

# X79 Extreme7

Intel® X79 Chipset

**ASRock**  
www.asrock.com



## Product Brief

- Premium Gold Caps (2.5 x longer life time), 100% Japan-made high-quality Conductive Polymer Capacitors
- Intel® Core™ i7 processor family for the LGA 2011 Socket
- Supports Quad Channel DDR3 2400+(OC) memory, 6 DIMM slots, Max capacity up to 48GB
- Digi Power Design, Advanced V12 + 2 Power Phase Design
- 5 x PCIe 3.0 x16 Slots, Supports AMD 3-Way CrossFireX™ and NVIDIA® 3-Way SLI™
- Dr. Debug, Smart Switch Design: Power/Reset/Clear CMOS Switch with LED
- Supports ASRock X-FAN, XFast RAM, XFast LAN, XFast USB, XFast Charger, Graphical UEFI, UEFI System Browser, AXTU
- 7.1 CH HD Audio with Content Protection (Realtek ALC898 Audio Codec), Supports THX TruStudio™
- Free Bundle : CyberLink MediaEspresso 6.5 Trial, ASRock MAGIX Multimedia Suite

## Detail Specification

<b>Platform</b>	- 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)
<b>CPU</b>	- Supports Intel® Core™ i7 processor family for the LGA 2011 Socket - Digi Power Design - Advanced V12 + 2 Power Phase Design - Supports Intel® Turbo Boost 2.0 Technology - Supports Hyper-Threading Technology - Supports Unlocked Overclocking Technology
<b>Chipset</b>	- Intel® X79
<b>Memory</b>	- Quad Channel DDR3 memory technology - 6 x DDR3 DIMM slots - Supports DDR3 2400+(OC)/1600/1333/1066/800 non-ECC, un-buffered memory - Supports DDR3 ECC, un-buffered memory with Intel® Workstation 1S Xeon™ processors E5 2xxx & 4xxx series in socket LGA 2011 - Max. capacity of system memory: 48GB - Supports Intel® Extreme Memory Profile (XMP) 1.3 / 1.2
<b>Expansion Slot</b>	- 5 x PCI Express 3.0 x16 slots (PCI-E1/PCI-E2/PCI-E3/PCI-E4/PCI-E5: x8/8/8/8 mode or x16/0/16/0/8 mode) - 1 x PCI slot - Supports AMD™ Quad CrossFireX™, 3-Way CrossFireX™ and CrossFireX™ - Supports NVIDIA® Quad SLI™, 3-Way SLI™ and SLI™
<b>Audio</b>	- 7.1 CH HD Audio with Content Protection (Realtek ALC898 Audio Codec) - Premium Blu-ray audio support - Supports THX TruStudio™
<b>LAN</b>	- PCI-E 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
<b>Rear Panel I/O</b>	I/O Panel - 1 x PS/2 Mouse Port - 1 x PS/2 Keyboard Port - 1 x Coaxial SPDIF Out Port - 1 x Optical SPDIF Out Port - 6 x Ready-to-Use USB 2.0 Ports - 1 x eSATA3 Connector - 2 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: Side Speaker / Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone
<b>SATA3</b>	- 2 x SATA3 6.0 Gb/s connectors by Intel® X79, support RAID (RAID 0, RAID 1, RAID 5, RAID 10 and Intel Rapid Storage 3.0), NCQ, AHCI and "Hot Plug" functions - 2 x SATA3 6.0 Gb/s connectors by Marvell SE9182, support RAID (RAID 0 and RAID 1), NCQ, AHCI and "Hot Plug" functions - 3 x SATA3 6.0 Gb/s connectors by Marvell SE9172, support RAID (RAID 0 and RAID 1), NCQ, AHCI and "Hot Plug" functions
<b>USB 3.0</b>	- 2 x Rear USB 3.0 ports by ASMedia ASM1042, support USB 1.0/2.0/3.0 up to 5Gb/s - 2 x Front USB 3.0 headers (support 4 USB 3.0 ports) by TI®, supports USB 1.0/2.0/3.0 up to 5Gb/s
<b>Connector</b>	- 4 x SATA2 3.0 Gb/s connectors, support RAID (RAID 0, RAID 1, RAID 5, RAID 10 and Intel Rapid Storage 3.0), NCQ, AHCI and Hot Plug functions - 7 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/SB 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
<b>Smart Switch</b>	- 1 x Power Switch with LED - 1 x Reset Switch with LED - 1 x Clear CMOS Switch with LED
<b>BIOS Feature</b>	- 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, VCCSA, DRAM, VTT, CPU PLL, PCH1.1V, PCH1.5V Voltage Multi-adjustment
<b>Support CD</b>	- Drivers, Utilities, AntiVirus Software (Trial Version), CyberLink MediaEspresso 6.5 Trial, ASRock MAGIX Multimedia Suite - OEM)
<b>Unique Feature</b>	- ASRock Extreme Tuning Utility (AXTU) - ASRock Instant Boot - ASRock Instant Flash - ASRock APP Charger - ASRock SmartView - ASRock XFast USB - ASRock XFast LAN - ASRock XFast Charger - ASRock XFast RAM - ASRock X-FAN - ASRock Crashless BIOS - Hybrid Booster: - CPU Frequency Stepless Control - ASRock U-COP - Boot Failure Guard (B.F.G.) - Good Night LED
<b>Hardware Monitor</b>	- CPU Temperature Sensing - Chassis Temperature Sensing - CPU/Chassis/Power/SB Fan Tachometer - CPU/Chassis Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) - CPU/Chassis/SB Fan Multi-Speed Control - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore
<b>OS</b>	- Microsoft® Windows® 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit compliant
<b>Certifications</b>	- FCC, CE, WHQL - ErP/EuP Ready (ErP/EuP ready power supply is required)
<b>Accessories</b>	- 1 x ASRock SLI_Bridge_2S Card - 1 x ASRock 3-Way SLI-2S1S 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 Front USB 3.0 Panel - 4 x HDD Screws - 6 x Chassis Screws - 1 x Rear USB 3.0 Bracket

