).

## En-tête du panneau système

(PANEL1 br.9)

(voir p.2 No. 28)



Cet en-tête permet d'utiliser plusieurs fonctions du panneau système frontal.



Connectez l'interrupteur d'alimentation, l'interrupteur de réinitialisation et l'indicateur d'état du système du châssis sur cette barrette en respectant l'affectation des broches décrite ci-dessous. Faites attention aux broches positives et négatives avant de connecter les câbles.

### **PWRBTN (Interrupteur d'alimentation):**

Connectez ici le connecteur d'alimentation sur le panneau avant du châssis. Vous pouvez configurer la façon de mettre votre système hors tension avec l'interrupteur d'alimentation.

### **RESET (Interrupteur de réinitialisation):**

Connectez ici le connecteur de réinitialisation sur le panneau avant du châssis. Appuyez sur l'interrupteur de réinitialisation pour redémarrer l'ordinateur s'il se bloque ou s'il n'arrive pas à redémarrer normalement.

### **PLED (DEL alimentation système):**

Connectez ici l'indicateur d'état de l'alimentation sur le panneau avant du châssis. Ce voyant DEL est allumé lorsque le système est en marche. Le voyant DEL clignote lorsque le système est en mode veille S1. Le voyant DEL est éteint lorsque le système est en mode veille S3/ S4 ou lorsqu'il est éteint (S5).

### HDLED (DEL activité du disque dur):

Connectez ici le voyant DEL d'activité du disque dur sur le panneau avant du châssis. Ce voyant DEL est allumé lorsque le disque dur est en train de lire ou d'écrire des données.

Le design du panneau avant peut varier en fonction du châssis. Un module de panneau avant consiste principalement en : interrupteur d'alimentation, interrupteur de réinitialisation, voyant DEL d'alimentation, voyant DEL d'activité du disque dur, haut-parleur, etc. Lorsque vous connectez le panneau avant de votre châssis sur cette barrette, vérifiez bien à faire correspondre les fils et les broches.

### En-tête du haut-parleur de châssis

(SPEAKER1 br. 4)  
(voir p.2 No. 19)



Veillez connecter le haut-parleur de châssis sur cet en-tête.

### LED di accensione

(3-pin PLED1)  
(vedi p.2 No. 30)



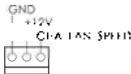
Collegare il LED di accensione chassi per indicare lo stato di alimentazione del sistema. Il LED è acceso quando il sistema è in funzione. Il LED continua a lampeggiare in stato S1. Il LED è spento in stato S3/S4 o S5 (spegnimento).

### Connecteur pour châssis et ventilateur

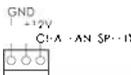
(CHA\_FAN1 br. 4)  
(voir p.2 No. 20)



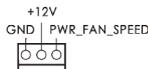
(CHA\_FAN2 br. 3)  
(voir p.2 No. 6)



(CHA\_FAN3 br. 3)  
(voir p.2 No. 24)



(PWR\_FAN1 br. 3)  
(voir p.2 No. 9)

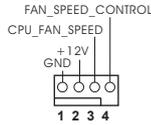


Branchez les câbles du ventilateur aux connecteurs pour ventilateur et faites correspondre le fil noir à la broche de terre. La vitesse des ventilateurs CHA\_FAN1/2/3 peut être réglée avec UEFI ou AXTU.

## Connecteur du ventilateur de l'UC

(CPU\_FAN1 br. 4)

(voir p.2 No. 4)



Veillez connecter le câble de ventilateur d'UC sur ce connecteur et brancher le fil noir sur la broche de terre.



Bien que cette carte mère offre un support de (Ventilateur silencieux ventilateur de CPU à 4 broches , le ventilateur de CPU à 3 broches peut bien fonctionner même sans la fonction de commande de vitesse du ventilateur. Si vous prévoyez de connecter le ventilateur de CPU à 3 broches au connecteur du ventilateur de CPU sur cette carte mère, veuillez le connecter aux broches 1-3.

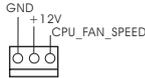
### Installation de ventilateur à 3 broches

Broches 1-3 connectées



(CPU\_FAN2 br. 3)

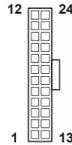
(voir p.2 No. 5)



## En-tête d'alimentation ATX

(ATXPWR1 br. 24)

(voir p.2 No. 10)



Veillez connecter l'unité d'alimentation ATX sur cet en-tête.



Bien que cette carte mère fournisse un connecteur de courant ATX 24 broches, elle peut encore fonctionner si vous adopter une alimentation traditionnelle ATX 20 broches. Pour utiliser une alimentation ATX 20 broches, branchez à l'alimentation électrique ainsi qu'aux broches 1 et 13.

20-Installation de l'alimentation électrique ATX



## Connecteur ATX 12V

(ATX12V1 br.8)

(voir p.2 No. 1)



Veillez connecter une unité d'alimentation électrique ATX 12V sur ce connecteur.



Bien que cette carte mère possède 8 broches connecteur d'alimentation ATX 12V, il peut toujours travailler si vous adoptez une approche traditionnelle à 4 broches ATX 12V alimentation. Pour utiliser l'alimentation des 4 broches ATX, branchez votre alimentation avec la broche 1 et la broche 5.

4-Installation d'alimentation à 4 broches ATX 12V

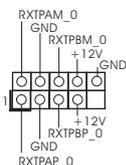


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### Header de IEEE 1394

(FRONT\_1394 br. 9)

(voir p.2 No. 33)



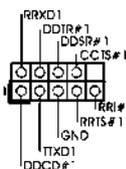
Sauf un port de default IEEE 1394 sur le panel I/O, il y a un header de IEEE1394 (FRONT\_1394) sur cette carte mere. Le header de IEEE 1394 peut supporter un port de IEEE 1394.

---

### En-tête de port COM

(COM1 br.9)

(voir p.2 No. 31)



Cette en-tête de port COM est utilisée pour prendre en charge un module de port COM.

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### Barrette pour module à infrarouges grand public

(CIR1 br.4)

(voir p.2 No. 27)



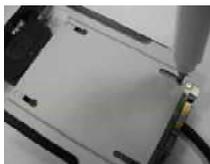
Cette barrette peut être utilisée pour connecter des récepteur

## Le Guide d'installation du panneau USB 3.0 frontal

**Étape 1** Préparez le panneau USB 3.0 frontal fourni, quatre vis HDD et six vis de châssis.



**Étape 2** Vissez le HDD/SSD 2,5" sur le panneau USB 3.0 frontal avec les quatre vis HDD.



**Étape 3** Installez le panneau USB 3.0 frontal dans la baie de disque 2,5" du châssis.



**Étape 4** Vissez le panneau USB 3.0 frontal dans la baie de disque avec les six vis de châssis.



**Étape 5** Branchez le câble USB 3.0 dans le connecteur USB 3.0 (USB3\_4\_5 ou USB3\_6\_7) de la carte mère.



**Étape 6** Le panneau USB 3.0 frontal peut maintenant être utilisé.



## Le Guide d'installation du Support arrière USB 3.0

**Étape 1** Dévissez les deux vis du panneau avant USB 3.0.



**Étape 2** Assemblez le câble USB 3.0 et le support arrière USB 3.0.



**Étape 3** Vissez les deux vis dans le support arrière USB 3.0.



**Étape 4** Placez le support arrière USB 3.0 dans le châssis.



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## 1.5 Interrupteur rapides

Cette carte mère dispose de trois interrupteurs rapides : un interrupteur d'alimentation, un interrupteur de réinitialisation et un interrupteur d'effacement de CMOS, permettant aux utilisateurs de rapidement allumer/éteindre ou réinitialiser le système, ainsi que d'effacer les valeurs du CMOS.

---

### Interrupteur d'alimentation

(PWRBTN)  
(voir p.2 No. 21)



L'interrupteur d'alimentation est un interrupteur rapide, qui permet à l'utilisateur d'allumer/éteindre rapidement le système.

---

### Interrupteur de réinitialisation

(RSTBTN)  
(voir p.2 No. 22)



L'interrupteur de réinitialisation est un interrupteur rapide, qui permet à l'utilisateur de réinitialiser rapidement le système.

---

### Interrupteur d'effacement de CMOS

(CLRCBTN)  
(voir p.3 No. 18)



L'interrupteur d'effacement de CMOS est un interrupteur rapide qui permet à l'utilisateur d'effacer rapidement les valeurs du CMOS.

---

## 2. Informations sur le BIOS

La puce Flash Memory sur la carte mère stocke le Setup du BIOS. Lorsque vous démarrez l'ordinateur, veuillez presser <F2> ou <Del> pendant le POST (Power-On-Self-Test) pour entrer dans le BIOS; sinon, le POST continue ses tests de routine. Si vous désirez entrer dans le BIOS après le POST, veuillez redémarrer le système en pressant <Ctl> + <Alt> + <Suppr>, ou en pressant le bouton de reset sur le boîtier du système. Vous pouvez également redémarrer en éteignant le système et en le rallumant. L'utilitaire d'installation du BIOS est conçu pour être convivial. C'est un programme piloté par menu, qui vous permet de faire défiler par ses divers sous-menus et de choisir parmi les choix prédéterminés. Pour des informations détaillées sur le BIOS, veuillez consulter le Guide de l'utilisateur (fichier PDF) dans le CD technique.

## 3. Informations sur le CD de support

Cette carte mère supporte divers systèmes d'exploitation Microsoft® Windows®: 8 / 8 64 bits / 7 / 7 64 bits / Vista™ / Vista™ 64 bits / XP / XP 64 bits. Le CD technique livré avec cette carte mère contient les pilotes et les utilitaires nécessaires pour améliorer les fonctions de la carte mère. Pour utiliser le CD technique, insérez-le dans le lecteur de CD-ROM. Le Menu principal s'affiche automatiquement si "AUTORUN" est activé dans votre ordinateur. Si le Menu principal n'apparaît pas automatiquement, localisez dans le CD technique le fichier "ASRSetup.exe" dans le dossier BIN et double-cliquez dessus pour afficher les menus.

---

# 1. Introduzione

Grazie per aver scelto una scheda madre **990FX Extreme9**, una scheda madre affidabile prodotta secondo i severi criteri di qualità ASRock. Le prestazioni eccellenti e il design robusto si conformano all'impegno di ASRock nella ricerca della qualità e della resistenza.

Questa Guida Rapida all'Installazione contiene l'introduzione alla motherboard e la guida passo-passo all'installazione. Informazioni più dettagliate sulla motherboard si possono trovare nel manuale per l'utente presente nel CD di supporto.



Le specifiche della scheda madre e il software del BIOS possono essere aggiornati, pertanto il contenuto di questo manuale può subire variazioni senza preavviso. Nel caso in cui questo manuale sia modificato, la versione aggiornata sarà disponibile sul sito di ASRock senza altro avviso. Sul sito ASRock si possono anche trovare le più recenti schede VGA e gli elenchi di CPU supportate.

ASRock website <http://www.asrock.com>

Se si necessita dell'assistenza tecnica per questa scheda madre, visitare il nostro sito per informazioni specifiche sul modello che si sta usando.

[www.asrock.com/support/index.asp](http://www.asrock.com/support/index.asp)

## 1.1 Contenuto della confezione

Scheda madre **990FX Extreme9** (ATX Form Factor)

Guida di installazione rapida **990FX Extreme9**

CD di supporto **990FX Extreme9**

Un Scheda ASRock SLI\_Bridge\_2S

Un scheda Bridge ASRock 3-Way SLI-2S1S

Sei cavi dati Serial ATA (SATA) (opzionali)

Due cavi di alimentazione HDD Serial ATA (SATA) (opzionali)

Un I/O Shield

Un Pannello USB 3.0 frontale con rack HDD/SSD 2,5"

Quattro HDD viti

Sei telaio viti

Un supporto USB 3.0 posteriore



### **ASRock vi ricorda...**

Per ottenere migliori prestazioni in Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit, si consiglia di impostare l'opzione BIOS in Storage Configuration (Configurazione di archiviazione) sulla modalità AHCI. Per l'impostazione BIOS, fare riferimento a "User Manual" (Manuale dell'utente) nel CD di supporto per dettagli.

## 1.2 Specifiche

<b>Piattaforma</b>	<ul style="list-style-type: none"><li>- ATX Form Factor</li><li>- Design Premium Gold Capacitor (condensatori a polimeri conduttivi di altissima qualità 100% made in Japan)</li><li>- Tappo filtro multiplo (MFC) (diverso disturbo filtro di 3 diversi condensatori: tappo solido DIP, POSCAP e MLCC)</li></ul>
<b>Processore</b>	<ul style="list-style-type: none"><li>- Supporto di processori Socket AM3+</li><li>- Supporto di processori Socket AM3: AMD Phenom™ II X6 / X4 / X3 / X2 (fatta eccezione per 920 / 940) / Athlon II X4 / X3 / X2 / Sempron</li><li>- CPU Otto-Core Ready</li><li>- Supporto UCC (Unlock CPU Core)</li><li>- Design Digi Power</li><li>- Struttura di fase con alimentazione 12 + 2 avanzata</li><li>- MOSFET a doppio stack (DSM)</li><li>- Supporta CPU fino a 140 W</li><li>- Supporto tecnologia AMD Cool 'n' Quiet™</li><li>- FSB 2600 MHz (5.2 GT/s)</li><li>- Supporta la tecnologia overclocking "slegata"</li><li>- Supporta la tecnologia Hyper-Transport 3.0 (HT 3.0)</li></ul>
<b>Chipset</b>	<ul style="list-style-type: none"><li>- Northbridge: AMD 990FX</li><li>- Southbridge: AMD SB950</li></ul>
<b>Memoria</b>	<ul style="list-style-type: none"><li>- Supporto tecnologia Dual Channel Memory</li><li>- 4 x slot DDR3 DIMM</li><li>- Supporto DDR3 2450(OC)/2100(OC)/1600/1333/1066 non-ECC, memoria senza buffer</li><li>- Capacità massima della memoria di sistema: 64GB</li><li>- Supporto di Intel® XMP (Extreme Memory Profile)1.3/1.2</li><li>- Supporto di AMD AMP (AMD Memory Profile)</li></ul>
<b>Slot di espansione</b>	<ul style="list-style-type: none"><li>- 4 x Alloggio PCI Express 2.0 x16 (PCIE1: modalità x16; PCIE3: modalità x4; PCIE4/PCIE5: singolo in modalità x16 (PCIE4) / x8 (PCIE5) o doppio in modalità x8/x8)</li><li>- 1 x slot PCI Express 2.0 x1</li><li>- 1 x slot PCI</li><li>- Supporto di AMD™ Quad CrossFireX™, 3-Way CrossFireX™ e CrossFireX™</li><li>- Supporto di NVIDIA® Quad SLI™, 3-Way SLI™ e SLI™</li></ul>
<b>Audio</b>	<ul style="list-style-type: none"><li>- 7.1 CH HD Audio con protezioni contenuti (Realtek ALC898 Audio Codec)</li><li>- Supporto audio Blu-ray Premium</li></ul>

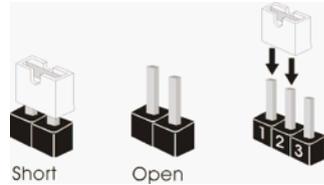
<b>LAN</b>	<ul style="list-style-type: none"> <li>- PCIE x1 Gigabit LAN 10/100/1000 Mb/s</li> <li>- Intel® 82583V</li> <li>- Supporta Wake-On-LAN</li> <li>- Supporta PXE</li> </ul>
<b>Pannello posteriore I/O</b>	<p>I/O Panel</p> <ul style="list-style-type: none"> <li>- 1 x porta PS/2 per mouse</li> <li>- 1 x porta PS/2 per tastiera</li> <li>- 1 x porta coassiale SPDIF Out</li> <li>- 1 x porta ottica SPDIF Out</li> <li>- 4 x porte USB 2.0 già integrate</li> <li>- 4 x porte USB 3.0 già integrate</li> <li>- 2 x connettori eSATA3</li> <li>- 1 x porta LAN RJ-45 con LED (LED azione/collegamento e LED velocità)</li> <li>- 1 x porta IEEE 1394</li> <li>- 1 x interruttore di pulizia CMOS</li> <li>- Connettore HD Audio: cassa laterale / cassa posteriore / cassa centrale / bassi / ingresso linea / cassa frontale / microfono</li> </ul>
<b>SATA3</b>	<ul style="list-style-type: none"> <li>- 6 x connettori AMD SB950 SATA3 6,0 Gb/s, supporto di RAID (RAID 0, RAID 1, RAID 0+1, JBOD e RAID 5) e delle funzioni NCQ, AHCI e "Hot Plug"</li> <li>- 2 x connettori ASMedia ASM1061 SATA3 6,0 Gb/s, supporto di NCQ e delle funzioni AHCI e "Hot Plug"</li> </ul>
<b>USB 3.0</b>	<ul style="list-style-type: none"> <li>- 4 x porte USB 3.0 posteriori amministrato dal controller Etron EJ188H, supporto di USB 1.1/2.0/3.0 fino a 5Gb/s</li> <li>- 2 x headers USB 3.0 frontale (supporta 4 porte USB 3.0) amministrato dal controller Etron EJ188H, supporto di USB 1.1/2.0/3.0 fino a 5Gb/s</li> </ul>
<b>Connettori</b>	<ul style="list-style-type: none"> <li>- 8 x connettori SATA3 6.0Go/s</li> <li>- 1 x collettore modulo infrarossi</li> <li>- 1 x Connettore modulo infrarosso consumer</li> <li>- 1 x collettore porta COM</li> <li>- 1 x collettore IEEE 1394</li> <li>- 1 x LED di accensione</li> <li>- 2 x Connettore CPU ventola (1 x 4-pin, 1 x 3-pin)</li> <li>- 3 x Connettore Chassis ventola (1 x 4-pin, 2 x 3-pin)</li> <li>- 1 x Connettore Alimentazione ventola (3-pin)</li> <li>- 24-pin collettore alimentazione ATX</li> <li>- 8-pin connettore ATX 12V (Connettore alimentazione ad alta densità)</li> </ul>

	<ul style="list-style-type: none"> <li>- Connettore audio sul pannello frontale</li> <li>- 2 x collezionisti USB 2.0 (supporta 4 porte USB 2.0)</li> <li>- 2 x collezionisti USB 3.0 (supporta 4 porte USB 3.0)</li> <li>- 1 x Dr. Debug (LED debug con 7 segmenti)</li> <li>- 1 x interruttore di alimentazione con LED</li> <li>- 1 x interruttore di reset con LED</li> </ul>
<b>BIOS</b>	<ul style="list-style-type: none"> <li>- 32Mb AMI UEFI Legal BIOS con interfaccia di supporto</li> <li>- Supporta "Plug and Play"</li> <li>- Compatibile con ACPI 1.1 wake up events</li> <li>- Supporta jumperfree</li> <li>- Supporta SMBIOS 2.3.1</li> <li>- Regolazione multi-voltaggio CPU, VCCM, NB, SB</li> </ul>
<b>CD di supporto</b>	<ul style="list-style-type: none"> <li>- Driver, utilità, software antivirus (Versione dimostrativa), CyberLink MediaEspresso 6.5 Trial, Google Chrome Browser e Toolbar</li> </ul>
<b>Monitoraggio Hardware</b>	<ul style="list-style-type: none"> <li>- Sensore per la temperatura del processore</li> <li>- Sensore temperatura scheda madre</li> <li>- Indicatore di velocità per la ventola del CPU/Chassis/Alimentazione</li> <li>- Ventola CPU/Chassis silenziosa</li> <li>- Ventola CPU/Chassis/Alimentazione con controllo di varie velocità</li> <li>- Voltaggio: +12V, +5V, +3.3V, Vcore</li> </ul>
<b>Compatibilità SO</b>	<ul style="list-style-type: none"> <li>- Microsoft® Windows® 8 / 8 64 bit / 7 / 7 64 bit / Vista™ / Vista™ 64 bit / XP / XP 64 bit</li> </ul>
<b>Certificazioni</b>	<ul style="list-style-type: none"> <li>- FCC, CE, WHQL</li> <li>- Predisposto ErP/EuP (è necessaria l'alimentazione predisposta per il sistema ErP/EuP)</li> </ul>

\* Per ulteriori informazioni, prego visitare il nostro sito internet: <http://www.asrock.com>

### 1.3 Setup dei Jumpers

L'illustrazione mostra come sono settati i jumper. Quando il ponticello è posizionato sui pin, il jumper è "CORTOCIRCUITATO". Se sui pin non ci sono ponticelli, il jumper è "APERTO". L'illustrazione mostra un jumper a 3 pin in cui il pin1 e il pin2 sono "CORTOCIRCUITATI" quando il ponticello è posizionato su questi pin.



#### Jumper

#### Settaggio del Jumper

Resettare la CMOS

(CLRCMOS1)  
(vedi p.2 item 29)



Impostazione  
predefinita



Azzeramen-  
to CMOS

Nota: CLRCMOS1 permette di azzerare i dati nella CMOS. Per cancellare e ripristinare i parametri del sistema sulla configurazione iniziale, spegnere il computer e scollegare il cavo d'alimentazione dalla presa di corrente. Attendere 15 secondi, poi usare un cappuccio jumper per cortocircuitare il pin 2 ed il pin 3 su CLRCMOS1 per 5 secondi. Tuttavia, si consiglia di non cancellare la CMOS subito dopo avere aggiornato il BIOS. Se si deve azzerare la CMOS quando si è completato l'aggiornamento del BIOS, è necessario per prima cosa avviare il sistema e poi spegnerlo prima di eseguire l'azzeramento della CMOS. Notare che password, data, ore, profilo utente predefinito, 1394 GUID e indirizzo MAC saranno cancellati solo se è rimossa la batteria della CMOS.



L'interruttore Clear CMOS (Cancella CMOS) ha la stessa funzione del jumper Clear CMOS.

## 1.4 Collettori e Connettori su Scheda



I collettori ed i connettori su scheda NON sono dei jumper. NON installare cappucci per jumper su questi collettori e connettori. L'installazione di cappucci per jumper su questi collettori e connettori provocherà danni permanenti alla scheda madre!

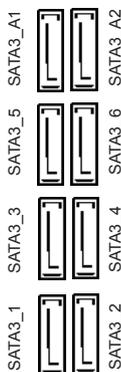
### Connettori Serial ATA3

(SATA3\_1\_2: vedi p.2 Nr. 18)

(SATA3\_3\_4: vedi p.2 Nr. 17)

(SATA3\_5\_6: vedi p.2 Nr. 16)

(SATA3\_A1\_A2: vedi p.2 Nr. 15)



Questi otto connettori Serial ATA3 (SATA3) supportano cavi dati SATA per dispositivi di immagazzinamento interni. SATA3 (SATA3) supportano cavi SATA per dispositivi di memoria interni. L'interfaccia SATA3 attuale permette velocità di trasferimento dati fino a 6.0 Gb/s.

### Cavi dati Serial ATA (SATA)

(Opzionale)



Una o altra estremità del cavo di dati SATA può essere collegata al disco rigido SATA3 o al connettore di SATA3 su questa cartolina base.

### Cavo d'alimentazione

#### Serial ATA (SATA)

(Opzionale)

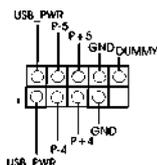


Collegare l'estremità nera del cavo di alimentazione SATA al connettore di alimentazione del drive. Poi connettete l'estremità bianca del cavo di alimentazione SATA al connettore power dell'alimentatore.

### Collettore USB 2.0

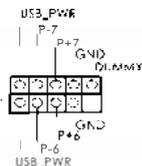
(9-pin USB4\_5)

(vedi p.2 Nr. 26)



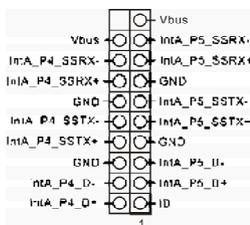
Oltre alle quattro porte USB 2.0 predefinite nel pannello I/O, la scheda madre dispone di due intestazioni USB 2.0. Ciascuna intestazione USB 2.0 supporta due porte USB 2.0.

(9-pin USB6\_7)  
(vedi p.2 Nr. 25)

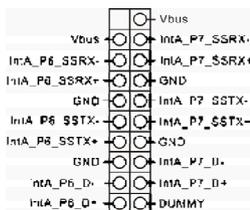


### Collettore USB 3.0

(19-pin USB3\_4\_5)  
(vedi p.2 Nr. 12)



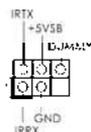
(19-pin USB3\_6\_7)  
(vedi p.2 Nr. 11)



Oltre alle quattro porte USB 3.0 standard del pannello I/O, la scheda madre dispone di due intestazioni USB 3.0. Ciascuna intestazione USB 3.0 supporta due porte USB 3.0.

### Collettore modulo infrarossi

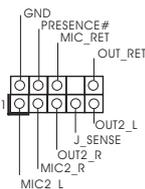
(5-pin IR1)  
(vedi p.2 Nr. 32)



Questo collettore supporta moduli ad infrarossi optional per la trasmissione e la ricezione senza fili.

### Connettore audio sul pannello frontale

(9-pin HD\_AUDIO1)  
(vedi p.2 Nr. 34)



È un'interfaccia per il cavo del pannello audio. Che consente connessione facile e controllo dei dispositivi audio.



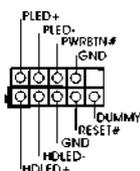
1. La caratteristica HDA (High Definition Audio) supporta il rilevamento dei connettori, però il pannello dei cavi sul telaio deve supportare la funzione HDA (High Definition Audio) per far sì che questa operi in modo corretto. Attenersi alle istruzioni del nostro manuale e del manuale del telaio per installare il sistema.
2. Se si utilizza un pannello audio AC'97, installarlo nell'intestazione audio del pannello anteriore, come indicato di seguito:

- A. Collegare Mic\_IN (MIC) a MIC2\_L.
- B. Collegare Audio\_R (RIN) a OUT2\_R e Audio\_L (LIN) ad OUT2\_L.
- C. Collegare Ground (GND) a Ground (GND).
- D. MIC\_RET e OUT\_RET sono solo per il pannello audio HD. Non è necessario collegarli per il pannello audio AC'97.
- E. Per attivare il microfono frontale.  
 Sistema operativo Windows® XP / XP 64-bit:  
 Selezionare "Mixer". Selezionare "Recorder" (Registratore). Poi, fare clic su "FrontMic" (Microfono frontale).  
 Sistema operativo Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit:  
 Andare alla scheda "FrontMic" (Microfono frontale) del pannello di controllo Realtek. Regolare la voce "Recording Volume" (Volume registrazione).

### Collettore pannello di sistema

(9-pin PANEL1)

(vedi p.2 Nr. 28)



Questo collettore accomoda diverse funzioni di sistema pannello frontale.



Collegare l'interruttore d'alimentazione, l'interruttore di ripristino, l'indicatore di stato del sistema del pannello frontale del telaio a questo header in base all'assegnazione dei pin definita di seguito. Determinare i pin positivi e negativi prima di collegare i cavi.

#### **PWRBTN (interruttore d'alimentazione):**

Va collegato all'interruttore d'alimentazione del pannello frontale del telaio. Usando l'interruttore d'alimentazione si può configurare il modo in cui si spegne il sistema.

#### **RESET (interruttore di ripristino):**

Va collegato all'interruttore di ripristino del pannello frontale del telaio. Premere l'interruttore di ripristino per riavviare il sistema se il computer si blocca e non riesce ad eseguire un normale riavvio.

#### **PLED (LED alimentazione del sistema):**

Va collegato all'indicatore di stato d'alimentazione del pannello frontale del telaio. Il LED è acceso quando il sistema è operativo. Il LED continua a lampeggiare quando il sistema è in stato di standby S1. Il LED è spento quando il sistema è in stato di sospensione /ibernazione S3/S4 oppure spento (S5).

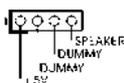
### HDLED (LED attività disco rigido):

Va collegato al LED attività disco rigido del pannello frontale del telaio. Il LED è acceso quando disco rigido legge e scrive i dati.

Il design del pannello frontale può variare in base ai telai. Il modulo di un pannello frontale può consistere di: interruttore d'alimentazione, interruttore di ripristino, LED d'alimentazione, LED attività disco rigido, casse, eccetera. Quando si collega il modulo del pannello frontale a questo header, assicurarsi che l'assegnazione dei fili e dei pin sia fatta corrispondere in modo appropriato.

### Collettore casse telaio

(4-pin SPEAKER1)  
(vedi p.2 Nr. 19)



Collegare le casse del telaio a questo collettore.

### LED di accensione

(3-pin PLED1)  
(vedi p.2 Nr. 30)



Collegare il LED di accensione chassi per indicare lo stato di alimentazione del sistema. Il LED è acceso quando il sistema è in funzione. Il LED continua a lampeggiare in stato S1. Il LED è spento in stato S3/S4 o S5 (spegnimento).

### Collettori Chassis ed alimentazione ventola

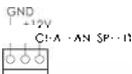
(4-pin CHA\_FAN1)  
(vedi p.2 Nr. 20)



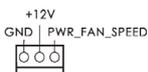
(3-pin CHA\_FAN2)  
(vedi p.2 Nr. 6)



(3-pin CHA\_FAN3)  
(vedi p.2 Nr. 24)



(3-pin PWR\_FAN1)  
(vedi p.2 Nr. 9)

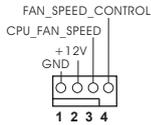


Collegare i cavi della ventola ai corrispondenti connettori facendo combaciare il cavo nero col pin di terra. La velocità della ventola CHA\_FAN1/2/3 può essere controllata tramite UEFI o AXTU.

### Connettore ventolina CPU

(4-pin CPU\_FAN1)

(vedi p.2 Nr. 4)



Collegare il cavo della ventolina CPU a questo connettore e far combaciare il filo nero al pin terra.



Sebbene la presente scheda madre disponga di un supporto per ventola CPU a 4 piedini (ventola silenziosa), la ventola CPU a 3 piedini è in grado di funzionare anche senza la funzione di controllo della velocità della ventola. Se si intende collegare la ventola CPU a 3 piedini al connettore della ventola CPU su questa scheda madre, collegarla ai piedini 1-3.

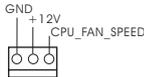
**Piedini 1-3 collegati** ←

Installazione della ventola a 3 piedini



(3-pin CPU\_FAN2)

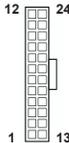
(vedi p.2 Nr. 5)



### Connettore alimentazione ATX

(24-pin ATXPWR1)

(vedi p.2 Nr. 10)



Collegare la sorgente d'alimentazione ATX a questo connettore.



Con questa scheda madre, c'è in dotazione un connettore elettrico ATX a 24 pin, ma può funzionare lo stesso se si adotta un alimentatore ATX a 20 pin. Per usare l'alimentatore ATX a 20 pin, collegare l'alimentatore con il Pin 1 e il Pin 13.

