

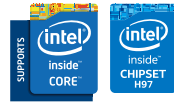
H97M-ITX/ac

Intel® H97 Chipset

ASRock

Product Brief

- ASRock Super Alloy
 - Premium Alloy Choke (Reduces 70% core loss compared to iron powder choke)
 - NexFET™ MOSFET
 - Sapphire Black PCB
- Supports 5th Generation, New 4th and 4th Generation Intel® Core™ i7/i5/i3/Pentium®/Celeron® Processors (Socket 1150)
- Solid Capacitor design
- Intel H97 Chipset
- Supports Dual Channel DDR3 1600
- 1 PCIe 3.0 x16, 1 Vertical Half mini-PCIe for WiFi + BT Module
- Graphics Output Options: D-Sub, DVI-D, HDMI
- Supports Triple Monitor
- Qualcomm® Atheros® Gigabit LAN
- 7.1 CH HD Audio with Content Protection (Realtek ALC892 Audio Codec), ELNA Audio Caps
- 5 SATA3, 6 USB 3.0 (2 Front, 4 Rear), 4 USB 2.0 (2 Front, 2 Rear)
- WLAN: 1 x 802.11ac WiFi + Bluetooth 4.0 module, 2 x ASRock WiFi 2.4/5 GHz Antennas
- Supports ASRock Full Spike Protection, ASRock Cloud, APP Shop, A-Tuning, Full HD UEFI



Detail Specification

Platform	<ul style="list-style-type: none">- Mini-ITX Form Factor- Solid Capacitor design- High Density Glass Fabric PCB
Unique Feature	<p>ASRock Super Alloy</p> <ul style="list-style-type: none">- Premium Alloy Choke (Reduces 70% core loss compared to iron powder choke)- NexFET™ MOSFET- Sapphire Black PCB <p>ASRock 802.11ac WiFi</p> <p>ASRock Full Spike Protection</p> <p>ASRock Cloud</p> <p>ASRock APP Shop</p>
CPU	<ul style="list-style-type: none">- Supports 5th Generation, New 4th and 4th Generation Intel® Core™ i7/i5/i3/Pentium®/Celeron® Processors (Socket 1150)- 4 Power Phase design- Supports Intel® Turbo Boost 2.0 Technology
Chipset	<ul style="list-style-type: none">- Intel® H97
Memory	<ul style="list-style-type: none">- Dual Channel DDR3 Memory Technology- 2 x DDR3 DIMM Slots- Supports DDR3 1600/1333/1066 non-ECC, un-buffered memory- Max. capacity of system memory: 16GB- Supports Intel® Extreme Memory Profile (XMP) 1.3 / 1.2
Expansion Slot	<ul style="list-style-type: none">- 1 x PCI Express 3.0 x16 Slot (PCI-E1: x16 mode)- 1 x Vertical Half Mini-PCI Express Slot: For WiFi + BT Module
Graphics	<p>* Intel® HD Graphics Built-in Visuals and the VGA outputs can be supported only with processors which are GPU integrated.</p> <ul style="list-style-type: none">- Supports Intel® HD Graphics Built-in Visuals : Intel® Quick Sync Video with AVC, MVC (S3D) and MPEG-2 Full HW Encode1, Intel® InTru™3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 4400/4600- Pixel Shader 5.0, DirectX 11.1- Max. shared memory 1792MB- Three graphics output options: D-Sub, DVI-D and HDMI- Supports Triple Monitor- Supports HDMI with max. resolution up to 1920x1200 @ 60Hz- Supports DVI-D with max. resolution up to 1920x1200 @ 60Hz- Supports D-Sub with max. resolution up to 1920x1200 @ 60Hz- Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio) with HDMI Port (Compliant HDMI monitor is required)- Supports HDCP with DVI-D and HDMI Ports- Supports Full HD 1080p Blu-ray (BD) playback with DVI-D and HDMI Ports
Audio	<ul style="list-style-type: none">- 7.1 CH HD Audio with Content Protection (Realtek ALC892 Audio Codec)- Premium Blu-ray Audio support- Supports Surge Protection (ASRock Full Spike Protection)- ELNA Audio Caps
LAN	<ul style="list-style-type: none">- PCIe x1 Gigabit LAN 10/100/1000 Mb/s- Qualcomm® Atheros® AR8171- Supports Qualcomm® Atheros® Security Wake On Internet Technology- Supports Wake-On-LAN- Supports Lightning/ESD Protection (ASRock Full Spike Protection)- Supports Energy Efficient Ethernet 802.3az- Supports PXE
Wireless LAN	<ul style="list-style-type: none">- Supports IEEE 802.11a/b/g/n/ac- Supports Dual-Band (2.4/5 GHz)- Supports High speed wireless connection up to 433Mbps- Supports Bluetooth 4.0 / 3.0 + High speed class II

