870iCafe R2.0

AMD 870 + SB850 Chipsets

ASRock®
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Detail Specification ‹ ‹ ‹

Platform	- ATX Form Factor: 12.0-in x 8.2-in, 30.5 cm x 20.8 cm - All Solid Capacitor design
CPU	- Support for Socket AM3+ processors - Support for Socket AM3 processors: AMD Phenom™ II X6 / X4 / X3 / X2 (except 920 / 940) / Athlon II X4 / X3 / X2 / Sempron processors - Supports 8-Core CPU - Supports UCC feature (Unlock CPU Core) - V4 + 1 Power Phase Design - Supports CPU up to 140W - Supports AMD's Cool 'n' Quiet Technology - FSB 2600 MHz (5.2 GT/s) - Supports Untied Overclocking Technology - Supports Hyper-Transport 3.0 (HT 3.0) Technology
Chipset	- Northbridge: AMD 870 - Southbridge: AMD SB850
Memory	- Dual Channel DDR3 memory technology - 4 x DDR3 DIMM slots - Supports DDR3 1866(OC)/1800(OC)/1600(OC)/1333/1066/800 non-ECC, un-buffered memory - Max. capacity of system memory: 32GB
Expansion Slot	- 2 x PCI Express 2.0 x16 slot (PCIE2 @ x16 mode; PCIE3 @ x4 mode) - 1 x PCI Express 2.0 x1 slot - 2 x PCI slots - Supports ATI™ Quad CrossFireX™ and CrossFireX™
Audio	- 7.1 CH HD Audio (Realtek ALC887 Audio Codec)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111E - Supports Wake-On-LAN - Supports LAN Cable Detection - Supports Energy Efficient Ethernet 802.3az
Rear Panel I/O	I/O Panel - 1 x PS/2 Mouse Port - 1 x PS/2 Keyboard Port - 1 x Serial Port: COM1 - 1 x Optical SPDIF Out Port - 8 x Ready-to-Use USB 2.0 Ports - 1 x eSATA3 Connector - 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED) - HD Audio Jack: Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone
SATA3	- 5 x SATA3 6.0 Gb/s connectors, support RAID (RAID 0, RAID 1, RAID 0+1 and RAID 5), NCQ, AHCI and "Hot Plug" functions
Connector	- 5 x SATA3 6.0 Gb/s connectors - 1 x IR header - 1 x HDMI_SPDIF header - 1 x Power LED header - CPU/Chassis/Power FAN connector - 24 pin ATX power connector - 8 pin 12V power connector - Front panel audio connector - 3 x USB 2.0 headers (support 6 USB 2.0 ports) - 1 x Dr. Debug (7-Segment Debug LED)
BIOS Feature	- 32Mb 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 - DRAM Voltage Multi-adjustment
Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version), AMD OverDrive™ Utility, ASRock Software Suite (CyberLink DVD Suite - OEM and Trial; Creative Sound Blaster X-Fi MB - Trial)

Unique Feature	- ASRock Extreme Tuning Utility (AXTU)
	- Instant Boot
	- ASRock Instant Flash
	- ASRock AIWI
	- ASRock APP Charger
	- SmartView
	- ASRock XFast USB
	- Hybrid Booster:
	   - CPU Frequency Stepless Control
	   - ASRock U-COP
	   - Boot Failure Guard (B.F.G.)

Hardware Monitor	- CPU Temperature Sensing - Chassis Temperature Sensing - CPU/Chassis/Power Fan Tachometer - CPU Quiet Fan - CPU/Chassis Fan Multi-Speed Control - Voltage Monitoring: +12V, +5V, +3.3V, 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	- Quick Installation Guide, Support CD, I/O Shield - 2 x SATA data cables (optional)

Product Brief ‹ ‹ ‹

- 100% All Solid Capacitor design

- Supports AM3+ Processor, 8-Core CPU

- Supports Dual Channel DDR3 1866(OC)

- Supports ATI™ Quad CrossFireX™, CrossFireX™

- 5 x SATA3, 1 x eSATA3

- Dr. Debug

- Supports AXTU, UEFI, XFast USB, Instant Boot, Instant Flash, APP Charger, SmartView

- 7.1 CH HD Audio (Realtek ALC887 Audio Codec)