Installazione dell'alimentatore ATX a 20 pin



### Connettore ATX 12 V

(8-pin ATX12V1)

(vedi p.2 Nr. 1)



Collegare un alimentatore ATX 12 V a questo connettore.



Sebbene questa schedamadre fornisca un connettore elettrico 8-pin ATX 12V, l'unità può ancora essere funzionante se viene utilizzata una fornitura elettrica tradizionale a 4-pin ATX 12V. Per usare tale fornitura elettrica 4-pin ATX 12V, prego collegare la presa elettrica al Pin 1 e Pin 5.

Installazione elettrica 4-Pin ATX 12V

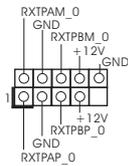


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### Intestazione IEEE 1394

(9-pin FRONT\_1394)

(vedi p.2 Nr. 33)



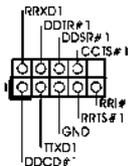
Accanto alla porta di default IEEE 1394 sul pannello I/O, e' presente un'intestazione IEEE 1394 (FRONT\_1394) sulla scheda madre. Questa intestazione IEEE 1394 puo' supportare una porta IEEE 1394.

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### Collettore porta COM

(9-pin COM1)

(vedi p.2 Nr. 31)



Questo collettore porta COM è utilizzato per supportare il modulo porta COM.

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### Connettore modulo infrarosso consumer

(4-pin CIR1)

(vedi p.2 Nr. 27)



Questo connettore può essere utilizzato per collegare ricevitore remoto.

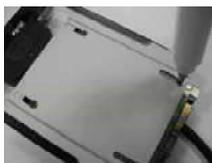
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## Guida all'installazione del pannello frontale USB 3.0

**Punto 1** Preparare il pannello frontale USB 3.0 fornito in dotazione, quattro viti HDD e sei viti telaio.



**Punto 2** Fissare l'unità HDD/SSD 2,5" al pannello frontale USB 3.0 usando quattro viti HDD.



**Punto 3** Installare il pannello frontale USB 3.0 nell'alloggio unità 2,5" del telaio.



**Punto 4** Fissare il pannello frontale USB 3.0 all'alloggio unità usando sei viti telaio.



**Punto 5** Collegare il cavo del pannello frontale USB 3.0 al connettore USB 3.0 (USB3\_4\_5 o USB3\_6\_7) della scheda madre.



**Punto 6** Il pannello frontale USB 3.0 è pronto all'uso.



## Guida di installazione del supporto USB 3.0 posteriore

**Punto 1** Svitare le due viti dal pannello USB 3.0 anteriore.



**Punto 2** Collegare il cavo USB 3.0 e il supporto USB 3.0 posteriore.



**Punto 3** Avvitare le due viti nel supporto USB 3.0 posteriore.



**Punto 4** Inserire il supporto USB 3.0 posteriore nel telaio.



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## 1.5 Interruttori rapidi

Questa scheda madre ha tre interruttori rapidi: Interruttore di alimentazione, interruttore di reset e interruttore pulizia CMOS, che consentono agli utenti di accendere / spegnere rapidamente o cancellare i valori CMOS.

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**Interruttore**  
(PWRBTN)  
(vedi p.2 Nr. 21)



L'interruttore di alimentazione è un interruttore rapido che consente agli utenti di accendere/spegnere rapidamente il sistema.

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**Interruttore di reset**  
(RSTBTN)  
(vedi p.2 Nr. 22)



L'interruttore di reset è un interruttore rapido che consente agli utenti di resettare rapidamente il sistema.

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**Interruttore pulizia CMOS**  
(CLRBTN)  
(vedi p.3 Nr. 18)



L'interruttore di pulizia CMOS è un interruttore rapido che consente agli utenti di cancellare velocemente i valori CMOS.

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## **2. Informazioni sul BIOS**

La Flash Memory sulla scheda madre contiene le Setup Utility. Quando si avvia il computer, premi <F2> o <Del> durante il Power-On-Self-Test (POST) della Setup utility del BIOS; altrimenti, POST continua con i suoi test di routine. Per entrare il BIOS Setup dopo il POST, riavvia il sistema premendo <Ctl> + <Alt> + <Delete>, o premi il tasto di reset sullo chassis del sistema. Per informazioni più dettagliate circa il Setup del BIOS, fare riferimento al Manuale dell'Utente (PDF file) contenuto nel cd di supporto.

## **3. Software di supporto e informazioni su CD**

Questa scheda madre supporta vari sistemi operativi Microsoft® Windows®: 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit. Il CD di supporto a corredo della scheda madre contiene i driver e utilità necessari a potenziare le caratteristiche della scheda.

Inserire il CD di supporto nel lettore CD-ROM. Se la funzione "AUTORUN" è attivata nel computer, apparirà automaticamente il Menù principale. Se il Menù principale non appare automaticamente, posizionarsi sul file "ASRSetup.exe" nel CESTINO del CD di supporto e cliccare due volte per visualizzare i menù.

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# 1. Introducción

Gracias por su compra de **990FX Extreme9** placa madre, una placa de confianza producida bajo el control de calidad estricto y persistente. La placa madre provee realización excelente con un diseño robusto conforme al compromiso de calidad y resistencia de ASRock.

Esta Guía rápida de instalación contiene una introducción a la placa base y una guía de instalación paso a paso. Puede encontrar una información más detallada sobre la placa base en el manual de usuario incluido en el CD de soporte.



Porque las especificaciones de la placa madre y el software de BIOS podrían ser actualizados, el contenido de este manual puede ser cambiado sin aviso. En caso de cualquier modificación de este manual, la versión actualizada estará disponible en el website de ASRock sin previo aviso. También encontrará las listas de las últimas tarjetas VGA y CPU soportadas en la página web de ASRock.

Website de ASRock <http://www.asrock.com>

Si necesita asistencia técnica en relación con esta placa base, visite nuestra página web con el número de modelo específico de su placa. [www.asrock.com/support/index.asp](http://www.asrock.com/support/index.asp)

## 1.1 Contenido de la caja

Placa base **990FX Extreme9** (Factor forma ATX)

Guía de instalación rápida de **990FX Extreme9**

CD de soporte de **990FX Extreme9**

Una tarjeta ASRock SLI\_Bridge\_2S

Una tarjeta SLI-2S1S Bridge de 3 direcciones de ASRock

Seises cables de datos Serial ATA (SATA) (Opcional)

Dos cables de alimentación HDD Serial ATA (SATA) (Opcional)

Una protección I/O

Una panel frontal USB 3.0 con rack para discos duros/unidades de estado sólido (SSD) de 2,5"

Cuatro de disco duro tornillos

Seises chasis tornillos

Una Soporte USB 3.0 posterior



### ASRock le recuerda...

Para mejorar el rendimiento en Windows® 8 / 8 64 bits / 7 / 7 64 bits / Vista™ / Vista™ 64 bits, es recomendable establecer la opción del BIOS de la configuración de almacenamiento en el modo AHCI. Para obtener detalles sobre la configuración del BIOS, consulte el "Manual del usuario" que se encuentra en nuestro CD de soporte.

## 1.2 Especificación

<b>Plataforma</b>	<ul style="list-style-type: none"><li>- Factor forma ATX</li><li>- Diseño de condensadores de oro de calidad superior (condensadores de polímero conductor de alta calidad de fabricación 100% japonesa)</li><li>- Tapa de filtros múltiples (MFC) (filtra ruidos distintos mediante 3 condensadores distintos: tapa sólida DIP, POSCAP y MLCC)</li></ul>
<b>Procesador</b>	<ul style="list-style-type: none"><li>- Compatibilidad con procesadores con conector AM3+</li><li>- Compatibilidad con procesadores con conector AM3: procesador AMD Phenom™ II X6 / X4 / X3 / X2 (excepto 920 / 940) / Athlon II X4 / X3 / X2 / Sempron</li><li>- Compatible con CPU de ocho núcleo</li><li>- Con soporte UCC (Unlock CPU Core)</li><li>- Diseño de alimentación digital</li><li>- Avanzado diseño de fases de potencia 12 + 2</li><li>- Pila dual MOSFET (DSM)</li><li>- Compatible con CPU de hasta 140W</li><li>- Con soporte para tecnología Cool 'n' Quiet™ de AMD</li><li>- FSB 2600 MHz (5.2 GT/s)</li><li>- Admite tecnología de aumento de velocidad liberada</li><li>- Soporta Tecnología de Hiper-Transporte 3.0 (HT 3.0)</li></ul>
<b>Chipset</b>	<ul style="list-style-type: none"><li>- North Bridge: AMD 990FX</li><li>- South Bridge: AMD SB950</li></ul>
<b>Memoria</b>	<ul style="list-style-type: none"><li>- Soporte de Tecnología de Memoria de Doble Canal</li><li>- 4 x DDR3 DIMM slots</li><li>- Apoya DDR3 2450(OC)/2100(OC)/1600/1333/1066 non-ECC, memoria de un-buffered</li><li>- Máxima capacidad de la memoria del sistema: 64GB</li><li>- Compatible con Intel® Extreme Memory Profile (XMP)1.3/1.2</li><li>- Compatible con AMD Memory Profile (AMP)</li></ul>
<b>Ranuras de Expansión</b>	<ul style="list-style-type: none"><li>- 4 x ranuras PCI Express 2.0 x16 (PCIE1: modo x16; PCIE3: modo x4; PCIE4/PCIE5: único a x16 (PCIE4) / x8 (PCIE5) o dual en modo x8/x8)</li><li>- 1 x ranura PCI Express 2.0 x1</li><li>- 1 x ranuras PCI</li><li>- Soporta AMD™ Quad CrossFireX™, 3-Way CrossFireX™ y CrossFireX™</li><li>- Compatible con NVIDIA® Quad SLI™, 3-Way SLI™ y SLI™</li></ul>
<b>Audio</b>	<ul style="list-style-type: none"><li>- 7.1 CH HD Audio con Protección de Contenido</li></ul>

	<p>(Realtek ALC898 Audio Codec)</p> <ul style="list-style-type: none"> <li>- Compatible con audio Blu-ray de alta calidad</li> </ul>
<b>LAN</b>	<ul style="list-style-type: none"> <li>- PCIE x1 Gigabit LAN 10/100/1000 Mb/s</li> <li>- Intel® 82583V</li> <li>- Soporta Wake-On-LAN</li> <li>- Admite PXE</li> </ul>
<b>Entrada/Salida de Panel Trasero</b>	<p>I/O Panel</p> <ul style="list-style-type: none"> <li>- 1 x puerto de ratón PS/2</li> <li>- 1 x puerto de teclado PS/2</li> <li>- 1 x puerto de salida coaxial SPDIF</li> <li>- 1 x puerto de salida óptica SPDIF</li> <li>- 4 x puertos USB 2.0 predeterminados</li> <li>- 4 x puertos USB 3.0 predeterminados</li> <li>- 2 x conectores eSATA3</li> <li>- 2 x puertos LAN RJ-45 con LED (LED de ACCIÓN/ ENLACE y LED de VELOCIDAD)</li> <li>- 1 x puerto IEEE 1394</li> <li>- 1 x conmutador de borrado de memoria CMOS</li> <li>- Conexión de audio: Altavoz lateral / Altavoz trasero / Central/Bajos / Entrada de línea / Altavoz frontal / Micrófono</li> </ul>
<b>SATA3</b>	<ul style="list-style-type: none"> <li>- 6 x conectores AMD SB950 SATA3 de 6,0 Gb/s con funciones RAID (RAID 0, RAID 1, RAID 0+1, JBOD y RAID 5), NCQ, AHCI y de "conexión en caliente"</li> <li>- 2 x conectores ASMedia ASM1061 SATA3 de 6,0 Gb/s con funciones NCQ, AHCI y de "conexión en caliente"</li> </ul>
<b>USB 3.0</b>	<ul style="list-style-type: none"> <li>- 4 x puertos USB 3.0 traseros de Etron EJ188H, compatible con USB 1.1/2.0/3.0 de hasta 5 GB/s</li> <li>- 2 x cabecera USB 3.0 delantera (compatible con 4 puertos USB 3.0) de Etron EJ188H, compatible con USB 1.1/2.0/3.0 de hasta 5 GB/s</li> </ul>
<b>Conectores</b>	<ul style="list-style-type: none"> <li>- 8 x conexiones SATA3, admiten una velocidad de transferencia de datos de hasta 6,0Gb/s</li> <li>- 1 x Cabezal de Módulo Infrarrojos</li> <li>- 1 x Base de conexiones del módulo de infrarrojos para el consumidor</li> <li>- 1 x En-tête de port COM</li> <li>- 1 x cabecera IEEE 1394</li> <li>- 1 x cabecera de indicador LED de encendido</li> <li>- 2 x Conector de ventilador de CPU (1 x 4-pin, 1 x 3-pin)</li> </ul>

	<ul style="list-style-type: none"> <li>- 3 x Conector de ventilador de chasis (1 x 4-pin, 2 x 3-pin)</li> <li>- 1 x Conector de ventilador de alimentación (3-pin)</li> <li>- 24-pin cabezal de alimentación ATX</li> <li>- 8-pin conector de ATX 12V power (Conector de alimentación de alta densidad)</li> <li>- Conector de audio de panel frontal</li> <li>- 2 x Cabezal USB 2.0 (admite 4 puertos USB 2.0 adicionales)</li> <li>- 2 x Cabezal USB 3.0 (admite 4 puertos USB 3.0 adicionales)</li> <li>- 1 x Dr. Debug (indicador LED de avería de 7 segmentos)</li> <li>- 1 x conmutador de encendido con indicador LED</li> <li>- 1 x conmutador de reinicio con indicador LED</li> </ul>
<b>BIOS</b>	<ul style="list-style-type: none"> <li>- 32Mb AMI BIOS legal UEFI AMI compatible con GUI</li> <li>- Soporta "Plug and Play"</li> <li>- ACPI 1.1 compliance wake up events</li> <li>- Soporta "jumper free setup"</li> <li>- Soporta SMBIOS 2.3.1</li> <li>- Múltiple ajuste de CPU, VCCM, NB, SB Voltage</li> </ul>
<b>CD de soport</b>	<ul style="list-style-type: none"> <li>- Controladores, Utilerías, Software de Anti Virus (Versión de prueba), Prueba de CyberLink MediaEspresso 6.5, Google Chrome Browser y Toolbar</li> </ul>
<b>Monitor Hardware</b>	<ul style="list-style-type: none"> <li>- Sensibilidad a la temperatura del procesador</li> <li>- Sensibilidad a la temperatura de la placa madre</li> <li>- Taquímetros de los ventiladores del procesador y del CPU /chasis/alimentacion</li> <li>- Ventilador silencioso para CPU/chasis</li> <li>- Control de ajuste de la velocidad del ventilador de la CPU /chasis/alimentacion</li> <li>- Monitor de Voltaje: +12V, +5V, +3.3V, Vcore</li> </ul>
<b>OS</b>	<ul style="list-style-type: none"> <li>- En conformidad con Microsoft® Windows® 8 / 8 64 bits / 7 / 7 64 bits / Vista™ / Vista™ 64 bits / XP / XP 64 bits</li> </ul>
<b>Certificaciones</b>	<ul style="list-style-type: none"> <li>- FCC, CE, WHQL</li> <li>- Cumple con la directiva ErP/EuP (se requiere una fuente de alimentación que cumpla con la directiva ErP/EuP)</li> </ul>

\* Para más información sobre los productos, por favor visite nuestro sitio web:

<http://www.asrock.com>

### 1.3 Setup de Jumpers

La ilustración muestra como los jumpers son configurados. Cuando haya un jumper-cap sobre los pins, se dice que el jumper está "Short". No habiendo jumper cap sobre los pins, el jumper está "Open". La ilustración muestra un jumper de 3 pins cuyo pin 1 y pin 2 están "Short".



#### Jumper

#### Setting

##### Limpiar CMOS

(CLRCMOS1, jumper de 3 pins)  
(ver p.2, No. 29)



Valor predeterminado



Restablecimiento de la CMOS

Nota: CLRCMOS1 permite borrar los datos de la memoria CMOS. Para borrar los parámetros del sistema y restablecer la configuración predeterminada de los mismos, apague el equipo y desenchufe el cable de alimentación de la toma de corriente eléctrica. Deje que transcurran 15 segundos y, después, utilice un puente para cortocircuitar los contactos 2 y 3 de CLRCMOS1 durante 5 segundos. No borre la memoria CMOS justamente después de actualizar el BIOS. Si necesita borrar la memoria CMOS justamente después de actualizar el BIOS, debe iniciar primero el sistema y, a continuación, cerrarlo antes de llevar a cabo el borrado de dicha memoria. Tenga en cuenta que la contraseña, la fecha, la hora, el perfil predeterminado del usuario, el GUID 1394 y la dirección MAC solamente se borrará si la batería CMOS se quita.



El conmutador Borrar CMOS tiene la misma función que el puente Borrar CMOS.

## 1.4 Cabezales y Conectores en Placas



Los conectores y cabezales en placa NO son puentes. NO coloque las cubiertas de los puentes sobre estos cabezales y conectores. El colocar cubiertas de puentes sobre los conectores y cabezales provocará un daño permanente en la placa base.

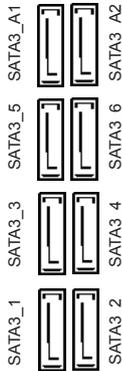
### Conexiones de serie ATA3

(SATA3\_1\_2: vea p.2, N. 18)

(SATA3\_3\_4: vea p.2, N. 17)

(SATA3\_5\_6: vea p.2, N. 16)

(SATA3\_A1\_A2: vea p.2, N. 15)



Estas ocho conexiones de serie ATA3 (SATA3) admiten cables SATA para dispositivos de almacenamiento internos. La interfaz SATA3 actual permite una velocidad de transferencia de 6.0 Gb/s.

### Cable de datos de serie ATA (SATA)

(Opcional)



Cualquier extremo del cable de los datos de SATA puede ser conectado con el disco duro de SATA3 o el conector de SATA3 en esta placa base.

### Cable de alimentación de serie ATA (SATA)

(Opcional)

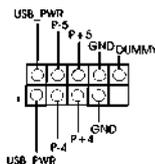


Conecte el extremo negro del cable de SATA al conector de energía de la unidad. A continuación, conecte el extremo blanco del cable de

### Cabezal USB 2.0

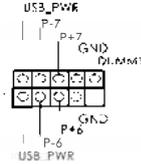
(9-pin USB4\_5)

(vea p.2, N. 26)



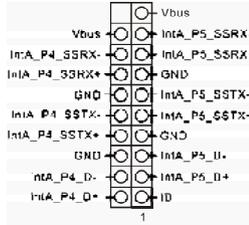
Además de cuatro puertos USB 2.0 predeterminados en el panel de E/S, hay dos bases de conexiones USB 2.0 en esta placa base. Cada una de estas bases de conexiones admite dos puertos USB 2.0.

(9-pin USB6\_7)  
(vea p.2, N. 25)

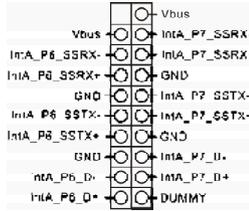


### Cabezal USB 3.0

(19-pin USB3\_4\_5)  
(vea p.2, N. 12)



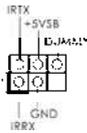
(19-pin USB3\_6\_7)  
(vea p.2, N. 11)



Además de cuatro puertos 3.0 predeterminados situados en el panel E/S, hay dos bases de conexiones USB 3.0 en esta placa base. Cada una de estas bases de conexiones admite dos puertos USB 3.0.

### Cabezal de Módulo Infrarrojos

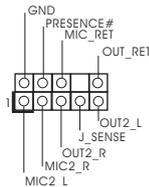
(5-pin IR1)  
(vea p.2, N. 32)



Este cabezal soporta un módulo infrarrojos de transmisión y recepción wireless opcional.

### Conector de audio de panel frontal

(9-pin HD\_AUDIO1)  
(vea p.2, N. 34)



Este es una interface para cable de audio de panel frontal que permite conexión y control conveniente de aparatos de Audio.



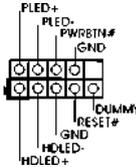
1. El Audio de Alta Definición soporta la detección de conector, pero el cable de panel en el chasis debe soportar HDA para operar correctamente. Por favor, siga las instrucciones en nuestro manual y en el manual de chasis para instalar su sistema.
2. Si utiliza el panel de sonido AC'97, instálelo en la cabecera de sonido del panel frontal de la siguiente manera:

- A. Conecte Mic\_IN (MIC) a MIC2\_L.
- B. Conecte Audio\_R (RIN) a OUT2\_R y Audio\_L (LIN) en OUT2\_L.
- C. Conecte Ground (GND) a Ground (GND).
- D. MIC\_RET y OUT\_RET son sólo para el panel de sonido HD. No necesitará conectarlos al panel de sonido AC'97.
- E. Activación del micrófono frontal.  
En sistemas operativos Windows® XP / XP 64-bit:  
Seleccione "Mixer" (Mezclador). Seleccione "Recorder" (Grabadora). A continuación, haga clic en "FrontMic" (Micrófono frontal).  
En sistemas operativos Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit:  
Acceda a la ficha "FrontMic" (Micrófono frontal) del panel de control Realtek. Ajuste la posición del control deslizante "Recording Volume" (Volumen de grabación).

### Cabezal de panel de sistema

(9-pin PANEL1)

(vea p.2, N. 28)



Este cabezar acomoda varias dunciones de panel frontal de sistema.



Conecte el interruptor de alimentación, el interruptor de restablecimiento y el indicador de estado del sistema situados en el chasis con esta cabecera en función de las siguientes asignaciones de contacto. Preste atención a los contactos positivos y negativos antes de conectar los cables.

#### **PWRBTN (interruptor de alimentación):**

Conecte el interruptor de encendido situado en el panel frontal del chasis. Puede configurar la forma de apagar su sistema mediante el interruptor de alimentación.

#### **RESTABLECER (interruptor de restablecimiento):**

Conecte el interruptor de restablecimiento situado en el panel frontal del chasis. Pulse el interruptor de restablecimiento para restablecer el equipo si se bloquea y no se reinicia con normalidad.

#### **PLED (LED de alimentación del sistema):**

Conecte el indicador de estado de alimentación situado en el panel frontal del chasis. El LED se enciende cuando el sistema esté en funcionamiento. El LED parpadea cuando el sistema se encuentre en estado de suspensión S1. El LED se apaga cuando el sistema se encuentre en estado de suspensión S3/S4 o se apaga (S5).

#### **HDLED (LED de actividad del disco duro):**

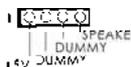
Conecte el LED de actividad de disco duro situado en el panel frontal del chasis. El LED se enciende cuando el disco duro esté leyendo o escribiendo datos.

Es posible que el diseño del panel frontal varíe en función del chasis. Un módulo del panel frontal consiste principalmente de interruptor de alimentación, interruptor de restablecimiento, LED de alimentación, LED de actividad del disco duro, altavoz, etc. Al conectar el módulo del panel frontal del chasis a esta cabecera, asegúrese de que las asignaciones de cables y las asignaciones de contactos coincidan correctamente.

### Cabezal del altavoz del chasis

(4-pin SPEAKER1)

(vea p.2, N. 19)



Conecte el altavoz del chasis a su cabezal.

### Cabecera de indicador LED de encendido

(3-pin PLED1)

(vea p.2, N. 30)



Conecte el indicador LED de encendido del chasis a esta cabecera para conocer el estado de encendido del sistema. El indicador LED se encenderá si el sistema se encuentra en funcionamiento. El indicador LED parpadeará en el estado S1. El indicador LED se apagará en los estados S3/S4 o S5 (apagado).

### Conectores de ventilador de chasis y alimentación

(4-pin CHA\_FAN1)

(vea p.2, N. 20)



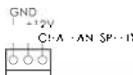
(3-pin CHA\_FAN2)

(vea p.2, N. 6)



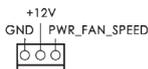
(3-pin CHA\_FAN3)

(vea p.2, N. 24)



(3-pin PWR\_FAN1)

(vea p.2, N. 9)

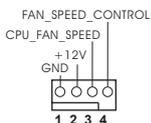


Por favor, conecte los cables del ventilador a los conectores de ventilador, haciendo coincidir el cable negro con la patilla de masa. La velocidad del ventilador CHA\_FAN1/2/3 se puede controlar mediante UEFI o AXTU.

### Conector del ventilador de la CPU

(4-pin CPU\_FAN1)

(vea p.2, N. 4)



Conecte el cable del ventilador de la CPU a este conector y haga coincidir el cable negro con el conector de tierra.



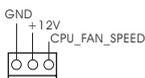
Aunque esta placa base proporciona compatibilidad para un ventilador (silencioso) de procesador de 4 contactos, el ventilador de procesador de 3 contactos seguirá funcionando correctamente incluso sin la función de control de velocidad del ventilador. Si pretende enchufar el ventilador de procesador de 3 contactos en el conector del ventilador de procesador de esta placa base, conéctelo al contacto 1-3.

**Contacto 1-3 conectado** ◀

Instalación del ventilador de 3 contactos

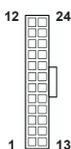


(3-pin CPU\_FAN2)  
(vea p.2, N. 5)



### Cabezal de alimentación ATX

(24-pin ATXPWR1)  
(vea p.2, N. 10)



Conecte la fuente de alimentación ATX a su cabezal.



A pesar de que esta placa base incluye un conector de alimentación ATX de 24 pines, ésta puede funcionar incluso si utiliza una fuente de alimentación ATX de 20 pines tradicional. Para usar una fuente de alimentación ATX de 20 pines, por favor, conecte su fuente de alimentación usando los Pines 1 y 13.

Instalación de una Fuente de Alimentación ATX de 20 Pines



### Conector de ATX 12V power

(8-pin ATX12V1)  
(vea p.2, N. 1)



Tenga en cuenta que es necesario conectar este conector a una toma de corriente con el enchufe ATX 12V, de modo que proporcione suficiente electricidad. De lo contrario no se podrá encender.



Aunque esta placa base proporciona un conector de energía de 8-pin ATX 12V, puede todavía trabajar si usted adopta un fuente tradicional de energía de 4-pin ATX 12V. Para usar el fuente de energía de 4-pin ATX 12V, por favor conecte su fuente de energía junto con Pin 1 y Pin 5.

Instalación de Fuente de Energía de 4-Pin ATX 12V

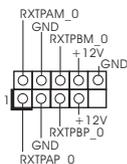


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### Jefe de IEEE 1394

(9-pin FRONT\_1394)

(ver p.2, N. 33)



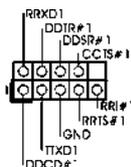
Además de un puerto de IEEE 1394 del defecto en el panel de I/O, hay un jefe de IEEE 1394 (FRONT\_1394) en esta placa base. Este jefe de IEEE 1394 puede apoyar un puerto de IEEE 1394.

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### Cabezal del puerto COM

(9-pin COM1)

(vea p.2, N. 31)



Este cabezal del puerto COM se utiliza para admitir un módulo de puerto COM.

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### Base de conexiones del módulo de infrarrojos para el consumidor

(4-pin CIR1)

(vea p.2, N. 27)



Esta base de conexiones se puede utilizar para conectar receptor remoto.

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## Guía de instalación del Panel frontal USB 3.0

**Paso 1** Prepare el Panel frontal USB 3.0, los cuatro tornillos para unidad HDD y los seis tornillos de fijación al chasis suministrados.



**Paso 2** Atornille la unidad HDD/SSD de 2,5" al Panel frontal USB 3.0 empleando los cuatro tornillos para unidad HDD.



**Paso 3** Instale el Panel frontal USB 3.0 en la bahía de unidad de 2,5" del chasis.



**Paso 4** Atornille el Panel frontal USB 3.0 a la bahía de unidad empleando los seis tornillos de fijación al chasis.



**Paso 5** Conecte el cable del Panel frontal USB 3.0 a la cabecera USB 3.0 (USB3\_4\_5 o USB3\_6\_7) de la placa base.



**Paso 6** El Panel frontal USB 3.0 quedará así listo para su uso.



## Guía de instalación del soporte USB 3.0 posterior

**Paso 1** Desatornille los dos tornillos del panel USB 3.0 frontal.



**Paso 2** Coloque el cable USB 3.0 el soporte USB 3.0 posterior juntos.



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**Paso 3** Atornille los dos tornillos en el soporte USB 3.0 posterior.



**Paso 4** Coloque el soporte USB 3.0 posterior en el chasis.



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## 1.5 Conmutadores rápidos

Esta placa base dispone de tres conmutadores rápidos: conmutador de encendido, conmutador de reinicio y conmutador de borrado de memoria CMOS. Dichos conmutadores permiten al usuario encender / apagar o reiniciar el sistema, o bien borrar el contenido de la memoria CMOS.

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Conmutador de encendido

(PWRBTN)

(vea p.2, N. 21)



El conmutador de reinicio es un conmutador rápido que permite al usuario reiniciar rápidamente el sistema.

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Conmutador de reinicio

(RSTBTN)

(vea p.2, N. 22)



El conmutador de borrado de memoria CMOS es un conmutador rápido que permite al usuario borrar rápidamente el contenido de la memoria CMOS.

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Conmutador de borrado de memoria CMOS

(CLRBTN)

(vea p.3, N. 18)



El conmutador de encendido es un conmutador rápido que permite al usuario encender / apagar rápidamente el sistema.

---

## **2. BIOS Información**

El Flash Memory de la placa madre deposita SETUP Utility. Durante el Power-Up (POST) apriete <F2> o <Del> para entrar en la BIOS. Si usted no oprime ninguna tecla, el POST continúa con sus rutinas de prueba. Si usted desea entrar en la BIOS después del POST, por favor reinicie el sistema apretando <Ctl> + <Alt> + <Borrar>, o apretando el botón Reset en el panel del ordenador. Para información detallada sobre como configurar la BIOS, por favor refiérase al Manual del Usuario (archivo PDF) contenido en el CD.

## **3. Información de Software Support CD**

Esta placa-base soporta diversos tipos de sistema operativo Windows®: 8 / 8 64 bits / 7 / 7 64 bits / Vista™ / Vista™ 64 bits / XP / XP 64 bits. El CD de instalación que acompaña la placa-base trae todos los drivers y programas utilitarios para instalar y configurar la placa-base. Para iniciar la instalación, ponga el CD en el lector de CD y se desplegará el Menú Principal automáticamente si «AUTORUN» está habilitado en su computadora.

Si el Menú Principal no aparece automáticamente, localice y doble-pulse en el archivo "ASRSetup.exe" para iniciar la instalación.

# 1. Введение

Благодарим вас за покупку материнской платы **990FX Extreme9** надежной материнской платы, изготовленной в соответствии с постоянно предъявляемыми ASRock жесткими требованиями к качеству. Она обеспечивает превосходную производительность и отличается отличной конструкцией, которые отражают приверженность ASRock качеству и долговечности.

Данное руководство по быстрой установке включает вводную информацию о материнской плате и пошаговые инструкции по ее установке. Более подробные сведения о плате можно найти в руководстве пользователя на компакт-диске поддержки.



