P8Z68-V PRO/GEN3

Fully PCI-Express 3.0 Ready, Intel Z68 motherboard. USB 3.0 Boost includes world's first UASP support.

- Dual Intelligent Processors 2 with DIGI+ VRM Digital Power Design
- UEFI BIOS (EZ Mode) - Flexible & Easy BIOS Interface
- LucidLogix® Virtu (Universal Switchable Graphics) - Auto Switching between Integrated Graphics and NVIDIA/AMD Cards
- Intel® Smart Response Technology - SSD Speed with HDD Capacity
- BT GO! (Bluetooth) - Diverse BT Enjoyment, New Technology Lifestyle
- GPU Boost - Push the Limits with iGPU Level Up!
- Quad USB 3.0/SATA 6Gb/s Support - Double Access, Double Convenience
- Quad-GPU SLI and Quad-GPU CrossFireX Support!



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Overview | Specifications | Download | Memory/Device Support | CPU Support List

P8Z68 Series Highlights

USB 3.0 Boost

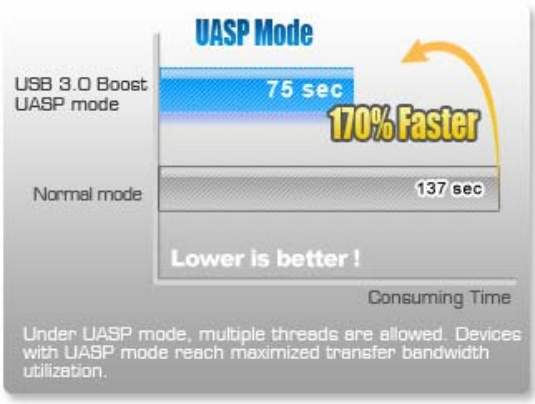
Faster USB 3.0 Transmission with UASP

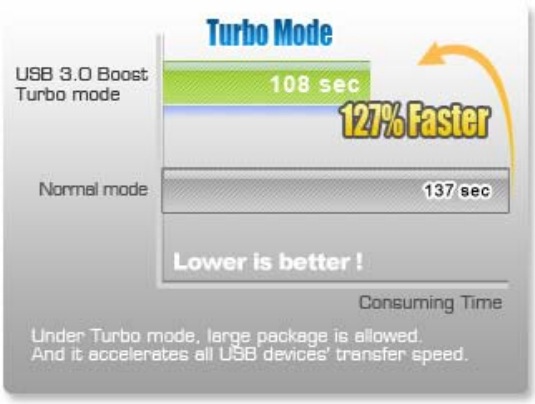
New ASUS USB 3.0 Boost technology supports UASP (USB Attached SCSI Protocol), the latest USB 3.0 standard. With USB 3.0 Boost technology, a USB device's transmission speed is significantly increased up to 170%, adding to an already impressive fast USB 3.0 transfer speed. ASUS software automatically accelerates data speeds for compatible USB 3.0 peripherals without the need for any user interaction.

- World's 1st USB 3.0 UASP Support – 170% faster instantly
- Complete USB 3.0 Solution – Performance boost for most USB devices
- Simple Plug & Boost – Auto detection design ensures best performance always

> Click Here to Learn More

When transferring a 13.8 GB movie, USB 3.0 Boost from ASUS lands an overall better-performing PC. Check out these benchmarks for more info:





Test Configuration: / OS : Windows 7 64bit/ MB : P8Z68-V PRO/GEN3/ CPU : i7-2600K/ BIOS : 0301/ Support DVD : 1860.04/ Destination: 3 x OCZ Vertex 3 120G as RAID0/ Source for UASP Test : AT2109 （OEM SATA 3.0 to USB 3.0 module based on ASM1051E with UASP enabled）+ Intel SSDSA2CW080G3 2.5" (Firmware: 0302) Source for Turbo Mode Test : 610-4US33B (OEM SATA3.0 to USB 3.0 module based on ASM1051 without UASP enabled) + Intel SSDSA2CW080G3 2.5" (Firmware: 0302)

