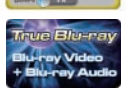


# 890GX Extreme4

AMD 890GX + SB850 Chipsets

**ASRock**  
www.asrock.com



## Detail Specification

<b>Platform</b>	- ATX Form Factor: 12.0-in x 9.6-in, 30.5 cm x 24.4 cm - All Solid Capacitor design (100% Japan-made high-quality Conductive Polymer Capacitors)
<b>CPU</b>	- Support for Socket AM3 processors: AMD Phenom™ II X6 / X4 / X3 / X2 (except 920 / 940) / Athlon II X4 / X3 / X2 / Sempron processors - Six-Core CPU Ready - Supports UCC feature (Unlock CPU Core) - Advanced V8 + 2 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
<b>Chipset</b>	- Northbridge: AMD 890GX - Southbridge: AMD SB850
<b>Memory</b>	- 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: 16GB
<b>Expansion Slot</b>	- 3 x PCI Express 2.0 x16 slots (PCI-E2/PCI-E3: single at x16 or dual at x8/x8 mode; PCI-E4: x4 mode) - 1 x PCI Express 2.0 x1 slot - 3 x PCI slots - Supports ATI™ Quad CrossFireX™, 3-Way CrossFireX™, CrossFireX™ and Hybrid CrossFireX™
<b>Graphics</b>	- Integrated AMD Radeon HD 4290 graphics - DX10.1 class iGPU, Shader Model 4.1 - Max. shared memory 512MB - Built-in 128MB DDR3 1333/1200MHz SidePort Memory - Multi VGA Output options: D-Sub, DVI-D and HDMI - Supports HDMI Technology with max. resolution up to 1920x1200 (1080P) - Supports Dual-link DVI with max. resolution up to 2560x1600 @ 75Hz - Supports D-Sub with max. resolution up to 2048x1536 @ 85Hz - Supports HDCP function with DVI and HDMI ports - Supports Full HD 1080p Blu-ray (BD) / HD-DVD playback with DVI and HDMI ports
<b>Audio</b>	- 7.1 CH HD Audio with Content Protection (Realtek ALC892 Audio Codec) - Premium Blu-ray audio support - Supports THX TruStudio PRO™
<b>LAN</b>	- 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
<b>Rear Panel I/O</b>	I/O Panel - 1 x PS/2 Keyboard Port - 1 x VGA/D-Sub Port - 1 x VGA/DVI-D Port - 1 x HDMI Port - 1 x Optical SPDIF Out Port - 4 x Ready-to-Use USB 2.0 Ports - 1 x eSATA3 Connector - 2 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: Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone
<b>USB 3.0</b>	- 2 x Rear USB 3.0 ports by NEC UPD720200, 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 NEC UPD720200, supports USB 1.0/2.0/3.0 up to 5Gb/s
<b>SATA3</b>	- 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
<b>Connector</b>	- 5 x SATA3 6.0 Gb/s connectors - 1 x IR header - 1 x COM port header - 1 x IEEE 1394 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)
<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>	- 8Mb AMI Legal BIOS - Supports "Plug and Play" - ACPI 1.1 Compliance Wake Up Events - Supports jumperfree - SMBIOS 2.3.1 Support - CPU, VCCM, NB, SB Voltage Multi-adjustment
<b>Support CD</b>	- Drivers, Utilities, AntiVirus Software (Trial Version), AMD OverDrive™ Utility, AMD Live! Explorer, AMD Fusion, ASRock Software Suite (CyberLink DVD Suite - OEM and Trial)
<b>Unique Feature</b>	- ASRock OC Tuner - Intelligent Energy Saver - Instant Boot - ASRock Instant Flash - ASRock OC DNA - ASRock AIWI - ASRock APP Charger - Hybrid Booster: - CPU Frequency Stepless Control - ASRock U-COP - Boot Failure Guard (B.F.G.) - Turbo 25 / Turbo 30 GPU Overclocking - Turbo UCC
<b>Hardware Monitor</b>	- 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
<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>	- Quick Installation Guide, Support CD, I/O Shield - 4 x SATA data cables (optional) - 2 x SATA 1 to 1 power cables (optional) - 1 x Front USB 3.0 Panel - 6 x Screws

