



# **SABERTOOTH P67** Intel P67 Based Military-grade Motherboard with Thermal Armor

- Intel® LGA1155 socket for Intel® 2nd Generation Core™ i7/ Core™ i5/ Core™ i3 Processors
- Intel® P67 Express Chipset
- TUF Thermal Armor Total Airflow-Boosting Heat Dissipation
- TUF Thermal Radar Real Time Temp Detection and Heat Removal
- TUF Components [Alloy Choke, Cap. & MOSFET; Certified by Militarystandard] - Certified for Tough Duty
- E.S.P. [Efficient Switching Power Design] Optimal power efficiency for key components



# TUF /tAf/, stands for The Ultimate Force.

The TUF series delivers a "tough" image. With the unique design & high quality components (military-standard), TUF series is born for pursuing the preeminent stability, all-round compatibility, and extreme durability



THE ULYIMATE POWCE

# "Ultimate COOL!" Thermal Solution



#### TUF Thermal Armor

#### Total Airflow-Boosting Heat Dissipation

The TUF Thermal Armor is the world's first ever thermal design for the entire motherboard, not just system against hot air generated by connected cards and components, keeping temps down. With design, the Thermal Armor improves cool air circulation, directing it towards every important part for effectively conducts hot air away and out of the case through special airflow channels, contributing t component lifespan.

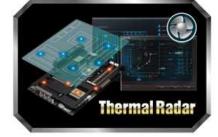




#### TUF Thermal Radar Real Time Temp Detection and Heat

Removal The TUF Thermal Radar monitors temps in critical parts of the motherboard in real time, automatically adjusting fan speeds

to make sure the system maintains high stability without overheating. It consists of multiple sensors for various components on the motherboard, giving users the ability to monitor each one individually. The Thermal Radar automatically calculates ideal fan



speeds based on different parameters selected by users for each component, keeping everything cooler and longer lasting.

"TUF ENGINE!" Power Design

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#### **DIGI+ VRM**

#### Herald the Arrival of a New Digital Power Design Era

The new ASUS DIGI+ VRM design upgrades motherboard power delivery to a digital standard. The 8+2 digital architecture provides the highest power efficiency, generating less heat to enhance longer component lifespan and ensure minimal powerloss. With ASUS DIGI+ VRM, users can easily adjust power phase performance, enabling new PWM voltage and frequency modulation controls. Digital 8+2 power phase design also expands the

modulation spectrum for improved stability and lower VRM switching noise by dynamically detecting system load, empowering users with superior flexibility and perfect precision to ensure optimized performance, extreme system stability, and greater power efficiency.

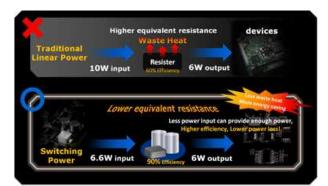




#### E.S.P. Efficient Switching Power Design

#### Optimal power efficiency for key components

Exclusively for this motherboard, the switching power design is provided not only for the CPU and memory, but also for other key components such as graphics cards, LAN and USB 3.0. E.S.P. dramatically improves system efficiency and reduces heat generation.





## TUF Components (Alloy Choke, Cap. & MOSFET; **Certified by Military-standard)**

#### Certified for Tough Duty

Get rugged performance even in the most challenging conditions with robust TUF chokes, solid capacitors, and MOSFETs--certified through third-party, military-grade testing. TUF Chokes, also known as the "Alloy Choke", is a made of a compound of various types of metal instead



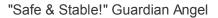
One-button rescue tool

Boot OK!!

An easy access butto

tionality at

standard iron, enables the support of up to a massive 40A of rated current, 25% higher than conventional component. Furthermore, the single piece packaing also elimates the emission of virbation noise, delivering superb charactoristics as well as durability under extreme conditions. > Learn more on test report





#### MemOK!

Any Memory is A-OK!

MemOK! quickly ensures memory boot compatibility. This remarkable memory rescue tool requires a mere push of a button to patch memory issues. MemOK! determines fails afe settings and dramatically improves your system boot success. Get your system up and running in no time!



#### **ESD Guards**

Unique protection of motherboard components from unexpected electrostatic discharges (ESD)

Electrostatic discharge (ESD) can happen suddenly and its damaging effects is often underestimated. Exclusive ASUS anti-static chip, a protective circuit design, and the I/O shield provides four times better protection to extend component lifespan.

Latest Transfer Technology Extra SATA 6Gb/s Supports

Front Panel USB 3.0 Support

Failing in system boot happens!!

Auto failsafe tweaking

1CI tRAS

DRAM B

is used

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## Extra Ports, Extra Speed and Accessibility

The Intel® P67 Express chipset natively supports the nextgeneration Serial ATA (SATA) interface, delivering up to 6Gb/s data transfer. ASUS provides extra SATA 6Gb/s ports with enhanced scalability, faster data retrieval, and double the bandwidth of current bus systems.