Спецификации материнской платы и программное обеспечение BIOS иногда изменяются, поэтому содержание этого руководства может обновляться без уведомления. В случае любых модификаций руководства его новая версия будет размещена на веб-сайте ASRock без специального уведомления. Кроме того, самые свежие списки поддерживаемых модулей памяти и процессоров можно найти на сайте ASRock.

Адрес веб-сайта ASRock <http://www.asrock.com>

При необходимости технической поддержки по вопросам данной материнской платы посетите наш веб-сайт для получения информации об используемой модели.

[www.asrock.com/support/index.asp](http://www.asrock.com/support/index.asp)

## 1.1 Комплектность

Материнская плата **990FX Extreme9** (форм-фактор ATX)

Руководство по быстрой установке **990FX Extreme9**

Компакт-диск поддержки **990FX Extreme9**

1 x карта ASRock SLI\_Bridge\_2S

1 x карта ASRock 3-Way SLI-2S1S Bridge

6 x кабель данных Serial ATA (SATA) (дополнительно)

2 x кабель питания для жесткого диска Serial ATA (SATA) (дополнительно)

1 x I/O Щит Группы ввода / вывода

1 x Передняя панель USB 3.0 с 2,5" карманами для жестких дисков/ твердотельных накопителей

4 x корпусе Винты

6 x Жесткий диск Винты

1 x Кронштейн заднего разъема USB 3.0



### **ASRock напоминает...**

Для обеспечения максимальной производительности ОС Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit рекомендуется в BIOS выбрать для параметра Storage Configuration (Конфигурация запоминающего устройства) режим AHCI. Подробные сведения о настройке BIOS см. в руководстве пользователя на прилагаемом компакт-диске.

## 1.2 Спецификации

<b>Платформа</b>	<ul style="list-style-type: none"> <li>- форм-фактор ATX</li> <li>- Дизайн конденсатора Premium Gold (100% японские высококачественные конденсаторы на основе проводящих полимеров)</li> <li>- Несколько фильтрующих конденсаторов (MFC) (для фильтрация различных видов шумов используются 3 различных конденсатора: Оксидно-полупроводниковый DIP-конденсатор, POSCAP и MLCC)</li> </ul>
<b>Процессор</b>	<ul style="list-style-type: none"> <li>- Поддержка Socket AM3+ процессоров</li> <li>- Поддержка Socket AM3 процессоров: AMD Phenom™ II X6 / X4 / X3 / X2 (не поддерживаются 920 / 940) / Athlon II X4 / X3 / X2 / Sempron</li> <li>- Поддержка восьмиядерных процессоров</li> <li>- Поддержка UCC (Unlock CPU Core)</li> <li>- Дизайн системы питания DigiPower</li> <li>- Технология Advanced 12 + 2 Power Phase Design</li> <li>- Двухстековый модуль MOSFET (DSM)</li> <li>- Поддержка процессоров мощностью до 140 Вт</li> <li>- Поддержка технологии AMD Cool 'n' Quiet™</li> <li>- FSB 2600 MHz (5.2 GT/s)</li> <li>- Поддержка технологии Untied Overclocking</li> <li>- Поддержка технологии Hyper-Transport 3.0 (HT 3.0)</li> </ul>
<b>Набор микросхем</b>	<ul style="list-style-type: none"> <li>- Северный мост: AMD 990FX</li> <li>- Южный мост: AMD SB950</li> </ul>
<b>Память</b>	<ul style="list-style-type: none"> <li>- Поддержка технологии Dual Channel DDR3 Memory Technology</li> <li>- 4 x гнезда DDR3 DIMM</li> <li>- Поддержите DDR3 2450(OC)/2100(OC)/1600/1333/1066 не-ECC, безбуферная память</li> <li>- Макс. 64 Гб</li> <li>- поддержка профиля Intel® Extreme Memory Profile (XMP) 1.3/1.2</li> <li>- поддержка профиля AMD Memory Profile (AMP)</li> </ul>
<b>Гнезда расширения</b>	<ul style="list-style-type: none"> <li>- 4 x слота PCI Express 2.0 x16 (PCIЕ1: режим x16; PCIЕ3: режим x4; PCIЕ4/PCIЕ5: одна видеокарта в режиме x16 (PCIЕ4) / x8 (PCIЕ5) или две видеокарты в режиме x8/x8)</li> <li>- 1 x гнезда PCI Express 2.0 x1</li> <li>- 1 x гнезда PCI</li> <li>- Поддерживает AMD™ Quad CrossFireX™, 3-Way CrossFireX™ и CrossFireX™</li> <li>- поддержка NVIDIA® Quad SLI™, 3-Way SLI™ и SLI™</li> </ul>
<b>Аудиосистема</b>	<ul style="list-style-type: none"> <li>- 7.1 CH HD Audio HD с Довольной Защитой (Кодер-декодер Audio Realtek ALC898)</li> <li>- Поддержка Premium Blu-ray audio</li> </ul>
<b>ЛВС</b>	<ul style="list-style-type: none"> <li>- PCIЕ x 1 Gigabit LAN 10/100/1000 Mb/s</li> <li>- Intel® 82583V</li> <li>- поддержка Wake-On-LAN</li> <li>- Поддерживается PXE</li> </ul>

<b>Разъемы ввода-вывода на задней панели</b>	I/O Panel - 1 x порт мыши PS/2 - 1 x порт клавиатуры PS/2 - 1 x порт Coaxial SPDIF Out - 1 x порт Optical SPDIF Out - 4 x порта USB 2.0 на задней панели в стандартной конфигурации - 4 x порта USB 3.0 на задней панели в стандартной конфигурации - 2 x eSATA3 порта - 1 x Разъем RJ-45 LAN с светодиодным индикатором (индикатор ACT/LINK и индикатор SPEED) - 1 x порт IEEE 1394 - 1 x кнопка Clear CMOS - Соединитель звуковой подсистемы: боковая колонка / тыльная колонка / центральная / суббуфер / линейный вход / передняя колонка / микрофон
<b>SATA3</b>	- 6 x портов AMD SB950 SATA3 со скоростью передачи данных 6,0 Гбит/с, поддержка функций RAID (RAID 0, RAID 1, RAID 0+1, JBOD и RAID 5), NCQ, AHCI и «горячего подключения» - 2 x портов ASMedia ASM1061 SATA3 со скоростью передачи данных 6,0 Гбит/с, поддержка функций NCQ, AHCI и «горячего подключения»
<b>USB 3.0</b>	- 4 x задних порта USB 3.0 на контроллере Etron EJ188H с поддержкой интерфейсов USB 1.1/2.0/3.0 и скорости передачи данных до 5 Гбит/с - 2 x передний разъем USB 3.0 (поддерживает 4 порта USB 3.0) на контроллере Etron EJ188H с поддержкой интерфейсов USB 1.1/2.0/3.0 и скорости передачи данных до 5 Гбит/с
<b>Колодки и плате</b>	- 8 x разъема SATA3 6,0 Гбит/с - 1 x Колодка инфракрасного модуля - 1 x Датчик пользовательского инфракрасного модуля - 1 x Колодка COM - 1 x Колодка IEEE 1394 - 1 x разъем Power LED - 2 x соединитель CPU FAN (1 x 4-контактный, 1 x 3-контактный) - 3 x соединитель Chassis FAN (1 x 4-контактный, 2 x 3-контактный) - 1 x соединитель Power FAN (3-контактный) - 24-контактный Колодка питания ATX - 8-контактный Разъем ATX 12 В (Разъем питания высокой плотности) - Аудиоразъем передней панели - 2 x Колодка USB 2.0 (одна колодка для поддержки 4 дополнительных портов USB 2.0) - 2 x Колодка USB 3.0 (одна колодка для поддержки 4 дополнительных портов USB 3.0) - 1 x Dr. Debug (7-сегментный ЖК-дисплей) - 1 x кнопка Power Switch со светодиодом

	- 1 х кнопка Reset Switch со светодиодом
<b>BIOS</b>	- 32Mb AMI UEFI Legal BIOS с поддержкой графического интерфейса поль зователя - поддержка "Plug and Play" - ACPI 1.1, включение по событиям - поддержка режима настройки без перемычек - поддержка SMBIOS 2.3.1 - Регулировка напряжений CPU, VCCM, NB, SB
<b>Компактдиск поддержки</b>	- Драйверы, Утилиты, Антивирус (пробная версия), Пробная версия программы CyberLink MediaEspresso 6.5, Google Chrome Browser и Toolbar
<b>Контроль оборудования</b>	- Датчики температуры процессора - Датчики температуры корпуса - Тахометры вентиляторов ЦП/Шасси/Power FAN - Бесшумный вентилятор ЦП/Шасси блока - Мультиконтроль скорости вентилятора ЦП/Шасси/Power - Контроль напряжения: +12V, +5V, +3.3V, Vcore
<b>Операционные системы</b>	- Совместимость с Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit
<b>Сертификаты</b>	- FCC, CE, WHQL - Совместимость с ErP/EuP Ready (требуется блок питания совместимый с ErP/EuP)

\* Для детальной информации продукта, пожалуйста посетите наш вебсайт:  
<http://www.asrock.com>

### 1.3 Установка перемычек

Конфигурация перемычек иллюстрируется на рисунке. Когда перемычка надета на контакты, они называются “замкнутыми” (short). Если на контактах перемычки нет, то они называются “разомкнутыми” (open). На иллюстрации показана 3-контактная перемычка, у которой контакты 1 и 2 замкнуты.



Перемычка	Установка	Описание
Очистка CMOS (CLRCMOS1, 3-контактная перемычка) (см. стр. 2, п. 29)	 Стандартные	 Очистка CMOS

**Примечание.** Контактная колодка CLRCMOS1 позволяет очистить данные CMOS. Для очистки данных и восстановления заводских системных параметров сначала выключите компьютер и отсоедините сетевую вилку кабеля питания от электророзетки. Выждите не менее 15 секунд и колпачковой перемычкой на 5 секунд перемкните штырьки 2 и 3 контактной колодки CLRCMOS1. Однако не производите очистку CMOS непосредственно после обновления BIOS. Если необходимо очистить CMOS сразу же после окончания обновления BIOS, то, перед очисткой CMOS, необходимо сначала выполнить загрузку системы, а затем завершить ее работу. Примите во внимание, что пароль, дата, время, профиль пользователя по умолчанию, идентификатор 1394 GUID и MAC-адрес будут очищены только тогда, когда будет извлечена из своего гнезда батарейка CMOS.



Переключатель Clear CMOS работает так же, как перемычка Clear CMOS.

## 1.4 Колодки и разъемы на плате



Имеющиеся на плате колодки и разъемы НЕ ЯВЛЯЮТСЯ контактами для перемычек. НЕ УСТАНОВЛИВАЙТЕ перемычки на эти колодки и разъемы – это приведет к необратимому повреждению материнской платы!

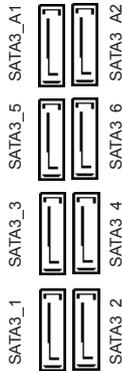
### Разъемы Serial ATA3

(SATA3\_1\_2, см. стр. 2, п. 18)

(SATA3\_3\_4, см. стр. 2, п. 17)

(SATA3\_5\_6, см. стр. 2, п. 16)

(SATA3\_A1\_A2, см. стр. 2, п. 15)



восемь соединителя Serial ATA3 предназначены для подключения внутренних устройств хранения с использованием интерфейсных кабелей SATA3. В настоящее время интерфейс SATA допускает скорость передачи данных до \ 6,0 Гбит/с.

Информационный кабель Serial ATA (SATA) (дополнительно)



Информационный кабель интерфейса SATA3 не является направленным. Любой из его соединителей может быть подключен либо к жесткому диску интерфейса SATA3 либо к материнской плате.

Кабель питания Serial ATA (SATA) (дополнительно)

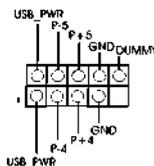


подключите к соединителю питания жесткого диска интерфейса SATA

подключите к источнику питания

Присоедините кабель питания стандарта SATA с помощью соединителей на его черном конце с ответными соединителями питания на каждом из жестких дисков. Затем соедините белый конец кабеля питания стандарта

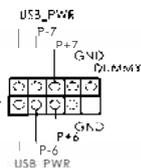
Колодка USB 2.0 (9-контактный USB4\_5) (см. стр. 2, п. 26)



Помимо четыре стандартных портов USB 2.0 на панели ввода-вывода, на данной материнской плате предусмотрено два разъема USB 2.0. Каждый разъем

(9-контактный USB6\_7)

(см. стр. 2, п. 25)

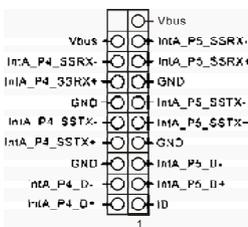


USB 2.0 поддерживает два порта USB 2.0.

Колodka USB 3.0

(19-контактный USB3\_4\_5)

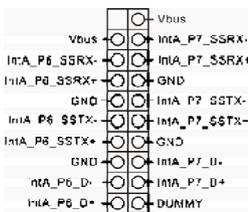
(см. стр. 2, п. 12)



Помимо четыре стандартных портов USB 3.0 на панели ввода-вывода, на данной материнской плате предусмотрено два разъема USB 3.0. Каждый разъем USB 3.0 поддерживает два порта USB 3.0.

(19-контактный USB3\_6\_7)

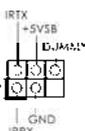
(см. стр. 2, п. 11)



Колodka инфракрасного модуля

(5-контактный IR1)

(см. стр. 2, п. 32)



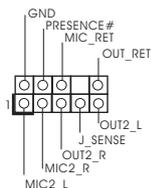
Данная колodka позволяет подключить дополнительный модуль беспроводного инфракрасного приемопередатчика.

Аудиоразъем передней

панели

(9-контактный HD\_AUDIO1)

(см. стр. 2, п.34)



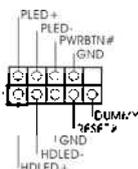
Этот интерфейс предназначен для присоединения аудиокабеля передней панели, обеспечивающего удобное подключение аудиоустройств и управление ими.



1. Система High Definition Audio поддерживает функцию автоматического обнаружения разъемов (Jack Sensing), однако для ее правильной работы кабель панели в корпусе должен поддерживать HDA. При сборке системы следуйте инструкциям, приведенным в нашем руководстве и руководстве пользователя для корпуса.

2. Если вы используете аудиопанель AC'97, подключите ее к колодке аудиоинтерфейса передней панели следующим образом:
- A. Подключите выводы Mic\_IN (MIC) к контактам MIC2\_L.
  - B. Подключите выводы Audio\_R (RIN) к контактам OUT2\_R, а выводы Audio\_L (LIN) к контактам OUT2\_L.
  - C. Подключите выводы Ground (GND) к контактам Ground (GND).
  - D. Контакты MIC\_RET и OUT\_RET предназначены только для аудиопанели HD. При использовании аудиопанели AC'97 подключать их не нужно.
  - E. Процедура активации микрофона приведена ниже.  
Для ОС Windows® XP / XP 64-бита:  
Выберите «Mixer» (Микшер). Выберите «Recorder» (Устройство записи). Затем щелкните «FrontMic» (Передний микрофон).  
Для ОС Windows® 8 / 8 64-бита / 7 / 7 64-бита / Vista™ / Vista™ 64-бита:  
Перейдите к вкладке «FrontMic» (Передний микрофон) в панели управления Realtek. Отрегулируйте уровень «Recording Volume» (Громкость записи).

Колодка системной панели  
(9-контактный PANEL1)  
(см. стр. 2, п. 28)



Данная колодка обеспечивает работу нескольких функций передней панели системы.



Подключите к этому разъему кнопку питания, кнопку сброса и индикатор состояния системы на корпусе в соответствии с указанным ниже назначением контактов. При подключении кабелей необходимо соблюдать полярность положительных и отрицательных контактов.

**PWRBTN (кнопка питания):**

Подключите к этим контактам кнопку питания на передней панели корпуса. Способ выключения системы с помощью кнопки питания можно настроить.

**RESET (кнопка сброса):**

Подключите к этим контактам кнопку сброса на передней панели корпуса. Нажмите кнопку сброса для перезагрузки компьютера, если компьютер «завис» и нормальную перезагрузку выполнить не удается.

**PLED (индикатор питания системы):**

Подключите к этим контактам индикатор состояния питания на передней панели корпуса. Этот индикатор светится, когда система

работает. Индикатор мигает, когда система находится в режиме ожидания S1. Этот индикатор не светится, когда система находится в режиме ожидания S3 или S4, либо выключена (S5).

**HDLED (индикатор активности жесткого диска):**

Подключите к этим контактам индикатор активности жесткого диска на передней панели корпуса. Этот индикатор светится, когда осуществляется считывание или запись данных на жестком диске.

Конструкция передней панели может различаться в зависимости от корпуса. Модуль передней панели в основном состоит из кнопки питания, кнопки сброса, индикатора питания, индикатора активности жесткого диска, динамика и т.п. При подключении к этому разъему модуля передней панели корпуса удостоверьтесь, что провода подключаются к соответствующим контактам.

Колодка динамика корпуса  
(4-контактный SPEAKER1)  
(см. стр. 2, п. 19)



Подключите к этой колодке кабель от динамика на корпусе компьютера.

разъем Power LED  
(3-контактный PLED1)  
(см. стр. 2, п. 30)



Подключите индикатор Power LED к этому разъему для отображения статуса питания системы. Этот светодиод продолжит мигать в режиме S1. Светодиод будет выключен в режимах S3/S4 или S5 (система выключена).

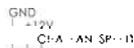
Chassis и Power Fan-соединители  
(4-контактный CHA\_FAN1)  
(см. стр. 2, п. 20)



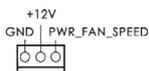
(3-контактный CHA\_FAN2)  
(см. стр. 2, п. 6)



(3-контактный CHA\_FAN3)  
(см. стр. 2, п. 24)

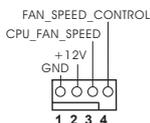


(3-контактный PWR\_FAN1)  
(см. стр. 2, п. 9)



Подключите кабели вентилятора к соединителям и присоедините черный шнур к штырю заземления. Управление скоростью вентиляторов CHA\_FAN1/2/3 может осуществляться посредством UEFI или AXTU.

Разъем вентилятора процессора  
(4-контактный CPU\_FAN1)  
(см. стр. 2, п. 4)



Подключите к этому разъему кабель вентилятора процессора так, чтобы черный провод соответствовал контакту земли.



Данная материнская плата поддерживает вентиляторы процессора с 4-контактным разъемом (функция тихого режима вентилятора), однако вентиляторы с 3-контактным разъемом также будут успешно работать, хотя функция управления скоростью вращения вентилятора окажется недоступной. Если вы хотите подключить вентилятор процессора с 3-контактным разъемом к разъему вентилятора процессора на данной материнской плате, для этого следует использовать контакты 1-3.

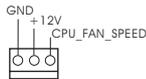
**Контакты 1-3 подключены** ←

Установка вентилятора с 3-контактным разъемом



(3-контактный CPU\_FAN2)

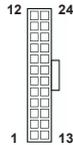
(см. стр. 2, п. 5)



Колодка питания ATX

(24-контактный ATXPWR1)

(см. стр. 2, п. 10)



Подключите к этой колодке кабель питания ATX.



Несмотря на то, что эта материнская плата предусматривает 24-штыревой разъем питания ATX, работа будет продолжаться, даже если адаптируется традиционный 20-штыревой разъем питания ATX. Для использования 20-штыревого разъема питания ATX вставьте источник питания вместе со штекером 1 и штекером 13.

Установка 20-штыревого разъема питания ATX



Колодка питания 12V-ATX

(8-контактный ATX12V1)

(см. стр. 2, п. 1)



Обратите внимание, что к этому разъему необходимо подключить вилку блока питания ATX 12 В, чтобы обеспечить достаточную мощность электропитания. В противном случае включение системы будет невозможно.

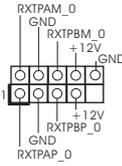


Хотя эта объединительная плата обеспечивает ATX с 8 булавками 12V соединитель власти, это может все еще работать, если Вы принимаете традиционный ATX с 4-Pin 12V электропитание. Чтобы использовать электропитание ATX с 4-Pin, пожалуйста включите ваше электропитание наряду с Булавкой 1 и Прикрепите 5.

ATX С 4-Pin 12V Установка Электропитания

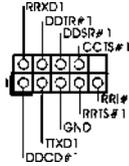


Колодки IEEE 1394  
(9-контактный FRONT\_1394)  
(см. стр. 2, п. 33)



Помимо четырех портов IEEE 1394 на панели ввода-вывода имеются две группы контактов на материнской плате для подключения двух дополнительных портов IEEE 1394 каждая.

Колодка COM-порта  
(9-контактный COM1)  
(см. стр. 2, п. 31)



Данная колодка COM-порта позволяет подключить модуль порта COM.

Датчик пользовательского инфракрасного модуля  
(4-контактный CIR1)  
(см. стр. 2, п. 27)



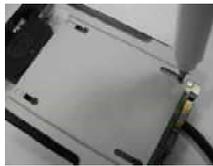
Датчик можно использовать для подключения дистанционный приемник.

## Руководство по установке передней панели USB 3.0

**Шаг 1** Подготовьте комплект передней панели USB 3.0, четыре винта для крепления жесткого диска и шесть винтов для крепления к шасси.



**Шаг 2** Закрепите 2,5"-привод жесткого/ твердотельного диска на передней панели USB 3.0 с помощью четырех винтов.



**Шаг 3** Установите переднюю панель USB 3.0 в отсек 2,5"-накопителя на шасси.



**Шаг 4** Закрепите переднюю панель USB 3.0 в отсеке накопителя с помощью шести винтов.



**Шаг 5** Подключите кабель передней панели USB 3.0 к монтажной колодке порта USB 3.0 (USB3\_4\_5 или USB3\_6\_7) на материнской плате.



**Шаг 6** Передняя панель USB 3.0 готова к использованию.



## Руководство по установке кронштейна заднего разъема USB 3.0

**Шаг 1** Открутите два винта на передней панели USB 3.0.



**Шаг 2** Соедините кабель USB 3.0 и кронштейн разъема USB 3.0.



---

**Шаг 3** Закрутите два винта кронштейна заднего разъема USB 3.0.



**Шаг 4** Вставьте кронштейн заднего разъема USB 3.0 в корпус.



---

## 1.5 Быстрое переключение

На этой материнской плате есть три кнопки для ускорения работы: кнопка питания, кнопка перезагрузки и кнопка для очистки CMOS, которые позволяют пользователям быстро включить/выключить или перезагрузить компьютер, сбросить установки CMOS, соответственно.

---

Power Switch  
(PWRBTN)  
(см. стр. 2, п. 21)



Кнопка Power Switch позволяет быстро включить или выключить систему.

---

Reset Switch  
(RSTBTN)  
(см. стр. 2, п. 22)



Кнопка Reset Switch позволяет быстро перезагрузить систему.

---

Clear CMOS Switch  
(CLRBTN)  
(см. стр. 3, п. 18)



Кнопка Clear CMOS Switch позволяет быстро сбросить установки CMOS.

---

## 2. Информация о BIOS

Утилита настройки BIOS (BIOS Setup) хранится во флэш-памяти на материнской плате. Чтобы войти в программу настройки BIOS Setup, при запуске компьютера нажмите <F2> или <Del> во время самопроверки при включении питания (Power-On-Self-Test – POST). Если этого не сделать, то процедуры тестирования POST будут продолжаться обычным образом. Если вы захотите вызвать BIOS Setup уже после POST, перезапустите систему с помощью клавиш <Ctrl> + <Alt> + <Delete> или нажатия кнопки сброса на корпусе системы. Подробную информацию о программе BIOS Setup вы найдете в Руководстве пользователя (в формате PDF) на компакт-диске поддержки.

## 3. Информация о компакт-диске поддержки с программным обеспечением

Данная материнская плата поддерживает различные операционные системы Microsoft® Windows® : 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit. Поставляемый вместе с ней компакт-диск поддержки содержит необходимые драйверы и полезные утилиты, которые расширяют возможности материнской платы.

Чтобы начать работу с компакт-диском поддержки, вставьте его в дисковод CD-ROM. Если в вашем компьютере включена функция автозапуска (AUTORUN), то на экране автоматически появится главное меню компакт-диска (Main Menu). Если этого не произошло, найдите в папке BIN на компакт-диске поддержки файл ASRSetup.exe и дважды щелкните на нем, чтобы открыть меню.

# 1. Introdução

Gratos por comprar nossa placa-mãe **990FX Extreme9** um produto confiável feito com ASRock um estrito controle de qualidade consistente. Com um excelente desempenho, essa placa é dotada de um projeto robusto que atende a ASRock de compromisso com a qualidade e durabilidade.

Este Guia de Instalação Rápida apresenta a placa-mãe e o guia de instalação passo a passo. Mais informações detalhadas sobre a placa-mãe podem ser encontradas no manual do usuário do CD de suporte.



Porque as especificações da placa mãe e o software de BIOS poderiam ser atualizados, o conteúdo deste manual pode ser cambiado sem aviso. Em caso de qualquer modificação deste manual, a versão atualizada estará disponível no website de ASRock sem prévio aviso. Pode também encontrar as listas das mais recentes placas VGA e das CPUs suportadas no site da web da ASRock.

Website de ASRock <http://www.asrock.com>

Se precisar de apoio técnico em relação a este placa-mãe, por favor visite o nosso sítio da internet para informação específica acerca do modelo que está a utilizar.

[www.asrock.com/support/index.asp](http://www.asrock.com/support/index.asp)

## 1.1 Este pacote contém

Placa-mãe ASRock **990FX Extreme9** (Formato ATX)

Guia de instalação rápida da ASRock **990FX Extreme9**

CD de suporte da placa ASRock **990FX Extreme9**

1 x Placa SLI\_Bridge\_2S ASRock

1 x Placa SLI-2S1S Bridge de Três Vias ASRock

6 x cabo de dados ATA Serial (SATA) (Opcional)

2 x cabos de alimentação para HDD Serial ATA (SATA)

1 x proteção I/O

1 x Pannel USB 3.0 Frontal com suporte para HDD/SSD de 2,5"

4 x Parafusos do HDD

6 x Parafusos do chassis

1 x Suporte USB 3.0 Traseiro



### A ASRock recorda-lhe...

Para obter melhor desempenho em Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit, recomendamos que defina a opção Configuração de Armazenamento na BIOS para o modo AHCI. Para mais detalhes acerca da configuração da BIOS consulte o "Manual de utilizador" no nosso CD de suporte.

## 1.2 Especificações

<b>Plataforma</b>	<ul style="list-style-type: none"><li>- Formato ATX</li><li>- Design de condensadores banhados a ouro de alta qualidade (Condensadores de polímeros condutores de alta qualidade 100% fabricados no Japão)</li><li>- Multiple Filter Cap (MFC) (incluem uma combinação de MLCC altamente condutivo, capacitores DIP e POSCAP)</li></ul>
<b>CPU</b>	<ul style="list-style-type: none"><li>- Suporte para processadores AM3+</li><li>- Suporte para processadores AM3: Processador AMD Phenom™ II X6 / X4 / X3 / X2 (exceto 920 / 940) / Athlon II X4 / X3 / X2 / Sempron</li><li>- Preparado para CPU de oito núcleos</li><li>- Suporta UCC (Unlock CPU Core)</li><li>- Design de Poder Digital</li><li>- Alimentação de 12 + 2 fases</li><li>- MOSFET de pilha dupla (DSM)</li><li>- Suporta CPU até 140W</li><li>- Suporta a tecnologia Cool 'n' Quiet da AMD</li><li>- FSB de 2600 MHz (5,2 GT/s)</li><li>- Suporta a tecnologia Untied Overclocking</li><li>- Suporta a tecnologia Hyper-Transport 3.0 (HT 3.0)</li></ul>
<b>Chipsets</b>	<ul style="list-style-type: none"><li>- North Bridge: AMD 990FX</li><li>- South Bridge: AMD SB950</li></ul>
<b>Memória</b>	<ul style="list-style-type: none"><li>- Suporte à tecnologia de memória de duplo canal</li><li>- 4 x slots de DDR3 DIMM</li><li>- Suporta memória DDR3 2450(OC)/2100(OC)/1600/1333/1066, não ECC, sem tampão</li><li>- Capacidade máxima de memória do sistema: 64GB</li><li>- Suporta Extreme Memory Profile (XMP)1.3/1.2 da Intel®</li><li>- Suporta Perfil de Memória AMD (AMP)</li></ul>
<b>Slots de Expansão</b>	<ul style="list-style-type: none"><li>- 4 x slots de PCI Express 2.0 x16 (PCIE1: modo x16; PCIE3: modo x4; PCIE4/PCIE5: único em x16 (PCIE4) / x8 (PCIE5) ou duplo em x8/x8)</li><li>- 1 x slot de PCI Express 2.0 x1</li><li>- 1 x slot de PCI</li><li>- Suporta Quad CrossFireX™, 3-Way CrossFireX™ e CrossFireX™ da AMD</li><li>- Suporta Quad SLI™, 3-Way SLI™ e SLI™ da NVIDIA®</li></ul>
<b>Áudio</b>	<ul style="list-style-type: none"><li>- Áudio HD de 7.1 canais com protecção de conteúdo (Realtek ALC898 Audio Codec)</li></ul>

	- Suporte áudio Blu-ray superior
<b>LAN</b>	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Intel® 82583V - Suporta Wake-On-LAN - Suporta PXE
<b>Entrada/Saída pelo painel</b>	I/O Panel - 1 x porta para mouse PS/2 - 1 x porta para teclado PS/2 - 1 x porta Saída SPDIF (coaxial) - 1 x porta Saída SPDIF (optical) - 4 x portas USB 2.0 padrão - 4 x portas USB 3.0 padrão - 2 x Conector eSATA3 - 1 x porta LAN RJ-45 com LED (LED ACT/LIG e LED VELOCIDADE) - 1 x porta IEEE 1394 - 1 x Interruptor para limpar o CMOS com LED - Ficha de áudio HD: Altifalante lateral/Altifalante traseiro/Central/Baixos/Entrada de linha/Altifalante frontal/Microfone
<b>SATA3</b>	- 6 x conectores SATA3 a 6,0 Gb/s através SB950 da AMD, com suporte para RAID (RAID 0, RAID 1, RAID 0+1, JBOD e RAID 5), NCQ, AHCI e funções Hot Plug - 2 x conectores SATA3 a 6,0 Gb/s através ASM1061 da ASMedia, com suporte para NCQ, AHCI e funções Hot Plug
<b>USB3.0</b>	- 4 x Portas USB 3.0 traseiras através de EJ188H da Etron, com suporte para USB 1.1/2.0/3.0 até 5Gb/s - 2 x Conector USB 3.0 frontal (suporta 4 portas USB 3.0) através de EJ188H da Etron, com suporte para USB 1.1/2.0/3.0 até 5Gb/s
<b>Conectores</b>	- 8 x conectores SATA3, suporte a taxa de transferência de dados de até 6,0 Gb/s - 1 x Conector do módulo de infravermelho - 1 x Conector CIR - 1 x conector de porta COM - 1 x Conector IEEE 1394 - 1 x Conector para LED de alimentação - 2 x Conector do ventilador da CPU (1 x 4 pinos, 1 x 3 pinos) - 3 x Conector do ventilador da chassis (1 x 4 pinos, 2 x 3 pinos) - 1 x Conector do ventilador da energia (3 pinos)

	<ul style="list-style-type: none"> <li>- Conector de força do ATX de 24 pinos</li> <li>- Conector ATX 12 V de 8 pinos (Conector de alimentação de alta densidade)</li> <li>- Conector Áudio do painel frontal</li> <li>- 2 x cabezal USB 2.0 (suporta 4 portas USB 2.0)</li> <li>- 2 x cabezal USB 3.0 (suporta 4 portas USB 3.0)</li> <li>- 1 x Dr. Debug com LED</li> <li>- 1 x Interruptor de alimentação LED</li> <li>- 1 x Interruptor de reposição LED</li> </ul>
<b>BIOS</b>	<ul style="list-style-type: none"> <li>- 32Mb BIOS UEFI oficial da AMI com suporte para GUI</li> <li>- Suporta dispositivos "Plug and Play"</li> <li>- ACPI 1.1 atendendo a eventos de "wake up"</li> <li>- Suporta dispositivos sem jumper</li> <li>- Suporte para SMBIOS 2.3.1</li> <li>- CPU, VCCM, NB, SB Voltage Multi-adjustment</li> </ul>
<b>CD de suporte</b>	<ul style="list-style-type: none"> <li>- Controladores, utilitários, software antivírus (Experimentacao Versao), CyberLink MediaEspresso 6.5 versão de demonstração, Navegador Google Chrome e Barra de Ferramentas</li> </ul>
<b>Monitor do HW</b>	<ul style="list-style-type: none"> <li>- Sensores de temperature do procesador</li> <li>- Medição de temperatura da placa-mãe</li> <li>- Tacômetros de ventilador do Processador/chassis/energia</li> <li>- Ventoinha silenciosa para a CPU/chassis</li> <li>- CPU/Chassis/energia Fan Controle Multi-Velocidade</li> <li>- Monitoramento de voltagem : +12 V, +5 V, +3.3 V, Vcore</li> </ul>
<b>Sistema Operacional</b>	<ul style="list-style-type: none"> <li>- Microsoft® Windows® 8 / 8 de 64 bits / 7 / 7 de 64 bits / Vista™ / Vista™ de 64 bits / XP / XP de 64 bits</li> </ul>
<b>Certificações</b>	<ul style="list-style-type: none"> <li>- FCC, CE, WHQL</li> <li>- "ErP/EuP Ready" (é necessária alimentação eléctrica "ErP/ EuP Ready")</li> </ul>

\* Para informações mais detalhadas por favor visite o nosso sítio Web: <http://www.asrock.com>

### 1.3 Configuração dos Jumpers

A ilustração mostra como os jumpers são configurados. Quando há uma capa de jumpers sobre os pinos, diz-se que o jumper está “curto”. Não havendo capa sobre os pinos, o jumper está “aberto”. A ilustração mostra um jumper de 3 pinos em que os pinos 1 e 2 estão “curtos” quando a capa de jumper estiver colocada sobre esses 2 pinos.