PCI Express® 3.0

PCI Express® 3.0 (PCIe 3.0) is the latest PCI Express bus standard with improved encoding schemes that provide twice the performance of current PCIe 2.0. Total bandwidth for a x16 link reaches a maximum of 32GB/s, double the 16GB/s of PCIe 2.0 (in x16 mode). As such, PCIe 3.0 provides users unprecedented data speeds, combined with the convenience and seamless transition offered by complete backward compatibility with PCIe 1.0 and PCIe 2.0 devices. PCIe 3.0 will become a must-have feature for users who wish to improve and optimize graphic performance, as well as have the latest technology available to them.

* Actual PCIe 3.0 speed varies with the installed CPU type.

UEFI BIOS (EZ Mode)

Flexible & Easy BIOS Interface

Exclusive to ASUS motherboards, its UEFI (Unified Extensible Firmware Interface) is the first ever mouse-controlled graphical BIOS interface designed with dual selectable modes. It delivers a user-friendly interface that goes beyond traditional keyboard-only BIOS controls to enable more flexible and convenient input with quick scrolling. Users can easily navigate the UEFI BIOS with the smoothness of their operating system. Quick and simple overclocking and setup sharing is facilitated by the F12 hotkey BIOS snapshot feature. The exclusive EZ Mode displays frequently-accessed setup info, while the Advanced Mode is for experienced performance enthusiasts that demand far more intricate system control, including detailed DRAM information.

Supports Hard Drives over 2.2TB

ASUS UEFI BIOS natively supports hard drives larger than 2.2TB in 64-bit, with full storage space utilization helping deliver far more exciting computing than traditional BIOS versions.

Exclusive ASUS Interface

- EZ Mode - gives easy access to selectable, optimized system modes, clear system info display and drag and drop boot prioritizing
- Advanced Mode - for experienced performance enthusiasts that demand intricate system settings

LucidLogix® Virtu

Universal Switchable Graphics Technology

LucidLogix® Virtu is designed for the Intel® Sandy Bridge platform's powerful integrated graphics. Its GPU virtualization dynamically assigns tasks to the best available graphics resources based on power, performance and system load on Windows® 7 based PCs. It allows users to fully utilize the unique capabilities of advanced Sandy Bridge multimedia features alongside the high end 3D rendering performance provided by installed graphics cards. When no discrete graphics are needed, the graphics card is put in idle mode to lower utilization, heat, fan speed and power draw down to near zero, making the system more

environmentally-friendly. For users with diverse needs, LucidLogix® Virtu GPU virtualization provides great flexibility and efficiency.

Universal Switchable Graphics

LucidLogix® Virtu's GPU virtualization technology assigns tasks to the best available GPU, allowing dynamic graphics switching between integrated graphics and NVIDIA® or AMD graphics cards.

3X Faster Video Conversion

With switchable graphics, all ASUS P8Z68 Series motherboards leverage the transcoding power of Sandy Bridge, allowing users to enjoy three times faster video conversion with Intel® Quick Sync Video technology.

Intel® Smart Response Technology

SSD Speed with HDD Capacity

Intel® Smart Response Technology boosts overall system performance. It uses an installed fast SSD (min 18.6GB available capacity) as a cache for frequently accessed data. Harness the combination of SSD-like performance and response with hard drive capacity, that's 4X faster than a HDD-only system.

* Support Intel® Smart Response Technology on 2nd generation Intel® Core™ processor family

