

# P4i945GC

Intel® 945GC+ ICH7 Chipsets

**ASRock®**  
www.asrock.com



## Product Brief <<<

- Supports Dual Channel DDR2 667
- Intel® Graphics Media Accelerator 950, DirectX 9.0
- PCIE Gigabit LAN
- ASRock Instant Boot, Instant Flash, Smart BIOS
- 7.1 CH Windows® Vista™ Premium Level HD Audio (Realtek ALC888 Audio Codec)

## Detail Specification <<<

<b>Platform</b>	- Micro ATX Form Factor: 9.6-in x 7.7-in, 24.4 cm x 19.6 cm
<b>CPU</b>	- Socket 478 for Intel® Pentium® 4 / Celeron® D (Prescott, Northwood) processors - FSB 800/533/400 MHz - Supports Hyper-Threading Technology - Supports Untied Overclocking Technology
<b>Chipset</b>	- Northbridge: Intel® 945GC - Southbridge: Intel® ICH7
<b>Memory</b>	- Dual Channel DDR2 memory technology - 2 x DDR2 DIMM slots - Supports DDR2 667/533/400 non-ECC, un-buffered memory - Max. capacity of system memory: 4GB
<b>Expansion Slot</b>	- 1 x PCI Express x16 slot - 1 x PCI Express x1 slot - 2 x PCI slots
<b>Graphics</b>	- Intel® Graphics Media Accelerator 950 - Pixel Shader 2.0, DirectX 9.0 - Max. shared memory 224MB
<b>Audio</b>	- 7.1 CH Windows® Vista™ Premium Level HD Audio (Realtek ALC888 Audio Codec)
<b>LAN</b>	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111DL - Supports Wake-On-LAN
<b>Rear Panel I/O</b>	ASRock 8CH I/O Plus - 1 x PS/2 Mouse Port - 1 x PS/2 Keyboard Port - 1 x Serial Port: COM1 - 1 x VGA Port - 1 x Parallel Port (ECP/EPP Support) - 4 x Ready-to-Use USB 2.0 Ports - 1 x RJ-45 LAN Port - HD Audio Jack: Side Speaker / Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone
<b>Connector</b>	- 4 x SATAII 3.0 Gb/s connectors (No support for RAID and "Hot Plug" functions) - 1 x ATA100 IDE connector by Intel® ICH7 (supports 2 x IDE devices) - 1 x ATA133 IDE connector by VIA® VT6415 (supports 2 x IDE devices) - 1 x Floppy connector - CPU/Chassis FAN connector - 24 pin ATX power connector - 4 pin 12V power connector - CD in header - Front panel audio connector - 2 x USB 2.0 headers (support 4 USB 2.0 ports)
<b>BIOS Feature</b>	- 4Mb AMI BIOS - AMI Legal BIOS - Supports "Plug and Play" - ACPI 1.1 Compliance Wake Up Events - Supports jumperfree - SMBIOS 2.3.1 Support - Supports Smart BIOS
<b>Support CD</b>	- Drivers, Utilities, AntiVirus Software (Trial Version)
<b>Unique Feature</b>	- Instant Boot - ASRock Instant Flash - Hybrid Booster: - CPU Frequency Stepless Control - ASRock U-COP - Boot Failure Guard (B.F.G.)
<b>Hardware Monitor</b>	- CPU Temperature Sensing - Chassis Temperature Sensing - CPU Fan Tachometer - Chassis Fan Tachometer - CPU Quiet Fan - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore
<b>OS</b>	- Microsoft® Windows® 2000 / XP / Vista™ compliant
<b>Certifications</b>	- FCC, CE, WHQL
<b>Accessories</b>	- Quick Installation Guide, Support CD, I/O Shield - ATA Cable (Optional) - 1 x SATA Data Cable (Optional)

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.

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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.

### Instant Boot Interface

This function is designed with two main options:

#### ● Enable Instant Boot

**Fast Mode:** It takes only 3 to 4 seconds to boot up the system. You may start using your computer, running Office, browsing internet and even MSN instantly.

**Regular Mode:** It only takes half of the traditional boot-up time to start the system. The boot up experience is safe and fast.

#### ● Disable Instant Boot

Instant Boot can also be disabled when you do not want to use this application.

Note: The actual boot up time is subject to the different models and configurations.



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

### ASRock YouTube

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



## Pro and Cons of various shut down modes

From this sum up table, we can find that ASRock Instant Boot not only excels in the Boot Up speed (3~4 sec.), it also provides clean OS and saves the most power energy.

	No Shut Down	Traditional boot up	S3	S4	Instant Boot	
					Fast Mode	Regular Mode
Boot Up Time	Best ●	Worse ● 50~60 sec	Best ● 3~4 sec.	Good ● 20~22 sec.	Best ● 3~4 sec.	Good ● 20~22 sec.
Cleanliness of OS	Fair ● Accumulated garbage data	Best ● Clean	Fair ● Accumulated garbage data	Fair ● Accumulated garbage data	Best ● Clean	Best ● Clean
Power Consumption (Light loading)	Worse ● 60W~100W	Best ● 1W~3W	Best ● 1W~3W	Best ● 1W~3W	Best ● 1W~3W	Best ● 1W~3W

● Best   ● Good   ● Fair   ● Worse

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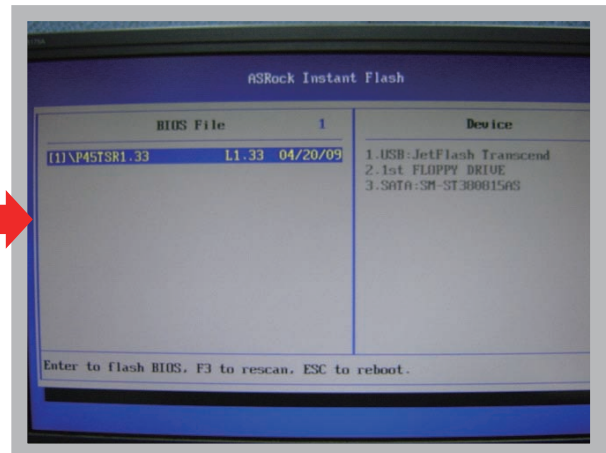
## ASRock Instant Flash

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.



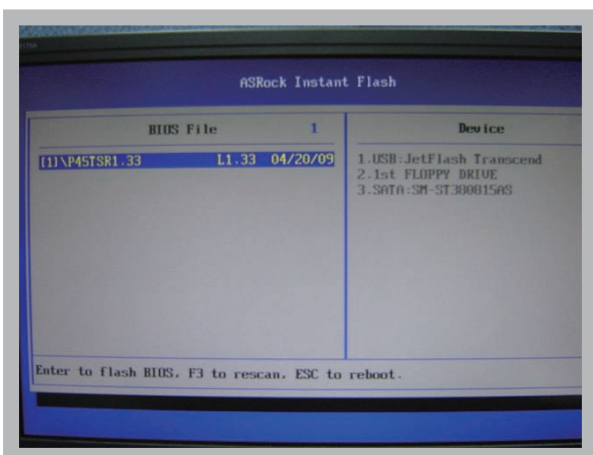
## How to execute ASRock Instant Flash?

ASRock Instant Flash is extremely user-friendly. You can access Instant Flash utility directly by pressing F6 when you saw this page.



## 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!**