#### Jumper

#### Configuração

##### Restaurar CMOS

(CLRCMOS1, jumper de 3 pinos)

(veja a folha 2, No. 29)



Configuração-padrão



Limpar o CMOS

Nota: CLRCMOS1 permite você limpar os dados em CMOS. Os dados em CMOS incluem informações da configuração do sistema como: por exemplo a senha do sistema, data, tempo, e os parâmetros da configuração do sistema. Para limpar e reconfigurar os parâmetros do sistema a configuração inicial da fábrica, por favor desligue o cabo de força, ponha em curto-circuito os pin 2 e pin 3 de CLRCMOS1 por mais de 5 segundos para limpar o CMOS usando um jumper. Por favor lembrese de remover o jumper depois de limpar o CMOS. Se precisar limpar o CMOS ao concluir a atualização do BIOS, deverá reiniciar o sistema primeiro e, em seguida, desligá-lo antes de executar a ação de limpeza o CMOS. Tenha em atenção que a palavra-passe, data, hora, perfil predefinido de utilizador, 1394 GUID e endereço MAC apenas serão limpos se a bateria do CMOS for retirada.



O Interruptor para limpar o CMOS tem a mesma função do Jumper para limpar o CMOS.

## 1.4 Conectores



Os conectores NÃO SÃO jumpers. NÃO coloque capas de jumper sobre estes conectores. A colocação de pontos de jumper sobre os conectores causará danos irreversíveis à placa-mãe.

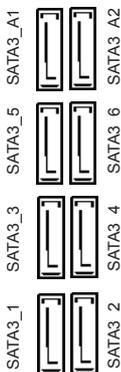
### Conectores ATA3 Serial

(SATA3\_1\_2: veja a folha 2, No. 18)

(SATA3\_3\_4: veja a folha 2, No. 17)

(SATA3\_5\_6: veja a folha 2, No. 16)

(SATA3\_A1\_A2: veja a folha 2, No. 15)



Estes sete conectores Serial ATA (SATA3) suportam unidades de disco rígido SATA ou SATA3 como dispositivos de armazenamento internos. A atual interface SATA3 permite uma taxa de transferência de dados de até 6.0 Gb/s.

Cabo de dados  
ATA (SATA)  
(opcional)



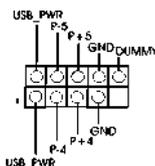
Tanto a saída do cabo de Serial dados SATA pode ser conectado ao disco rígido SATA3 quanto o conector SATA3 na placa mãe.

Cabo de Alimentação  
ATA (SATA)  
(opcional)



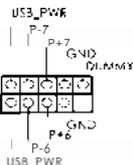
Conecte a saída de cor preta do cabo de alimentação SATA ao conector de alimentação cada acionador. Em seguida, conecte a saída branca do cabo de alimentação SATA ao conector de alimentação da fonte.

Cabezal USB 2.0  
(USB4\_5 de 9 pinos)  
(veja a folha 2, No. 26)



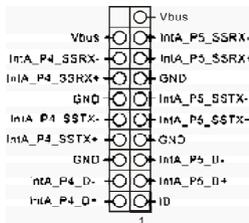
Além das quatro portas USB 2.0 por defeito no painel de entrada/saída, há dois ligações USB 2.0 nesta placa-mãe. Cada ligação USB 2.0 pode suportar duas portas USB 2.0.

(USB6\_7 de 9 pinos)  
(veja a folha 2, No. 25)

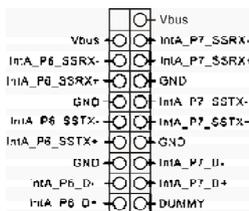


### Cabezal USB 3.0

(USB3\_4\_5 de 19 pinos)  
(veja a folha 2, No. 12)



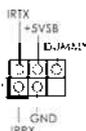
(USB3\_6\_7 de 19 pinos)  
(veja a folha 2, No. 11)



Além das quatro portas USB 3.0 por defeito no painel de entrada/saída, há dois ligações USB 3.0 nesta placa-mãe. Cada ligação USB 3.0 pode suportar dois portas USB 3.0.

### Conector do módulo de infravermelho

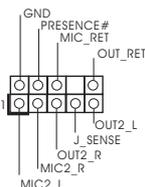
(IR1 de 5 pinos)  
(veja a folha 2, No. 32)



Este conector suporta um módulo de infravermelho para transmissão e recepção sem fio, opcional.

### Conector Áudio do painel frontal

(HD\_AUDIO1 de 9 pinos)  
(veja a folha 2, No. 34)



Esta é uma interface para o cabo de áudio no painel frontal, que permite uma conexão e controle convenientes dos dispositivos de áudio.

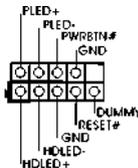


1. Áudio de elevada definição que suporta a sensibilidade da tomada, mas o fio do painel existente no chassis tem de suportar HDA para funcionar correctamente. Siga s instruções que aparecem no manual e no manual do chassis para instalar o sistema.
2. Se utilizar o painel de áudio AC'97, instale-o no cabeçalho de áudio do painel frontal, como a figura abaixo mostra:

- A. Ligue o Mic\_IN (MIC) ao MIC2\_L.
- B. Ligue o Audio\_R (RIN) ao OUT2\_R e o Audio\_L (LIN) ao OUT2\_L.
- C. Ligue o Ground (GND) ao Ground (GND).
- D. MIC\_RET e OUT\_RET são apenas para o painel de áudio HD. Não necessita de os ligar para o painel de áudio AC'97.
- E. Para activar o microfone frontal.
  - Para os Sistemas Operativos Windows® XP / XP 64 bits:
    - Seleccione "Misturador". Seleccione "Gravador". Depois clique em "Microfone frontal".
  - Para os Sistemas Operativos Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit:
    - Aceda ao separador "Microfone frontal" no painel de Controlo Realtek. Ajuste o "Volume de gravação".

### Conector do painel do sistema

(PANEL1 de 9 pinos)  
(veja a folha 2, No. 28)



Este conector acomoda várias funções do painel frontal do sistema.



Ligue o botão de alimentação, o botão de reposição e o indicador do estado do sistema no chassis a este conector de acordo com a descrição abaixo. Tenha em atenção os pinos positivos e negativos antes de ligar os cabos.

#### **PWRBTN (Botão de alimentação):**

Ligue ao botão de alimentação no painel frontal do chassis. Pode configurar a forma para desligar o seu sistema através do botão de alimentação.

#### **RESET (Botão de reposição):**

Ligue ao botão de reposição no painel frontal do chassis. Prima o botão de reposição para reiniciar o computador caso este bloqueie e não seja possível reiniciar normalmente.

#### **PLED (LED de alimentação do sistema):**

Ligue ao indicador do estado da alimentação no painel frontal do chassis. O LED ficará acesso quando o sistema estiver em funcionamento. O LED ficará intermitente quando o sistema estiver no estado de suspensão S1. O LED ficará desligado quando o sistema estiver nos estados de suspensão S3/S4 ou desligado (S5).

#### **HDLED (LED de actividade do disco rígido):**

Ligue ao LED de actividade do disco rígido no painel frontal do chassis. O LED ficará acesso quando o disco rígido estiver a ler ou a escrever dados.

O design do painel frontal poderá variar dependendo do chassis. Um

módulo de painel frontal consiste principalmente em um botão de alimentação, um botão de reposição, um LED de alimentação, um LED de actividade do disco rígido, um altifalante, etc. Ao ligar o seu módulo de painel frontal do chassis a este conector, certifique-se que os fios e os pinos têm uma correspondência exacta.

### Conector do alto-falante do chassis

(SPEAKER1 de 4 pinos)  
(veja a folha 2, No. 19)



Ligue o alto-falante do chassis neste conector.

### Conector do LED de alimentação

(PLED1 de 3 pinos)  
(veja a folha 2, No. 30)



Ligue o LED de alimentação do chassis a este conector para indicar o estado de alimentação do sistema. O LED ficará aceso quando o sistema estiver em funcionamento. O LED fica intermitente no estado S1. O LED fica desligado nos estados S3/S4 ou no estado S5 (desligado).

### Conector do ventilador do chassis/energia

(CHA\_FAN1 de 4 pinos)  
(veja a folha 2, No. 20)

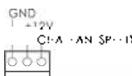


Ligue o cabo do ventilador neste conector, coincidindo o fio preto com o pino de aterramento.

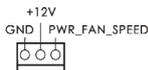
(CHA\_FAN2 de 3 pinos)  
(veja a folha 2, No. 6)



(CHA\_FAN3 de 3 pinos)  
(veja a folha 2, No. 24)

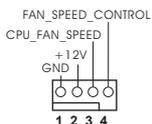


(PWR\_FAN1 de 3 pinos)  
(veja a folha 2, No. 9)



### Conector do ventilador da CPU

(CPU\_FAN1 de 4 pinos)  
(veja a folha 2, No. 4)



Ligue o cabo do ventilador da CPU, coincidindo o fio preto com o pino de aterramento.



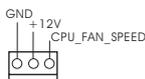
Apesar de esta placa-mãe possuir 4 apoios para uma ventoinha de CPU (Ventoinha silenciosa), uma ventoinha de 3 pinos para CPU poderá funcionar mesmo sem a função de controlo de velocidade da ventoinha. Se pretender ligar uma ventoinha de 3 pinos para CPU ao conector de ventoinha do CPU nesta placa-mãe, por favor, ligue-a aos pinos 1-3.

**Pinos 1-3 ligados** ←

Instalação de Ventoinha de 3 pinos

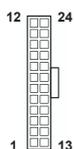


(CPU\_FAN2 de 3 pinos)  
(veja a folha 2, No. 5)



## Conector de força do ATX

(ATXPWR1 de 24 pinos)  
(veja a folha 2, No. 10)



Ligue a fonte de alimentação ATX neste conector.



Embora esta placa-mãe providencie um conector de energia ATX de 24 pinos, pode apesar disso funcionar com a adaptação de uma fonte de energia tradicional de 20 pinos. Para usar a fonte de alimentação de 29 pinos, por favor ligue a sua fonte de alimentação com o Pino 1 e o Pino 13.

Instalação da Fonte de alimentação ATX de 20 Pinos



## Conector de força do ATX 12V

(ATX12V1 de 8 pinos)  
(veja a folha 2, No. 1)



Ligue a fonte de alimentação ATX 12V neste conector.



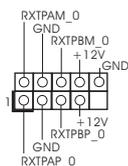
Embora esta placa-mãe providencie um conector de energia ATX 12V de 8 pinos, pode apesar disso funcionar com a adaptação de uma fonte de energia tradicional de 4 pinos. Para usar a fonte de alimentação de 4 pinos, por favor ligue a sua fonte de alimentação com o Pino 1 e o Pino 5.

Instalação da Fonte de alimentação ATX 12V de 4 Pinos



## Cabezal IEEE 1394

(FRONT\_1394 de 9 pinos)  
(veja a folha 2, No. 33)



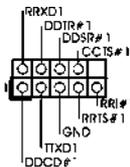
Além das uns porta IEEE 1394 por defeito no painel de entrada/saída, há uns ligações IEEE 1394 nesta placa-mãe. Cada ligação IEEE 1394 pode suportar uns porta IEEE 1394.

---

### Conector de porta de série

(COM1 de 9 pinos)

(veja a folha 2, No. 31)



Este conector COM1 suporta um módulo de porta de série.

---

### Conector do módulo de infravermelhos

(CIR1 de 4 pinos)

(veja a folha 2, No. 27)



Este conector pode ser utilizado para ligar o receptor do controle remoto.

## O Guia de Instalação do Painel USB 3.0 Frontal

**Passo 1** Prepare o Painel USB 3.0 Frontal, quatro parafusos do HDD e seis parafusos do chassis.



**Passo 2** Aparafuse o HDD/SSD de 2,5" ao Painel USB 3.0 Frontal com quatro parafusos do HDD.



**Passo 3** Instale o Painel USB 3.0 Frontal no compartimento de unidade de 2,5" do chassis.



**Passo 4** Aparafuse o Painel USB 3.0 Frontal ao compartimento da unidade com seis parafusos do chassis.



**Passo 5** Ligue o cabo USB 3.0 Frontal ao conector USB 3.0 (USB3\_4\_5 ou USB3\_6\_7) da placa principal.



**Passo 6** O Painel USB 3.0 Frontal está pronto a ser utilizado.



## O Guia de Instalação do Suporte USB 3.0 Traseiro

**Passo 1** Desaperte os dois parafusos no Painel USB 3.0 Frontal.



**Passo 2** Coloque o cabo USB 3.0 e o suporte USB 3.0 traseiro em conjunto.



**Passo 3** Aperte os dois parafusos no suporte USB 3.0 traseiro.



**Passo 4** Coloque o suporte USB 3.0 traseiro no chassis.



---

## 1.5 Interruptores inteligentes

A placa principal tem três interruptores inteligentes: interruptor de alimentação, interruptor de reposição e interruptor para limpar o CMOS, que permitem aos utilizadores ligar/desligar ou repor o sistema e limpar os valores CMOS rapidamente.

---

### Interruptor de alimentação

(PWRBTN)

(veja a folha 2, No. 21)



O interruptor de alimentação é um interruptor inteligente, que permite aos utilizadores ligar/desligar o sistema rapidamente.

---

### Interruptor de reposição

(RSTBTN)

(veja a folha 3, No. 22)



O interruptor de reposição é um interruptor inteligente, que permite aos utilizadores repor o sistema rapidamente.

---

### Interruptor para limpar o CMOS

(CLRBTN)

(veja a folha 3, No. 18)



O interruptor para limpar o CMOS é um interruptor inteligente, que permite aos utilizadores limpar os valores CMOS rapidamente.

---

## **2. Informações da BIOS**

O Utilitário de Configuração do BIOS está armazenado no chip FWH do BIOS. Ao iniciar o computador, pressione <F2> ou <Del> durante o Autoteste de iniciação (POST) para acessar o Utilitário de Configuração do BIOS; caso contrário, o POST continuará com as rotinas de teste. Se desejar acessar o Utilitário de Configuração do BIOS depois do POST, reinicie o sistema pressionando <Ctl> + <Alt> + <Del>, ou pressionando o botão de reinício no chassi do sistema. Para as informações detalhadas sobre o Utilitário de Configuração do BIOS, consulte o Manual do Usuário (arquivo PDF) no CD de suporte.

## **3. Informações do CD de Suporte**

Esta placa Mãe suporta vários sistemas operacionais: Microsoft® Windows®: 8 / 8 de 64 bits / 7 / 7 de 64 bits / Vista™ / Vista™ de 64 bits / XP / XP de 64 bits. O CD de instalação que acompanha a placa Mãe contém: drivers e utilitários necessários para um melhor desempenho da placa Mãe. Para começar a usar o CD de instalação, introduza o CD na leitora de CD-ROM do computador. Automaticamente iniciará o menu principal, caso o AUTORUN esteja ativado. Se o menu principal não aparecer automaticamente, explore o CD e execute o "ASRSetup.exe" localizado na pasta BIN.

# 1. Giriş

ASRock'ın kesintisiz titiz kalite denetimi altında üretilen güvenilir bir anakart olan **990FX Extreme9** anakartını satın aldığınız için teşekkür ederiz. ASRock'ın kalite ve dayanıklılık konusundaki kararlılığına uygun güçlü tasarımıyla mükemmel bir performans sunar.

Bu Hızlı Takma Kılavuzu anakarta giriş ve adım adım takma kılavuzu içerir. Anakart hakkında daha ayrıntılı bilgiyi Destek CD'sinde sunulan kullanıcı kılavuzunda bulabilirsiniz.



Anakart özellikleri ve BIOS yazılımı güncelleştirilebileceğinden bu kılavuzun içeriği önceden haber verilmeksizin değişebilir. Bu belgede değişiklik yapılması durumunda, güncellenmiş sürüm ayrıca haber verilmeksizin ASRock web sitesinde sunulur. En son VGA kartlarını ve CPU destek listelerini de ASRock web sitesinde bulabilirsiniz. ASRock web sitesi <http://www.asrock.com>

Bu anakartla ilgili teknik desteğe ihtiyacınız olursa, kullandığınız modele özel bilgiler için lütfen web sitemizi ziyaret edin. [www.asrock.com/support/index.asp](http://www.asrock.com/support/index.asp)

## 1.1 Paket İçindekiler

**990FX Extreme9** Anakart (ATX Form Faktörü)

**990FX Extreme9** Hızlı Takma Kılavuzu

**990FX Extreme9** Destek CD'si

1 x ASRock SLI\_Bridge\_2S Kartı

1 x ASRock 3-Yollu SLI-2S1S Köprü Kart

6 x Seri ATA (SATA) Veri Kablosu (İsteğe Bağlı)

2 x Seri ATA (SATA) HDD Güç Kablosu (İsteğe Bağlı)

1 x G/Ç Panel Kalkanı

1 x 2,5" HDD/SSD Rafı Ön USB 3.0 Panel

4 x HDD Vida

6 x kasaya Vida

1 x Arka USB 3.0 Braketi



### **ASRock Size Şunu Hatırlatır...**

Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit ile daha iyi performans elde etmek için, Depolama Konfigürasyonundaki BIOS seçeneğini AHCI moduna ayarlamamız tavsiye edilir. BIOS ayarı için, ayrıntıları öğrenmek üzere lütfen destek CD'mizdeki "Kullanıcı Kılavuzu"na bakın.

## 1.2 Özellikler

<b>Platform</b>	<ul style="list-style-type: none"><li>- ATX Form Faktörü</li><li>- Birinci Sınıf Altın Kapasitör tasarımı (%100 Japon malı yüksek kaliteli İletken Polimer Kapasitörler)</li><li>- Çoklu Filtre Kapağı (MFC) (3 farklı kapasitör ile filtreden gelen farklı gürültü: DIP sağlam kapak, POSCAP ve MLCC)</li></ul>
<b>CPU</b>	<ul style="list-style-type: none"><li>- Soket AM3+ işlemcileri desteği</li><li>- Soket AM3 işlemcileri desteği: AMD Phenom™ II X6 / X4 / X3 / X2 (920 / 940 hariç) / Athlon II X4 / X3 / X2 / Sempron işlemcileri</li><li>- Sekiz Çekirdekli CPU Desteği</li><li>- UCC özelliğini destekler - CPU çekirdeği Kilidi Açma</li><li>- Digi Güç Tasarımı</li><li>- Gelişmiş 12 + 2 Güç Fazı Tasarımı</li><li>- Çift İstifli MOSFET (DSM)</li><li>- 140W'ye kadar CPU'yu destekler</li><li>- AMD'nin Cool 'n' Quiet™ Teknolojisini Destekler</li><li>- FSB 2600 MHz (5,2 GT/sn)</li><li>- Untied Overclocking Teknolojisini destekler</li><li>- Hyper-Transport 3.0 (HT 3.0) Teknolojisini Destekler</li></ul>
<b>Yonga seti</b>	<ul style="list-style-type: none"><li>- Kuzey Köprüsü: AMD 990FX</li><li>- Güney Köprüsü: AMD SB950</li></ul>
<b>Bellek</b>	<ul style="list-style-type: none"><li>- Çift Kanallı DDR3 Belleği Teknolojisi</li><li>- 4 x DDR3 DIMM yuva</li><li>- DDR3 2450(OC)/2100(OC)/1600/1333/1066 ECC olmayan, ara belleksiz bellek</li><li>- Sistem belleğinin maks. kapasitesi: 64 GB</li><li>- Intel® Extreme Bellek Profilini (XMP)1.3/1.2 destekler</li><li>- AMD Bellek Profilini (AMP) destekler</li></ul>
<b>Genişletme Yuvası</b>	<ul style="list-style-type: none"><li>- 4 x PCI Express 2.0 x16 yuva (PCIe1: x16 modu; PCIe3: x4 modu; PCIe4/PCIe5: x16 (PCIe4) / x8 (PCIe5)'de tekli veya x8/x8 modda çiftli)</li><li>- 1 x PCI Express 2.0 x1 yuva</li><li>- 1 x PCI yuva</li><li>- AMD™ CrossFireX™, 3-Way CrossFireX™ ve Quad CrossFireX™ 'i destekler</li><li>- NVIDIA® Quad SLI™, 3-Way SLI™ ve SLI™'yı destekler</li></ul>
<b>Ses</b>	<ul style="list-style-type: none"><li>- İçerik Korumalı (Realtek ALC898 Ses Kodeki) 7,1 Kanal HD Ses</li><li>- Premium Blu-ray ses desteği</li></ul>

<b>LAN</b>	<ul style="list-style-type: none"> <li>- PCIE x1 Gigabit LAN 10/100/1000 Mb/sn</li> <li>- Intel® 82583V</li> <li>- LAN'da Uyan özelliğini destekler</li> <li>- PXE destekler</li> </ul>
<b>Arka Panel</b>	<p>G/3 Paneli</p> <ul style="list-style-type: none"> <li>- 1 x PS/2 Fare Portu</li> <li>- 1 x PS/2 Klavye Portu</li> <li>- 1 x 1 x Koaksiyel SPDIF Çıkışı Portu</li> <li>- 1 x Optik SPDIF Çıkışı Portu</li> <li>- 4 x Kullanıma Hazır USB 2.0 Portu</li> <li>- 4 x Kullanıma Hazır USB 3.0 Portu</li> <li>- 2 x eSATA3 konektörler</li> <li>- 1 x RJ-45 LAN Portu, LED'li (AKT/L3NK LED'i ve HIZ LED)</li> <li>- 1 x IEEE 1394 Konektörü</li> <li>- 1 x CMOS'u Temizleme Anahtarı</li> <li>- HD Ses Jakı: Yan Hoparlör/Arka Hoparlör/Orta/Bas/Hat Girişi/Ön Hoparlör/Mikrofon</li> </ul>
<b>SATA3</b>	<ul style="list-style-type: none"> <li>- 6 x AMD SB950 SATA3 6,0Gb/sn konektör, donanım RAID (RAID 0, RAID 1, RAID 0+1, JBOD ve RAID 5), NCQ, AHCI ve "Sistem Açırken Bileşen Takma" işlevlerini</li> <li>- 2 x ASMedia ASM1061 SATA3 6,0Gb/sn konektör, donanım NCQ, AHCI ve "Sistem Açırken Bileşen Takma" işlevlerini</li> </ul>
<b>USB 3.0</b>	<ul style="list-style-type: none"> <li>- Etron EJ188H tarafından 2 x Arka USB 3.0 bağlantı noktası, 5Gb/s'ye kadar USB 1.1/2.0/3.0</li> <li>- Etron EJ188H tarafından 2 x Ön USB 3.0 başlıkları (4 USB 3.0 bağlantı noktasını destekler), 5Gb/s'ye kadar USB 1.1/2.0/3.0</li> </ul>
<b>Konektör</b>	<ul style="list-style-type: none"> <li>- 8 x SATA3 6,0 Gb/s konektör</li> <li>- 1 x KÖ fişi</li> <li>- 1 x Kullanıcı Kızılötesi Modül Bağlantısı</li> <li>- 1 x COM portu fişi</li> <li>- 1 x IEEE 1394 fişi</li> <li>- 1 x Güç LED'i fişi</li> <li>- 2 x CPU FAN konektörü (1 x 4 pin, 1 x 3 pin)</li> <li>- 3 x Kasa FAN konektörü (1 x 4 pin, 2 x 3 pin)</li> <li>- 1 x Gb3 FAN konektörü (3 pin)</li> <li>- 24 pin ATX güç konektörü</li> <li>- 8 pin 12V güç konektörü (Yüksek Yoğunluklu Güç Konektörü)</li> <li>- Ön panel ses konektörü</li> <li>- 2 x USB 2.0 fiş (4 USB 2.0 portu destekler)</li> </ul>

	<ul style="list-style-type: none"> <li>- 2 x USB 3.0 fiş (4 USB 3.0 portu destekler)</li> <li>- 1 x Dr. Debug (7 Segmentli Hata Ayıklama LED'i)</li> <li>- 1 x LED'li Güç Anahtarı</li> <li>- 1 x LED'li Sıfırlama Anahtarı</li> </ul>
<b>BIOS Özelliği</b>	<ul style="list-style-type: none"> <li>- 32 Mb GUI destekli AMI UEFI Geçerli BIOS</li> <li>- "Tak Çalıştır"ı destekler</li> <li>- ACPI 1.1 Uyumlu Uyandırma Olayları</li> <li>- Jumpersız ayarlamayı destekler</li> <li>- SMBIOS 2.3.1 Desteği</li> <li>- CPU, VCCM, NB, SB Voltaj Çoklu ayarı</li> </ul>
<b>Destek CD'si</b>	<ul style="list-style-type: none"> <li>- Sürücüler, Yardımcı Programlar, AntiVirüs Yazılımı (Deneme Sürümü), CyberLink MediaEspresso 6.5 Deneme Sürümü, Google Chrome Browser ve Toolbar</li> </ul>
<b>Donanım Monitör</b>	<ul style="list-style-type: none"> <li>- CPU Sıcaklık Duyarlılığı</li> <li>- Kasa Sıcaklık Duyarlılığı</li> <li>- CPU/Kasa/Güç Fan Takometresi</li> <li>- CPU/Kasa Sessiz Fan</li> <li>- CPU/Kasa/Güç Fan Çoklu-Hız Kontrolü</li> <li>- Voltaj İzleme: +12V, +5V, +3,3V, Vcore</li> </ul>
<b>İS</b>	<ul style="list-style-type: none"> <li>- Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit uyumlu</li> </ul>
<b>Sertifikalar</b>	<ul style="list-style-type: none"> <li>- FCC, CE, WHQL</li> <li>- ErP/EuP Hazır (ErP/EuP hazır güç kaynağı gerekli)</li> </ul>

\* Ayrıntılı ürün bilgileri için lütfen web sitemizi ziyaret edin: <http://www.asrock.com>

### 1.3 Jumper'ların Ayarı

Şekilde jumper'ların nasıl ayarlandıkları gösterilmektedir. Jumper kapağı pinler üzerine yerleştirildiğinde jumper "Kapalı" dır. Jumper kapağı pinler üzerindeyken jumper "Açık" tır. Şekilde pin1 ve pin2'si "Kapalı" olan jumper kapağı bu 2 pine yerleştirilmiş 3-pinli jumper gösterilmektedir.



#### Jumper

#### Ayar

CMOS'u temizleme

(CLRCMOS1, 3-pinli jumper)

(bkz. s.2 No. 29)



Default



Clear CMOS

Not: CLRCMOS1, CMOS'daki verilerinizi temizlemenize olanak sağlar. Sistem parametrelerini temizlemek ve varsayılan ayara sıfırlamak için lütfen bilgisayarı kapatın ve güç kablosunun fişini güç kaynağından çekin. 15 saniye bekledikten sonra, pin2 ve pin3'ü CLRCMOS1'de 5 saniye kısaltmak için bir atlatıcı şapkası kullanın. Ancak, BIOS'u güncelledikten hemen sonra lütfen CMOS'u temizlemeyin. BIOS'u güncellemeyi tamamladığınızda CMOS'u temizlemeniz gerekirse, ilk olarak sistemi başlatmanız ve ardından CMOS temizleme işlemini gerçekleştirmeden önce kapatmanız gereklidir. Parola, tarih, saat, kullanıcı varsayılan profili, 1394 GUID ve MAC adresinin yalnızca CMOS pili çıkarıldığında temizleneceğini lütfen aklınızda bulundurunuz.



CMOS Devresini Temizle, CMOS Ayarı'nı Temizle ile aynı işleve sahiptir.

