Z77 Extreme9
Intel® Z77 Chipset

ASRock®
www.asrock.com

Compatible with Windows®7

intel CHIPSET Z77 inside™

Supports intel® inside™ CORE™

ATI CROSS FIRE X™ TECHNOLOGY

NVIDIA SLI READY

555 XFast

Free Bundle : WiFi + BT Module

Free Bundle : Wi-SB BOX

PEX8747 chip

Digi Power

Intel® Smart Connect Technology

Intel® Rapid Start Technology

Internet Flash

ASRock OMG

VIRTU MVP Universal.GPU.Virtualization by Lucid

PCI-E 3.0

SYSTEM BROWSER

ASRock Dehumidifier

Detail Specification

Section	Specification
Platform	- ATX Form Factor: 12.0-in x 9.6-in, 30.5 cm x 24.4 cm - Premium Gold Capacitor design (100% Japan-made high-quality Conductive Polymer Capacitors)
CPU	- Supports 3rd and 2nd Generation Intel® Core™ i7 / i5 / i3 in LGA1155 Package - Digi Power Design - 8 + 4 Power Phase Design - Supports Intel® Turbo Boost 2.0 Technology - Supports Intel® K-Series unlocked CPU - Supports Hyper-Threading Technology
Chipset	- Intel® Z77 - Supports Intel® Rapid Start Technology and Smart Connect Technology
Memory	- Dual Channel DDR3 memory technology - 4 x DDR3 DIMM slots - Supports DDR3 3000+(OC)/2400(OC)/2133(OC)/1866(OC)/1600/1333/1066 non-ECC, un-buffered memory - Max. capacity of system memory: 32GB - Supports Intel® Extreme Memory Profile (XMP) 1.3 / 1.2
Expansion Slot	- 5 x PCI Express 3.0 x16 slots (PCIE2: x16 mode; PCIE1/PCIE3/PCIE5/PCIE7: x16/0/16/0 or x8/8/8/8 mode) * PCIE 3.0 is only supported with Intel® Ivy Bridge CPU. With Intel® Sandy Bridge CPU, it only supports PCIE 2.0. - 1 x PCI Express 2.0 x16 slot (PCIE4: x4 mode) - 1 x PCI Express 2.0 x1 slot - 1 x mini-PCI Express slot: For WiFi + BT module - Supports AMD Quad CrossFireX™, 4-Way CrossFireX™, 3-Way CrossFireX™ and CrossFireX™ - Supports NVIDIA™ Quad SLI™, 4-Way SLI™, 3-Way SLI™ and SLI™
Graphics	* Intel® HD Graphics Built-in Visuals and the VGA outputs can be supported only with processors which are GPU integrated. - Supports Intel® HD Graphics Built-in Visuals : Intel® Quick Sync Video 2.0, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 2500/4000 - Pixel Shader 5.0, DirectX 11 with Intel® Ivy Bridge CPU. Pixel Shader 4.1, DirectX 10.1 with Intel® Sandy Bridge CPU. - Max. shared memory 1760MB - Supports HDMI 1.4a Technology with max. resolution up to 1920x1200 @ 60Hz - Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio) with HDMI (Compliant HDMI monitor is required) - Supports HDCP function with HDMI - Supports Full HD 1080p Blu-ray (BD) / HD-DVD playback with HDMI
Audio	- 7.1 CH HD Audio with Content Protection (Realtek ALC898 Audio Codec) - Premium Blu-ray audio support - Supports THX TruStudio™
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Broadcom BCM57781 - Supports Wake-On-LAN - Supports Energy Efficient Ethernet 802.3az - Supports Dual LAN with Teaming function - Supports PXE
Wireless LAN	WiFi + BT module - Supports IEEE 802.11a/b/g/n - Supports Dual-Band (2.4/5 GHz) - Supports High speed wireless connection up to 300Mbps - 2 antennas to support 2 (Transmit) x 2 (Receive) MIMO technology - Supports Bluetooth 4.0 Class II
Rear Panel I/O	I/O Panel - 1 x PS/2 Mouse/Keyboard Port - 1 x HDMI Port - 1 x Optical SPDIF Out Port - 2 x Ready-to-Use USB 2.0 Ports - 1 x eSATA3 Connector - 8 x Ready-to-Use USB 3.0 Ports - 2 x RJ-45 LAN Ports with LED (ACT/LINK LED and SPEED LED) - 1 x IEEE 1394 Port - 1 x Clear CMOS Switch with LED - HD Audio Jack: Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone
SATA3	- 2 x SATA3 6.0 Gb/s connectors by Intel® Z77, support RAID (RAID 0, RAID 1, RAID 10, RAID 5, Intel Rapid Storage and Intel Smart Response Technology), NCQ, AHCI and "Hot Plug" functions - 4 x SATA3 6.0 Gb/s connectors by ASMedia ASM1061, support NCQ, AHCI and "Hot Plug" functions (SATA3_A4 connector is shared with eSATA3 port)
USB 3.0	- 4 x Rear USB 3.0 ports by Intel® Z77, support USB 1.0/2.0/3.0 up to 5Gb/s - 4 x Rear USB 3.0 ports by Etron EJ188, support USB 1.0/2.0/3.0 up to 5Gb/s - 2 x Front USB 3.0 headers by Etron EJ188 (support 4 USB 3.0 ports), support USB 1.0/2.0/3.0 up to 5Gb/s
Connector	- 4 x SATA2 3.0 Gb/s connectors, support RAID (RAID 0, RAID 1, RAID 5, RAID 10, Intel Rapid Storage and Intel Smart Response Technology), NCQ, AHCI and Hot Plug functions - 6 x SATA3 6.0 Gb/s connectors - 1 x IR header - 1 x CIR header - 1 x COM port header - 1 x HDMI_SPDIF header - 1 x IEEE 1394 header - 1 x Power LED header - CPU/Chassis/Power FAN connector - 24 pin ATX power connector - 8 pin 12V power connector - SLI/XFire power connector - Front panel audio connector - 3 x USB 2.0 headers (support 6 USB 2.0 ports) - 2 x USB 3.0 headers (support 4 USB 3.0 ports) - 1 x Dr. Debug with LED
Smart Switch	- 1 x Power Switch with LED - 1 x Reset Switch with LED - 1 x Clear CMOS Switch with LED
BIOS Feature	- 64Mb AMI UEFI Legal BIOS with GUI support - Supports "Plug and Play" - ACPI 1.1 Compliance Wake Up Events - Supports jumperfree - SMBIOS 2.3.1 Support - CPU Core, IGPU, DRAM, 1.8V PLL, VTT, VCCSA Voltage Multi-adjustment
Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version), CyberLink MediaEspresso 6.5 Trial, ASRock MAGIX Multimedia Suite - OEM

