AMD 785G + SB710 Chipsets





































Product Brief < < <

- Supports CPU up to 140W
- Supports AMD OverDrive™ with ACC feature (Advanced Clock Calibration)
- Integrated AMD Radeon HD 4200 graphics, DX10.1 class iGPU, Shader Model 4.1, Max. shared memory 512MB
- Supports ATI™ CrossFireX™, ATI™ Hybrid CrossFireX™, Built-in 128MB SidePort
- Three VGA Output options: D-Sub, DVI-D and **HDMI**
- EuP Ready
- Supports ASRock Instant Boot, Instant Flash, Smart BIOS, ASRock OC Tuner, Intelligent Energy Saver, OC DNA

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.

Detail Specification



Detail Specification ()		
	- ATX Form Factor: 12.0-in x 8.4-in, 30.5 cm x 21.3 cm - Solid Capacitor for CPU power	
	- Support for Socket AM2+ / AM2 processors: AMD Phenom™ FX / Phenom / Athlon 64 FX / Athlon 64 X2 Dual-Core / Athlon X2 Dual-Core / Athlon 64 / Sempron processor - Support for AM3 processors: AMD Phenom™ II X4 / X3 / X2 and Athlon II X4 / X3 / X2 processors - Supports CPU up to 140W - Supports AMD OverDrive™ with ACC feature (Advanced Clock Calibration) - AMD LIVE!™ Ready - Supports AMD's Cool 'n' Quiet Technology - FSB 2600 MHz (5.2 GT/s) - Supports United OverClocking Technology - Supports Hyper-Transport 3.0 (HT 3.0) Technology	
	- Northbridge: AMD 785G - Southbridge: AMD SB710	
Memory	 - Dual Channel DDR2 memory technology - 4 x DDR2 DIMM slots - Supports DDR2 1066/800/667/533 non-ECC, un-buffered 	

Max. capacity of system memory: 16GB 2 x PCI Express 2.0 x16 slots (green @ x16 mode, orange @ **Expansion Slot** x4 mode) 1 x PCI Express 2.0 x1 slot

2 x PCI slots
Supports ATI™ CrossFireX™ and Hybrid CrossFireX™

Integrated AMD Radeon HD 4200 graphics DX10.1 class iGPU, Shader Model 4.1 Graphics Max. shared memory 512MB
Integrated 128MB side port memory for iGPU
Three VGA Output options: D-Sub, DVI-D and HDMI
Supports HDCP function Supports Full HD 1080p Blu-ray (BD) / HD-DVD playback

7.1 CH Windows® Vista™ Premium Level HD Audio (VIA® VT1708S Audio Codec) Audio

PCIE x1 Gigabit LAN 10/100/1000 Mb/s Realtek RTL8111DL Supports Wake-On-LAN I/O Panel

Rear Panel I/O 1 x PS/2 Mouse Port 1 x PS/2 Keyboard Port 1 x VGA/D-4 D 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 RJ-45 LAN Port with LED (ACT/LINK LED and SPEED

HD Audio Jack: Side Speaker / Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone 6 x Serial ATAII 3.0 Gb/s connectors, support RAID (RAID 0, RAID 1, RAID 10 and JBOD), NCQ, AHCl and "Hot Plug" Connector 1 x ATA133 IDE connector (supports 2 x IDE devices)
1 x Floppy connector
1 x IR header

1 x COM port header 1 x HDMI_SPDIF header CPU/Chassis/NB/Power FAN connector 24 pin ATX power connector 8 pin 12V power connector CD in header Front panel audio connector 3 x USB 2.0 headers (support 6 USB 2.0 ports)

BIOS Feature 8Mb AMI BIOS

AMI Legal BIOS
Supports "Plug and Play"
ACPI 1.1 Compliance Wake Up Events Supports jumperfree
SMBIOS 2.3.1 Support
CPU, VCCM, NB Voltage Multi-adjustment Supports Smart BIOS

ASRock OC Tuner

Drivers, Utilities, AntiVirus Software (Trial Version), AMD OverDrive™ Utility, AMD Live! Explorer **Support CD**

Intelligent Energy Saver Instant Boot ASRock Instant Flash ASRock OC DNA

Unique Feature

Hybrid Booster:
- CPU Frequency Stepless Control
- ASRock U-COP - Boot Failure Guard (B.F.G.)

ASRock AM2 Boost: ASRock Patented Technology to boost memory performance up to 12.5% CPU Temperature Sensing **Hardware Monitor** Chassis Temperature Sensing
CPU/Chassis/NB/Power Fan Tachometer
CPU Quiet Fan

Voltage Monitoring: +12V, +5V, +3.3V, Vcore Microsoft® Windows® XP / XP Media Center / XP 64-bit / Vista $^{\text{TM}}$ / Vista $^{\text{TM}}$ 64-bit / Win7 compliant os

FCC, CE, WHQL EuP Ready (EuP ready power supply is required) Certifications Quick Installation Guide, Support CD, I/O Shield Accessories Floppy/ATA 133 cables2 x SATA data cables (optional)

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What is EuP?