## 1.4 Yerleşik Fişler ve Konektörler



Yerleşik fişler ve konektörler jumper DEĞİLDİR. Bu fişlerin ve konektörlerin üzerine jumper kapakları YERLEŞTİRMEYİN. Fişlerin ve konektörlerin üzerine jumper kapakları yerleştirmek anakartın kalıcı olarak zarar görmesine neden olabilir!

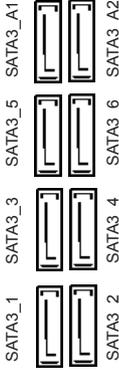
### Seri ATA3 Konektörler

(SATA3\_1\_2: bkz. s.2, No. 18)

(SATA3\_3\_4: bkz. s.2, No. 17)

(SATA3\_5\_6: bkz. s.2, No. 16)

(SATA3\_A1\_A2: bkz. s.2, No. 15)



Bu sekiz Seri ATA3 (SATA3) konektör, dahili depolama cihazları için SATA veri kablolarını destekler. Geçerli SATA3 arayüzü 6,0 Gb/sn veri aktarım hızına izin verir.

### Seri ATA (SATA)

#### Veri Kablosu

(İsteğe bağlı)



SATA veri kablosunu her iki ucu da SATA3 sabit diskinde veya anakarttaki SATA3 konektörüne bağlanabilir.

### Seri ATA (SATA) Güç Kablosu

(İsteğe bağlı)

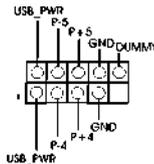


Lütfen SATA güç kablosunun siyah ucunu her sürücüde bulunan güç konektörüne bağlayın. Sonra, SATA güç kablosunun beyaz ucunu güç kaynağının güç konektörüne bağlayın.

### USB 2.0 Fişleri

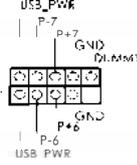
(9-pinli USB4\_5)

(bkz. s.2 No. 26)



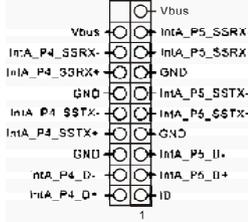
G/Ç panelindeki varsayılan dört USB 2.0 portundan başka, bu anakartta iki USB 2.0 fişi bulunur. Her USB 2.0 fişi iki USB 2.0 portunu destekler.

(9-pinli USB6\_7)  
(bkz. s.2 No. 25)

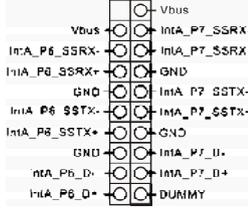


## USB 3.0 Fişleri

(19-pinli USB3\_4\_5)  
(bkz. s.2 No. 12)



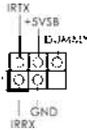
(19-pinli USB3\_6\_7)  
(bkz. s.2 No. 11)



I/O panelinde bulunan dört adet varsayılan USB 3.0 bağlantı noktasının yanı sıra, bu anakartta iki USB 3.0 fişi bulunur. Her USB 3.0 fişi iki USB 3.0 portunu destekler.

## Kızılötesi Modüllü Fişi

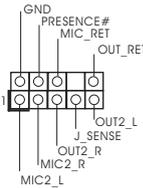
(5-pinli IR1)  
(bkz. s.2 No. 32)



Bu fiş, isteğe bağlı bir kablosuz aktarma ve alma kızılötesi modülünü destekler.

## Ön Panel Ses Fişi

(9-pinli HD\_AUDIO1)  
(bkz. s.2 No. 34)



Bu, panel ses kablosu için uygun bağlantı sağlayan ve ses cihazlarını kontrol etmeyi sağlayan bir arayüzdür.



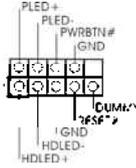
1. Yüksek Tanımlı Ses Jak Duyarlılığını destekler, ancak kasadaki panel kablosunun HDA'nın düzgün çalışmasını desteklemesi gerekir. Lütfen sisteminizi yüklemek için kılavuzumuzdaki ve kasa kılavuzundaki talimatları izleyin.
2. AC'97 ses paneli kullanıyorsanız, lütfen ön panel ses fişine aşağıdaki gibi takın:

- A. Mic\_IN'i (MIC) MIC2\_L'ye bağlayın.
- B. Audio\_R'yi (RIN) OUT2\_R'ye ve Audio\_L'yi (LIN) OUT2\_L'ye bağlayın.
- C. Ground'u (GND) Ground'a (GND) bağlayın.
- D. MIC\_RET ve OUT\_RET yalnızca HD ses paneli içindir. Bunları AC'97 ses paneli için bağlamanız gerekmez.
- E. Ön mikrofonu etkinleştirmek için  
Windows® XP / XP 64-bit İS için:  
"Karıştırıcı"yı seçin. "Kaydedici"yi seçin. Sonra "Ön Mikrofon"u tıklayın.  
Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit İS için:  
Realtek Kontrol panelinde "Ön Mikrofon" Sekmesine gidin. "Kayıt Ses Seviyesi"ni ayarlayın.

## Sistem Paneli Fişi

(9-pinli PANEL1)

(bkz. s.2 No. 28)



Bu fiş, birçok sistem ön paneli işlevini barındırır.



Kasa üzerindeki güç anahtarını, sıfırlama anahtarını ve sistem durumu göstergesini aşağıdaki pin atamalarına göre bu bağlantıya bağlayın. Kabloları bağlamadan önce pozitif ve negatif pinlere dikkat edin.

### PWRBTN (Güç Anahtarı):

Kasa üzerindeki güç anahtarını ön panele bağlayın. Güç anahtarını kullanarak sisteminizi kapatma şeklinizi yapılandırabilirsiniz.

### RESET (Sıfırlama Anahtarı):

Kasa üzerindeki sıfırlama anahtarını ön panele bağlayın. Bilgisayar donarsa veya normal bir yeniden başlatma gerçekleştirilemezse, bilgisayarı yeniden başlatmak için sıfırlama anahtarına basın.

### PLED (Sistem Gücü LED'i):

Kasa üzerindeki güç durumu göstergesini ön panele bağlayın. Sistem çalışırken LED yanar. Sistem S1 uyku modunda iken LED yanıp sönmeye devam eder. Sistem S3/S4 uyku modunda veya kapalı (S5) iken LED söner.

### HDLED (Sabit Disk Çalışma LED'i):

Kasa üzerindeki sabit disk çalışma LED'ini ön panele bağlayın. Sabit disk veri okurken veya yazarken LED yanar.

Ön panel tasarımı kasaya göre değişiklik gösterebilir. Ön panel modülünde temel olarak güç anahtarı, sıfırlama anahtarı, güç LED'i, sabit disk çalışma LED'i, hoparlör vb. bulunur. Kasa ön panel modülünüzü bu bağlantıya bağlarken, kablo atamalarının ve pin atamalarının doğru biçimde eşleştirildiğinden emin olun.

### Kasa Hoparlörü Fişi

(4-pinli SPEAKER1)

(bkz. s.2 No. 19)



Lütfen kasa hoparlörünü bu fişe bağlayın.

### Güç LED'i Fişi

(3-pinli PLED1)

(bkz. s.2 No. 30)



Sistem gücü durumunu belirtmek için lütfen kasa güç LED'ini bu fişe bağlayın. Sistem çalışırken LED açıktır. LED S1 durumunda yanıp sönmeye devam eder. LED S3/S4 durumunda veya S5 durumunda da (güç kapalı) kapalıdır.

### Kasa/güç Fan Konektörü

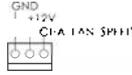
(4-pinli CHA\_FAN1)

(bkz. s.2 No. 20)



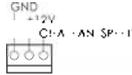
(3-pinli CHA\_FAN2)

(bkz. s.2 No. 6)



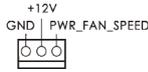
(3-pinli CHA\_FAN3)

(bkz. s.2 No. 24)



(3-pinli PWR\_FAN1)

(bkz. s.2 No. 9)

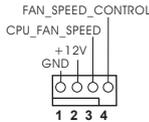


Lütfen kasa fan kablolarını fanına bu konektöre bağlayın ve siyah kabloyu toprak pinine bağlayın. CHA\_FAN1/2/3 fan hızı UEFI veya AXTU yoluyla kontrol edilebilir.

### CPU Fan Konektörü

(4-pinli CPU\_FAN1)

(bkz. s.2 No. 4)



Lütfen fan kablolarını CPU fanına bu konektöre bağlayın ve siyah kabloyu toprak pinine bağlayın.



Bu anakart 4-Pinli CPU fan (Sessiz Fan) desteği sağlasa da, 3-Pinli CPU fan hızı kontrol işlevi olmadan bile hala başarılı bir şekilde çalışabilir. 3-Pinli CPU fanı bu konektördeki CPU fan konektörüne bağlamayı planlıyorsanız, lütfen Pin 1-3'e bağlayın.

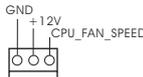
**Pin 1-3 Bağlı** ←

3-Pinli Fanı Takma



(3-pinli CPU\_FAN2)

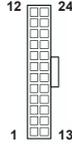
(bkz. s.2 No. 5)



## ATX Güç Konektörü

(24-pinli ATXPWR1)

(bkz. s.2 No. 10)



Lütfen bir ATX güç kaynağını  
bu konektöre bağlayın.



Bu anakart 24-pinli ATX güç konektörü sağlasa da geleneksel bir 20-pinli ATX güç kaynağı bağlarsanız da çalışabilir. 20-pinli ATX güç kaynağını kullanmak için, lütfen güç kaynağınızı Pin 1 ve Pin 13'le birlikte takın.



20-Pinli ATX Güç Kaynağını Takma 1 13

## ATX 12V Güç Konektörü

(8-pinli ATX12V1)

(bkz. s.2 No. 1)



Lütfen bir ATX 12V güç  
kaynağını bu konektöre  
bağlayın.



Bu anakart 8-pinli ATX 12V güç konektörü sağlasa da geleneksel bir 4-pinli ATX 12V güç kaynağı bağlarsanız da çalışabilir. 4-pinli ATX güç kaynağını kullanmak için, lütfen güç kaynağınızı Pin 1 ve Pin 5'le birlikte takın.

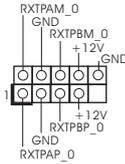


4-Pinli ATX 12V Güç Kaynağını Takma 4 5

## IEEE 1394 Fişi

(9-pinli FRONT\_1394)

(bkz. s.2 No. 33)

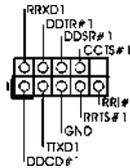


Bu anakartta G/Ç panelindeki  
bir varsayılan IEEE 1394 portu  
nun yanı sıra, bir IEEE 1394 fiş  
(FRONT\_1394) de bulunur. Bu  
IEEE 1394 fişi bir IEEE 1394  
portunu destekler.

## Seri port Fişi

(9-pinli COM1)

(bkz. s.2 No. 31)



Bu COM1 fişi bir seri port  
modülünü destekler.

## Kullanıcı Kızılötesi Modül Bağlantısı

(4-pinli CIR1)

(bkz. s.2 No. 27)



Bu fiş, uzaktan kumanda alıcısı destekler.

## Ön USB 3.0 Panelinin Kurulum Kılavuzu

**Adım 1** Verilen Ön USB 3.0 Panelini, dört HDD vidasını ve altı şasi vidasını hazırlayın.



**Adım 2** 2,5" HDD/SSD'yi Ön USB 3.0 Paneline dört adet HDD vidasını kullanarak vidalayın.



**Adım 3** Ön USB 3.0 Panelini şasinin 2,5" sürücü yuvasına kurun.



**Adım 4** Ön USB 3.0 Panelini altı şasi vidası ile sürücü yuvasına vidalayın.



**Adım 5** Ön USB 3.0 kablosunu anakarttaki USB 3.0 başlığına (USB3\_4\_5 veya USB3\_6\_7) takın.



**Adım 6** Ön USB 3.0 Paneli zaten kullanılıyor.



## Arka USB 3.0 Braketinin Kurulum Kılavuzu

**Adım 1** Ön USB 3.0 Panelinden iki vidayı sökün.



**Adım 2** USB 3.0 kablosunu ve arka USB 3.0 braketini bir araya getirin.



**Adım 3** İki vidayı arka USB 3.0 braketine vidalayın.



**Adım 4** Arka USB 3.0 braketini kasaya yerleştirin.



## 1.5 Akıllı Anahtarlar

Bu anakartta üç akıllı anahtar bulunur: güç anahtarı, sıfırlama anahtarı ve CMOS'u temizleme anahtarı; bunlar kullanıcıların hızlı bir şekilde sistemi açıp kapatmalarını veya CMOS değerlerini temizlemelerini sağlar.

### Güç Anahtarı

(PWRBTN)

(bkz. s.2 No.21)



Güç Anahtarı, kullanıcıların hızlı bir şekilde sistemi açıp kapatmalarını sağlayan akıllı bir anahtardır.

### Sıfırlama Anahtarı

(RSTBTN)

(bkz. s.2 No.22)



Sıfırlama Anahtarı, kullanıcıların hızlı bir şekilde sistemi sıfırlamalarını sağlayan akıllı bir anahtardır.

### CMOS'u Temizleme Anahtarı

(CLRSBTN)

(bkz. s.3 No.18)



CMOS'u Temizleme Anahtarı, kullanıcıların hızlı bir şekilde CMOS değerlerini temizlemelerini sağlayan akıllı bir anahtardır.

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## 2. BIOS Bilgileri

Anakarttaki Flash Bellek BIOS Ayarları Yardımcı Programını içerir. Bilgisayarı başlattığınızda, lütfen Otomatik Güç Sınaması (POST) sırasında BIOS Ayarları yardımcı programına girmek için <F2> veya <Del> tuşuna basın; aksi halde, POST test rutinlerine devam eder. BIOS Ayarlarına POST'tan sonra girmek istiyorsanız, lütfen <Ctl> + <Alt> + <Delete> tuşlarına basarak veya sistem kasasındaki sıfırlama düğmesine basarak sistemi yeniden başlatın. BIOS Ayarları programı kullanıcı dostu olacak şekilde tasarlanmıştır. Çeşitli alt menüler arasında dolaşmanıza ve önceden belirlenen seçenekler arasından seçim yapmanıza izin veren menü tabanlı bir programdır. BIOS Ayarları hakkında ayrıntılı bilgi için, lütfen Destek CD'sinde bulunan Kullanıcı Kılavuzu'na (PDF dosyası) başvurun.

## 3. Yazılım Destek CD'si bilgileri

Bu anakart çeşitli Microsoft® Windows® işletim sistemleri destekler: 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit. Anakartla birlikte gelen Destek CD'si anakart özelliklerini genişleten gerekli sürücüleri ve kullanışlı yardımcı programları içerir. Destek CD'sini kullanmaya başlamak için, CD'yi CDRom sürücünüze takın. Bilgisayarınızda "OTOMATİK KULLAN" özelliği etkinleştirilmişse, Ana Menüü otomatik olarak görüntüler. Ana Menü otomatik olarak görüntülenmezse, menüleri görüntülemek için Destek CD'sinin "BIN" klasöründeki "ASRSetup.exe" dosyasını bulun ve çift tıklayın.

# 1. 제품소개

**990FX Extreme9** 메인 보드를 구매하여 주신것에 대하여 감사 드립니다. 이 메인 보드는 엄격한 품질관리 하에 생산되어진 신뢰성 있는 메인보드 입니다. 이 제품은 고품격 디자인과 함께 ASRock 의 우수한 품질과 최고의 안정성을 자랑하고 있습니다. 이 빠른 설치 안내서에는 마더보드에 대한 설명과 단계별 설치 방법이 실려 있습니다. 마더보드에 대한 보다 자세한 내용은 지원 CD 의 사용 설명서에서 확인할 수 있습니다.



메인보드의 사양이나 바이오스가 업 데이트 되기 때문에 이 사용자 설명서의 내용은 예고 없이 변경되거나 바뀔 수가 있습니다. 만일을 생각해서 이 사용자 설명서의 어떤 변경이 있으면 ASRock 의 웹 사이트에서 언제든지 업 데이트를 하실 수 있습니다. 웹 사이트에서 최신 VGA 카드와 CPU 지원 목록을 확인할 수 있습니다. ASRock 의 웹 사이트 주소는 <http://www.asrock.com> 입니다. 본 마더보드와 관련하여 기술 지원이 필요한 경우 당사 웹 사이트를 방문하여 사용 중인 모델에 대한 특정 정보를 얻으십시오. [www.asrock.com/support/index.asp](http://www.asrock.com/support/index.asp)

## 1.1 패키지 내용

**990FX Extreme9** 마더보드 (ATX 폼 팩터)

**990FX Extreme9** 렉 설치 가이드

**990FX Extreme9** 지원 CD

ASRock SLI\_ 브릿지 \_2S 카드 1 개

ASRock 3-Way SLI-2S1S Bridge 카드 1 개

시리얼 ATA (SATA) 데이터 케이블 6 개 (선택 사양)

시리얼 ATA (SATA) HDD 전원 케이블 2 개 (선택 사양)

I/O 차폐 1 개

2.5" HDD/SSD 랙 포함 전면 USB 3.0 패널 1 개

HDD 나사 4 개

새시나사 6 개

후면 USB 3.0 브래킷 1개



**ASRock은사용자에게 알립니다...**

Windows® 8 / 8 64-비트 / 7 / 7 64-비트 / Vista™ / Vista™ 64-비트의 성능을 향상시키기 위해서 Storage Configuration(스토리지 구성)에서 BIOS 옵션을 AHCI 모드로 설정하는 것이 좋습니다. BIOS 설정과 관련하여 자세한 내용은 지원 CD에 포함된 “사용 설명서” 를 참조하십시오.

## 1.2 설명서

플랫폼	<ul style="list-style-type: none"> <li>- ATX 폼 팩터</li> <li>- 프리미엄 골드 콘덴서디자인 (100% 일본산 고품질 정도성 고분자 콘덴서)</li> <li>- 복수 필터 캡 (MFC) (3 개의 커패시터별 필터별 노이즈 : DIP 솔리드 캡 , POSCAP 및 MLCC)</li> </ul>
CPU	<ul style="list-style-type: none"> <li>- Socket AM3+ 프로세서에 대한 지원</li> <li>- Socket AM3 프로세서에 대한 지원 : AMD Phenom™ II X6 / X4 / X3 / X2 (920/940 제외) / Athlon II X4 / X3 / X2 / Sempron 프로세서</li> <li>- 8- 코어 CPU 지원</li> <li>- UCC (Unlock CPU Core) 지원</li> <li>- Digi 전원 설계</li> <li>- 고급 12 + 2 전원 위상 디자인</li> <li>- 듀얼 스택 MOSFET (DSM)</li> <li>- 최대 140W 까지 CPU 지원</li> <li>- AMD 의 Cool 'n' Quiet™ 기술 지원</li> <li>- FSB 2600 MHz (5.2 GT/s)</li> <li>- 언타이드 오버클러킹 (Untied Overclocking) 기술 지원</li> <li>- 하이퍼 트랜스포트 3.0 (HT 3.0) 기술 지원</li> </ul>
칩셋	<ul style="list-style-type: none"> <li>- 노스브릿지 : AMD 990FX</li> <li>- 사우스 브릿지 : AMD SB950</li> </ul>
메모리	<ul style="list-style-type: none"> <li>- 듀얼 채널 메모리 기술 지원</li> <li>- DDR3 DIMM 슬롯 4 개</li> <li>- DDR3 2450(OC)/2100(OC)/1600/1333/1066 비-ECC, 언버퍼드 메모리를 지원</li> <li>- 최대 시스템 메모리 용량 : 64GB</li> <li>- Intel® 익스트림 메모리 프로파일 (XMP)1.3/1.2 지원</li> <li>- AMD 메모리 프로파일 (AMP) 지원</li> </ul>
확장 슬롯	<ul style="list-style-type: none"> <li>- 4 x PCI Express 2.0 x16 슬롯 (PCIe1: x16 모드 ; PCIe3: x4 모드 ; PCIe4/PCIe5: x16 (PCIe4) / x8 (PCIe5) 의 경우 싱글 또는 x8/x8 모드의경우 듀얼 )</li> <li>- 1 개의 PCI Express 2.0 x1 슬롯</li> <li>- 1 개의 PCI 슬롯</li> <li>- AMD™ Quad CrossFireX™, 3-Way CrossFireX™ 및 CrossFireX™ 지원</li> <li>- NVIDIA® Quad SLI™, 3-Way SLI™ 및 SLI™ 지원</li> </ul>
오디오	<ul style="list-style-type: none"> <li>- 7.1 CH HD Audio 목록 보호 (Realtek ALC898 Audio Codec)</li> <li>- Premium Blu-ray 오디오 지원</li> </ul>

랜	<ul style="list-style-type: none"> <li>- PCIE x1 Gigabit LAN 10/100/1000 Mb/s</li> <li>- Intel® 82583V</li> <li>- 웨이크 - 온 - 랜 지원</li> <li>- PXE 지원</li> </ul>
후면판 I/O	<p>I/O Panel</p> <ul style="list-style-type: none"> <li>- 1 개 PS/2 마우스 포트</li> <li>- 1 개 PS/2 키보드 포트</li> <li>- 1 개 동축 SPDIF 출력 포트</li> <li>- 1 개 광학 SPDIF 출력 포트</li> <li>- 4 개 디폴트 USB 2.0 포트</li> <li>- 4 개 디폴트 USB 3.0 포트</li> <li>- 2 개 eSATA3 커넥터</li> <li>- 1 개 LED(ACT/LINK LED 및 SPEED LED) 가 있는 RJ-45 LAN 포트</li> <li>- 1 개 IEEE 1394 포트</li> <li>- 1 개 CMOS 삭제 스위치</li> <li>- 오디오 잭 : 측면 스피커 / 후방 스피커 / 중앙 / 저음 / 라인 인 / 전방 스피커 / 마이크</li> </ul>
SATA3	<ul style="list-style-type: none"> <li>- AMD SB950 SATA3 6.0 Gb/s 커넥터 6 개 , RAID (RAID 0, RAID 1, RAID 0+1, JBOD 및 RAID 5), NCQ, AHCI 및 “ 핫 플러그 ” 기능 지원</li> <li>- ASMedia ASM1061 SATA3 6.0 Gb/s 커넥터 2 개 , NCQ, AHCI 및 “ 핫 플러그 ” 기능 지원</li> </ul>
USB 3.0	<ul style="list-style-type: none"> <li>- Etron EJ188H 에 의한 후면 패널 USB 3.0 포트 4 개 , 최고 5Gb/s 의 USB 1.1/2.0/3.0 지원</li> <li>- Etron EJ188H 에 의한 전면 패널 USB 3.0 헤더 2 개 (USB 3.0 포트 4 개 지원) , 최고 5Gb/s 의 USB 1.1/2.0/3.0 지원</li> </ul>
온보드 헤더 및 커넥터	<ul style="list-style-type: none"> <li>- 8 개의 SATA3 6.0Gb/s 커넥터</li> <li>- 적외선 모듈 헤더 1 개</li> <li>- 소비자용 적외선 모듈 헤더 1 개</li> <li>- COM 포트 헤더 1 개</li> <li>- IEEE 1394 헤더 1 개</li> <li>- 전원 LED 헤더 1 개</li> <li>- CPU 팬 커넥터 2 개 (4 핀 1 개 , 3 핀 1 개)</li> <li>- 새시 팬 커넥터 3 개 (4 핀 1 개 , 3 핀 2 개)</li> <li>- 전원 팬 커넥터 1 개 (3 핀)</li> <li>- 24 핀 ATX 전원 헤더</li> <li>- 8 핀 ATX 12V 파워 콘넥터 (고밀도 전력 커넥터)</li> <li>- 전면부 오디오 콘넥터</li> <li>- USB 2.0 헤더 2 개 (4 개의 추가 USB 2.0 포트를 지원하는 헤더 2 개)</li> </ul>

	<ul style="list-style-type: none"> <li>- USB 3.0 헤더 2 개 (4 개의 추가 USB 3.0 포트를 지원하는 헤더 2 개)</li> <li>- Dr. Debug (7 세그먼트 디버그 LED) 1 개</li> <li>- LED 가 달린 전원 스위치 1 개</li> <li>- LED 가 달린 리셋 스위치 1 개</li> </ul>
BIOS	<ul style="list-style-type: none"> <li>- 32Mb GUI 지원을 제공하는 AMI UEFI 적합형 BIOS</li> <li>- “플러그 앤 플레이” 지원</li> <li>- ACPI 1.1 웨이크 - 업 이벤트와의 호환</li> <li>- 점퍼 프리 지원</li> <li>- SMBIOS 2.3.1 지원</li> <li>- CPU, VCCM, NB, SB 전압 멀티 조절</li> </ul>
지원 CD	<ul style="list-style-type: none"> <li>- 드라이버, 유틸리티, 안티바이러스 소프트웨어 (시험판), CyberLink MediaEspresso 6.5 평가판, Google Chrome Browser 및 Toolbar</li> </ul>
하드웨어 모니터	<ul style="list-style-type: none"> <li>- CPU 온도 감지</li> <li>- 마더보드 온도 감지</li> <li>- CPU/ 새시 / 전원 팬 회전 속도계</li> <li>- CPU/ 새시 저소음 팬</li> <li>- CPU/ 새시 / 전원 팬 멀티스피드 컨트롤</li> <li>- 전압 감시 기능 : +12V,+5V,+3.3V,Vcore</li> </ul>
OS	<ul style="list-style-type: none"> <li>- 마이크로 소프트웨어 Windows® 8/8 64 비트 /7/7 64 비트 /Vista™/ Vista™ 64 비트 /XP/XP 64 비트 와 호환</li> </ul>
인증서	<ul style="list-style-type: none"> <li>- FCC, CE, WHQL</li> <li>- ErP/EuP 지원 (ErP/EuP 지원 전원 공급기가 요구됨 )</li> </ul>

\* 상세한 제품정보는 당사의 웹사이트를 방문할수있습니다 . <http://www.asrock.com>



## 1.4 온보드 헤더 및 커넥터



### 주의!

이 콘택터는 점퍼가 아닙니다. 이 콘택터 위에 점퍼 캡을 사용하지마세요. 커넥터에 점퍼 캡을 설치하면 마더보드가 영구적으로 손상됩니다!

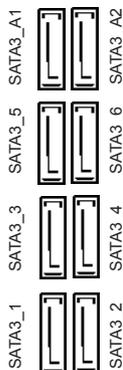
### 시리얼 ATA3 커넥터

(SATA3\_1\_2: 2 페이지, 18 번 항목 참조)

(SATA3\_3\_4: 2 페이지, 17 번 항목 참조)

(SATA3\_5\_6: 2 페이지, 16 번 항목 참조)

(SATA3\_A1\_A2: 2 페이지, 15 번 항목 참조)



### 8 개의 시리얼 ATA3

(SATA3) 커넥터는 내부 저장 장치용 SATA 데이터 케이블을 지원합니다. 커넥터가 내부 기어 장치용 SATA 케이블을 지원합니다. 현재의 SATA3 인터페이스는 최고 6.0 Gb/s 의 데이터 전송 속도를 지원합니다.

### 시리얼 ATA(SATA)

#### 데이터 케이블

(선택 사양)



SATA 데이터 케이블의 임의적인 측을 마더보드의 SATA3 하드 디스크 혹은 SATA3 커넥터에 연결합니다.

### 시리얼 ATA(SATA)

#### 전원 케이블

(선택 사양)

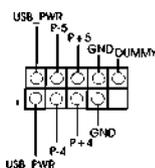


SATA 전원 케이블의 검은색 끝부분을 드라이브의 전원 커넥터에 연결하십시오. 그 다음에 SATA 전원 케이블의 흰색 끝을 전원 공급장치의 전원 커넥터에 연결합니다.

### USB 2.0 헤더

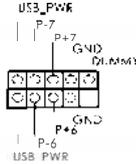
(9 핀 USB4\_5)

(2 페이지, 26 번 항목 참조)

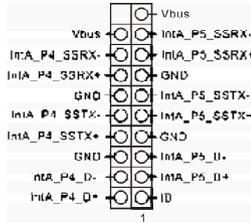


본 머더보드에는 I/O 패널에 있는 4 개의 기본 USB 2.0 포트 외에도 USB 2.0 헤더가 2 개 있습니다. 각각의 USB 2.0 헤더는 2 개의 USB 2.0 포트를 지원할 수 있습니다.

(9 편 USB6\_7)  
(2 페이지, 25 번 항목 참조)

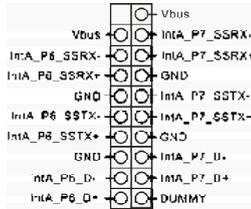


USB 3.0 헤더  
(19 편 USB3\_4\_5)  
(2 페이지, 12 번 항목 참조)

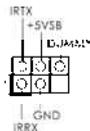


본 머더보드에는 I/O 패널에 있는 4 개의 기본 USB 3.0 포트의 에도 USB 3.0 헤더가 2 개 있습니다. 각각의 USB 3.0 헤더는 2 개의 USB 3.0 포트를 지원할 수 있습니다.

(19 편 USB3\_6\_7)  
(2 페이지, 11 번 항목 참조)

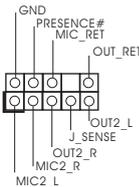


적외선 모듈 헤더  
(5 편 IR1)  
(2 페이지, 32 번 항목 참조)



이 헤더는 선택품목인 무선 적외선 송수신 모듈을 지원합니다.

전면부 오디오 콘넥터  
(9 편 HD\_AUDIO1)  
(2 페이지, 34 번 항목 참조)



이 콘넥터는 오디오 장치를 편리하게 조절하고 연결할 수 있는 전면 오디오 인터페이스입니다.



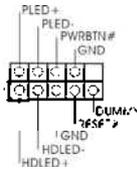
1. High Definition Audio(고음질 오디오)는 잭 센스 기능을 지원하나, 제대로 작동하려면 새시의 패넬 와이어가 HAD 를 지원해야 합니다. 이 설명서 및 새시 설명서의 지침을 따라 시스템을 설치하십시오.
2. AC' 97 오디오 패넬을 사용하는 경우, 이를 아래와 같이 프론트 패넬의 오디오헤더에 설치하십시오.
  - A. Mic\_IN (MIC)을 MIC2\_L에 연결합니다.

- B. Audio\_R (RIN) 을 OUT2\_R 에 연결하고, Audio\_L (LIN) 을 OUT2\_L 에 연결합니다.
- C. Ground (GND) 을 Ground (GND) 에 연결합니다.
- D. MIC\_RET 및 OUT\_RET 는 HD 오디오 패널 전용입니다. 이들을 AC' 97 오디오 패널에 연결 하지 않아도 됩니다.
- E. 앞면 마이크 작동.  
Windows® XP / XP 64 비트 OS 의 경우 :  
"Mixer" ( 믹서 ) 와 "Recorder" ( 리코더 ) 를 선택한 후  
"FrontMic" ( 앞면 마이크 ) 를 선택합니다.  
Windows® 8 / 8 64 비트 / 7 / 7 64 비트 / Vista™ / Vista™ 64 비트 OS 의 경우 :  
Realtek 제어판에서 "FrontMic" ( 앞면 마이크 ) 로 가서  
"Recording Volume" ( 리코딩 볼륨 ) 을 조정합니다.

