

# X79 Extreme6/GB

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, 8 DIMM slots, Max capacity up to 64GB
- Digi Power Design, 12 + 2 Power Phase Design
- 3 x PCIe 3.0 x16 Slots, Supports AMD 3-Way CrossFireX™ and NVIDIA® 3-Way SLI™
- Broadcom Dual LAN with Teaming Function
- Supports ASRock X-FAN, XFast RAM, XFast LAN, XFast USB, Graphical UEFI, UEFI System Browser, AXTU
- Creative Sound Core3D 7.1 CH, Supports THX TruStudio PRO
- Free Bundle : ASRock Game Blaster, 1 x Front USB 3.0 Panel, 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 - 12 + 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 - 8 x DDR3 DIMM slots - Supports DDR3 2400+(OC)/2133(OC)/1866(OC)/1600/1333/1066 non-ECC, un-buffered memory - Supports DDR3 ECC, un-buffered memory with Intel® Workstation 1S Xeon® processors E5 16xx/26xx/46xx series in socket LGA 2011 - Max. capacity of system memory: 64GB - Supports Intel® Extreme Memory Profile (XMP) 1.3 / 1.2
<b>Expansion Slot</b>	- 3 x PCI Express 3.0 x16 slots (PCI-E1 @ x16 mode; PCI-E3 @ x16 mode; PCI-E4 @ x8 mode) - 1 x PCI Express 2.0 x1 slot - 2 x PCI slots - Supports AMD Quad CrossFireX™, 3-Way CrossFireX™ and CrossFireX™ - Supports NVIDIA® Quad SLI™, 3-Way SLI™ and SLI™
<b>Audio</b>	ASRock Game Blaster Audio - Supported by the bundled ASRock Game Blaster - Creative Sound Core3D quad-core sound and voice processor - Supports THX TruStudio™ PRO - Supports CrystalVoice - Supports EAX1.0 to EAX5.0 Onboard Audio - 7.1 CH HD Audio with Content Protection (Realtek ALC898 Audio Codec) - Premium Blu-ray audio support - Supports THX TruStudio™
<b>LAN</b>	- 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 with the bundled ASRock Game Blaster - 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 - 4 x Ready-to-Use USB 2.0 Ports - 1 x eSATA3 Connector - 4 x Ready-to-Use USB 3.0 Ports - 1 x RJ-45 LAN Port 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 - 3 x SATA3 6.0 Gb/s connectors by ASMedia ASM1061, support NCQ, AHCI and "Hot Plug" functions
<b>USB 3.0</b>	- 4 x Rear USB 3.0 ports by TI®, support USB 1.0/2.0/3.0 up to 5Gb/s - 1 x Front USB 3.0 header (supports 2 USB 3.0 ports) by ASMedia ASM1042, supports USB 1.0/2.0/3.0 up to 5Gb/s
<b>Connector</b>	- 4 x SATA3 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 - 5 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/Fire power connector - 3 x USB 2.0 headers (support 6 USB 2.0 ports) - 1 x USB 3.0 header (supports 2 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 Software Suite (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 RAM - ASRock X-FAN - ASRock Crashless BIOS - Hybrid Booster: - CPU Frequency Stepples 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 SLL_Bridge_2S Card - 1 x ASRock 3-Way SLI-2S1S Bridge Card - 1 x ASRock Game Blaster - Quick Installation Guide, Support CD, I/O Shield - 5 x SATA Data 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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## Digi Power

More Precise, More Efficient

By adopting digital Pulse-width modulation (PWM), the ASRock X79 Extreme6/GB 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.



## 12 + 2 CPU Power Phase

Optimized Solution for CPU Power

The ASRock X79 Extreme6/GB is designed with a 12 + 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.



## Premium Gold Caps

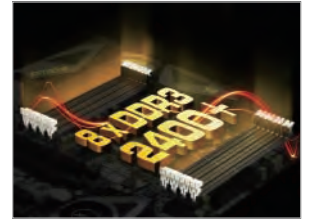
Top-Class Quality Guaranteed

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



## 8 x DDR3 2400+ DIMM Supports Quad Channel Memory

The ASRock X79 Extreme6/GB has 8 DIMM slots for Quad-Channel memory, supporting for 2400+(OC) MHz DDR3 memory!