## Product Brief

- World's First AMD 890GX Motherboard Supporting Front USB3.0
- ASRock DuraCap (2.5 longer life time), 100% Japan-made high-quality Conductive Polymer Capacitors
- Phenom II X6 6-Core CPU Ready
- Supports ASRock Turbo UCC
- Supports ASRock UCC - Unlock CPU Core
- Supports Dual Channel DDR3 1866(OC)
- Supports ATI™ Quad CrossFireX™, 3-Way CrossFireX™, CrossFireX™ and Hybrid CrossFireX™
- Integrated AMD Radeon HD 4290 graphics, DX10.1 Class iGPU, Shader Model 4.1
- Multi VGA Output options: D-Sub, DVI-D and HDMI
- 2 x Front USB 3.0 ports, 2 x Rear USB 3.0 ports, 5 x SATA3 connectors, 2 x IEEE1394 ports
- Dr. Debug, Smart Swith Design: Power/Reset/ Clear CMOS Switch with LED
- Supports ASRock Instant Boot, Instant Flash, OC Tuner, IES, OC DNA, Good Night LED, Multi-Speed Fan Control, AIWI, APP Charger
- 7.1 CH HD Audio with Content Protection (Realtek ALC892 Audio Codec), THX TruStudio PRO™ and Premium Blu-ray audio support
- Free Software : CyberLink DVD Suite - OEM and Trial
- ErP/EuP Ready

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.

890GX Extreme4

AMD 890GX + SB850 Chipsets

ASRock®  
www.asrock.com

# 890GX Extreme 4

World's First AMD 890GX Motherboard  
Supporting Front USB 3.0

**4 USB 3.0**

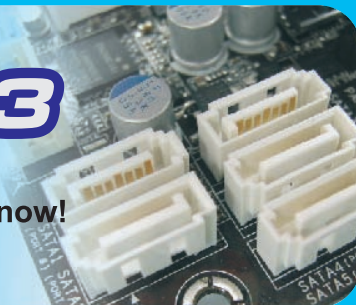
( 2 x Back USB 3.0  
+  
2 x Front USB 3.0 )

**Free Bundle**  
Front USB 3.0 Panel



**5 SATA3**

Enjoy 6 Gb/s  
high transfer speed now!



# 890GX Extreme4

AMD 890GX + SB850 Chipsets

**ASRock**  
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**ASRock Turbo UCC**  
Your All-in-one Solution

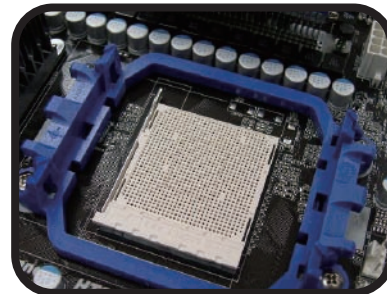
- ✓ Overclocking
- ✓ Unlock CPU Core
- ✓ Power Saving

Motherboard	890GX Extreme4
Chipset	AMD 890GX + SB850
CPU	Phenom II X2 555
RAM	Kingston 1333 1Gx2
VGA	onboard VGA
HDD	WD 500G

CINEBENCH R10 CPU Benchmark(x CPU)	
Turbo UCC OFF	5674
<b>97% Increase</b>	
Turbo UCC ON	11130

Sandra 09-Multi-Media Int	
Turbo UCC OFF	61.3
<b>121% Increase</b>	
Turbo UCC ON	153.42