Unique Feature	- ASRock Extreme Tuning Utility (AXTU)
	- ASRock Instant Boot
	- ASRock Instant Flash
	- ASRock APP Charger
	- ASRock SmartView
	- ASRock XFast USB
	- ASRock XFast LAN
	- ASRock XFast RAM
	- ASRock Crashless BIOS
	- ASRock OMG (Online Management Guard)
	- ASRock Internet Flash
	- ASRock Dehumidifier Function
	- Lucid Virtu Universal MVP
	* Lucid Virtu Universal MVP can be supported only with processors which are GPU integrated.
	- Hybrid Booster:
	  - CPU Frequency Stepless Control
	  - ASRock U-COP
	  - Boot Failure Guard (B.F.G.)
	- Good Night LED

Hardware Monitor	- CPU Temperature Sensing - Chassis Temperature Sensing - CPU/Chassis/Power Fan Tachometer - CPU/Chassis Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) - CPU/Chassis Fan Multi-Speed Control - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore
OS	- Microsoft® Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit compliant
Certifications	- FCC, CE, WHQL - ErP/EuP Ready (ErP/EuP ready power supply is required)
Accessories	- 2 x ASRock SLI_Bridge Cards - 1 x ASRock SLI_Bridge_3S Card - 1 x ASRock 3-Way SLI Bridge Card - Quick Installation Guide, Support CD, I/O Shield - 6 x SATA Data Cables (Optional) - 2 x SATA 1 to 1 Power Cables (Optional) - 1 x ASRock Wi-SB Box - 12 x Screws

Product Brief

- Premium Gold Caps
- Digi Power Design / 8 + 4 Power Phase Design
- Supports Dual Channel DDR3 3000+(OC)
- 5 x PCIe 3.0 x16 Slots, 1 x PCIe 2.0 x16 Slot, 1 x mini-PCI Express slot
- Supports AMD 4-Way CrossFireX™ and NVIDIA 4-Way SLI™
- PCIE Dual Gigabit LAN with Teaming Function
- Supports Intel® HD Graphics with Built-in Visuals
- 12 USB 3.0 (4 Front, 8 Rear) + 6 SATA3
- 7.1 CH HD Audio with Content Protection (Realtek ALC898 Audio Codec), Supports THX TruStudio™
- Supports ASRock XFast RAM, XFast LAN, XFast USB, OMG, Internet Flash, Dehumidifier, UEFI System Browser
- Supports Intel Smart Connect, Intel Rapid Start, Lucid Virtu Universal MVP
- Free Bundle : 1 x WiFi + BT Module, 1 x ASRock Wi-SB BOX, CyberLink MediaEspresso 6.5 Trial, ASRock MAGIX Multimedia Suite