## Next-Gen PCIe 3.0 Support

- 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

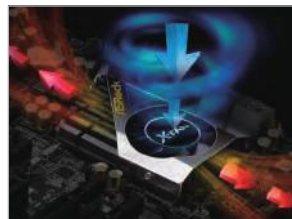


Note: PCI-E 3.0 requires both a supporting CPU and motherboard at the same time. Currently Intel Socket 1155 Sandy Bridge-E Processor doesn't support PCI-E 3.0, but this motherboard is already PCI-E 3.0 hardware ready. It depends on Intel CPU to enable PCI-E 3.0. Please check Intel website for information on future CPU updates and releases.

## X-FAN

The Smart Cooling Design

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.



## 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.



## XMP 1.3 Support

XMP 1.3 provides more precise DRAM timing settings! Simply load XMP 1.3 profile in the BIOS to explore the maximum speed of your DDR3 memory. For unbelievably powerful overclocking without having to adjust the settings in BIOS manually, the rig builder should look no longer than the XMP 1.3 support!



## 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

The fastest video media conversation software



## AXTU

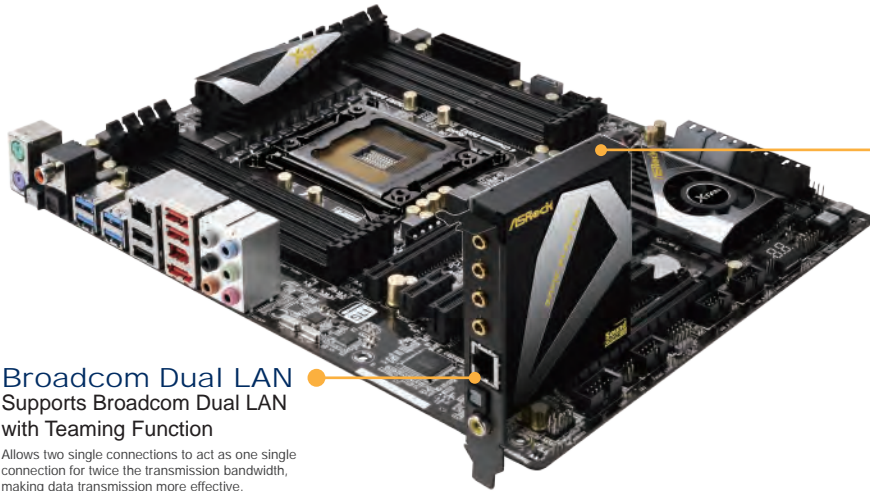
ASRock Extreme Tuning Utility (AXTU) is an all-in-one software to fine-tune different features in a userfriendly interface, which includes Hardware Monitor, Fan Control, Overclocking, OC DNA, IES and XFast RAM.



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## Broadcom Dual LAN Supports Broadcom Dual LAN with Teaming Function

Allows two single connections to act as one single connection for twice the transmission bandwidth, making data transmission more effective.

## ASRock Game Blaster Unleash Your Maximum Gaming Power

Supporting Creative Sound Core3D 7.1 CH HD audio and Broadcom gigabit lan via the bundled ASRock Game Blaster, ASRock X79 Extreme9 could give the extreme value for serious gamers!

### Creative Sound Core3D Audio

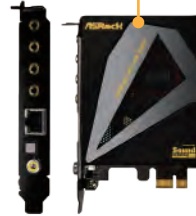
- THX TruStudio PRO
- CrystalVoice
- EAX 5.0
- Full Blu-ray Profile 2.0 Audio Decoder Support

### Broadcom Gigabit LAN

- Wirespeed performance increases user performance
- Extremely low power consumption enables environment-friendly designs

## Quad Core Audio Processor (DSP) - Improves System Performance

- 7.1 CH HD Audio, Sample Rate : 192KHz / 24-Bit
- Independent audio processing capability and zero-waste of CPU utilization
- Capable of both time and frequency domain audio processing
- Advanced modes optimized for hardware acceleration



**GAME BLASTER**



## XFast RAM Technology

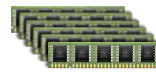


### • 5X Faster for Photoshop Execution



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

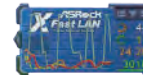
After setting online game priority higher in XFast LAN, it can lower the latency in game.

### • 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 USB Technology



## USB 3.0 Benchmark