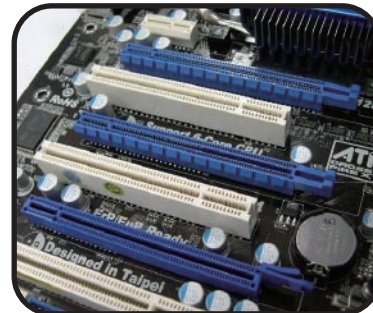
## Six-Core CPU Ready



Heatpipe design for  
CPU power Mosfet



Supports ATI™ Quad CrossFireX™,  
3-Way CrossFireX™, CrossFireX™  
and Hybrid CrossFireX™



# 890GX Extreme4

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**ASRock**  
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## ASRock AIWI - Turn Your iPhone Into Game Joystick

### Playing Games by Holding Your iPhone or iPod touch

ASRock AIWI software introduces a new way of PC gaming operation. ASRock AIWI is the world's first software to turn your iPhone/iPod touch as a game joystick to control your PC games. Just to install the ASRock AIWI software on your ASRock motherboard, connect your PC and apple devices via Bluetooth or WiFi networks, then you can start experiencing the exciting motion controlled games.



**System Requirement:**


- ASRock Motherboard with ASRock AIWI PC Software
- iPhone or iPod touch



## ASRock AIWI Quick Start Guide

### Step 1.

Download and install the ASRock AIWI PC software on ASRock PC:



### Step 2.

Free download AIWI-Lite from App Store and install to your iPhone / iPod Touch:



### Step 3.

Connect your iPhone / iPod touch with ASRock PC via WiFi or bluetooth.



### Step 4.

Execute ASRock AIWI software on the PC and log in to register to become a new AIWI member, then you can receive continues new games update.





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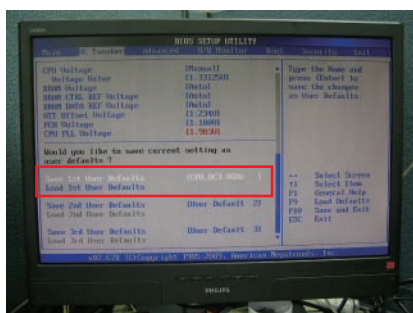
## OC DNA

Save your OC settings as a profile and share with friends. Try OC DNA now!

## OC DNA Instruction

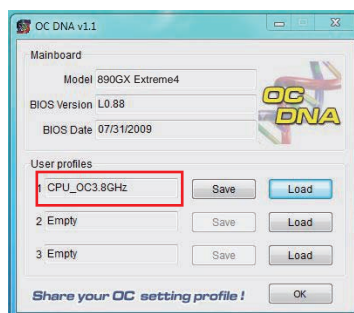
### Step 1

Save your BIOS OC settings as User Default in BIOS OC Tweaker menu. (For example: we name this User Default setting as "CPU\_OC3.8GHz")



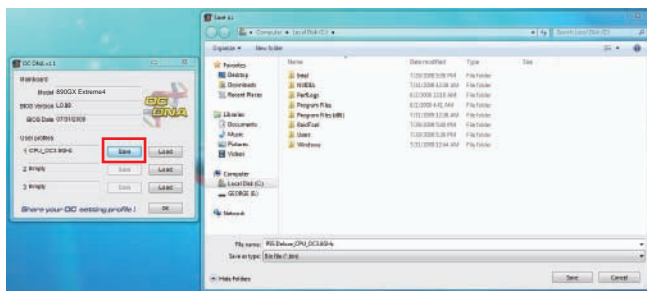
### Step 2

Execute ASRock OC DNA under OS, you will find "CPU\_OC3.8GHz" as User Profile 1.



### Step 3

Press "Save" button to save the "CPU\_OC3.8GHz" OC settings as a profile.



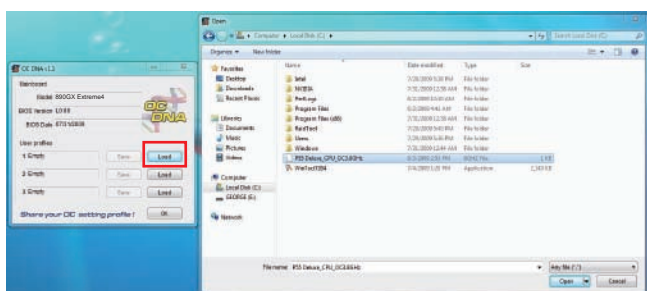
### Step 4

Send the "CPU\_OC3.8GHz" profile to other friends.