The specification is subject to change without notice. The brand and product names are trademarks of their respective companies. Any configuration other than original product specification is not guaranteed.
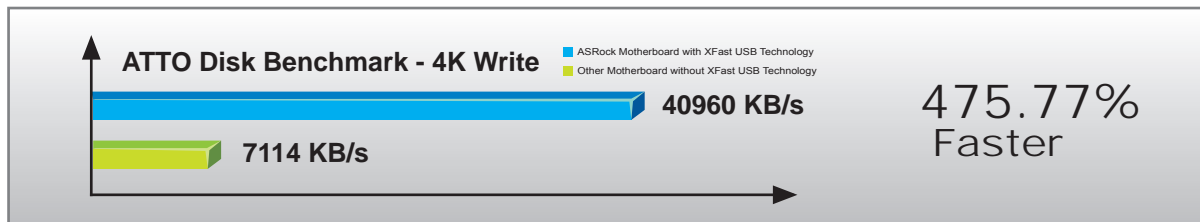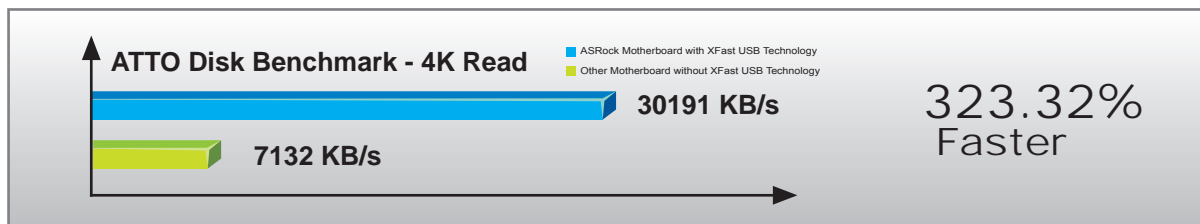
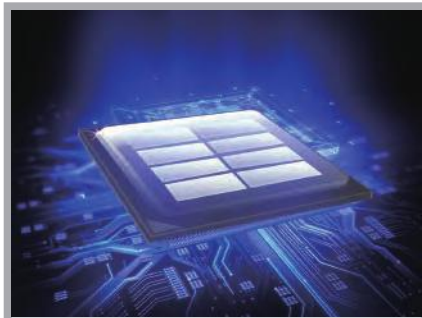# ASRock XFast USB Technology - Faster Than Your Imagination!

ASRock XFast USB Technology redefines the new standard in high performance computing. Proving once again to be the pioneer in motherboard industry, ASRock XFast USB Series Motherboards integrate with the latest XFast USB Technology which delivers the world's fastest USB data transfer speed. According to below graph, it shows that the ASRock XFast USB Technology can even boost USB 2.0 performance up to 475.77% faster!

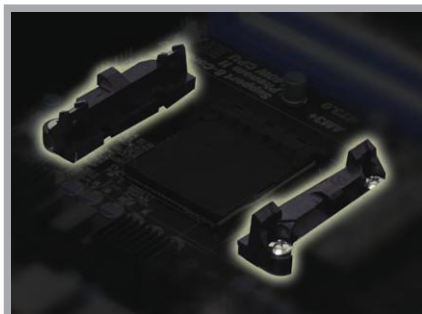**ATTO Disk Benchmark - 4K Read**

■ ASRock Motherboard with XFast USB Technology
■ Other Motherboard without XFast USB Technology

30191 KB/s

7132 KB/s

323.32%
Faster

ATTO Disk Benchmark - 4K Write

■ ASRock Motherboard with XFast USB Technology
■ Other Motherboard without XFast USB Technology

40960 KB/s

7114 KB/s

475.77%
Faster

AM3+ 8-Core Processor Support

Compatible with AM3+ 8-Core CPU! This board is designed to build up the most powerful system performance and deliver the most demanding technology for users nowadays. Just enjoy next generation computing with ASRock 8-Core CPU Ready motherboard.
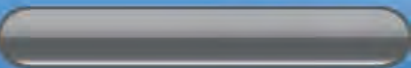
Two-Piece Retention Module

By adopting the exclusive AMD two-piece retention module that improves the cooling efficiency with AM3+/AM3/AM2+ CPU coolers, this board allows heat dissipation becomes faster and effective.