SATA

## **Convenient USB 3.0 Front Panel Compatibility**

ASUS provides standardized USB 3.0 front panel support, compatible with any chassis. Enjoy faster throughput of USB 3.0 without relegating cables or devices to the hard-to-reach rear I/O







Complete USB 3.0 Solution

Intel® P67 Express Chipset

The Intel® P67 Express Chipset is the latest singlechipset design to support new socket 1155 Intel® second

generation Core™ i7/Core™ i5/Core™ i3 processors. It

point links, allowing increased bandwidth and stability.

Additionally, the P67 provides 2 SATA 6Gb/s and 4 SATA

provides improved performance by utilizing serial point-to-

#### **Complete USB 3.0 Solution**

#### Double USB access, double convenience

ASUS facilitates strategic USB 3.0 accessibility for both the front and rear panel - 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 SABERTOOTH P67 affords greater convenience to high speed connectivity.

## CPU, Chipset, Memory and Graphics features

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

This motherboard supports the latest Intel® second generation Core™ i7/Core™ i5/Core™ i3 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



systems.

performance. Intel® second generation Core™ i7/Core™ i5/Core™ i3 processors are among the most powerful and energy efficient CPUs in the world.

#### Quad-GPU SLI and Quad-GPU CrossFireX Support!

Flexible Multi-GPU solutions, Your Weapon of Choice!



SABERTOOTH P67 brings multi-GPU configurations through both SLI™ and CrossFireX. This motherboard features the

powerful Intel P67 platform, optimizing PCIe allocation in multiple GPU configurations. Expect a brand new gaming style like you've never experienced before!

# SABERTOOTH P67 Product Overview

# Dual-Channel DDR3 1866/1800/1600/1333/1066 support

3Gb/s ports for faster data retrieval at double the bandwidth of current bus

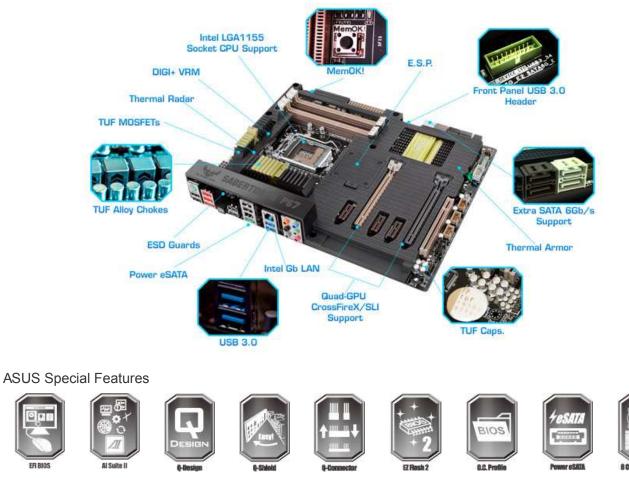
The motherboard supports DDR3 memory that features data transfer rates of 1866/1800/1600/1333/1066 MHz to meet the higher bandwidth requirements of the latest 3D graphics, multimedia, and Internet applications. The dual-channel DDR3 architecture enlarges the bandwidth of your system memory to boost system performance.



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# Specifications

CPU	Intel® Socket 1155 for Intel® 2 <sup>nd</sup> Generation Core ™ i7 Processor/Core ™ i5 Processor/Core ™ i3 Processor/ Support Intel® 32nm CPU Supports Intel® Turbo Boost Technology 2.0 * The Intel® Turbo Boost Technology 2.0 support depends on the CPU types * Refer to www.asus.com for Intel CPU support list
Chipset	Intel® P67 Express Chipset
Memory	<ul> <li>4 x DIMM, Max. 32 GB, DDR3 1866/1800/1600/1333/1066 Non-ECC,Un-buffered Memory Dual Channel memory architecture Supports Intel® Extreme Memory Profile (XMP)</li> <li>* According to Intel® SPEC, the Max. 32GB memory capacity can be supported with DIMMs of 8GB (or above). ASUS will update QVL once the DIMMs are available on the market.</li> <li>* Hyper DIMM support is subject to the physical characteristics of individual CPUs. Some hyper DIMMs only support one DIMM per channel. Please refer to Memory QVL for details.</li> <li>* Due to CPU behavior, DDR3 1800 MHz memory module will run at DDR3 1600 MHz frequency as default.</li> <li>* Please refer to www.asus.com or user manual for Memory QVL.</li> </ul>
Expansion Slots	2 x PCle 2.0 x16 (single at x16 or dual at x8/x8 mode) 3 x PCle 2.0 x1 1 x PCl
Multi-GPU Support	Supports NVIDIA® Quad-GPU SLI™ Technology Supports ATI® Quad-GPU CrossFireX™ Technology
Storage	Intel® P67 Express Chipset 2 xSATA 6.0 Gb/s ports (brown) 4 xSATA 3Gb/s ports (black) Intel® Rapid Storage Technology Support RAID 0,1,5,10 Marvell® PCle SATA 6Gb/s controller 2 xSATA 6Gb/s ports (gray) JMicron® JMB362 SATA controller

