Z68 Pro3-M

Intel® Z68 Chipset





Product Brief < < <

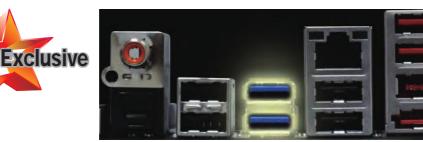
- 100% All Solid Capacitor Design
- Supports Intel® Smart Response Technology
- Supports Intel® K-Series unlocked CPU
- Supports Dual Channel DDR3 2133(OC)
- Supports Intel® HD Graphics with Built-in Visuals
- Multi VGA Output options: D-Sub, DVI-D, HDMI, and DisplayPort
- 2 x USB 3.0 ports, 3 x SATA2 connectors
- Supports ASRock XFast USB Technology, Graphical UEFI, Lucid Virtu
- Supports ASRock Extreme Tuning Utility (AXTU), Instant Boot, Instant Flash, Good Night LED, APP Charger, SmartView
- Combo Cooler Option (C.C.O.)
- 7.1 CH HD Audio with Content Protection (Realtek ALC892 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.

	Detail Specif	fication < < <
	Platform	- Micro ATX Form Factor: 9.6-in x 9.6-in, 24.4 cm x 24.4 cm - All Solid Capacitor design
	CPU	- Supports 2 rd Generation Intel [®] Core [™] i7 / i5 / i3 in LGA1155 Package - 4 + 1 Power Phase Design - Supports Intel [®] Turbo Boost 2.0 Technology - Supports Intel [®] K-Series unlocked CPU - Supports Hyper-Threading Technology
	Chipset	- Intel® Z68
	Memory	Dual Channel DDR3 memory technology 4 x DDR3 DIMM slots Supports DDR3 2133(OC)/1866(OC)/1600/1333/1066 non-ECC, un-buffered memory Max. capacity of system memory: 32GB Max. capacity of system memory: 32GB
	Expansion Slot	- Supports Intél® Extreme Memory Profile (XMP) - 1 x PCI Express 2.0 x16 slot (blue @ x16 mode)
	•	 2 x PCI Express 2.0 x1 slots 1 x PCI slot Supports Intel[®] HD Graphics Built-in Visuals : Intel[®] Quick Sync Video,
	Graphics	Intél [®] InTru [®] 3D, Intel [®] Clear Video HD Technology, Intel [®] HD Graphics 2000/3000, Intel [®] Advanced Vector Extensions (AVX) - Pixel Shader 4.1, DirectX 10.1 Max. shared memory 1759MB - Four VGA Output options: D-Sub, DVI-D, HDMI and DisplayPort - Supports HDMI 1.4 a Technology with max. resolution up to 1920x1200 @ 60Hz - Supports DNI with max. resolution up to 1920x1200 @ 60Hz - Supports DisplayPort with max. resolution up to 2048x1536 @ 75Hz - Supports DisplayPort with max. resolution up to 2048x1536 @ 60Hz - Supports DisplayPort with max. resolution up to 2560x1600 @ 60Hz - Supports DisplayPort with max. resolution up to 2560x1600 @ 60Hz - Supports DisplayPort with max. resolution up to 2560x1600 @ 60Hz - Supports LOEP function with DVI, HDMI and DisplayPort ports - Supports HDCP function with DVI, HDMI and DisplayPort ports - Supports HD HD 1080p Blu-ray (BD) / HD-DVD playback with DVI, HDMI and DisplayPort ports
	Audio	 - 7.1 CH HD Audio with Content Protection (Realtek ALC892 Audio Codec) - Premium Blu-ray audio support
	LAN	PCIE x1 Gigabit LAN 10/100/1000 Mb/s Realtek RTL8111E Supports Wake-On-LAN Supports LAN Cable Detection Supports Lenergy Efficient Ethernet 802.3az Supports PXE
	Rear Panel I/O	I/O Panel - 1 x PS/2 Keyboard Port - 1 x VGA/D-Sub Port - 1 x VGA/D-Sub Port - 1 x VGA/D-N-D Port - 1 x DiplayPort - 1 x DiplayPort - 1 x Optical SPDIF Out Port - 4 x Ready-to-Use USB 2.0 Ports - 1 x eSATA2 Connector - 2 x Ready-to-Use USB 3.0 Ports - 1 x AJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED) - HD Audio Jack: Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone
	SATA3	 2 x SATA3 6.0 Gb/s connectors, support RAID (RAID 0, RAID 1, RAID 10, RAID 5, Intel Rapid Storage and Intel Smart Response Technology), NCQ, AHCI and "Hot Plug" functions
	USB 3.0	- 2 x USB 3.0 ports by Etron EJ168A, support USB 1.0/2.0/3.0 up to 5Gb/s
	Connector	- 3 x SATA2 3.0 Gb/s connectors, support RAID (RAID 0, RAID 1, RAID 10, RAID 5, Intel Rapid Storage and Intel Smart Response Technology), NCQ, AHCI and Hol Plug functions - 2 x SATA3 6.0 Gb/s connectors - 1 x Floppy connector - 1 x RN header - 1 x RN header - 1 x CIN header - 1 x CIN header - 1 x CIN header - 1 x COM theader - 1 x NDML SPDIF header - 1 x Power LED header - 1 x Power LED header - 1 x Power LED header - 24 pin ATX power connector - 24 pin ATX power connector - Front panel audio connector - Front panel audio connector - 3 x USB 2.0 headers (support 6 USB 2.0 ports)
	BIOS Feature	AMD AMI UEFI Legal BOTO SUB LO parts) AdVb AMI UEFI Legal BOTO SWIth GUI support Supports "Plug and Play" ACPT 1.1 Compliance Wake Up Events Supports Jumperfree SMBIOS 2.3.1 Support CPU Core, IGPU, DRAM, PCH, CPU PLL, VTT, VCCSA Voltage Multi-adjustment
	Support CD	 Drivers, Utilities, AntiVirus Software (Trial Version), ASRock Software Suite (CyberLink DVD Suite - OEM and Trial; Creative Sound Blaster X-Fi MB - Trial)
	Unique Feature	ASRock Extreme Tuning Utility (AXTU) ASRock Instant Boot ASRock Instant Flash ASRock APP Charger ASRock XFast USB Ucid Virtu Hybrid Booster: CPU Frequency Stepless Control ASRock U-COP Boot Failure Guard (B.F.G.) Combo Cooler Option (C.C.O.) Good Night LED
	Hardware Monitor	- CPU Temperature Sensing - Chassis Temperature Sensing - Chassis Temperature Sensing - CPU/Chassis/Power Fan Tachometer - CPU/Chassis Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) - CPU Fan Multi-Speed Control - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore
	OS	- Microsoft" Windows" 7 / 7 64-bit / Vista TM / Vista TM 64-bit / XP / XP 64-bit compliant
	Certifications	- FCC, CE, WHQL - ErP/EuP Ready (ErP/EuP ready power supply is required)
r	Accessories	- Quick Installation Guide, Support CD, I/O Shield - 2 x SATA Data Cables (Optional)