Rear Panel I/O	<ul style="list-style-type: none">- 1 x PS/2 Mouse/Keyboard Port- 1 x D-Sub Port- 1 x DVI-D Port- 1 x HDMI Port- 1 x Optical SPDIF Out Port- 2 x USB 2.0 Ports (Supports ESD Protection (ASRock Full Spike Protection))- 4 x USB 3.0 Ports (Supports ESD Protection (ASRock Full Spike Protection))- 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED)- HD Audio Jacks: Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone	
Storage	<ul style="list-style-type: none">- 5 x SATA3 6.0 Gb/s Connectors, support RAID (RAID 0, RAID 1, RAID 5, RAID 10, Intel Rapid Storage Technology 13 and Intel Smart Response Technology), NCQ, AHCI and Hot Plug	
Connector	<ul style="list-style-type: none">- 1 x Chassis Intrusion Header- 1 x TPM Header- 1 x CPU Fan Connector (4-pin)- 1 x Chassis Fan Connector (4-pin)- 1 x 24 pin ATX Power Connector- 1 x 4 pin 12V Power Connector- 1 x Front Panel Audio Connector- 1 x USB 2.0 Header (Supports 2 USB 2.0 ports) (Supports ESD Protection (ASRock Full Spike Protection))- 1 x USB 3.0 Header (Supports 2 USB 3.0 ports) (Supports ESD Protection (ASRock Full Spike Protection))	
BIOS Feature	<ul style="list-style-type: none">- 64Mb AMI UEFI Legal BIOS with multilingual GUI support- ACPI 1.1 Compliant wake up events- SMBIOS 2.3.1 support- CPU, DRAM, PCH 1.05V, PCH 1.5V Voltage multi-adjustment	
Support CD	<ul style="list-style-type: none">- Drivers, Utilities, AntiVirus Software (Trial Version), Google Chrome Browser and Toolbar, Start8 (30 days trial), Orbweb.ME Professional (Win 8.1 / 7)	
Software and UEFI	<p>Software</p> <ul style="list-style-type: none">- ASRock A-Tuning- ASRock Disk Health Report- ASRock USB Key- ASRock System Browser- ASRock APP Charger- ASRock XFast LAN- ASRock XFast RAM- ASRock Restart to UEFI	<p>UEFI</p> <ul style="list-style-type: none">- ASRock Full HD UEFI- ASRock My Favorites in UEFI- ASRock UEFI Guide- ASRock Instant Flash- ASRock Internet Flash- ASRock Crashless BIOS- ASRock OMG (Online Management Guard)- ASRock UEFI Tech Service- ASRock Dehumidifier- ASRock Easy RAID Installer- ASRock Easy Driver Installer
Hardware Monitor	<ul style="list-style-type: none">- CPU/Chassis temperature sensing- CPU/Chassis Tachometer- CPU/Chassis Quiet Fan (Auto adjust chassis fan speed by CPU temperature)- CPU/Chassis Fan multi-speed control- CASE OPEN detection- Voltage monitoring: +12V, +5V, +3.3V, CPU Input Voltage, CPU Internal Voltages	
OS	<ul style="list-style-type: none">- Microsoft® Windows® 8.1 32-bit / 8.1 64-bit / 8 32-bit / 8 64-bit / 7 32-bit / 7 64-bit	
Certifications	<ul style="list-style-type: none">- FCC, CE, WHQL- ErP/EuP ready (ErP/EuP ready power supply is required)	
Accessories	<ul style="list-style-type: none">- Quick Installation Guide, Support CD, I/O Shield- 2 x SATA Data Cables- 1 x WiFi-802.11ac Module- 2 x SMA WiFi Antenna Cables- 2 x ASRock WiFi 2.4/5 GHz Antennas- 1 x WiFi Module Bracket- 2 x Screws for WiFi Module	