### 시스템 콘넥터

(9 핀 PANEL1)

(2 페이지, 28 번 항목 참조)



이 콘넥터는 시스템 전면 패널 기능을 지원하기 위한 것입니다.



새시의 전원 스위치, 리셋 스위치, 시스템 상태 표시등을 아래의 핀 할당에 따라 이헤더에 연결합니다. 케이블을 연결하기 전에 양극 핀과 음극 핀을 기록합니다.

**PWRBTN( 전원 스위치 ) :**

새시 전면 패널의 전원 스위치에 연결합니다. 전원 스위치를 이용해 시스템을 끄는방법을 구성할 수 있습니다.

**RESET( 리셋 스위치 ) :**

새시 전면 패널의 리셋 스위치에 연결합니다. 컴퓨터가 정지하고 정상적 재시작을수행하지 못할 경우 리셋 스위치를 눌러 컴퓨터를 재시작합니다.

**PLED( 시스템 전원 LED) :**

새시 전면 패널의 전원 상태 표시등에 연결합니다. 시스템이 작동하고 있을 때는 LED 가 켜져 있습니다. 시스템이 S1 대기 상태에 있을 때는 LED 가 계속 깜박입니다. 시스템이 S3/S4 대기 상태 또는 전원 꺼짐 (S5) 상태에 있을 때는 LED 가 꺼져 있습니다.

**HDLED( 하드 드라이브 동작 LED) :**

새시 전면 패널의 하드 드라이브 동작 LED 에 연결합니다. 하드 드라이브가 데이터를 읽거나 쓰고 있을 때 LED 가 켜져 있습니다.

전면 패널 디자인은 새시별로 다를 수 있습니다. 전면 패널 모듈은 주로 전원 스위치, 리셋 스위치, 전원 LED, 하드 드라이브 동작 LED, 스피커 등으로 구성되어 있습니다. 새시 전면 패널 모듈을 이 헤더에 연결할 때 와이어 할당과 핀 할당이 정확히 일치하는지 확인합니다.

### 새시 스피커 헤더

(4 핀 SPEAKER 1)  
(2 페이지, 19 번 항목 참조)



새시 스피커를 이 헤더에 연결하십시오.

### 전원 LED 헤더

핀 PLED1)  
(2 페이지, 30 번 항목 참조)



시스템 전원 상태를 표시하려 (3 면 새시 전원 LED 를 헤더에 연결하십시오. 시스템 작동 중에는 LED 에 전원이 켜져 있습니다. S1 상태에서는 LED 가 계속 깜박입니다. S3/S4 상태 또는 S5 상태에서는 LED 가 꺼집니다 (전원 꺼짐).

### 새시 및 전원 팬 커넥터

(4 핀 CHA\_FAN1)  
(2 페이지, 20 번 항목 참조)

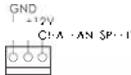


팬 케이블을 팬 커넥터에 연결하고 접지 핀에는 검은색 전선을 연결하십시오. CHA\_FAN1/2/3 팬 속도는 UEFI 또는 AXTU 를 통하여 제어할 수 있습니다.

(3 핀 CHA\_FAN2)  
(2 페이지, 6 번 항목 참조)



(3 핀 CHA\_FAN3)  
(2 페이지, 24 번 항목 참조)

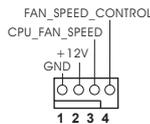


(3 핀 PWR\_FAN1)  
(2 페이지, 9 번 항목 참조)



### CPU 팬 커넥터

(4 핀 CPU\_FAN1)  
(2 페이지, 4 번 항목 참조)



CPU 팬 케이블을 이 커넥터에 연결하고 흑색 선을 접지 핀에 맞추십시오.



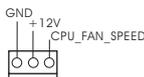
본 머더보드가 4 핀 CPU 팬 (저소음 팬) 지원을 제공하기는 하지만 팬 속도 제이기능없어도 3 핀 CPU 팬을 성공적으로 작동할 수 있습니다. 본 머더보드의 CPU 팬 커넥터에 3 핀 CPU 팬을 연결하려면 1-3 번 핀에 연결하십시오.

1-3 번 핀에 연결됨 ←

3 핀 팬 설치



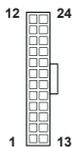
(3 핀 CPU\_FAN2)  
(2 페이지, 5 번 항목 참조)



### ATX 전원 헤더

(24 핀 ATXPWR1)

(2 페이지, 10 번 항목 참조)



ATX 전원 공급기를 이 헤더에 연결하십시오.



이 마더보드는 24 핀 ATX 전원 커넥터를 제공하지만, 종래의 20 핀 ATX 전원 공급장치를 사용해도 작동이 가능합니다. 20 핀 ATX 전원 공급장치를 사용하려면, Pin 1 과 Pin 13 으로 전원공급장치를 연결하십시오.



20 핀 ATX 전원 공급장치 설치

### ATX 12V 파워 콘넥터

(8 핀 ATX12V1)

(2 페이지, 1 번 항목 참조)



ATX 12V 플러그가 달린 전원공급장치를 이 커넥터에 연결해야 충분한 전력을 공급할 수 있습니다. 그러지 않을 경우 전원을 켤 수 없습니다.



비록 본 마더보드는 8-핀 ATX 12V 전원 연결기를 제공하지만 이것은 여전히작업할수있습니다. 만약 전통적인 4-핀 ATX 12V 전원공급을 채용하여 4-핀 ATX 전력을 사용하는 경우, 반드시 전원 공급을 핀 1 과 핀 5 에전원공급을 삽입해야합니다.

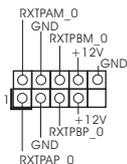


4-핀 ATX 12V 전원공급장치

### IEEE 1394 헤더

(9 핀 FRONT\_1394)

(2 페이지, 33 번 항목 참조)

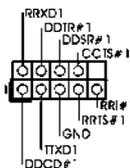


이본 머더보드에는 I/O 패널에 있는 1 개의 기본 IEEE 1394 포트 외에도 IEEE 1394 (FRONT\_1394) 헤더가 1 개 있습니다. 각각의 IEEE 1394 헤더는 1 개의 IEEE 1394 포트를지원할 수 있습니다.

### 시리얼포트 콘넥터

(9 핀 COM1)

(2 페이지, 31 번 항목 참조)



이 콘넥터는 시리얼 포트 모듈을 지원합니다.

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소비자용 적외선 모듈 헤더

(4 핀 CIR1)

(2 페이지, 27 번 항목 참조)



이 헤더는 리모콘 수신기  
연결하는 데 사용될  
수 있습니다.

## 전면 USB 3.0 패널의 설치 안내서

**1 단계** 번들 프론트 USB 3.0 패널, 네 개의 나사, 여섯 개의 새시 나사를 준비합니다.



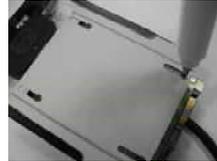
**3 단계** 전면 USB 3.0 패널을 새시의 2.5" 드라이브 베이에 설치합니다.



**5 단계** 전면 USB 3.0 케이블을 마더보드의 USB 3.0 헤더(USB3\_4\_5 또는 USB3\_6\_7)에 연결합니다.



**2 단계** 네 개의 HDD 나사를 사용하여 2.5" HDD/SSD 를 프론트 USB 3.0 패널을 고정합니다.



**4 단계** 여섯 개의 새시 나사를 사용하여 프론트 USB 3.0 패널을 드라이브 베이에 고정합니다.



**6 단계** 전면 USB 3.0 패널이 사용 준비가 완료됩니다.



## 후면 USB 3.0 브래킷의 설치 안내서

**1 단계** 전면 USB 3.0 패널에서 두 개의 나사를 제거합니다.



**3 단계** 후면 USB 3.0 패널에 두 개의 나사를 장착합니다.



**2 단계** USB 3.0 케이블과 후면 USB 3.0 브래킷을 연결합니다.



**4 단계** 후면 USB 3.0 브래킷을 새시에 장착합니다.



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## 1.5 빠른 스위치

이 메인보드에는 세 개의 빠른 스위치, 즉 전원 스위치, 리셋 스위치 및 CMOS 삭제 스위치가 있어, 사용자가 빠르게 시스템을 켜고 끄거나 리셋하고 CMOS 값을 삭제할 수 있습니다.

---

전원 스위치  
(PWRBTN)  
(2 페이지, 21 번 항목 참조)



전원 스위치는 빠른 스위치로서, 사용자가 시스템을 빠르게 켜거나 끌 수 있습니다.

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리셋 스위치  
(RSTBTN)  
(2 페이지, 22 번 항목 참조)



리셋 스위치는 빠른 스위치로서, 사용자가 시스템을 빠르게 리셋할 수 있습니다.

---

CMOS 삭제 스위치  
(CLRBTN)  
(3 페이지, 18 번 항목 참조)



CMOS 삭제 스위치는 빠른 스위치로서, 사용자가 CMOS 값을 빠르게 삭제할 수 있습니다.

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## 2. 시스템 바이오스 정보

메인보드의 플래쉬 메모리에는 바이오스 셋업 유틸리티가 저장되어 있습니다. 컴퓨터를 사용하실 때, “자가진단 테스트” (POST)가 실시되는 동안 <F2> 또는 <Del> 키를 눌러 바이오스 셋업으로 들어가세요; 만일 그렇게 하지 않으면 POST는 테스트 루틴을 계속하여 실행할 것입니다. 만일 POST 이후 바이오스 셋업을 하기를 원하신다면, <Ctl>+<Alt>+<Delete> 키를 누르거나, 또는 시스템 본체의 리셋 버튼을 눌러 시스템을 재 시작하여 주시기 바랍니다. 바이오스 셋업 프로그램은 사용하기 편하도록 디자인되어 있습니다. 각 항목은 다양한 서브 메뉴 표가 올라오며 미리 정해진 값 중에서 선택할 수 있도록 되어 있습니다. 바이오스 셋업에 대한 보다 상세한 정보를 원하신다면 보조 CD 안의 포함된 사용자 매뉴얼 (PDF 파일) 을 따라 주시기 바랍니다.

## 3. 소프트웨어 지원 CD 정보

이 메인보드는 여러 가지 마이크로소프트 윈도우 운영 체제를 지원합니다:  
8/8 64 비트 /7/7 64 비트 /Vista™/Vista™ 64 비트 /XP/XP 64 비트. 메인보드에 필요한 드라이버와 사용자 편의를 위해 제공되는 보조 CD는 메인보드의 기능을 향상시켜 줄 것입니다. 보조 CD를 사용하여 시작하시려면, CD-ROM 드라이브에 CD를 넣어주시기 바랍니다. 만일 고객님의 컴퓨터가 “AUTORUN” 이 가능하다면 자동으로 메인 메뉴를 모니터에 디스플레이 시켜 줄 것입니다. 만일 자동으로 메인 메뉴가 나타나지 않는다면, 보조 CD의 디스플레이 메뉴 안에 있는 BIN 폴더 ASRSetup.exe 파일을 더블 클릭하여 주시기 바랍니다.  
(D: \BIN\ASRSetup.exe, D: 는 CD-ROM 드라이브)

# 1、はじめに

**990FX Extreme9** マザーボードをお買い上げいただきありがとうございます。本製品は、弊社の厳しい品質管理の下で製作されたマザーボードです。本製品は、弊社の品質と耐久性の両立という目標に適合した堅牢な設計により優れた性能を実現します。このクイックインストールガイドには、マザーボードの説明および段階的に説明したインストールの手引きが含まれています。マザーボードに関するさらに詳しい情報は、「サポートCD」のユーザーマニュアルを参照してください。



マザーボードの仕様および BIOS ソフトウェアは、アップデートされることがありますので、マニュアルの内容は、予告なしに変更されることがあります。本マニュアルに変更があった場合は、弊社のウェブサイトに通告なしに最新版のマニュアルが掲載されます。最新の VGA カードおよび CPU サポートリストもウェブサイトでご覧になれます。ASRock 社ウェブサイト：  
<http://www.asrock.com>  
このマザーボードに関連する技術サポートが必要な場合、当社の Web サイトにアクセスし、使用しているモデルについての特定情報を見つけてください。  
[www.asrock.com/support/index.asp](http://www.asrock.com/support/index.asp)

## 1.1 パッケージ内容

**990FX Extreme9** マザーボード (ATX フォームファクター)

**990FX Extreme9** クイックインストールガイド

**990FX Extreme9** サポート CD

- 1 x ASRock SLI\_Bridge\_2S カード
- 1 x ASRock 3-Way SLI-2S1S Bridge カード
- 6 x シリアル ATA (SATA) データケーブル (オプション)
- 2 x シリアル 1 ATA (SATA) HDD 用電源変換ケーブル (オプション)
- 1 x I/O パネルシールド
- 1 x USB 3.0 前面パネルとともに 2.5" HDD/SSD ラック
- 4 x HDD ねじ
- 6 x 筐体ねじ
- 1 x 背面USB 3.0ブラケット



### ASRockからのお知らせ...

Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit でより良い性能を得るには、ストレージ構成のBIOSオプションをAHCIモードに設定することを推奨します。BIOSのセットアップについての詳細は、サポートCDの「ユーザーマニュアル」を参照してください。

## 1.2 仕様

プラットフォーム	<ul style="list-style-type: none"> <li>- ATX フォームファクター</li> <li>- プレミアムゴールド固体コンデンサ設計 (日本製高品質 100% 導電性高分子コンデンサ)</li> <li>- MFC (Multiple Filter Cap) (DIP ソリッドキャップ、POSCAP、および MLCC という 3 種類のコンデンサーで各種ノイズをフィルタリング)</li> </ul>
CPU	<ul style="list-style-type: none"> <li>- Socket AM3+ プロセッサのサポート</li> <li>- Socket AM3 プロセッサのサポート: AMD Phenom™ II X6 / X4 / X3 / X2(920 / 940 を除く) / Athlon II X4 / X3 / X2 / Sempron プロセッサ</li> <li>- 8-Core CPU 搭載</li> <li>- UCC (Unlock CPU Core) をサポート</li> <li>- デジタル電源設計</li> <li>- 高度な 12 + 2 電源位相設計</li> <li>- デュアルスタック MOSFET (DSM)</li> <li>- 140W まで CPU をサポート</li> <li>- AMD 社 Cool 'n' Quiet™ をサポート</li> <li>- FSB 2600 MHz (5.2 GT/s)</li> <li>- Untied Overclocking をサポート</li> <li>- Hyper-Transport 3.0 (HT 3.0) をサポート</li> </ul>
チップセット	<ul style="list-style-type: none"> <li>- ノースブリッジ: AMD 990FX</li> <li>- サウスブリッジ: AMD SB950</li> </ul>
メモリー	<ul style="list-style-type: none"> <li>- デュアルチャンネル DDR3 メモリーテクノロジー</li> <li>- DDR3 DIMM スロット x 4</li> <li>- DDR3 2450(OC)/2100(OC)/1600/1333/1066 non-ECC, un-buffered メモリーに対応</li> <li>- システムメモリの最大容量: 64GB</li> <li>- Intel® Extreme Memory Profile (XMP)1.3/1.2 をサポート</li> <li>- AMD Memory Profile (AMP) をサポート</li> </ul>
拡張スロット	<ul style="list-style-type: none"> <li>- 4 x PCI Express 2.0 x16 スロット (PCIe1: x16 モード、PCIe3: x4 モード、PCIe4/PCIe5: シングルモード時 x16 (PCIe4) / x8 (PCIe5) またはデュアルモード時 x8/x8)</li> <li>- 1 x PCI Express 2.0 x1 スロット</li> <li>- 1 x PCI スロット</li> <li>- AMD Quad CrossFireX™、3-Way CrossFireX™ および CrossFireX™ をサポート</li> <li>- NVIDIA® Quad SLI™、3-Way SLI™ および SLI™ をサポート</li> </ul>
オーディオ	<ul style="list-style-type: none"> <li>- 7.1 CH HD オーディオ (コンテンツ保護付)</li> </ul>

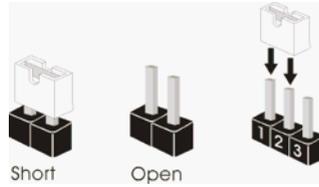
	(Realtek ALC898 オーディオ Codec) - Premium Blu-ray オーディオのサポー
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Intel® 82583V - Wake-On-LANをサポート - PXE に対応
リアパネル I/O	I/O Panel - PS/2 マウスポート x 1 - PS/2 キーボードポート x 1 - 同軸 SPDIF 出力ポート x 1 - 光学 SPDIF 出力ポート x 1 - Ready-to-Use USB 2.0 ポート x 4 - Ready-to-Use USB 3.0 ポート x 4 - eSATA3 ポート x 2 - LED(ACT/LINK LED および SPEED LED)付き RJ-45 LAN ポート x 1 - IEEE 1394 ポート x 1 - クリア CMOS スイッチ x 1 - オーディオジャック: 側面のスピーカー、後部スピーカー、中央低音、 入力、前部スピーカー、マイク入力
SATA3	- AMD SB950 SATA3 6.0 Gb/ 秒のコネクタ 6 機が、RAID (RAID 0, RAID 1, RAID 0+1, JBOD and RAID 5), NCQ, AHCI および “Hot Plug” (ホットプラグ) 機能をサポート - ASMedia ASM1061 SATA3 6.0 Gb/ 秒のコネクタ 6 機が、 NCQ, AHCI および “Hot Plug” (ホットプラグ) 機能をサポート
USB 3.0	- 2 x リア USB 3.0 ポート (Etron EJ188H)、USB 1.1/2.0/3.0 に最高 5Gb/s まで対応 - 2 x フロント USB 3.0 ヘッダ (USB 3.0 ポート 4 基対応) (Etron EJ188H)、USB 1.1/2.0/3.0 に最高 5Gb/s まで対応
コネクタ	- 8 x SATA3 6.0Gb/ 秒コネクタが - IR ヘッダー x 1 - コンシューマー赤外線モジュールヘッダー x 1 - COM ポートヘッダ x 1 - IEEE 1394 ヘッダー x 1 - 電源 LED ヘッダー x 1 - CPU ファンコネクタ x 2 (4ピン x 1, 3ピン x 1) - シャーシファンコネクタ x 3 (4ピン x 1, 3ピン x 2) - 電源ファンコネクタ x 1 (3ピン) - 24ピン ATX 電源コネクタ - 8ピン 12V 電源コネクタ (高密度電源コネクタ)

	<ul style="list-style-type: none"> <li>- フロントパネルオーディオコネクタ</li> <li>- USB 2.0 ヘッダー (USB 2.0 用 4 ポートをサポート) x 2</li> <li>- USB 3.0 ヘッダー (USB 3.0 用 4 ポートをサポート) x 2</li> <li>- 1 x Dr. Debug (7-セグメント Debug LED)</li> <li>- 1 x 電源スイッチ(LED 付き)</li> <li>- 1 x リセットスイッチ(LED 付き)</li> </ul>
BIOS 関連機能	<ul style="list-style-type: none"> <li>- 32Mb AMI UEFI Legal BIOS(GUI サポート)</li> <li>- プラグ&amp;プレイをサポート</li> <li>- ACPI 1.1 準拠ウェイクアップイベント</li> <li>- jumperfree モードサポート</li> <li>- SMBIOS 2.3.1 サポート</li> <li>- CPU, VCCM, NB, SB ブリッジ電圧</li> </ul>
サポート CD	<ul style="list-style-type: none"> <li>- ドライバー、ユーティリティ、アンチウィルスソフトウェアハードウェア (体験版)、CyberLink MediaEspresso 6.5 試用版、Google Chrome Browser および Toolbar</li> </ul>
モニター	<ul style="list-style-type: none"> <li>- CPU 温度検知</li> <li>- マザーボード温度検知</li> <li>- CPU/シャーシ / 電源ファンタコメータ</li> <li>- CPU/シャーシクワイエットファン</li> <li>- CPU/シャーシ / 電源ファンマルチ速度制御</li> <li>- 電源モニター: +12V, +5V, +3.3V, Vcore</li> </ul>
OS	<ul style="list-style-type: none"> <li>- Microsoft® Windows® 8/8 64-bit/7/7 64-bit/Vista™/Vista™ 64-bit/XP/XP 64-bit compliant</li> </ul>
認証	<ul style="list-style-type: none"> <li>- FCC, CE, Microsoft® WHQL 認証済み</li> <li>- ErP/EuP 対応(ErP/EuP 対応の電源装置が必要です)</li> </ul>

\* 製品の詳細については、<http://www.asrock.com> を御覧ください。

### 1.3 ジャンパ設定

右の図はジャンパがどのように設定されているかを示します。ジャンパキャップがピンに置かれている場合、ジャンパは“ショート”になります。ジャンパキャップがピンに置かれていない場合、ジャンパは“オープン”になります。右の図で、3ピンジャンパで、1-2ピンを“ショート”の場合、これらの2つのピンにジャンパキャップを置きます。



ジャンパ	設定	説明
CMOS の消去ジャンパ (CLR CMOS1) (ページ 2, アイテム 29 参照)	 1 2 デフォルト設定	 2 3 CMOS の消去

注： CLR CMOS1 により、CMOS のデータをクリアできます。システムパラメータをクリアしデフォルト設定にリセットするには、コンピュータの電源をオフにし、電源装置から電源コードを抜いてください。15 秒待ってから、ジャンパキャップを使用して CLR CMOS1 のピン 2 とピン 3 を 5 秒間ショートしてください。ただし、BIOS 更新の後すぐには CMOS をクリアしないでください。BIOS の更新の終了後直ちに CMOS をクリアする必要がある場合、まずシステムを起動してからシャットダウンし、その後クリア CMOS アクションを実行する必要があります。パスワード、日付、時刻、ユーザーデフォルトのプロファイルを忘れずにメモしてください。1394 GUID と MAC アドレスは、CMOS バッテリを取り外した場合のみ消去されます。



クリア CMOS スイッチには、クリア CMOS ジャンパと同じ機能があります。

## 1.4 オンボードのヘッダとコネクタ類



オンボードのヘッダとコネクタ類はジャンパではありません。それらのヘッダやコネクタにジャンパキャップをかぶせないでください。ヘッダやコネクタにジャンパキャップをかぶせると、マザーボードに深刻な影響を与える場合があります。

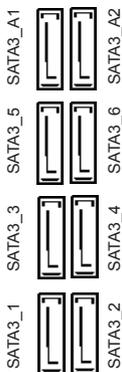
### シリアル ATA3 コネクタ

SATA3\_1\_2: ページ 2, アイテム 18 を参照

SATA3\_3\_4: ページ 2, アイテム 17 を参照

SATA3\_5\_6: ページ 2, アイテム 16 を参照

SATA3\_A1\_A2: ページ 2, アイテム 15 を参照



これら 8 本のシリアル ATA3 (SATA3)コネクタは内蔵ストレージデバイスに使用する SATA データケーブルに対応しています。現在の SATA3 インタフェースの最大データ転送速度は 6.0 Gb/s です。

### シリアル ATA(SATA) データケーブル(オプション)



SATA データケーブルのどちらかの端をマザーボードの SATA3 ハードディスク、または SATA3 コネクタに接続できます。

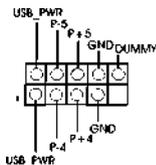
### シリアル ATA(SATA) 電源ケーブル(オプション)



SATA 電源ケーブルの黒端を各ドライブの電源コネクタに接続し、白端をパワーサプライの電源コネクタに接続してください。

### USB 2.0 ヘッダ (9ピン USB4\_5)

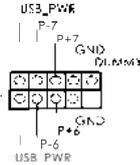
ページ 2, アイテム 26 を参照



I/O パネルには、デフォルトの 4 つの USB 2.0 ポート以外に、このマザーボードに 2 つの USB 2.0 ヘッダが搭載されています。それぞれの USB 2.0 ヘッダは 2 つの USB 2.0 ポートをサポートできます。

(9ピン USB6\_7)

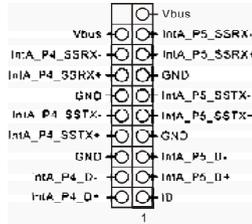
ページ 2, アイテム 25 を参照



USB 3.0 ヘッダ

(19ピン USB3\_4\_5)

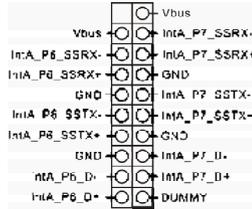
ページ 2, アイテム 12 を参照



I/O パネル上にあるデフォルトの USB 3.0 ポート 4 基に加え、このマザーボードに 2 つの USB 3.0 ヘッダが搭載されています。それぞれの USB 3.0 ヘッダは 2 つの USB 3.0 ポートをサポートできます。

(19ピン USB3\_6\_7)

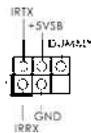
ページ 2, アイテム 11 を参照



赤外線モジュールコネクタ

(5ピン IR1)

ページ 2, アイテム 32 を参照

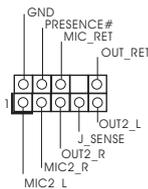


このコネクタは赤外線 の無線送受信モジュールに対応します。

フロントオーディオパネルコネクタ

(9ピン HD\_AUDI01)

ページ 2, アイテム 34 を参照



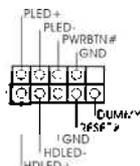
このコネクタは、オーディオ機器との便利な接続とコントロールを可能にするフロントオーディオパネルのためのインターフェイスです。



1. ハイディフィニションオーディオはジャックセンシングをサポートしますが、正しく機能するためにシャーシのパネルワイヤが HAD をサポートする必要があります。このマニュアルとシャーシのマニュアルの指示に従って、システムを取り付けてください。

2. AC'97 オーディオパネルを使用する場合、次のように前面パネルのオーディオヘッドに取り付けてください。
  - A. Mic\_IN (MIC) を MIC2\_L に接続します。
  - B. Audio\_R (RIN) を OUT2\_R に、Audio\_L (LIN) を OUT2\_L に接続します。
  - C. Ground (GND) を Ground (GND) に接続します。
  - D. MIC\_RET と OUT\_RET はオーディオパネル専用です。AC'97 オーディオパネルに接続する必要はありません。
  - E. フロントマイクを有効化するには。  
Windows® XP / XP 64-bit OS の場合：  
“Mixer” (ミキサー) を選択し、続いて “Recorder” (レコーダー) を選択します。その後 “FrontMic” (フロントマイク) をクリックします。  
Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit OS の場合：  
Realtek コントロールパネルから “FrontMic” (フロントマイク) タブを開きます。“Recording Volume”(録音音量) を調整します。

システムパネルコネクタ  
(9ピン PANEL1)  
ページ 2, アイテム 27 を参照



このコネクタは数種類のシステムフロントパネルの機能を提供します。



シャーシに付いている電源スイッチ、リセットスイッチ、システムステータスインジケータを下記のピン割り当て指示に従ってこのヘッドに接続します。ケーブルを接続する前にピンの正負極性にご注意ください。

**PWRBTN (電源スイッチ):**

前面パネルに付いている電源スイッチに接続します。電源スイッチによるシステム電源オフ方法を設定して変更することも可能です。

**RESET (リセットスイッチ):**

シャーシの前面パネルに付いているリセットスイッチに接続します。コンピュータがフリーズし、正常な再起動をしない場合は、リセットスイッチを押してコンピュータを再起動します。

**PLED (システム電源 LED):**

シャーシの前面パネルに付いている電源ステータスインジケータに接続します。LED は、システムが動作しているときに点灯します。LED はシステムが S1 スリープ状態のときに点滅します。システムが S3 または S4 スリープ状態になるか、電源オフ (S5) になると、LED は消灯します。

### HDLED (ハードドライブアクティビティ LED):

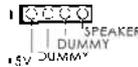
シャーシの前面パネルに付いているハードドライブアクティビティ LED に接続します。LED は、ハードドライブがデータの読み込みまたは書き込み動作をしているときに点灯します。

前面パネルのデザインはシャーシによって異なります。前面パネルモジュールは、主に電源スイッチ、リセットスイッチ、電源 LED、ハードドライブアクティビティ LED、スピーカーなどから構成されています。シャーシの前面パネルモジュールをこのヘッダに接続する際は、ワイヤとピンの割り当てが正しく対応していることを確認してください。

### シャーシスピーカーヘッダ

(4 ピン SPEAKER1)

ページ 2, アイテム 19 を参照



シャーシのスピーカーとこのヘッダを接続してください。

### 電源 LED ヘッダー

(3 ピン PLED1)

ページ 2, アイテム 30 を参照



シャーシ電源 LED をこのヘッダーに接続し、システム電源ステータスを示すようにしてください。LED はシステムが動作中の際にオンになります。S1 ステータスでは LED は点滅し続けます。S3/S4 ステータス、または S5 ステータス (電源オフ) の場合、LED は消灯します。

### シャーシおよび電源ファンコネクタ

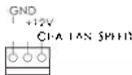
(4 ピン CHA\_FAN1)

ページ 2, アイテム 20 を参照



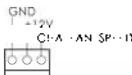
(3 ピン CHA\_FAN2)

ページ 2, アイテム 6 を参照



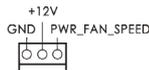
(3 ピン CHA\_FAN3)

ページ 2, アイテム 24 を参照



(3 ピン PWR\_FAN1)

ページ 2, アイテム 9 を参照

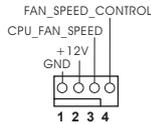


ファンケーブルをファンコネクタに接続し、黒いワイヤをアースピンに合わせてください。CHA\_FAN1/2/3 ファン速度は、UEFI または AXTU を通じて制御可能です。

### CPU ファンコネクタ

(4ピン CPU\_FAN1)

ページ 2, アイテム 4 を参照



このコネクタには CPU ファンケーブルを接続します。黒いコードはアースピンに接続してください。



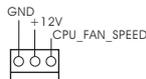
このマザーボードでは 4 ピン CPU ファン (クワイエットファン) がサポートされていますが、ファン速度コントロール機能がない場合でも、3 ピン CPU ファンは正常に作動します。3 ピン CPU ファンをこのマザーボードの CPU ファンコネクタに接続しようとしている場合、ピン 1-3 に接続してください。

接続されたピン 1-3 ←  
3 ピンファンのインストール



### (3ピン CPU\_FAN2)

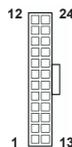
ページ 2, アイテム 5 を参照



### ATX パワーコネクタ

(24ピン ATXPWR1)

ページ 2, アイテム 10 を参照



ATX 電源コネクタを接続します。



このマザーボードには 24 ピン ATX 電源コネクタが装備されており、従来の 20 ピン ATX 電源装置を採用している場合でも作動します。20 ピン ATX 電源を使用するには、ピン 1 およびピン 13 と共に電源装置にプラグを差し込みます。