APP Charger - Fast Charge & Charge Anytime!

If you desire a faster, less restricted way of charging your Apple devices, such as iPhone/iPod/iPad Touch, ASRock has prepared a wonderful solution for you – ASRock App Charger. Simply installing the App Charger driver, it makes your iPhone charged 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 than ever.

PC Status / Charge Way	Working (S0)	Standby (S1)	Suspend to RAM (S3)	Hibernation (S4)	Shutdown (S5)	Charge time (Lower is Better)
ASRock App Charger	YES	YES**	YES**	YES**	YES**	Up to 40%* Faster
Traditional Design	No	No	No	No	No	

* The charging capability may vary with different power supply design. The more +5V standby current provided, the better charge efficiency you get.

** Please connect the devices to the PC USB ports before the PC enters S1/S3/S4/S5 mode to enable a fast charge.

AXTU – The All-in-1 Tuning Software

ASRock Extreme Tuning Utility (AXTU) is an all-in-one software to fine-tune different features in an user-friendly interface, which includes Hardware Monitor, Fan Control, Overclocking, OC DNA and IES. 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 adjust the CPU frequency, ratio and some voltages for optimal system performance. In OC DNA, you can save your OC settings as a profile and share 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.

UEFI – The Revolutionary BIOS Interface

*Windows Vista-64bit or Windows 7-64bit OS is required

Unified Extensible Firmware Interface (UEFI) is a revolutionary BIOS utility which offers tweak-friendly options in an advanced viewing interface. Compared with traditional BIOS design, the latest UEFI utility provides lots improved functions. The major features of UEFI include:

1. Graphical Visual Experience – UEFI provides an improved visual interface with colorful icons and makes your computing environment more versatile to replace the traditional dull BIOS page.

2. Mouse Enabling – Besides keyboard control, you can freely use mouse to select your ideal settings in UEFI as well.

3. Supports 3TB bootable HDD - UEFI breaks the limitations of 2TB bootable HDD on traditional BIOS. With UEFI, you can enjoy 3TB bootable HDD size.

SmartView

Experience the Brand New Browser Now

SmartView is the smart start page for IE that combines your most visited web sites, your history, your Facebook friends and your real-time newsfeed into an enhanced view for a more personal Internet experience. ASRock motherboards are exclusively equipped with the SmartView utility that helps you keep in touch with friends on-the-go.

The Major Features of SmartView

Visual thumbnail images which categorize and rank your frequently visited websites, as well as provide a chronological view of your browser history.

A persistent, real-time Facebook newsfeed located within the Internet Explorer sidebar.

A "Friend Wall" that conveniently alphabet-izes your Facebook friends by profile photo, allowing immediate access to your friends' profile pages.

A "share this" button which allows you to instantly and immediately share webpage posts and links to your friends' Facebook pages.

A persistent search box from best-in-class search engines such as Google, Yahoo, Baidu (China only) and Yandex (Russia only).

Two mode options that allow you to choose your favored view style.

Flow Mode

Flow Mode

System Requirements
OS version: Win7 32/64 bit, Vista 32/64 bit Browser version: IE8

CyberLink Power2Go 6.1 LE OEM

Power2Go 6 lets you burn and backup videos, photos, music and data onto Blu-ray Discs and DVDs.

CyberLink MediaShow 4.1 SE OEM

Photo and video management software MediaShow edits videos and photos instantly, creates slideshow, and allows publishing directly to YouTube and Flickr.

CyberLink PowerDVD 8.0 DTS Trial

World-renowned PowerDVD 8 DTS delivers outstanding DVD movie playback quality on your PC.

CyberLink PowerDirector 8.0 Trial

PowerDirector - Video Editing software – edits high-definition videos including AVCHD, allows output to PSP iPod and Blu-ray Disc.

CyberLink PowerBackup 2.5 Trial

PowerBackup backups valuable data on your PC.

Creative Sound Blaster X-Fi MB Trial

The Sound Blaster X-Fi MB solution provides premium audio quality, effects and features for PC systems equipped with onboard audio.
For gamers, the EAX® ADVANCED HD 4.0, with its state-of-the-art Multi-Environment rendering and reverb modelling, delivers a much more realistic and immersive 3D gaming experience than your motherboard audio ever will.