555 XFast

XFast LAN · 5X LAN SPEED
XFast RAM
XFast USB · 5X USB SPEED
5X SYSTEM SPEED

XFast RAM — Fully Optimize Memory Usage

Photoshop 5X Faster

5X Faster for Photoshop Execution

XFast RAM will create a virtual disk from the system memory to boost the performance. For Photoshop, it can even perform 5X faster than before.
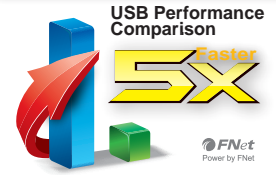
XFast LAN — Faster Internet Access

Lower Latency In Game

5X Faster

XFast LAN can lower latency in the game after setting online game priority higher.

Time latency in World of Warcraft: Cataclysm
*Lower is better
■ ASRock Motherboard with XFast LAN
■ Other Motherboard without XFast LAN

XFast USB — Boosts up your USB speed

USB Performance Comparison

5X Faster

FNet Power by FNet

ATTO Disk Benchmark 4K Read
■ ASRock Motherboard with XFast USB
■ Other Motherboard without XFast USB

● The performance boost percentage may vary with a different configuration.

4-Way SLI & CrossFireX

PLX PEX8747 chip

Supported by PLX PEX 8747 Bridge

PLX PEX 8747 is a PCIe Gen3 bridge chip. It offers solid PCIe 3.0 lanes for PCIe devices and is optimized to support high performance graphics. With this bridge onboard, ASRock Z77 Extreme9 is able to work with dual VGA cards (2-Way SLI/CrossFireX) at PCI-E Gen3 x16 / x16 mode or four VGA cards (4-Way SLI/CrossFireX) at PCI-E Gen3 x8 / x8 / x8 / x8 mode.

PCIE1 (x8)
PCIE3 (x8)
PCIE5 (x8)
PCIE7 (x8)
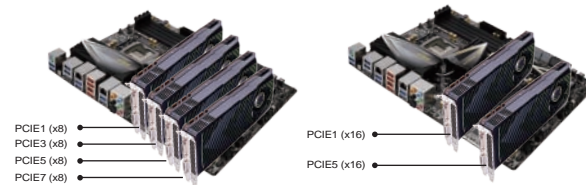
● 4-Way SLI, 4-Way CrossFireX

PCIE1 (x16)
PCIE5 (x16)

● 2-Way SLI, CrossFireX

ATI CrossFireX TECHNOLOGY
NVIDIA SLI READY

Digi Power

By adopting digital Pulse-width modulation (PWM), the Z77 motherboardcan provide CPU Vcore voltage more efficiently and smoothly.

8+4 Power Phase Design

ASRock Z77 Extreme9 is designed with a 8 + 4 Power Phase design. It features sturdy components and completely smooth power delivery to the CPU. Plus, it offers unmatched overclocking capability and enhanced performance with the lowest temperature for advanced gamers as well.

Premium Gold Caps

Premium Gold Caps are 100% made in Japan; these solid capacitors are sleek, high gloss caps with a premium gold coating representing long life and stable performance.

4 x DDR3 3000+(OC)

ASRock 7-Series motherboards unlock maximum memory performance, coming with 4 DIMM slots for dual-channel memory, supporting up to DDR3 3000+(OC) MHz!

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12 USB 3.0 + 6 SATA3

SATA3 technology enables incredible data transfer rate up 6 Gb/s speed which is 2X faster speed over SATA2. USB 3.0 delivers 10X faster performance than USB 2.0 with optimized power efficiency and supports data transfer rate up to 5 Gb/s.
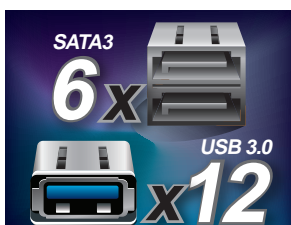
2T2R Dual-Band WiFi + Bluetooth v4.0 Support

ASRock Z77 Extreme9 motherboard comes with an exclusive 2T2R WiFi 802.11 a/b/g/n + BT v4.0 module that offers support for WiFi 802.11 a/b/g/n connectivity standards and Bluetooth v4.0. WiFi module is an easy-to-use wireless local area network (WLAN) adapter to support WiFi function. Bluetooth v4.0 standard features Smart Ready technology and Low Energy Technology.

