# X79 Extreme6/GB





## **Product Brief**

- Premium Gold Caps (2.5 x longer life time), 100% Japan-made high-quality Conductive Polymer Capacitors
- Intel<sup>®</sup> Core<sup>™</sup> 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<sup>™</sup> and NVIDIA<sup>®</sup> 3-Way SLI<sup>™</sup>
- 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 Speci	fication
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 Intel <sup>®</sup> Core <sup>™</sup> i7 processor family for the LGA 2011 Socket - Digi Power Design - 12 + 2 Power Phase Design - Supports Intel <sup>®</sup> Turbo Boost 2.0 Technology - Supports Intel <sup>®</sup> Turbo Ending Technology - Supports Untled Overclocking Technology
Chipset	- Intel® X79
Memory	Ouad Channel DDR3 memory technology     A 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
Expansion Slot	- 3 x PCI Express 3.0 x16 slots (PCIE1 @ x16 mode; PCIE3 @ x16 mode; PCIE4 @ x8 mod - 1 x PCI Express 2.0 x1 slot - 2 x PCI slots - Supports AMD oud CrossFireX™, 3-Way CrossFireX™ and CrossFireX™ - Supports NVIDIA* Quad SLI™, 3-Way SLI™ and SLI™
Audio	ASRock Game Blaster Audio - Supported by the bundled ASRock Game Blaster - Creative Sound Core3D quad-core sound and voice processor - Supports THX TruStudio <sup>TM</sup> PRO - Supports EXX1.0 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 <sup>TM</sup>
LAN	PCIE x1 Gigabit LAN 10/100/1000 Mb/s     Broadcom BCM57781     Supports Wake-On-LAN     Supports Energy Efficient Elhernet 802.3az     Supports Daul LAN with Teaming function with the bundled ASRock Game Blaster     Supports PXE
Rear Panel I/O	I/O Panel - 1 x PS/2 Mouse Port - 1 x PS/2 Keyboard Port - 1 x PS/2 Keyboard Port - 1 x Coaxial SPDIF Out Port - 4 x Ready-to-Use USB 3.0 Ports - 4 x Ready-to-Use USB 3.0 Ports - 4 x Ready-to-Use USB 3.0 Ports - 1 x R2I-45 LAW 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
SATA3	<ul> <li>2 x SATA3 6.0 Gb/s connectors by Intel<sup>®</sup> X79, support RAID (RAID 0, RAID 1, RAID 5, RAID 10 and Intel Rapid Storage 3.0), NCO, AHCI and "Hot Plug" functions</li> <li>3 x SATA3 (o Gb/s connectors by ASMedia ASM1061, support NCQ, AHCI and "Hot Plug functions</li> </ul>
USB 3.0	<ul> <li>4 x Rear USB 3.0 ports by TI*, support USB 1.0/2.0/3.0 up to SGb/s</li> <li>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 SGb/s</li> </ul>
Connector	- 4 x SATA2 3.0 Gb/s connectors, support RAID (RAID 0, RAID 1, RAID 5, RAID 10 and Intel Rapid Storage 3.0), NCO, AHC1 and Hot Plug functions - 5 x SATA3 6.0 Gb/s connectors - 1 x IR header - 1 x CIR header - 1 x CIR header - 1 x CIM spOIf header - 1 x HOM, SPOIF header - 1 x HEEE 1394 header - 1 x Power LED header - CPU/Chassis/Power/SB FAN connector - 24 pin ATX power connector - 3 pin 12V power connector - 3 x USB 2.0 headers (support 6 USB 2.0 ports) - 1 x DB 3.0 header (support 2 USB 3.0 ports) - 1 x DB 3.0 header (support 2 USB 3.0 ports) - 1 x DD.
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"     - ACP1 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
Support CD	<ul> <li>Drivers, Utilities, AntiVirus Software (Trial Version), CyberLink MediaEspresso 6.5 Trial, ASRock Software Suite (ASRock MAGIX Multimedia Suite - OEM)</li> </ul>
Unique Feature	ASRock Extreme Tuning Utility (AXTU)     ASRock Instant Bool     ASRock Instant Flash     ASRock APP Charger     ASRock APP Charger     ASRock YFast LAN     ASRock XFast LAN     ASRock XFast LAN     ASRock XFast LAN     ASRock XFast RAM     ASRock XFAN     ASRock XFAN     ASRock Crashless BIOS     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     - Chassis Temperature Sensing     - CPU/Chassis/Power/SB Tean Tachometer     - CPU/Chassis/Ower/SB Tean Multi-Speed Control     - CPU/Chassis/SB Tean 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	- 1 x ASRock SLI_Bridge_2S Card - 1 x ASRock 3-Way SLI-251S 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 Storews - 6 x Chassis Screws - 1 x Rear USB 3.0 Bracket



# X79 Extreme6/GB Intel® X79 Chipset



# **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

# **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.



PCI-E 3.0 requires both a su orting CPU and m ntly Intel Socket 2011 Sandy Bridge-E Processor doesn't rt 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.

## 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 an userfriendly interface, which includes Hardware Monitor, Fan Control Overclocking, OC DNA, IES and XFast RAM.







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# X79 Extreme6/GB Intel® X79 Chipset





#### 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



# 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.

value for serious gamers!

#### 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

- 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



# GAME BL ER

IHX

### XFast RAM Technology



## Photoshop

5X Faster for Photoshop Execution

memory to boost up the performance. For Photoshop, it can even perform 5X faster than before!

The XFast RAM will create

a virtual disk from system

#### • Enhance Internet Surfing Experience



Exactly shortens the loading time of previously visited webpages, making web surfing faster than ever

• Fully Utilize Wasted Memory under 32bit OS



Sound

COREID

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

#### • Extend SSD / HDD Lifespan

Lower Latency In Game

219 ms



# HI SSD



594% Faster

## XFast LAN Technology



## XFast USB Technology



#### LAN Application Prioritization



Traffic Shaping

You can configure your

#### application priority ideally and/or add new programs

#### 🖡 1301 ms tency in World of Warcraft: Cataclysr

With XFast LAN Without XFast LAN

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

#### • Real-Time Analysis Of Your Data

You can watch Youtube You Tube 📖 HD video and download files simultaneously





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

## USB 3.0 Benchmark