ASRock XFast USB Technology -Faster Than Your Imagination!



(The rear I/O photo is example only)

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 the below graph, it shows that the ASRock XFast USB technology can even boost USB 3.0 performance up to 185.52%!

USB 3.0 Benchmark



ATTO Disk Benchmark - 4K Read	ASRock Metherboard with XFast USB Technology Other Metherboard without XFast USB Technology 150528 KB/s	185.52%
52720 KB/s	150520 KD/S	Faster

ATTO Disk Benchmark - 4K Write	ASRock Motherboard with XFast USB Technology Other Motherboard without XFast USB Technology 138916 KB/s	145.28%
● 56636 KB/s	130910 KD/S	Faster

Z68 Pro3-M

Intel® Z68 Chipset



Intel Smart Response Technology



For users who are tempted to connect the SSD and HDD on ASRock motherboard, the Intel Smart Response Technology can make the SSD become the "Cache of the HDD" to boost up the HDD access speed.

System Configuration:

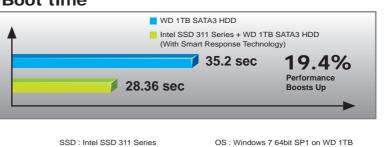
MB : Z68 Pro3-M BIOS : L0.33 CPU : i7-2600K 3.4G DRAM : Kingston DDR3-1333 2Gx2

Lucid Virtu[™]



PCMark 05 HDD Score WD 1TB SATA3 HDD Intel SSD 311 Series + WD 1TB SATA3 HDD (With Smart Response Technology) 6149 28009 Performance Boosts Up

Boot time



SATA3 HDD

With Lucid Virtu software, next-generation PCs with 2nd Generation Intel[®] Core[™] processor platforms will dynamically assign tasks in real time to the best available graphics resource based on power, performance and features.