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 EuP, the total AC power of the completed system shall be under 1.00W in off mode condition.

How to setup an EuP system?

To meet EuP standard, the EuP ready motherboard and the EuP ready power supply are required. As a mother-board vendor with eco-awareness, ASRock is the pioneer to develop "EuP Ready" motherboards based on the great efforts of our exceptional hardware design.

According to Intel, the EuP ready power supply must meet the standard of 5v standby power efficiency is higher than 50% under 100 mA current consumption. For EuP ready power supply selection, please check with the power supply manufacturer for more details.

ASRock, Worldwide First EuP Ready Motherboard Manufacturer!

ASRock hereby proudly announced that we are the Worldwide First motherboard manufacturer to release "EuP Ready" motherboard to the market! With ASRock "EuP Ready" motherboard, you are confident to setup a system to pass the EuP standard.

ATI Radeon® HD4200

DirectX 10.1 Onboard Graphics

Key features of DirectX 10.1 include an updated shader model, improved anti-aliasing support, more flexible data access, and tighter specifications for better applicationcompatibility.

DirectX 10.1 Anti-Aliasing



DirectX 10 –Standard MSAA:Foliage edges do not get anti-aliased –causes shimmering and crawling when they move

DirectX 10.1 –Alpha Test MSAA:Foliage edges are smoothed and anti-aliased –offers significant image quality improvement

Features	DirectX® 10	DirectX® 10.1
Shader Model	4	4.1
Separate per-MRT	No	Yes
blend modes		
Pixel Coverage	NIa	Voc
Masks	No	Yes
Sample Pattern	No	Voc
Selection	NO	Yes
Cube Map Arrays	No	Yes
Gather4	No	Yes
VS Inputs	16	32
Blending	INT8, FP16/32	INT8/16, FP16/32
Filtering	FP16	FP32

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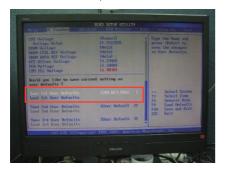
OC DNA

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

OC DNA Instruction

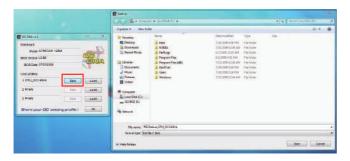
Step 1

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")



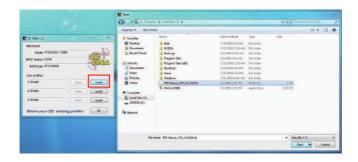
Step 3

Press "Save" button to save the "CPU_OC3.8GHz" OC settings as a profile.



Step 5

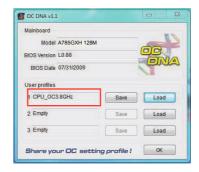
When the friend receives your "CPU_OC3.8GHz" profile, he can press "Load" to load the "CPU_OC3.8GHz" profile in OC DNA.



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

Step 2

Execute ASRock OC DNA under OS, you will find "CPU_OC3.8GHz" as User Profile 1.



Step 4

Send the "CPU_OC3.8GHz" profile to other friends.



Step 6

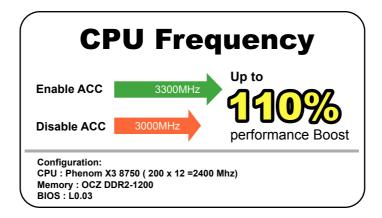
After that, the friend can enter into BIOS OC Tweaker menu to load the "CPU_OC3.8GHz" profile as his BIOS OC settings.



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AMD OverDriveTM with AGG feature (Advanced Glock Galibration)



Enable AOD ACC, Upgrade your CPU cores and L3 eache now!

With AMD Sempron 140 CPU

Single core → Dual core

With AMD Phenom II X2 550 BF CPU

X2 cores → X4 cores

With AMD Phenom II X3 710 / 720 BE CPU

X3 cores → X4 cores

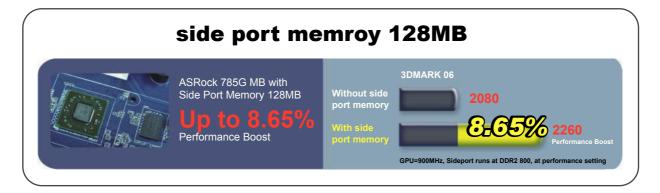
With AMD Phenom II 805 / 810 CPU

L3 cache 4MB → 6MB

*The success rate of this enhancement depends on the individual CPU.

Side port memory 128MB:

Boost performance up to 8.65% which is rarely seen on other 785G boards



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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 userfriendly 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.





Click and start Flashing!