20 ピン ATX 電源装置の取り付け 1 13

### ATX 12V コネクタ

(8ピン ATX12V1)

ページ 2, アイテム 1 を参照



このコネクタには CPU に Vcore 電源を供給できるように、ATX 12V プラグを備えたサワーサプライを接続する必要があることに注意してください。接続に問題があると、電源は正しく供給されません。



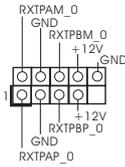
このマザーボードで 8-pin ATX 12V 電源コネクタが提供されたが、従来の 4-pin ATX 12V 電源でも動作できます。4-pin ATX 電源を使用する場合、電源を Pin 1 と Pin 5 とともに差し込んでください。

4-Pin ATX 12V 電源の取り付け



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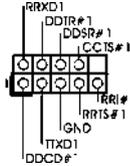
IEEE 1394 ヘッダ  
(9ピン FRONT\_1394)  
ページ2, アイテム 33 を参照



I/O パネルには、デフォルトの 1 つの IEEE 1394 ポート以外に、このマザーボードに 1 つの IEEE 1394 ヘッダが搭載されています。それぞれの IEEE 1394 ヘッダは 1 つの IEEE 1394 ポートをサポートできます。

---

シリアルポートヘッダ  
(9ピン COM1)  
ページ 2, アイテム 31 を参照



この COM1 ヘッダは、シリアルポートモジュールをサポートします。

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コンシューマー赤外線モジュールヘッダー  
(4ピン CIR1)  
ページ2, アイテム 27 を参照



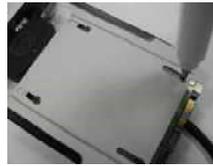
このヘッダーは、リモコン受光部の接続に使用することができます。

## 前面USB 3.0パネルの取り付けガイド

**手順 1** バンドルされた前面 USB 3.0 パネル、4 本の HDD ねじ、6 本のシャーシねじを準備します。



**手順 2** 2.5" HDD/SSD を 4 本の HDD ねじで前面 USB 3.0 パネルに取り付けます。



**手順 3** 前面USB 3.0パネルを筐体の2.5インチドライブベイに取り付けます。



**手順 4** 正面 USB 3.0 パネルを 6 本のシャーシねじでドライブベイに取り付けます。



**手順 5** 前面USB 3.0ケーブルをマザーボードのUSB3.0ヘッダ(USB3\_4\_5やUSB3\_6\_7)に差し込みます。



**手順 6** これで前面USB 3.0パネルの使用準備は完了です。



## 背面USB 3.0ブラケットの取り付けガイド

**手順 1** 前面USB 3.0パネルの2本のネジをはずします。



**手順 2** USB 3.0ケーブルと背面USB 3.0ブラケットを組み立てます。



**手順 3** 背面USB 3.0ブラケットにネジを2本取り付けます。



**手順 4** 背面USB 3.0ブラケットを筐体に取り付けます。



---

## 1.5 クイックスイッチ

マザーボードには電源スイッチ、リセットスイッチおよびクリアリング CMOS スイッチの 3 つのクイックスイッチがあり、システムの電源のオン / オフの素早い切り替えまたはリセットまたは CMOS 値の消去をできるようにしています。

---

電源スイッチ  
(PWRBTN)

ページ 2, アイテム 21 を参照



電源スイッチはクイックスイッチで、システム電源のオン / オフを素早く切り替えることができます。

---

リセットスイッチ  
(RSTBTN)

ページ 2, アイテム 22 を参照



リセットスイッチはクイックスイッチで、システムを素早くリセットすることができます。

---

クリア CMOS スイッチ  
(CLRCBTN)

ページ 3, アイテム 18 を参照



クリア CMOS スイッチはクイックスイッチで、CMOS 値を素早くクリアできます。

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## 2. BIOS 情報

BIOS セットアップユーティリティはマザーボードのフラッシュメモリに保存されています。コンピュータを起動させた後、POST(パワーオンセルフテスト)中に〈F2〉または〈Del〉を押し、BIOS セットアップユーティリティに入ってください。押さない場合、POST はテストルーチンを続けます。テストを実行した後に BIOS セットアップユーティリティに入りたい場合、POST 終了後〈Ctrl〉+〈Alt〉+〈Delete〉を押すか、ケースのリセットスイッチを押してシステムを再起動してください。BIOS セットアップユーティリティは、ユーザーフレンドリであることを目指しています。これはメニュー方式のプログラムです。スクロールさせることで様々なサブメニューを表示し、かつあらかじめ定義した選択肢から選択することが可能です。BIOS セットアップの詳細な情報については、サポート CD 内のユーザーズマニュアル (PDF ファイル) をごらんください。

## 3. ソフトウェア サポート CD 情報

このマザーボードは Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit といった様々なマイクロソフト ウィンドウズ オペレーティングシステムをサポートします。マザーボードに付属しているサポート CD はマザーボードの特徴を有効にするために必要なドライバやユーティリティを含んでいます。サポート CD を使用するには、CDROM ドライブに CD を挿入してください。AUTORUN 機能が有効な場合、自動的にメインメニューが立ち上がります。AUTORUN 機能が無効な場合、サポート CD 内の BIN フォルダにある ASRSetup.exe をダブルクリックすることにより、メインメニューが立ち上がります。

---

# 1. 主板简介

谢谢你采用了华擎 **990FX Extreme9** 主板，本主板由华擎严格制造，质量可靠，稳定性好，能够获得卓越的性能。本安装指南介绍了安装主板的步骤。更加详细的主板信息可参看驱动光盘的用户手册。



由于主板规格和 BIOS 软件将不断升级，本手册之相关内容变更恕不另行通知。请留意华擎网站上公布的升级版本。你也可以在华擎网站找到最新的显卡和 CPU 支持表。

华擎网址：<http://www.asrock.com>

如果您需要与此主板有关的技术支持，请参观我们的网站以了解您使用机种的规格信息。

[www.asrock.com/support/index.asp](http://www.asrock.com/support/index.asp)

## 1.1 包装盒内物品

**990FX Extreme9** 主板 (ATX 规格)

**990FX Extreme9** 快速安装指南

**990FX Extreme9** 支持光盘

一个华擎 SLI\_Bridge\_2S 桥接卡

一个华擎 3-Way SLI-2S1S 桥接卡

六条 Serial ATA(SATA) 数据线 (选配)

两条 Serial ATA(SATA) 硬盘电源线 (选配)

一块 I/O 挡板

一个配 2.5" HDD/SSD 托架的前 USB 3.0 面板

四个硬盘螺丝

六个机箱螺丝

一个后部 USB 3.0 面板



**ASRock提醒您...**

为了在 Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit 系统中取得更好的性能，建议您在 BIOS 中将 Storage Configuration (存储配置) 选项设成 AHCI 模式。关于 BIOS 设置程序，请参见支持光盘中的 “User Manual” 以了解详细信息。

## 1.2 主板规格

架构	<ul style="list-style-type: none"><li>- ATX 规格</li><li>- 优质镀金电容设计 (100% 日制高品质高传导性固态电容)</li><li>- 三层滤波电容 (MFC) (通过三种不同的电容过滤不同噪音: DIP 固态电容、POSCAP 和 MLCC)</li></ul>
处理器	<ul style="list-style-type: none"><li>- 支持 Socket AM3+ 处理器</li><li>- 支持 Socket AM3 处理器: AMD Phenom™ II X6 / X4 / X3 / X2(920/940 除外) / Athlon II X4 / X3 / X2 / Sempron 处理器</li><li>- 八核心 CPU 就绪</li><li>- 支持 UCC (Unlock CPU Core)</li><li>- Digi 电源设计</li><li>- 高级 12 + 2 电源相位设计</li><li>- 双层 MOS(DSM)</li><li>- 支持高达 140W 的 CPU</li><li>- 支持 AMD Cool 'n' Quiet™ 冷静技术</li><li>- 支持 FSB 2600 MHz (5.2 GT/s)</li><li>- 支持异步超频技术</li><li>- 支持 Hyper-Transport 3.0 (HT 3.0) 技术</li></ul>
芯片组	<ul style="list-style-type: none"><li>- 北桥: AMD 990FX</li><li>- 南桥: AMD SB950</li></ul>
系统内存	<ul style="list-style-type: none"><li>- 支持双通道内存技术</li><li>- 配备 4 个 DDR3 DIMM 插槽</li><li>- 支持 DDR3 2450(超频)/2100(超频)/1600/1333/1066 non-ECC、un-buffered 内存</li><li>- 系统最高支持 64GB 容量</li><li>- 支持 Intel® Extreme Memory Profile(XMP)1.3/1.2</li><li>- 支持 AMD Memory Profile(AMP)</li></ul>
扩展插槽	<ul style="list-style-type: none"><li>- 4 x PCI Express 2.0 x16 插槽 (PCIe1: x16 模式、PCIe3: x4 模式、PCIe4/PCIe5: 单个 x16(PCIe4)/x8(PCIe5) 或两个 x8/x8 模式)</li><li>- 1 x PCI Express 2.0 x1 插槽</li><li>- 1 x PCI 插槽</li><li>- 支持 AMD Quad CrossFireX™、3-Way CrossFireX™ 和 CrossFireX™</li><li>- 支持 NVIDIA® Quad SLI™、3-Way SLI™ 和 SLI™ 技术</li></ul>
音效	<ul style="list-style-type: none"><li>- 7.1 声道高保真音频, 支持内容保护功能 (Realtek ALC898 音频编解码器)</li><li>- 支持优质蓝光音效</li></ul>

板载 LAN 功能	<ul style="list-style-type: none"> <li>- PCIE x1 Gigabit LAN 10/100/1000 Mb/s</li> <li>- Intel® 82583V</li> <li>- 支持网路唤醒 (Wake-On-LAN)</li> <li>- 支持 PXE</li> </ul>
Rear Panel (后面板输入 / 输出接口)	<p>I/O 界面</p> <ul style="list-style-type: none"> <li>- 1 个 PS/2 鼠标接口</li> <li>- 1 个 PS/2 键盘接口</li> <li>- 1 个同轴 SPDIF 输出接口</li> <li>- 1 个光纤 SPDIF 输出接口</li> <li>- 4 个可直接使用的 USB 2.0 接口</li> <li>- 4 个可直接使用的 USB 3.0 接口</li> <li>- 2 个 eSATA3 接口</li> <li>- 1 个 RJ-45 局域网接口与 LED 指示灯 (ACT/LINK LED 和 SPEED LED)</li> <li>- 1 个 IEEE 1394 接口</li> <li>- 1 个 CMOS 数据清除开关</li> <li>- 高保真音频插孔: 侧置喇叭 / 后置喇叭 / 中置喇叭 / 低音喇叭 / 音频输入 / 前置喇叭 / 麦克风</li> </ul>
SATA3	<ul style="list-style-type: none"> <li>- 6 x AMD SB950 SATA3 6.0Gb/s 连接头, 支持 RAID (RAID 0, RAID 1, RAID 0+1, JBOD 和 RAID 5), NCQ, AHCI 和热插拔功能</li> <li>- 2 x ASMedia ASM1061 SATA3 6.0Gb/s 连接头, 支持 NCQ, AHCI 和热插拔功能</li> </ul>
USB 3.0	<ul style="list-style-type: none"> <li>- 4 x Etron EJ188H 的后置 USB 3.0 连接头, 支持 USB 1.1/2.0/3.0 到 5Gb/s</li> <li>- 2 x Etron EJ188H 的前置 USB 3.0 连接头 (支持 4 个 USB 3.0 接口), 支持 USB 1.1/2.0/3.0 到 5Gb/s</li> </ul>
连接头	<ul style="list-style-type: none"> <li>- 8 x SATA3 6.0Gb/s 连接头</li> <li>- 1 x 红外线模块接头</li> <li>- 1 x 消费类红外线模块接头</li> <li>- 1 x 串行接口连接器</li> <li>- 1 x IEEE 1394 接头</li> <li>- 1 x 电源指示灯连接排针</li> <li>- 2 x CPU 风扇接头 (1 x 4 针, 1 x 3 针)</li> <li>- 3 x 机箱风扇接头 (1 x 4 针, 2 x 3 针)</li> <li>- 1 x 电源风扇接头 (3 针)</li> <li>- 24 针 ATX 电源接头</li> <li>- 8 针 12V 电源接头 (高密度电源接口)</li> <li>- 前置音频面板接头</li> <li>- 2 x USB 2.0 接口 (可支持 4 个额外的 USB 2.0 接口)</li> <li>- 2 x USB 3.0 接口 (可支持 4 个额外的 USB 3.0 接口)</li> </ul>

	<ul style="list-style-type: none"> <li>- 1 x Dr. Debug (7 段调试 LED)</li> <li>- 1 个带 LED 的电源开关</li> <li>- 1 个带 LED 的复位开关</li> </ul>
BIOS	<ul style="list-style-type: none"> <li>- 32Mb AMI UEFI Legal BIOS, 支持 GUI</li> <li>- 支持即插即用 (Plug and Play, PnP)</li> <li>- ACPI 1.1 电源管理唤醒功能</li> <li>- 支持 jumperfree 免跳线模式</li> <li>- 支持 SMBIOS 2.3.1</li> <li>- CPU, VCCM, NB, SB 电压多功能调节器</li> </ul>
支持光盘	<ul style="list-style-type: none"> <li>- 驱动程序、工具软件、杀毒软件 (测试版本)、CyberLink MediaEspresso 6.5 试用版、Chrome 谷歌浏览器和工具栏</li> </ul>
硬件监控器	<ul style="list-style-type: none"> <li>- CPU 温度侦测</li> <li>- 主板温度侦测</li> <li>- CPU/ 机箱 / 电源风扇转速计</li> <li>- CPU/ 机箱静音风扇</li> <li>- CPU/ 机箱 / 电源风扇多速控制</li> <li>- 电压范围: +12V, +5V, +3.3V, 核心电压</li> </ul>
操作系统	<ul style="list-style-type: none"> <li>- Microsoft® Windows® 8/8 64 位元 /7/7 64 位元 /Vista™ / Vista™ 64 位元 /XP/XP 64 位元适用于此主板</li> </ul>
认证	<ul style="list-style-type: none"> <li>- FCC, CE, WHQL</li> <li>- 支持 ErP/EuP (需要同时使用支持 ErP/EuP 的电源供应器)</li> </ul>

\* 请参阅华擎网站了解详细的产品信息：<http://www.asrock.com>

### 1.3 跳线设置

插图所示的就是设置跳线的方法。当跳线帽放置在针脚上时，这个跳线就是“短接”。如果针脚上没有放置跳线帽，这个跳线就是“开路”。插图显示了一个 3 针脚的跳线，当跳线帽放置在针脚 1 和针脚 2 之间时就是“短接”。



接脚

设定

清除 CMOS

(CLR\_CMOS1, 3 针脚跳线)

(见第 2 页第 29 项)



注意：CLR\_CMOS1 允许您清除 CMOS 中的数据。如要清除并将系统参数恢复至默认设置，请关闭计算机，然后从电源插座上拔掉电源线。等待 15 秒后，使用跳线帽将 CLR\_CMOS1 上的插针 2 和插针 3 短接 5 秒。但是，请勿在更新 BIOS 后立即清除 CMOS。如果需要在更新 BIOS 后立即清除 CMOS，必须在执行 CMOS 清除操作之前，先启动然后关闭系统。请注意，只有取出 CMOS 电池，密码、日期、时间、用户默认配置文件、1394 GUID 和 MAC 地址才会被清除。



清除 CMOS 开关与清除 CMOS 跳线具有相同的功能。

## 1.4 板载接头和接口



板载接头和接口不是跳线。切勿将跳线帽放置在这些接头和接口上。将跳线帽放置在接头和接口上将会导致主板的永久性损坏！

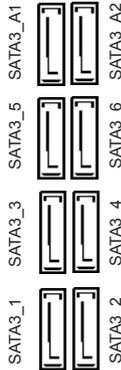
### Serial ATA3 接口

(SATA3\_1\_2: 见第 2 页第 18 项)

(SATA3\_3\_4: 见第 2 页第 17 项)

(SATA3\_5\_6: 见第 2 页第 16 项)

(SATA3\_A1\_A2: 见第 2 页第 15 项)



这里有八组 Serial ATA3 (SATA3) 接口支持 Serial (SATA) 数据线作为内部储存设置。目前 SATA3 界面理论上可提供高达 6.0Gb/s 的数据传输速率。

### Serial ATA (SATA) 数据线 (选配)



SATA 数据线的任意一端均可连接 SATA3 硬盘或者主板上的 SATA3 接口。

### Serial ATA (SATA) 电源线 (选配)

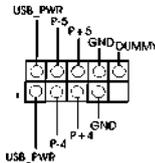


请将 SATA 电源线黑色的一端连接到 SATA 驱动器的电源接口。然后将 SATA 电源线白色的一端连接到电源适配器的电源接口。

### USB 2.0 扩展接头

(9 针 USB4\_5)

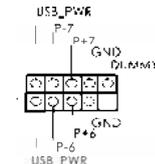
(见第 2 页第 26 项)



除了位于 I/O 面板的四个默认 USB 2.0 接口之外, 这款主板有两组 USB 2.0 接针。每组 USB 2.0 接针可以支持两个 USB 2.0 接口。

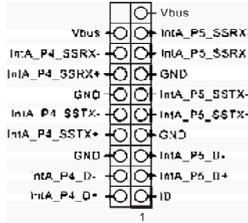
(9 针 USB6\_7)

(见第 2 页第 25 项)



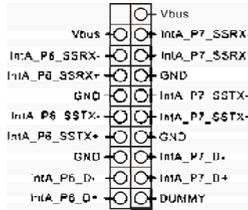
## USB 3.0 扩展接头

(19 针 USB3\_4\_5)  
(见第 2 页第 12 项)



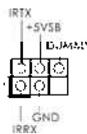
除了位於 I/O 面板的四个默认 USB 3.0 接口之外, 这款主板有两组 USB 3.0 接针。每组 USB 3.0 接针可以支持两个 USB 3.0 接口。

(19 针 USB3\_6\_7)  
(见第 2 页第 11 项)



## 红外线模块接头

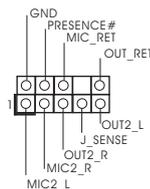
(5 针 IR1)  
(见第 2 页第 32 项)



这个接头支持一个选配的无线发送和接受红外线的模块。

## 前置音频面板接头

(9 针 HD\_AUDI01)  
(见第 2 页第 34 项)



可以方便连接音频设备。



1. 高保真音频 (High Definition Audio, HDA) 支持智能音频接口检测功能 (Jack Sensing), 但是机箱面板的连线必须支持 HDA 才能正常使用。请按我们提供的手册和机箱手册上的使用说明安装您的系统。
2. 如果您使用 AC' 97 音频面板, 请按照下面的步骤将它安装到前面板音频接针:
  - A. 将 Mic\_IN (MIC) 连接到 MIC2\_L。
  - B. 将 Audio\_R (RIN) 连接到 OUT2\_R, 将 Audio\_L (LIN) 连接到 OUT2\_L。
  - C. 将 Ground (GND) 连接到 Ground (GND)。
  - D. MIC\_RET 和 OUT\_RET 仅用于 HD 音频面板。您不必将它们连接到 AC' 97 音频面板。
  - E. 开启前置麦克风。

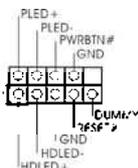
在 Windows® XP / XP 64 位元操作系统中:  
选择“Mixer”。选择“Recorder”。接著点击“FrontMic”。

在 Windows® 8 / 8 64 位元 / 7 / 7 64 位元 / Vista™ / Vista™ 64 位元操作系统中：  
在 Realtek 控制面板中点击” FrontMic”。调节” Recording Volume”。

## 系统面板接头

(9 针 PANEL1)

(见第 2 页第 28 项)



这个接头提供数个系统前面板功能。



根据下面的针脚说明连接机箱上的电源开关、重启按钮与系统状态指示灯到这个排针。根据之前请注意针脚的正负极。

PWRBTN (电源开关):

连接机箱前面板的电源开关。您可以设置用电源键关闭系统的方式。

RESET (重启开关):

连接机箱前面板的重启开关。当电脑死机且无法正常重新启动时，可按下重启开关重新启动电脑。

PLED (系统电源指示灯):

连接机箱前面板的电源状态指示灯。当系统运行时，此指示灯亮起。当系统处于 S1 待机模式时，此指示灯保持闪烁。当系统处于 S3/S4 待机模式或关机 (S5) 模式时，此指示灯熄灭。

HD LED (硬盘活动指示灯):

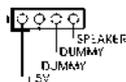
连接机箱前面板的硬盘动作指示灯。当硬盘正在读取或写入数据时，此指示灯亮起。

前面板设计因机箱不同而有差异。前面板模块一般由电源开关、重启开关、电源指示灯、硬盘动作指示灯、喇叭等构成。将您的机箱前面板连接到此排针时，请确认连接线与针脚上的说明相对应。

## 机箱喇叭接头

(4 针 SPEAKER1)

(见第 2 页第 19 项)



请将机箱喇叭连接到这个接头。

## 电源指示灯连接排针

(3 针 PLED1)

(见第 2 页第 30 项)

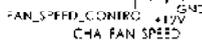


请将机箱电源指示灯连接到这一排针，以指示系统电源状态。当系统正在运行时，LED 指示灯亮。在 S1 模式下，LED 指示灯会不停闪烁。在 S3/S4 或 S5 模式 (关机) 下，LED 指示灯会熄灭。

## 机箱，电源风扇接头

(4 针 CHA\_FAN1)

(见第 2 页第 20 项)



请将风扇连接线接到这个接头，并让黑线与接地的针脚相接。CHA\_FAN1/2/3 风扇速度可通过 UEFI 或 AXTU 来控制。

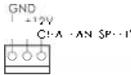
(3 针 CHA\_FAN2)

(见第 2 页第 6 项)



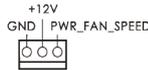
(3 针 CHA\_FAN3)

(见第 2 页第 24 项)



(3 针 PWR\_FAN1)

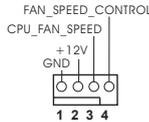
(见第 2 页第 9 项)



## CPU 风扇接头

(4 针 CPU\_FAN1)

(见第 2 页第 4 项)



请将 CPU 风扇连接线接到这个接头，并让黑线与接地的针脚相接。



虽然此主板支持 4-Pin CPU 风扇 (Quiet Fan, 静音风扇)，但是没有调速功能的 3-Pin CPU 风扇仍然可以在此主板上正常运行。如果您打算将 3-Pin CPU 风扇连接到此主板的 CPU 风扇接口，请将它连接到 Pin 1-3。

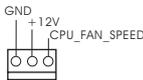
Pin 1-3 连接

3-Pin 风扇的安装



(3 针 CPU\_FAN2)

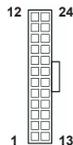
(见第 2 页第 5 项)



## ATX 电源接头

(24 针 ATXPWR1)

(见第 2 页第 10 项)



请将 ATX 电源供应器连接到这个接头。



虽然此主板提供 24-pin ATX 电源接口，但是您仍然可以使用传统的 20-pin ATX 电源。为了使用 20-pin ATX 电源，请顺著 Pin 1 和 Pin 13 插上电源接头。



20-Pin ATX 电源安装说明

1 13

ATX 12V 接头  
(8 针 ATX12V1)  
(见第 2 页第 1 项)



请将一个 ATX 12V 电源供应器接到这个接头。

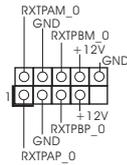


虽然此主板提供 8-pin ATX 12V 电源接口，但是您仍然可以使用传统的 4-pin ATX 12V 电源。为了使用 4-pin ATX 12V 电源，请顺著 Pin 1 和 Pin 5 插上电源接头。

4-Pin ATX 12V 电源安装说明

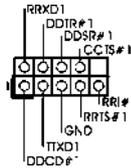


IEEE 1394 接口  
(9 针 FRONT\_1394)  
(见第 2 页第 33 项)



除了位於 I/O 面板的一个默认 IEEE 1394 接口之外，这款主板有一组 IEEE 1394 接针。这组 IEEE 1394 接针可以支持一个 IEEE 1394 接口。

串行接口连接器  
(9 针 COM1)  
(见第 2 页第 31 项)



这个 COM1 端口支持一个串行接口的外设。

消费类红外线模块接头  
(4 针 CIR1)  
(见第 2 页第 27 项)



此接口可以连接遥控器。

## 前部USB 3.0面板安装指南

**步骤 1** 准备好随附的前部 USB 3.0 面板、四个 HDD 螺丝、以及六个机箱螺丝。



**步骤 3** 将前部USB 3.0面板装入机箱的2.5”驱动器托槽。



**步骤 5** 将前部USB 3.0线插入主板上的USB 3.0接头 (USB3\_4\_5或USB3\_6\_7)。



**步骤 2** 用四个 HDD 螺丝将 2.5” HDD/SSD 装到前部 USB 3.0 面板上。



**步骤 4** 用六个机箱螺丝将前部USB 3.0面板装入驱动器托槽并拧上螺丝。



**步骤 6** 现在，即可使用USB 3.0面板了。



## 后部USB 3.0面板安装指南

**步骤 1** 拧下前部USB 3.0面板上的两个螺丝。



**步骤 3** 将两个螺丝拧入后部USB 3.0面板。



**步骤 2** 将USB 3.0线连接到后部USB 3.0面板。



**步骤 4** 将后部USB 3.0面板装到机箱上。



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## 1.5 快速开关

本主板有三个快速开关：电源开关，复位开关与 CMOS 数据清除开关，可让用户快速开启 / 关闭或复位系统，或者清除 CMOS 中的数据。

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### 电源开关

(PWRBTN)

(见第 2 页第 21 项)



电源开关是一种快速开关，可让用户快速开启 / 关闭系统。

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### 复位开关

(RSTBTN)

(见第 2 页第 22 项)



复位开关是一种快速开关，可让用户快复位系统。

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### CMOS 数据清除开关

(CLRBTN)

(见第 3 页第 18 项)



CMOS 数据清除开关是一种快速开关，可让用户快速清除 CMOS 中的数据。

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## 2. BIOS 信息

主板上的 Flash Memory 存储了 BIOS 设置程序。请再启动电脑进行开机自检 (POST) 时按下 <F2> 或 <Del> 键进入 BIOS 设置程序；此外，你也可以让开机自检 (POST) 进行常规检验。如果你需要在开机自检 (POST) 之后进入 BIOS 设置程序，请按下 <Ctrl>+<Alt>+<Delete> 键重新启动电脑，或者按下系统面板上的重启按钮。有关 BIOS 设置的详细信息，请查阅随机支持光盘里的用户手册 (PDF 文件)。

## 3. 支持光盘信息

本主板支持各种微软视窗操作系统：Microsoft®Windows® 8/8 64 位元 /7/7 64 位元 /Vista™/Vista™ 64 位元 /XP/XP 64 位元。主板随机支持光盘包含各种有助于提高主板效能的必要驱动和实用程序。请将随机支持光盘放入光驱里，如果电脑的“自动运行”功能已启用，屏幕将会自动显示主菜单。如果主菜单不能自动显示，请查找支持光盘内 BIN 文件夹下的“ASRSetup.exe”，并双击它，即可调出主菜单。

## 电子信息产品污染控制标示

依据中国发布的「电子信息产品污染控制管理办法」及 SJ/T 11364-2006「电子信息产品污染控制标示要求」，电子信息产品应进行标示，藉以向消费者揭露产品中含有的有毒有害物质或元素不致发生外泄或突变从而对环境造成污染或对人身、财产造成严重损害的期限。依上述规定，您可于本产品之印刷电路板上看见图一之标示。图一中之数字为产品之环保使用期限。由此可知此主板之环保使用期限为 10 年。



图一

## 有毒有害物质或元素的名称及含量说明

若您欲了解此产品的有毒有害物质或元素的名称及含量说明，请参照以下表格及说明。

部件名称	有害物质或元素					
	铅 (Pb)	镉 (Cd)	汞 (Hg)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板及电子组件	X	O	O	O	O	O
外部信号连接头及线材	X	O	O	O	O	O

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求，然该部件仍符合欧盟指令 2002/95/EC 的规范。

备注：此产品所标示之环保使用年限，系指在一般正常使用状况下。

# 1. 主機板簡介

謝謝你採用了 **990FX Extreme9** 主機板，本主機板由華擎嚴格製造，品質可靠，穩定性好，能夠獲得卓越的性能。此快速安裝指南包括了主機板介紹和分步驟安裝指導。您可以查看支持光碟裡的使用手冊了解更詳細的資料。



由於主機板規格和 BIOS 軟體將不斷更新，本手冊之相關內容變更恕不另行通知。請留意華擎網站上公布的更新版本。你也可以在華擎網站找到最新的顯示卡和 CPU 支援列表。

華擎網址：<http://www.asrock.com>

如果您需要與此主機板有關的技術支援，請參觀我們的網站以了解您使用機種的規格訊息。

[www.asrock.com/support/index.asp](http://www.asrock.com/support/index.asp)

## 1.1 包裝盒內物品

**990FX Extreme9** 主機板 (ATX 規格)

**990FX Extreme9** 快速安裝指南

**990FX Extreme9** 支援光碟

一張華擎 SLI\_Bridge\_2S 卡

一張華擎 3-Way SLI-2S1S Bridge 卡

六條 Serial ATA(SATA) 數據線 (選配)

兩條 Serial ATA(SATA) 硬碟電源線 (選配)

一塊 I/O 擋板

一個包含 2.5 吋傳統硬碟／固態硬碟架的前置 USB 3.0 面板

四個硬碟螺絲

六個機殼螺絲

一個後 USB 3.0 托架



**ASRock提醒您...**

若要在 Windows® 8 / 8 64位元 / 7 / 7 64位元 / Vista™ / Vista™ 64位元中發揮更好的效能，建議您將儲存裝置組態中的 BIOS 選項設為 AHCI 模式。有關 BIOS 設定的詳細資訊，請參閱支援光碟中的「使用者手冊」。