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	1 xPower eSATA 3Gb/s port (green)
	1 xExternal SATA 3Gb/s port (red)
LAN	Intel® 82579 Gigabit LAN- Dual interconnect between the Integrated LAN controller and Physical Layer (PHY)
	Realtek® ALC892 8-Channel High Definition Audio CODEC
	- Absolute Pitch 192khz/24bit True BD Lossless Sound
Audio	- BD Audio Layer Content Protection
	- Supports Jack-Detection, Multi-streaming, and Front Panel Jack-Retasking
	- Optical S/PDIF out port at back I/O
IEEE 1394	VIA® VT6308P controller supports 2 x 1394a port(s) (one at mid-board; one at back panel)
	NEC USB 3.0 controllers
USB	- 4 x USB 3.0/2.0 ports (2 ports at mid-board for front panel support; 2 ports at back panel [blue])
	Intel® P67 Express Chipset - 14 x USB 2.0/1.1 ports (6 ports at mid-board, 8 ports at back panel)
	Exclusive TUF Features "Ultimate COOL!" Thermal Solution
	- TUF Thermal Armor
	- TUF Thermal Radar
	"TUF ENGINE!" Power Design
	- 8+2 Digital Phase Power Design
	- TUF Components (Alloy choke, Cap. & MOSFET; certified by military-standard)
	- ASUS DIGI+ VRM Utility
	- E.S.P. : Efficient Switching Power Design
	"Safe & Stable!" Guardian Angel
	- ESD Guards
	- Mem OK!
	- Anti Surge
ASUS Unique Features	
	Other Special Features
	- Front Panel USB 3.0 Support
	- ASUS EFI BIOS EZ Mode featuring friendly graphics user interface
	- Al Suite II - ASUS Q-Connector
	- ASUS Q-Shield
	- ASUS Q-LED (CPU, DRAM, VGA, Boot Device LED)
	- ASUS Q-ELED (CF-0, DIAWI, VGA, BOOLDEVICE ELED)
	- ASUS Q-DIMM
	- ASUS O.C. Profile
	- ASUS CrashFree BIOS 3
	- ASUS EZ Flash 2
	- ASUS MyLogo 2
	- Multi-language BIOS
	1 x PS/2 Keyboard/Mouse Combo port
	1 x External SATA 3Gb/s port (red)
	1 x Power eSATA 3Gb/s port (green)
	1 x IEEE 1394a
Back Panel I/O Ports	1 x LAN(RJ45) port(s)
	2 x USB 3.0/2.0 ports (blue)
	8 x USB 2.0/1.1 ports
	1 x S/PDIF Out (Optical)
	8 -Channel Audio I/O
	1 x USB 3.0/2.0 connector(s) supports additional 2 USB ports (19-pin; moss green)
	3 x USB 2.0/1.1 connector(s) support additional 6 USB ports
	1 x Mem OK! button
	4 x SATA 6.0Gb/s connectors ( 2 x gray; 2 x brown)
	4 x SATA 3.0Gb/s (black)
	1 x IEEE 1394a connector
	1 x CPU Fan connector(s) (4-pin)
	2 x Chassis Fan connector(s) (1 x4-pin; 1 x3-pin)
Internal I/O Connectors	1 x Power Fan connector(s) (3-pin)
	1 x Assistant Fan connector (3-pin)
	1 x S/PDIF Out connector
	24-pin EATX Power connector
	8-pin EATX 12V Power connector
	1 x Front panel audio connector
	1 x Front panel audio connector 1 x COM connector

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	1 x Clear CMOS jumper
BIOS	32 Mb Flash ROM, EFI AMI BIOS, PnP, DMI2.0, WfM2.0, SM BIOS 2.5, ACPI 2.0a, Multi-language BIOS, ASUS EZ Flash
	2, ASUS CrashFree BIOS 3
Manageability	WfM 2.0, DMI 2.0, WOL by PME, WOR by PME, PXE
Accessories	User's manual
	2 x SATA 3.0Gb/s cables
	2 x SATA 6.0Gb/s cables
	1 x Q-Shield
	1 x Q-Connecor (2 in 1)
	1 x ASUS SLI bridge cable
	1 x TUF Certification card
	1 x TUF 5 Year Warranty manual (by region)
	4 x screws for Assistant Fan
Support Disc	Drivers
	Anti-virus software (OEM version)
	ASUS Update
	ASUS Utilities
Form Factor	ATX Form Factor
	12 inch x 9.6 inch ( 30.5 cm x 24.4 cm )