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## Next-Gen PCIe 3.0 Support

By adopting PCI-E 3.0 quick switch IC onboard, the ASRock motherboards can support the Next-Gen PCI-E 3.0! PCI Express 3.0 can maximize the bandwidth for the next-gen PCI Express 3.0 VGA cards, provide ultimate graphics performance.



## Get PCI-E 3.0 Benefits

- 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

PCI-E architecture	Raw bit rate	Bandwidth per lane	Encoding Efficiency
PCI-E 2.0	5.0GT/s	500MB/s	80%
PCI-E 3.0	8.0GT/s	1GB/s	98.5%

Note: PCI-E 3.0 requires both a supporting CPU and motherboard at the same time. Currently Intel® Socket 2011 Sandy Bridge-E Processor doesn't support PCI-E 3.0, but this motherboard is already PCI-E 3.0 hardware ready. It depends on Intel CPU to enable PCI-E 3.0. Please check Intel website for information on future CPU updates and releases.

## XFast RAM Technology



- ### 5X Faster for Photoshop Execution

The XFast RAM will create a virtual disk from system memory to boost up the performance. For Photoshop, it can even perform 5X faster than before!
- ### Fully Utilize Wasted Memory under 32bit OS

XFast RAM is part of ASRock Extreme Tuning Utility (AXTU). It fully utilizes the memory space that cannot be used under 32-bit OS.
- ### Enhance Internet Surfing Experience

Exactly shortens the loading time of previously visited webpages, making web surfing faster than ever.
- ### Extend SSD / HDD Lifespan

It will reduce the frequency of accessing your SSDs or HDDs in order to extend their lifespan.

## XFast LAN Technology



- ### LAN Application Prioritization

You can configure your application priority ideally and/or add new programs.
- ### Lower Latency In Game

Time latency in World of Warcraft: Cataclysm  
 ■ With XFast LAN ■ Without XFast LAN

After setting online game priority higher in XFast LAN, it can lower the latency in game.
- ### Traffic Shaping

You can watch Youtube HD video and download files simultaneously.
- ### Real-Time Analysis Of Your Data

With the status window, you can easily recognize which data streams you are currently transferring.

## XFast Charger Technology



XFast Charger is the best and fastest technology to charge your mobile devices via PC. With the superb XFast Charger USB port, users are assured to enjoy the quick charging experience anytime. In addition to Apple devices, it is also capable of charging the BC 1.1 standard smart devices.

## XFast USB Technology



## USB 3.0 Benchmark

**ATTO Disk Benchmark - 4K Read**

ASRock Motherboard with XFast USB Technology	240039 KB/s	469.30% Faster
Other Motherboard without XFast USB Technology	42164 KB/s	

**ATTO Disk Benchmark - 4K Write**

ASRock Motherboard with XFast USB Technology	155648 KB/s	264.63% Faster
Other Motherboard without XFast USB Technology	42687 KB/s	

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## Dual LAN Teaming

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.



## Graphical UEFI

- \* Graphical Visual Experience
- \* Mouse Enabling
- \* Supports 3TB bootable HDD



## UEFI System Browser

The UEFI system browser can let you easily check your current system configuration in UEFI setup.



## AXTU

ASRock Extreme Tuning Utility (AXTU) is an all-in-one software to fine-tune different features in a userfriendly interface, which includes Hardware Monitor, Fan Control, Overclocking, OC DNA, IES and XFast RAM.



## THX TruStudio

Delivering the fullest audio experience for games, music and movies.



## Cyberlink MediaEspresso 6.5 Trial

The fastest video media conversation software



## 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.



## Digi Power

By adopting digital Pulse-width modulation (PWM), the ASRock X79 Extreme7 can provide CPU Vcore voltage more efficiently and smoothly. Compared to analog PWM, Digi Power can optimize the CPU power solution and provide a proper and stable Vcore for the processor.



## Premium Gold Caps

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



## Advanced V12 + 2 Power Phase

The ASRock X79 Extreme7 is designed with a V12 + 2 Power Phase, featuring sturdy components and completely smooth power delivery to the CPU. It offers unmatched overclocking capability and enhanced performance with the lowest temperatures for PC gaming enthusiasts.



## Craftsman Heatsink Design

The ASRock X79 Extreme7 features a craftsman heatsink design. The metallic and minimalism look of the package brings the atmosphere of technology; On the other hand, the stylish brushed aluminum heatpipe design also ensures its effective heat dissipation.



## X-FAN

ASRock X-FAN will be automatically activated only when the system rises to a certain temperature under heavy-loading. Normally, ASRock X-FAN will remain deactivated to give users the quietest computing experience.