## 1.2 主機板規格

架構	<ul style="list-style-type: none"> <li>- ATX 規格</li> <li>- 頂級黃金電容器設計 ( 百分百日本製造的高品質導電高分子電容器 )</li> <li>- 多重濾波電容 (MFC) ( 以 3 種電容過濾不同的雜訊：DIP 固態電容、POSCAP 及 MLCC )</li> </ul>
處理器	<ul style="list-style-type: none"> <li>- 支援 Socket AM3+ 處理器</li> <li>- 支援 Socket AM3 處理器：AMD Phenom™ II X6 / X4 / X3 / X2(920 / 940 除外) / Athlon II X4 / X3 / X2 / Sempron 處理器</li> <li>- 八核心 CPU 就緒</li> <li>- 支援 UCC (Unlock CPU Core)</li> <li>- Digi 電源設計</li> <li>- 高級 12 + 2 電源相位設計</li> <li>- 雙堆疊 MOSFET (DSM)</li> <li>- 支援高達 140W 的 CPU</li> <li>- 支援 AMD Cool 'n' Quiet 冷靜技術</li> <li>- 支援 FSB 2600 MHz (5.2 GT/s)</li> <li>- 支援非同步超頻技術</li> <li>- 支援 Hyper-Transport 3.0 (HT 3.0) 技術</li> </ul>
晶片組	<ul style="list-style-type: none"> <li>- 北橋：AMD 990FX</li> <li>- 南橋：AMD SB950</li> </ul>
系統記憶體	<ul style="list-style-type: none"> <li>- 支援雙通道記憶體技術</li> <li>- 4 個 DDR3 DIMM 插槽</li> <li>- 支援 DDR3 2450(超頻)/2100(超頻)/1600/1333/1066 non-ECC、un-buffered 記憶體</li> <li>- 系統最高支援 64GB 容量</li> <li>- 支援 Intel® Extreme Memory Profile(XMP)1.3/1.2</li> <li>- 支援 AMD Memory Profile(AMP)</li> </ul>
擴充插槽	<ul style="list-style-type: none"> <li>- 4 x PCI Express 2.0 x16 插槽 (PCIe1: x16 模式、PCIe3: x4 模式、PCIe4/PCIe5：單個 x16 (PCIe4) / x8 (PCIe5) 或兩個 x8/x8 模式)</li> <li>- 1 x PCI Express 2.0 x1 插槽</li> <li>- 1 x PCI 插槽</li> <li>- 支援 AMD Quad CrossFireX™、3-Way CrossFireX™ 和 CrossFireX™</li> <li>- 支援 NVIDIA® Quad SLI™、3-Way SLI™ 和 SLI™ 技術</li> </ul>
音效	<ul style="list-style-type: none"> <li>- 7.1 聲道高清晰音效，支援內容保護功能 (Realtek ALC898 音效編解碼器)</li> <li>- 支援高級藍光音效</li> </ul>

網路功能	<ul style="list-style-type: none"> <li>- PCIE x1 Gigabit LAN 10/100/1000 Mb/s</li> <li>- Intel® 82583V</li> <li>- 支援網路喚醒 (Wake-On-LAN)</li> <li>- 支援預先開機執行環境 (PXE)</li> </ul>
Rear Panel I/O (後背板輸入/ 輸出接口)	<p>I/O 界面</p> <ul style="list-style-type: none"> <li>- 1 個 PS/2 滑鼠接口</li> <li>- 1 個 PS/2 鍵盤接口</li> <li>- 1 個同軸 SPDIF 輸出接口</li> <li>- 1 個光纖 SPDIF 輸出接口</li> <li>- 4 個可直接使用的 USB 2.0 接口</li> <li>- 4 個可直接使用的 USB 3.0 接口</li> <li>- 2 個 eSATA3 接口</li> <li>- 1 個 RJ-45 區域網接口與 LED 指示燈 (ACT/LINK LED 和 SPEED LED)</li> <li>- 1 個 IEEE 1394 接口</li> <li>- 1 個 CMOS 數據清除開關</li> <li>- 高清晰音效插孔：側置喇叭 / 後置喇叭 / 中置喇叭 / 低音喇叭 / 音效輸入 / 前置喇叭 / 麥克風</li> </ul>
SATA3	<ul style="list-style-type: none"> <li>- 6 x AMD SB950 SATA3 6.0Gb/s 接頭，支援 RAID (RAID 0, RAID 1, RAID 0+1, JBOD 和 RAID 5)，NCQ, AHCI 和熱插拔功能</li> <li>- 2 x ASMedia ASM1061 SATA3 6.0Gb/s 接頭，支援 NCQ, AHCI 和熱插拔功能</li> </ul>
USB 3.0	<ul style="list-style-type: none"> <li>- 4 x Etron EJ188H 的後置 USB 3.0 接頭，支援 USB 1.1/2.0/3.0 到 5Gb/s</li> <li>- 2 x Etron EJ188H 的前置 USB 3.0 接頭 (支援 4 個 USB 3.0 接頭)，支援 USB 1.1/2.0/3.0 到 5Gb/s</li> </ul>
接頭	<ul style="list-style-type: none"> <li>- 8 x SATA3 6.0Gb/s 接頭</li> <li>- 1 x 紅外線模組接頭</li> <li>- 1 x 消費性紅外線模組插座</li> <li>- 1 X 序列埠</li> <li>- 1 x IEEE 1394 接頭</li> <li>- 1 x 電源指示燈接頭</li> <li>- 2 x CPU 風扇接頭 (1 x 4 針, 1 x 3 針)</li> <li>- 3 x 機箱風扇接頭 (1 x 4 針, 2 x 3 針)</li> <li>- 1 x 電源風扇接頭 (3 針)</li> <li>- 24 針 ATX 電源接頭</li> <li>- 8 針 12V 電源接頭 (高密度電源接頭)</li> <li>- 前置音效接頭</li> <li>- 2 x USB 2.0 接口 (可支援 4 個額外的 USB 2.0 接口)</li> </ul>

	<ul style="list-style-type: none"> <li>- 2 x USB 3.0 接口 (可支援 4 個額外的 USB 3.0 接口)</li> <li>- 1 x Dr. Debug (7 段顯示器偵錯 LED)</li> <li>- 1 個 LED 電源開關</li> <li>- 1 個 LED 重置開關</li> </ul>
BIOS	<ul style="list-style-type: none"> <li>- 32Mb AMI UEFI Legal BIOS (支援 GUI)</li> <li>- 支援即插即用 (Plug and Play, PnP)</li> <li>- ACPI 1.1 電源管理喚醒功能</li> <li>- 支援 jumperfree 免跳線模式</li> <li>- 支援 SMBIOS 2.3.1</li> <li>- CPU, VCCM, NB, SB 電壓多功能調節器</li> </ul>
支援光碟	<ul style="list-style-type: none"> <li>- 驅動程式、工具軟體、防毒軟體 (試用版本)、CyberLink MediaEspresso 6.5 試用版、Google Chrome Browser 和 Toolbar</li> </ul>
硬體監控器	<ul style="list-style-type: none"> <li>- CPU 溫度偵測</li> <li>- 主板溫度偵測</li> <li>- CPU/ 機箱 / 電源風扇轉速計</li> <li>- CPU/ 機箱靜音風扇</li> <li>- CPU/ 機箱 / 電源風扇多速控制</li> <li>- 電壓範圍: +12V, +5V, +3.3V, 核心電壓</li> </ul>
操作系統	<ul style="list-style-type: none"> <li>- Microsoft® Windows® 8/8 64 位元 /7/7 64 位元 /Vista™/ Vista™ 64 位元 /XP/XP 64 位元</li> </ul>
認證	<ul style="list-style-type: none"> <li>- FCC, CE, WHQL</li> <li>- 支援 ErP/EuP (需要同時使用支援 ErP/EuP 的電源供應器)</li> </ul>

\* 請參閱華擎網站了解詳細的產品訊息：<http://www.asrock.com>

### 1.3 跳線設置

插圖所示的就是設置跳線的方法。當跳線帽放置在針腳上時，這個跳線就是“短接”。如果針腳上沒有放置跳線帽，這個跳線就是“開路”。插圖顯示了一個3針腳的跳線，當跳線帽放置在針腳1和針腳2之間時就是“短接”。



接腳

設定

清除 CMOS

(CLRCMOS1, 3 針腳跳線)

(見第2頁第29項)



默認設置



清除 CMOS

註： CLRCMOS1 可供您清除 CMOS 中的資料。若要清除及重設系統參數並恢復為預設設定，請先關閉電腦電源，並從電源插座中拔下電源線，等待 15 秒鐘之後，使用跳線帽使 CLRCMOS1 的 pin2 及 pin3 短路 5 秒的時間。但請勿於更新 BIOS 後立即清除 CMOS。如需於更新 BIOS 後立即清除 CMOS，您必須先開機再關機，然後再執行 CMOS 清除操作。請注意，只有在移除 CMOS 電池的情況下，密碼、日期、時間、使用者預設設定檔、1394 GUID 及 MAC 位址才會清除。



Clear CMOS開關的功能與Clear CMOS跳線相同。

## 1.4 接頭



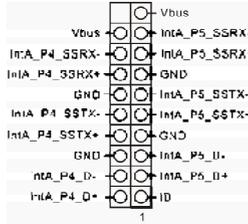
此類接頭是不用跳線帽連接的，請不要用跳線帽短接這些接頭。  
跳線帽不正確的放置將會導致主機板的永久性損壞！

接頭	圖示	說明
<b>Serial ATA3 接口</b> (SATA3_1_2: 見第 2 頁第 18 項) (SATA3_3_4: 見第 2 頁第 17 項) (SATA3_5_6: 見第 2 頁第 16 項) (SATA3_A1_A2: 見第 2 頁第 15 項)		這裡有八組 Serial ATA3 (SATA3) 接口支援 SATA 數據線作為內部儲存設置。 目前 SATA3 界面理論上可提供高達 6.0Gb/s 的數據傳輸速率。
<b>Serial ATA (SATA) 數據線</b> (選配)		SATA 數據線的任意一端均可連接 SATA3 硬碟或者主機板上的 SATA3 接口。
<b>Serial ATA (SATA) 電源線</b> (選配)		請將 SATA 電源線黑色的一端連接到 SATA 驅動器的電源接口。然後將 SATA 電源線白色的一端連接到電源适配器的電源接口。
<b>USB 2.0 擴充接頭</b> (9 針 USB4_5) (見第 2 頁第 26 項)		除了位於 I/O 面板的四個 USB 2.0 接口之外，這款主機板有兩組 USB 2.0 接針。每組 USB 2.0 接針可以支援兩個 USB 2.0 接口。
(9 針 USB6_7) (見第 2 頁第 25 項)		

## USB 3.0 擴充接頭

(19 針 USB3\_4\_5)

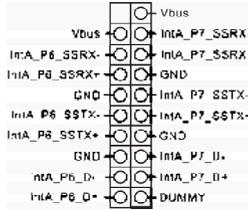
(見第 2 頁第 12 項)



除了位於 I/O 面板的四個 USB 3.0 接口之外，這款主機板有兩組 USB 3.0 接針。每組 USB 3.0 接針可以支援兩個 USB 3.0 接口。

(19 針 USB3\_6\_7)

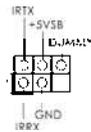
(見第 2 頁第 11 項)



## 紅外線模組接頭

(5 針 IR1)

(見第 2 頁第 32 項)

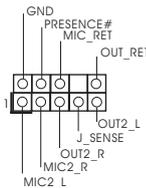


這個接頭支援一個選配的模組，可用來無線傳輸和接收紅外線。

## 前置音效接頭

(9 針 HD\_AUDI01)

(見第 2 頁第 34 項)



可以方便連接音效設備。



1. 高清晰音效 (High Definition Audio, HDA) 支援智能音效接口檢測功能 (Jack Sensing)，但是機箱面板的連線必須支持 HDA 才能正常使用。請按我們提供的手冊和機箱手冊上的使用說明安裝您的系統。
2. 如果您使用 AC' 97 音效面板，請按照下面的步驟將它安裝到前面板音效接針：
  - A. 將 Mic\_IN(MIC) 連接到 MIC2\_L。
  - B. 將 Audio\_R(RIN) 連接到 OUT2\_R，將 Audio\_L(LIN) 連接到 OUT2\_L。
  - C. 將 Ground(GND) 連接到 Ground(GND)。
  - D. MIC\_RET 和 OUT\_RET 僅用於 HD 音效面板。您不必將它們連接到 AC' 97 音效面板。
  - E. 開啟前置麥克風。

在 Windows® XP / XP 64 位元作業系統中：

選擇 "Mixer"。選擇 "Recorder"。接著點選 "FrontMic"。

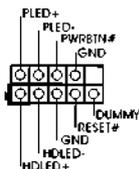
在 Windows® 8 / 8 64 位元 / 7 / 7 64 位元 / Vista™ / Vista™ 64 位元作業系統中：

在 Realtek 控制面板中點選” FrontMic” 。調整” Recording Volume” 。

### 系統面板接頭

(9 針 PANEL1)

(見第 2 頁第 28 項)



可接各種不同燈，電源開關及重啟鍵等各種連線。



請根據下面的腳位說明連接機箱上的電源開關、重開按鈕與系統狀態指示燈到這個接頭。請先注意針腳的正負極。

**PWRBTN( 電源開關 ):**

連接機箱前面板的電源開關。您可以設定用電源鍵關閉系統的方式。

**RESET( 重開開關 ):**

連接機箱前面板的重開開關。當電腦當機且無法正常重新啟動時，可按下重開開關重新啟動電腦。

**PLED( 系統電源指示燈 ):**

連接機箱前面板的電源狀態指示燈。當系統運行時，此指示燈亮起。當系統處於 S1 待命模式時，此指示燈保持閃爍。當系統處於 S3/S4 待命模式或關機 (S5) 模式時，此指示燈熄滅。

**HD LED( 硬碟活動指示燈 ):**

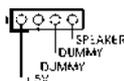
連接機箱前面板的硬碟動作指示燈。當硬碟正在讀取或寫入數據時，此指示燈亮起。

前面板設計因機箱不同而有差異。前面板模組一般由電源開關、重開開關、電源指示燈、硬碟活動指示燈、喇叭等構成。將您的機箱前面板连接到此接頭時，請確認連線與針腳上的說明相對應。

### 機箱喇叭接頭

(4 針 SPEAKER)

(見第 2 頁第 19 項)



請將機箱喇叭連接到這個接頭。

### 電源指示燈接頭

(3 針 PLED1)

(見第 2 頁第 30 項)



請將機箱電源指示燈連接到此接頭，以指示系統電源狀態。當系統正在運行時，LED 指示燈亮。在 S1 模式下，LED 指示燈會不停閃爍。在 S3/S4 或 S5 模式 (關機) 下，LED 指示燈會熄滅。

### 機箱，電源風扇接頭

(4 針 CHA\_FAN1)  
(見第 2 頁第 20 項)

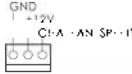


請將風扇連接線接到這個接頭，並讓黑線與接地的針腳相接。CHA\_FAN1/2/3 可由 UEFI 或 AXTU 設定。

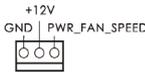
(3 針 CHA\_FAN2)  
(見第 2 頁第 6 項)



(3 針 CHA\_FAN3)  
(見第 2 頁第 24 項)

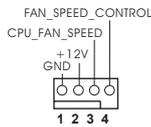


(3 針 PWR\_FAN1)  
(見第 2 頁第 9 項)



### CPU 風扇接頭

(4 針 CPU\_FAN1)  
(見第 2 頁第 4 項)



請將 CPU 風扇連接線接到這個接頭，並讓黑線與接地的針腳相接。



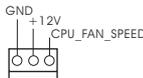
雖然此主板支持 4-Pin CPU 風扇 (Quiet Fan, 靜音風扇)，但是沒有調速功能的 3-Pin CPU 風扇仍然可以在此主板上正常運行。如果您打算將 3-Pin CPU 風扇連接到此主板的 CPU 風扇接口，請將它連接到 Pin 1-3。

Pin 1-3 連接 ←

3-Pin 風扇的安裝

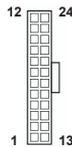


(3 針 CPU\_FAN2)  
(見第 2 頁第 5 項)



### ATX 電源接頭

(24 針 ATXPWR1)  
(見第 2 頁第 10 項)



請將 ATX 電源供應器連接到這個接頭。



雖然此主機板提供 24-pin ATX 電源接口，但是您仍然可以使用傳統的 20-pin ATX 電源。為了使用 20-pin ATX 電源，請順著 Pin 1 和 Pin 13 插上電源接頭。

20-Pin ATX 電源安裝說明



### ATX 12V 電源接口

(8 針 ATX12V1)

(見第 2 頁第 1 項)



請注意，必需將帶有 ATX 12V 插頭的電源供應器連接到這個插座，這樣就可以提供充足的電力。如果不這樣做，就會導致供電故障。



雖然此主機板提供 8-pin ATX 12V 電源接口，但是您仍然可以使用傳統的 4-pin ATX 12V 電源。為了使用 4-pin ATX 12V 電源，請順著 Pin 1 和 Pin 5 插上電源接頭。

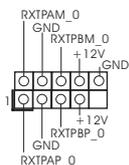


4-Pin ATX 12V 電源安裝說明

### IEEE 1394 接口

(9 針 FRONT\_1394)

(見第 2 頁第 33 項)

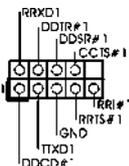


除了位於 I/O 面板的一個默認 IEEE 1394 接口之外，這款主機板有一組 IEEE 1394 接針。這組 IEEE 1394 接針可支援一個 IEEE 1394 接口。

### 序列埠

(9 針 COM1)

(見第 2 頁第 31 項)



這個序列埠 COM1 支援一個序列埠的裝置。

### 消費性紅外線模組插座

(4 針 CIR1)

(見第 2 頁第 27 項)



此插座可用於連接遙控器。

## 前USB 3.0面板安裝指南

**步驟 1** 備妥搭售的 USB 3.0 前面板、四顆硬碟螺絲及六顆機殼螺絲。



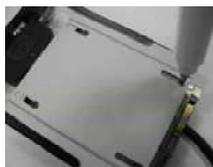
**步驟 3** 將前USB 3.0面板裝入底座的 2.5 吋磁碟機槽中。



**步驟 5** 將前USB 3.0纜線插入主機板上的USB 3.0座 (USB3\_4\_5或USB3\_6\_7)。



**步驟 2** 用四顆硬碟螺絲，將 2.5" 硬碟／固態硬碟鎖至 USB 3.0 前面板上。



**步驟 4** 用六顆機殼螺絲，將 USB 3.0 前面板鎖至硬碟槽內。



**步驟 6** 前USB 3.0面板隨即可供使用。



## 後USB 3.0托架安裝指南

**步驟 1** 鬆開前USB 3.0面板上的兩顆螺絲。



**步驟 3** 將兩顆螺絲鎖回後USB 3.0托架。



**步驟 2** 將USB 3.0纜線和後USB 3.0托架放在一起。



**步驟 4** 將後USB 3.0托架放入底座中。



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## 1.5 快速開關

本主機板有三個快速開關：電源開關，重置開關與 CMOS 數據清除開關，可讓用戶快速開啟 / 關閉或重置系統，或者清除 CMOS 中的數據。

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### 電源開關

(PWRBTN)

(見第 2 頁第 21 項)



電源開關是一種快速開關，可讓用戶快速開啟 / 關閉系統。

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### 重置開關

(RSTBTN)

(見第 2 頁第 22 項)



重置開關是一種快速開關，可讓用戶快速重置系統。

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### CMOS 數據清除開關

(CLRBTN)

(見第 3 頁第 18 項)



CMOS 數據清除開關是一種快速開關，可讓用戶快速清除 CMOS 中的數據。

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## 2. BIOS 訊息

主板上的 Flash Memory 晶片存儲了 BIOS 設置程序。啟動系統，在系統開機自檢 (POST) 的過程中按下 <F2> 或 <Del> 鍵，就可進入 BIOS 設置程序，否則將繼續進行開機自檢之常規檢驗。如果需要在開機自檢後進入 BIOS 設置程序，請按下 <Ctl> + <Alt> + <Delete> 鍵重新啟動電腦，或者按下系統面板上的重開按鈕。功能設置程序儲存有主板自身的和連接在其上的設備的缺省和設定的參數。這些訊息用於在啟動系統和系統運行需要時，測試和初始化元件。有關 BIOS 設置的詳細訊息，請查閱隨機支援光碟裡的使用手冊 (PDF 文件)。

## 3. 支援光碟訊息

本主板支援各種微軟 Windows® 操作系統：Microsoft® Windows® 8/8 64 位元 /7/7 64 位元 /Vista™/Vista™ 64 位元 /XP/XP 64 位元。主板附帶的支援光碟包含各種有助於提高主板效能的必要驅動和實用程式。請將隨機支援光碟放入光碟機裡，如果系統的“自動運行”功能已啟用，銀幕將會自動顯示主菜單。如果主菜單不能自動顯示，請查閱支援光碟內 BIN 文件夾下的 ASRSetup.exe 文件並雙點它，即可調出主菜單。

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# 1. Penjelasan

Terimakasih untuk membeli papan induk penghasil kontrol kualitas keras terus-menerus ASRock's yang dapat dipercaya. Dia dapat menyajikan pertunjukan baik dengan bentuknya sesuai dengan janji kualitas dan ketahanan ASRock's. Buku Pedoman Instalasi Cepat ini mengandung pengenalan papan induk dan instalasi langkah-demi-langkah. Informasi lebih terperinci tentang papan induk ini dapat dilihat dalam buku tangan pemakai dalam Support CD.



Karena spesifikasi papan induk dan software BIOS barangkali dapat diperbarui, isi dalam buku pedoman ini akan mengikuti perubahan tanpa peringatan. Dalam kondisi terjadinya modifikasi buku pedoman ini, versi baru akan diperlihatkan dalam website ASRock tanpa peringatan lebih. Anda dapat mendapatkan kartu-kartu yang paling baru dan daftar bantuan CPU pada website ASRock. Website ASRock <http://www.asrock.com>

## 1.1 Isi Paket

Papan Induk **990FX Extreme9** ASRock (Faktor Form ATX)  
Pemimpin Instalasi Cepat **990FX Extreme9** ASRock  
Support CD **990FX Extreme9** ASRock  
1 x Kartu ASRock SLI\_Bridge\_2  
1 x Kartu ASRock 3-Way SLI-2S1S Bridge  
6 x Kabel satu serial Data ATA (SATA) (bebas-pilih)  
2 x Kabel Power Satu Serial ATA (SATA) HDD (bebas-pilih)  
1 x Satu Pelindung I/O  
1 x Panel Bagian Depan USB 3.0 dengan Rak HDD/SSD 2.5"  
4 x HDD Sekrup  
6 x Casis Sekrup  
1 x Belakang USB 3.0 golongan



### **ASRock Mengingatkan...**

Untuk mendapatkan performa lebih baik di Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit, sebaiknya atur pilihan BIOS dalam Storage Configuration (Konfigurasi Penyimpanan) ke mode AHCI. Untuk konfigurasi BIOS, lihat "Panduan Pengguna" dalam CD dukungan kami untuk informasi rinci.

## 1.2 Spesifikasi

<b>Podium</b>	<ul style="list-style-type: none"> <li>- Faktor Form ATX</li> <li>- Desain Kapasitor Warna Emas Premium (100% Kapasitor Polimer Konduktif buatan Jepang berkualitas tinggi)</li> <li>- Kapasitor Multi Filter atau Multiple Filter Cap (MFC) (Menyaring berbagai noise menggunakan 3 kapasitor yang berbeda: kapasitor solid DIP, POSCAP, dan MLCC)</li> </ul>
<b>CPU</b>	<ul style="list-style-type: none"> <li>- Stopkontak AM3+</li> <li>- Stopkontak AM3 untuk AMD Phenom™ II X6 / X4 / X3 / X2 (kecuali 920 / 940) / Athlon II X4 / X3 / X2 / Sempron processor</li> <li>- Dukungan CPUT Delapan Inti</li> <li>- Mendukung fitur UCC (Unlock CPU Core)</li> <li>- Digi Power Desain</li> <li>- Desain Daya 12 + 2 Fase</li> <li>- MOSFET Stack Ganda atau Dual Stack MOSFET (DSM)</li> <li>- Mendukung CPU hingga 140 W</li> <li>- Dapat digunakan AM's Cool 'n' Quiet™ Technology</li> <li>- FSB 2600 MHz (5.2 GT/s)</li> <li>- Menggunakan Teknologi Untied Overclocking</li> <li>- Dapat digunakan Hyper-Transport 3.0 (HT 3.0) Technology</li> </ul>
<b>Grup Chip</b>	<ul style="list-style-type: none"> <li>- Jembatanutara: AMD 990FX</li> <li>- Jembatanselatan: AMD SB950</li> </ul>
<b>Ingatan</b>	<ul style="list-style-type: none"> <li>- Teknologi ingatan DDR3 dwisaluran</li> <li>- 4 x Alur DDR3 DIMM</li> <li>- Menggunakan DDR3 2450(OC)/2100(OC)/1600/1333/1066</li> <li>- Kapasitas paling banyak: 64GB</li> <li>- Mendukung Intel® Extreme Memory Profile (XMP)1.3/1.2</li> <li>- Mendukung AMD Memory Profile (AMP)</li> </ul>
<b>Alur Ekspansi</b>	<ul style="list-style-type: none"> <li>- 4 x PCI Express 2.0 x16 slots (PCIE1: x16 mode; PCIE3: x4 mode; PCIE4/PCIE5: tunggal pada mode x16 (PCIE4) / x8 (PCIE5) atau ganda pada mode x8/x8)</li> <li>- 1 x PCI Express 2.0 x1 slot</li> <li>- 2 x Alur PCI</li> <li>- Mendukung AMD Quad CrossFireX™, 3-Way CrossFireX™ dan CrossFireX™</li> <li>- Mendukung NVIDIA® Quad SLI™, 3-Way SLI™ dan SLI™</li> </ul>
<b>Audio</b>	<ul style="list-style-type: none"> <li>- 7.1 CH HD Audio dengan Content Protection (Realtek ALC898 Audio Codec)</li> <li>- Menggunakan Premium Blu-ray audio</li> </ul>

<b>LAN</b>	<ul style="list-style-type: none"> <li>- PCIE x1 Gigabit LAN 10/100/1000 Mb/s</li> <li>- Intel® 82583V</li> <li>- Menggunakan Wake-On-LAN</li> <li>- Mendukung PXE</li> </ul>
<b>Papan Belakang I/O</b>	<ul style="list-style-type: none"> <li>I/O Panel</li> <li>- 1 x Port Mouse PS/2</li> <li>- 1 x Port Keyboard PS/2</li> <li>- 1 x Port Keluaran Coaxial SPDIF</li> <li>- 1 x Port Keluaran Optical SPDIF</li> <li>- 4 x Port USB 2.0 siap-dipakai</li> <li>- 4 x Port USB 3.0 siap-dipakai</li> <li>- 2 x Port eSATA3</li> <li>- 1 x RJ-45 LAN Port LED (ACT/LINK LED dan SPEED LED)</li> <li>- 1 x Port IEEE 1394</li> <li>- 1 x Tombol Clear CMOS dengan LED</li> <li>- HD Audio Jack: Penyuara Tepi/Penyuara Belakang/Pusat/Bass/Line in/Penyuara Depan/mikropon</li> </ul>
<b>SATA3</b>	<ul style="list-style-type: none"> <li>- 6 x penghubung AMD SB950 SATA3 6.0Gb/s, dapat digunakan RAID (RAID 0, RAID 1, RAID 0+1, JBOD dan RAID 5), NCQ, AHCI dan fungsi fungsi "Hot Plug"</li> <li>- 2 x penghubung ASMedia ASM1061 SATA3 6.0Gb/s, dapat digunakan NCQ, AHCI dan fungsi fungsi "Hot Plug"</li> </ul>
<b>USB 3.0</b>	<ul style="list-style-type: none"> <li>- 4 x Port Belakang USB 3.0 dari Etron EJ188H, mendukung USB 1.1/2.0/3.0 hingga 5Gb/s</li> <li>- 2 x Port Depan USB 3.0 dari Etron EJ188H (menggunakan 4 port USB 3.0), mendukung USB 1.1/2.0/3.0 hingga 5Gb/s</li> </ul>
<b>Penghubung</b>	<ul style="list-style-type: none"> <li>- 8 x penghubung SATA3 6.0Gb/s</li> <li>- 1 x header IR</li> <li>- 1 x header CIR</li> <li>- 1 x port header COM</li> <li>- 1 x header IEEE 1394</li> <li>- 1 x header power LED</li> <li>- 2 x Penghubung KIPAS CPU (1 x 4 pin, 1 x 3 pin)</li> <li>- 3 x Penghubung KIPAS casing (1 x 4 pin, 2 x 3 pin)</li> <li>- 1 x Penghubung KIPAS Power (3 pin)</li> <li>- Penghubung power 24 pin ATX</li> <li>- Penghubung power 8 pin 12V (Konektor Daya Kepadatan Tinggi)</li> <li>- Penghubung audio panel depan</li> <li>- 2 x USB 2.0 header (menggunakan 4 port USB 2.0)</li> </ul>

	<ul style="list-style-type: none"> <li>- 2 x USB 3.0 header (menggunakan 4 port USB 3.0)</li> <li>- 1 x Dr. Debug LED</li> <li>- 1 x kuasa beralih LED</li> <li>- 1 x ulang beralih LED</li> </ul>
<b>Ciri-ciri BIOS</b>	<ul style="list-style-type: none"> <li>- 32Mb AMI UEFI Legal BIOS dengan dukungan GUI</li> <li>- Menggunakan "Plug and Play"</li> <li>- ACPI 1.1 Compliance Wake Up Events</li> <li>- Menggunakan jumperfree</li> <li>- Penyokong AMBIOS 2.3.1</li> <li>- Penyesuaian berbagai tegangan CPU, VCCM, NB, SB</li> </ul>
<b>Sokongan CD</b>	<ul style="list-style-type: none"> <li>- Penggerak, kegunaan, Software AntiVirus (Versi Cobaan), CyberLink MediaEspresso 6.5 Trial, Google Chrome Browser dan Toolbar</li> </ul>
<b>Penjaga Hardware</b>	<ul style="list-style-type: none"> <li>- Perasa Suhu CPU</li> <li>- Perasa Suhu Casis</li> <li>- Pengukur Kipas CPU/casis/Power</li> <li>- Kipas diam CPU/casis</li> <li>- Kontrol Multi-Kecepatan Kipas CPU/casis/Power</li> <li>- Penjagaan voltasi: +12V, +5V, +3.3V, Vcore</li> </ul>
<b>OS</b>	<ul style="list-style-type: none"> <li>- dapat digunakan Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit</li> </ul>
<b>Sertifikasi</b>	<ul style="list-style-type: none"> <li>- FCC, CE, WHQL</li> <li>- ErP/EuP Ready (memerlukan catu daya ErP/EuP ready)</li> </ul>

\* Untuk informasi rinci, silakan kunjungi website kami: <http://www.asrock.com>

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## **Installing OS on a HDD Larger Than 2TB**

This motherboard is adopting UEFI BIOS that allows Windows® OS to be installed on a large size HDD (>2TB). Please follow below procedure to install the operating system.

1. Please make sure to use **Windows® Vista™ 64-bit (with SP1 or above), Windows® 7 64-bit or Windows® 8 64-bit.**
2. Press <F2> or <Delete> at system POST. Set **AHCI Mode** in UEFI Setup Utility > Advanced > Storage Configuration > SATA Mode.
3. Choose the item **“UEFI:xxx”** to boot in UEFI Setup Utility > Boot > Boot Option #1. (“xxx” is the device which contains your Windows® installation files. Normally it is an optical drive.) You can also press <F11> to launch boot menu at system POST and choose the item **“UEFI:xxx”** to boot.
4. Start Windows® installation.