HDD : WD 1TB SATA3 HDD



MB : ASRock Z68 Motherboard Other Z68 Motherboard CPU : Intel Core i7 2600K 3.4GHz DRAM : Kingston DDR3-1333 2Gx2

HDD : WD 500GB VGA : Nvidia GTX580 ; Intel HD Graphics OS : Windows 7 64bit SP1 Lucid : Lucid VIRTU 1.0.105

Nvidia Driver : 266.58 Application : Cyberlink MediaEspresso 6.5 Original File : m2ts, 1080p, 2200MB

Free Bundle Exclusive Cyberlink MediaEspresso 6.5 Trial



CyberLink MediaEspresso 6.5 trial now supports Intel[®] Quick Sync Video hardware transcoding and is optimized for second generation Core i7, i5, and i3 processors to accelerated conversion of all your favorite media files for your favorite portable players. Now you can easily display your favorite movies, songs and photos on iPhone, iPad, PSP, Xbox, Youtube, Facebook etc. Compile, convert and enjoy images and songs as much as you want and enhance your videos to new levels with TrueTheater Technology. Try it today!

Limitations:

30-day trial limitation

• Convert videos to the H.264 format 50 times

Z68 Pro3-M Intel® Z68 Chipset



Craphical UEFI BIOS Interface



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

Unified Extensible Firmware Interface (UEFI) is a revolutionary BIOS utility which offers tweakfriendly 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.

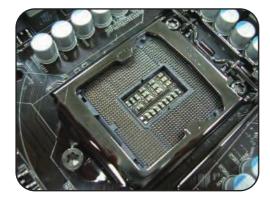
AXTU - The All-in-1 Tuning Software

dware Monitor	TEMPERATURE	
Fan Control	CPU Temperature 38C / 100F	MB Temperature 38C / 100F
DC Tuner	Target Speed LEVEL5	
Autotune Manual Tuning	Target Temperature 38C / 100F	
IES	CHASSIS FAN1 NA	
OC DNA	Target Speed LEVELS	
nstant Boot	CHASSIS FAN1 NA	
	Target Speed LEVEL5	
BIOS	CHASSIS FAN1 MA	
Options	Target Speed LEVEL5	

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 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 overclock the GT frequency which helps to boost up the graphics performance and some voltage settings 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.







Support Intel® K-Series unlocked CPU



100% All Solid Capacitor design





C.C.O. provides the flexible option to adopt three different CPU cooler types, Socket LGA 775*, LGA 1155 and LGA 1156**

*C.C.O. may not be compatible with all Socket 775 CPU coolers. **O is for Socket 1155 and Socket 1156 CPU cooler.

Intel[®] HD Graphics Built-in Visuals



Z68 Pro3-M

Intel[®] Z68 Chipset

Intel[®] Quick Sync Video

Intel[®] Quick Sync Video saves valuable time for PC users who want to create and edit video, synchronize it with other devices, and share it–at home and on the internet. Intel Quick Sync Video uses hardware on the processor, instead of software, to accelerate video encoding.



Intel[®] InTru[™] 3D

Enjoy the ultimate 3D visual experiences–seamlessly–from your PC. Now you can watch your favorite 3D movies with Blu-ray Stereo 3D playback using active shutter 3D glasses. It delivers it all in 1080p full, high-definition resolution on your TV over HDMI 1.4.



Intel[®] Clear Video HD Technology

Intel[®] Clear Video HD Technology (Intel[®] CVT HD) enables rich media experiences with picture perfect images by using a host of advanced graphics technologies that support optimized, high-definition video playback and sharp image quality.



Intel[®] HD Graphics 2000/3000

Intel[®] HD Graphics is now built right into the processor! This integration means lower latencies and leads to superior mainstream gaming and enhanced 3D experiences.



Intel[®] Advanced Vector Extensions (AVX)

Intel[®] Advanced Vector Extensions (Intel[®] AVX) gives more computing power to application developers with a new, 256 bit instruction set extension to Intel[®] SSE.

Z68 Pro3-M Intel® Z68 Chipset





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 "Friend Wall" that conveniently alphabetizes your Facebook friends by profile photo, allowing immediate access to your friends' profile pages.



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



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



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.