Dual Intelligent Processors 2 with DIGI+ VRM

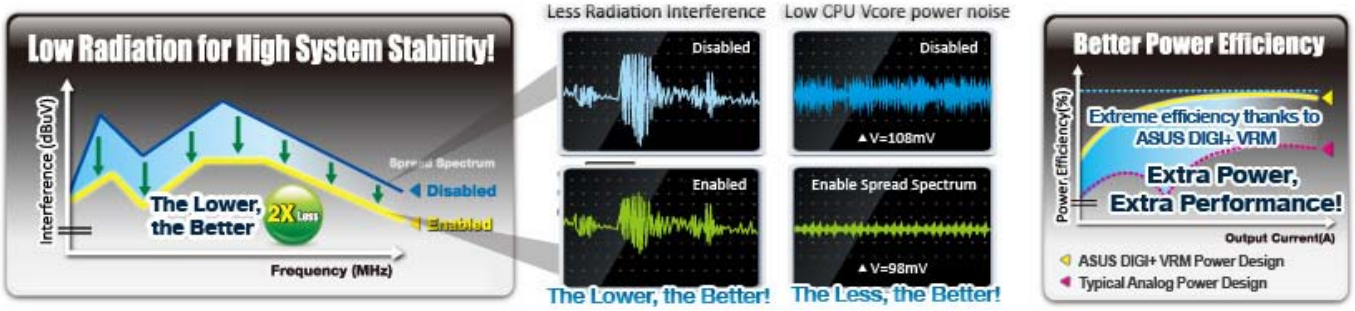
Digital Power Design: The New Standard

The world's first Dual Intelligent Processors from ASUS pioneered the use of two onboard chips - EPU (Energy Processing Unit) and TPU (TurboV Processing Unit). The new generation of Dual Intelligent Processors 2 with DIGI+ VRM provides precise Vcore PWM, integrated graphics voltages and frequency module adjustments with minimal power loss through BIOS tuning and an exclusive user interface to increase the board's overclocking range while performance reaches its full potential. ASUS DIGI+ VRM digital power design empowers users with superior flexibility and perfect precision to ensure optimized performance, extreme system stability and greater power efficiency.

DIGI+ VRM

Herald the Arrival of a New Digital Power Design Era

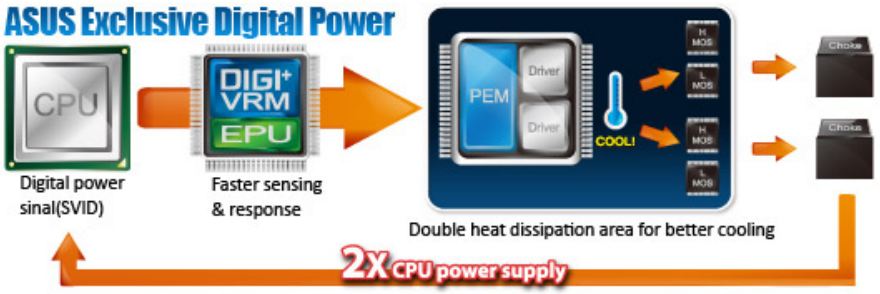
VRM, or voltage regulator modules, are considered among the most essential motherboard design components. They supply the voltage demanded by the CPU, and a good VRM must intelligently detect actual CPU power draw to provide precise power accordingly. ASUS DIGI+ VRM is an innovative, industry-leading technology that fully integrates Intel® VRD12 specifications on a native level, greatly enhancing power to go far beyond the limits of analog designs.



Advantages of ASUS DIGI+ VRM Digital Power Design

Unlike previous VRD versions, Intel® VRD12 uses digital signals (SVID). To ensure perfect power delivery, ASUS specially designed DIGI+ VRM to sync completely with this new technology.

- Faster sensing and response: ASUS DIGI+ VRM acts as a digital controller to perfectly match digital power signal (SVID) requests from the CPU, eliminating digital-to-analog conversion lag.
- Better cooling: exclusive dual driver and MOS design doubles the heat dissipation area with expanded cooling surfaces for improved thermal performance. Spacing components out over a wider area speeds up cooling to enhance reliability and stability.
- 2X CPU power supply: the same exclusive dual driver and MOS design also provides twice the CPU power supply with two complete power stages. This results in far greater phase load tolerances, so the CPU never has to wait for power to arrive, increasing performance and overclocking potential.



Active Cooling for Extreme Durability- Super Cool VRM

ASUS DIGI+ VRM delivers intelligent power management to balance loadings for each power phase by detecting VRM temperatures to ensure longer component lifespan and better cooling.