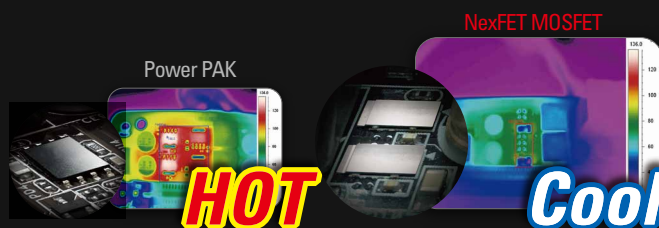
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Super Alloy Motherboard

Stable and Reliable



The next generation NexFET MOSFETs provide lower $R_{ds(on)}$ 2.9 mΩ, delivering higher efficiency and lower temperature.



Pure black PCB appearance. The new Sapphire Black PCB represents rock-solid quality and gives the motherboard a more mysterious touch.



The new generation alloy chokes effectively increase up to 90% saturation current and feature a highly magnetic and heat resistant design, making the motherboard more efficient, stable and reliable.

Saturation Current
Premium Alloy Choke

38A
90% Better!

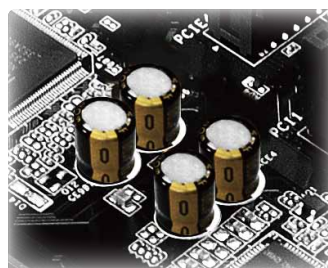
Ferrite Choke

20A



ELNA Audio Caps

Who says high quality audio is only available on high-end motherboards? ASRock applied ELNA audio capacitors on mainstream and entry-level motherboards! Compared with traditional solid caps, the leakage current of ELNA audio caps is merely 3uA. This is the key to reduce noise level significantly and satisfy even the pickiest audiophiles.



ASRock Cloud

ASRock Cloud* technology makes your mobile devices connect to your PC seamlessly! We offer a one-year subscription to Orbweb.ME Professional version, a personal cloud service which is \$49.99 per year. It allows you to get connected with your PC's files, music, photos, and video clips remotely with tablets anytime, anywhere. Plus an additional one-month upgrade to Orbweb.ME Ultimate package with Remote Desktop function.



* OrbWeb ME is provided by a third party. Restriction may apply and the offer is subject to change, termination or discontinuation by the third party without prior notice. Please visit the website for further details: <http://www.asrock.com/feature/cloud/index.html>



ASRock APP Shop

We provide various apps and support software for users to download. You can easily optimize your system and keep your motherboard up to date with ASRock APP Shop.





802.11ac WiFi

This motherboard comes with an exclusive 802.11ac WiFi (5G WiFi) module that supports up to 433Mbps wireless networks and Bluetooth v4.0. Experience up to 144% speed boost compared to your old 802.11n WiFi!



Solid Capacitor Design

ASRock applied solid capacitors on this motherboard. With these solid caps, this motherboard is allowed to perform more stably and ensure longer lifetime.



3 Graphics Outputs

Complete with all three types of most used connectors! Packed with a D-Sub + DVI + HDMI combo. Plus the HDMI port supports Full HD 1080p Blu-ray (BD) playback.



Triple Monitor

This motherboard supports Triple Monitor. You may choose up to three display interfaces to connect monitors and use them simultaneously.



A-Tuning

A-Tuning is ASRock's multi purpose software suite with a new interface, more new features and improved utilities, including XFast RAM and a whole lot more.