Wi-SB BOX

Wi-SB BOX provides two invisible antennas (placed in a vertical/horizontal position), hidden inside the front panel that offer the most stable wireless network coverage. It even comes with 2 front USB 3.0 ports for easier USB 3.0 device and 1 rack for SSD placement.

LED Heatsink Design

ASRock Z77 Extreme9 is extraordinary dominated by a fancy LED heatsink design which represents advanced users' unique taste of motherboard preference. In addition, the metallic and minimalism look of the package brings the atmosphere of technology; the stylish brushed aluminum heatpipe design also ensures its effective heat dissipation.

SATA3 6 x
USB 3.0 x12

WiFi+BT
Wi-Fi

Virtu Universal MVP - Uncompromised Game Response Performance

1. HyperFormance™ :

A new technology which combines integrated and discrete graphics for uncompromised performance and improves gaming frame rates 30-70%.

**It's also supported with both ATI andNVIDIA graphics cards.**

With Virtu MVP
70%
Performance Boost
Without Virtu MVP

3. Switchable Graphics :

Dynamically assigns tasks to the best graphics resource regardless of physical cable connections.

2. Virtual Vsync :

A technology designed to solve the ever lasting debate between quality and performance. Bring GPU performance from 60 FPS Vsync limit back to its maximum while keeping Vsync image quality and no tearing.

Before Virtual Vsync:
TEARING ARTIFACT OR FPS LIMIT

After Virtual Vsync:
NO TEARING
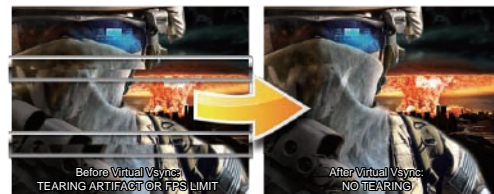
Intel Smart Connect Technology

Intel Smart Connect Technology keeps content continuously updated while the PC is asleep! It will periodically wake up the PC while in a sleep state and check updates for things like email, Twitter, Facebook, etc.

Intel Rapid Start Technology

Quickly return to where you left off with a PC that goes from deep-sleep to full awake in a flash.

ASRock Dehumidifier

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.

Next-Gen PCIe 3.0

- Higher bit rate - 8.0GT/s
- Higher bandwidth per lane - 1GB/s
- Higher efficiency - 98.5% encoding efficiency
- 100% backward compatible with previous PCI-E 2.0 / 1.0 standard

Note: Supported with 3rd Gen Intel Core Processor

ASRock OMG
(Online Management Guard)

Fast, Easy and Free – ASRock OMG technology allows you to establish an internet curfew or restrict internet access at specified times. Administrators are able to schedule the starting and ending hours of internet access granted to other users.

Internet Flash

Internet Flash searches for available UEFI firmware updates from ASRock servers. System can auto-detect the latest UEFI from our servers and flash them within UEFI setup without entering Windows® OS.
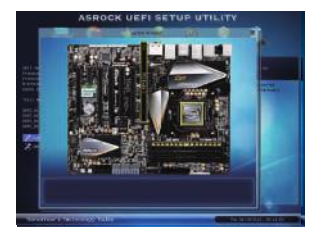
Broadcom Dual LAN

Dual LAN with Teaming function enabled on this motherboard allows two single connections to act as one single connection for twice the transmission bandwidth, making data transmission more effective.
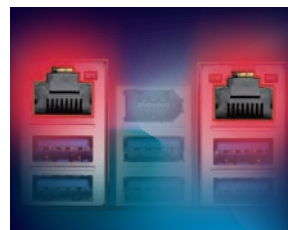
UEFI System Browser

The UEFI system browser allows you to easily check your current system configuration in UEFI setup.

THX TruStudio

THX TruStudio is specially designed to bring the same great audio experience found in live performances, films, and recording studios to the PC.

MAGIX Multimedia Suite

The ultimate solutions to enhance your media experience. From music management, music creation, video editing to photo management. Simply do more with your media than you ever thought possible.

Cyberlink MediaEspresso 6.5 Trial

CyberLink MediaEspresso 6.5 trial supports hardware transcoding and is optimized to accelerate conversion of all your favorite media files for your favorite portable players.

Intel HD Graphics

Intel® HD Graphics, simplifies your designs by eliminating additional discrete graphics hardware, while integrating stunning visuals and performance for immersive gaming.

Intel® Quick Sync Video   Intel® InTru™ 3D   Intel® Clear Video HD Technology

Intel® Insider™   Intel® HD Graphics 2500/4000