TPU

The Ultimate Turbo Processor

Unleash your performance with ASUS' simple onboard switch or AI Suite II utility. The TPU chip offers precise voltage control and advanced monitoring through Auto Tuning , GPU Boost and TurboV functions. Auto Tuning offers a user friendly way to automatically optimize the system for fast, yet stable clock speeds, while TurboV enables unlimited freedom to adjust CPU frequencies and ratios for optimized performance in diverse situations.

EPU

Energy Efficiency All Around

Tap into the world's first real-time PC power saving chip through a simple onboard switch or AI Suite II utility. Get total system-wide energy optimization by automatically detecting current PC loadings and intelligently moderating power consumption. This also reduces fan noise and extends component longevity!

ASUS Exclusive Features

GPU Boost

Go to the Limit with iGPU Level Up!

GPU Boost accelerates the integrated GPU for extreme graphics performance. The user-friendly interface facilitates flexible frequency adjustments. It easily delivers stable system-level upgrades for every use.

BT GO!

Diverse BT Enjoyment, New Technology Lifestyle

Onboard Bluetooth wireless design enables smart connectivity to Bluetooth devices with no additional adapter. ASUS BT GO! comes with 7 special functions that offer a significant breakthrough in Bluetooth evolution, including Folder Sync, BT Transfer, BT Turbo Remote, BT-to-Net, Music Player, Shot and Send, and Personal Manager. All are accessible through the exclusive, user-friendly ASUS interface.

* The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by ASUSTeK Computer Inc. is under license. Other trademarks and trade names are those of their respective owners

Latest Transfer Technology

Complete USB 3.0 Integration

Double USB Access, Double Convenience

ASUS facilitates strategic USB 3.0 accessibility for both the front and rear panels - 4 USB 3.0 ports in total. Experience the latest plug & play connectivity at speeds up to 10 times faster than USB 2.0. The P8Z68-V PRO/GEN3 affords greater convenience with high speed connectivity.

Extra SATA 6Gb/s Supports

Extra Ports, Extra Speed and Accessibility

The Intel® Z68 Express chipset natively supports the next-generation Serial ATA (SATA) interface, delivering up to 6Gb/s data transfers. ASUS provides extra SATA 6Gb/s ports with enhanced scalability, faster data retrieval and double the bandwidth of current bus systems.

ASUS Crystal Sound

DTS

DTS Surround Sensation UltraPC

DTS Surround Sensation UltraPC delivers exceptional 5.1 surround experience through the most common PC audio setups - your existing stereo speakers or headphones. In addition to virtual surround, “Bass enhancement” provides stronger low frequency bass sound, and “Voice clarification” provides clear human dialogue even with loud background sound. With these technologies, you may experience a better home-theater audio with ease.

Industry Standard

Intel® LAN Support

P8Z68-V PRO/GEN3 features Intel® Gigabit LAN which complies with 802.3az Energy Efficient Ethernet (EEE) standard and reduces power consumption during normal operation and enhances faster transfer speed through dual interconnection between the Integrated LAN controller and Physical Layer (PHY).

CPU, Chipset and Graphics features

LGA1155 socket for Intel® Second Generation Core™ i7/ Core™ i5/ Core™ i3/ Pentium® / Celeron® Processors

This motherboard supports the latest Intel® second generation Core™ i7/Core™ i5/Core™ i3/Pentium®/Celeron® Processors in the LGA1155 package, with memory and PCI Express controllers integrated to support 2-channel (4 DIMM) DDR3 memory and 16 PCI Express 2.0 lanes. This provides great graphics performance. Intel® second generation Core™ i7/Core™ i5/Core™ i3/Pentium®/Celeron® Processors are among the most powerful and energy efficient CPUs in the world.