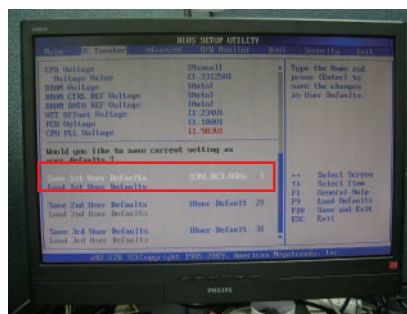
### Step 5

When the friend receives your "CPU\_OC3.8GHz" profile, he can press "Load" to load the "CPU\_OC3.8GHz" profile in OC DNA.



### Step 6

After that, the friend can enter into BIOS OC Tweaker menu to load the "CPU\_OC3.8GHz" profile as his BIOS OC settings.



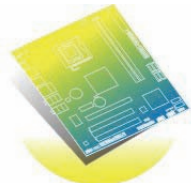
Now, you have successfully share your OC setting profile with your friends.

\*The OC DNA works only when users use the same motherboard and BIOS version.

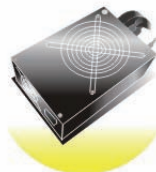
# 890GX Extreme4

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**ASRock**  
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ErP/EuP Ready Motherboard



ErP/EuP Ready Power Supply



ErP/EuP System

## What is ErP/EuP?

ErP/EuP, stands for Energy Using Product, was a provision regulated by European Union to define the power consumption for the completed system. With the great quantity and the popularly using of the electrical products nowadays and the continuously increasing of the electrical products categories in the following 20 to 30 years, European Union decided to establish an effective strategy to solve the energy consumption problem. That is, according to ErP/EuP, the total AC power of the completed system shall be under 1.00W in off mode condition.

## ASRock Instant Boot



ASRock Instant Boot is a new feature invented exclusively by ASRock. It can boot up system in an amazing speed, which is 10 times faster than traditional boot up. For home users or office PC users, ASRock Instant Boot can also guarantee a clean Windows OS, and consumed less power! For details: <http://www.asrock.com/feature/InstantBoot/index.asp>

\* This function is applicable ONLY to single user that does not secure ID and Password to their systems.

\* The boot up time depends on the hardware configuration.

10 Times Faster, Only 4 Secs to Boot Up to Windows!

**ASRock YouTube**

<http://tw.youtube.com/watch?v=BucljXZVxXo>



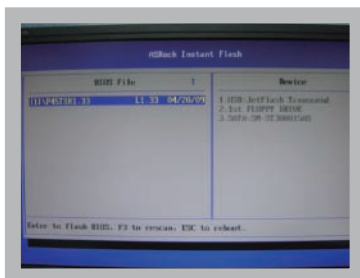
## ASRock Instant Flash

ASRock Instant Flash is an exclusive and the most user-friendly BIOS flash utility developed by ASRock. It is embedded in Flash ROM which is used to update the system BIOS without having to enter operating systems like MS-DOS or Windows.



### Features

Once executing ASRock Instant Flash, the utility will automatically detect all devices such as USB, hard disk or even floppy drive to find the exact BIOS for your system. Instead of giving you all BIOS in your devices, the Instant Flash just list BIOS versions that apply to your motherboard model only. For example, if you have many different BIOS of different motherboards saved in your devices, but you just need to flash your P45 motherboard, the Instant Flash will just list the P45 BIOS versions for you. This unique function allows you to easily select the suitable BIOS version instead of browsing through all data.



Instant Flash just list BIOS versions that apply to your motherboard model.

**Simple!**



Click and start Flashing!

**Quick!**

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**CyberLink**

## 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.