Intel® Z68 Express Chipset

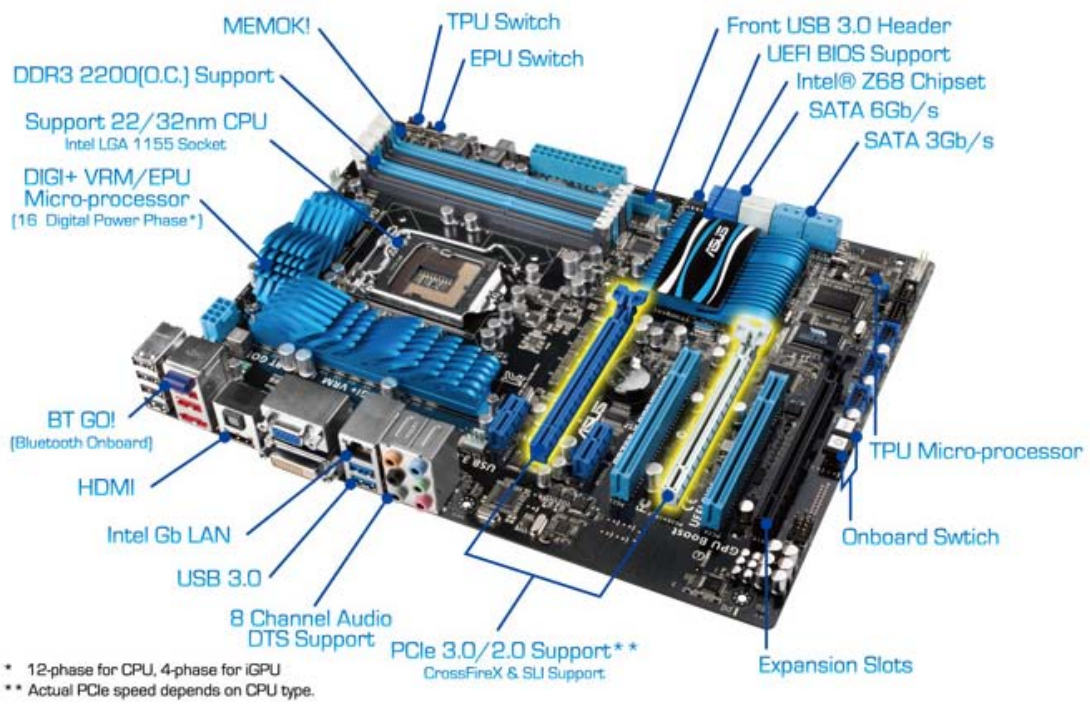
The Intel® Z68 Express Chipset is a single-chipset design to support socket 1155 Intel® second generation Core™ i7/Core™ i5/Core™ i3 processors. It provides improved performance by utilizing serial point-to-point links, allowing increased bandwidth and stability. Additionally, Z68 chipset provides 2 SATA 6Gb/s and 4 SATA 3Gb/s ports for faster data retrieval at double the bandwidth of current bus systems. Moreover, Intel® Z68 Express Chipset also supports iGPU function, letting users enjoy the latest Intel integrated graphic performance.

RoHS

GreenASUS and ErP Ready

The motherboard is European Union´s Energy-related Products (ErP) ready, and ErP requires products to meet certain energy efficiency requirements in regards to energy consumptions. This is in line with ASUS vision of creating environment-friendly and energy-efficient products through product design and innovation to reduce carbon footprint of the product and thus mitigate environmental impacts.

P8Z68-V PRO/GEN3 Product Overview



Other ASUS Features

Auto Tuning

Achieve extreme yet stable overclocking results automatically

TurboV

Adjust system performance parameters with just a few clicks away

AI Suite II

One-stop access to innovative ASUS features

HDMI

Enjoy full HD 1080p multimedia home-theater entertainment

Fan Xpert

Fanless

Q-Design

MemOK!

Built-in variety of useful profiles offer flexible controls of fan speed to achieve a quiet and cool environment.

Heatsink Design

Stylish heatsink features 0-dB thermal solution that offers a noiseless PC environment.

ASUS Q-Design enhances your DIY experience!

Any memory is A-OK!

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE