

B150GTN Motherboard



- Supports 6th Generation Intel ${\ensuremath{\mathbb R}}$ Core ${\ensuremath{\mathbb M}}$ Processor
- Intel B150 single chip architecture
- Support 2-DIMM DDR4-2133/ 1866 up to 32G maximum capacity
- BIOSTAR Hi-Fi Technology inside
- Support USB 3.0
- Support PCIe U.2(32Gb/s)
- Support PCIe M.2(32Gb/s)

Specifcation	
CPU SUPPORT	7th & 6th Gen Intel® Core [™] i7 LGA 1151 Processor 7th & 6th Gen Intel® Core [™] i5 LGA 1151 Processor 7th & 6th Gen Intel® Core [™] i3 LGA 1151 Processor 7th & 6th Gen Intel® Pentium® LGA 1151 Processor 7th & 6th Gen Intel® Celeron® LGA 1151 Processor Maximum CPU TDP (Thermal Design Power) : 95Watt
MEMORY	Support Dual Channel DDR4 2133/ 1866 MHz 2 x DDR4 DIMM Memory Slot Max. Supports up to 32GB Memory
INTEGRATED VIDEO	By CPU model Supports DX12 Supports HDCP
STORAGE	4 x SATA III Connector 1 x U.2 32Gb/s Connector 1 x M.2 (M Key) 32Gb/s Connector, support M.2 type 2260/ 2280 SATA 6Gb/s & PCI-E Storage(on the back of the motherboard)
LAN	Intel i219V - Gigabit Ethernet PHY
AUDIO CODEC	Realtek ALC892 8-Channel Blu-ray Audio Support Biostar Hi-Fi
USB	4 x USB 3.0 Port 1 x USB 3.0 Header 2 x USB 2.0 Port 1 x USB 2.0 Header
EXPANSION SLOT	1 x PCI-E 3.0 x16 Slot

REAR I/O	1 x PS/2 Keyboard/Mouse 4 x USB 3.0 Port 2 x USB 2.0 Port 1 x HDMI Connector, resolution up to 4096 x 2160 @24Hz, compliant with HDMI 1.4a 1 x DVI-D Connector, resolution up to 1920 x 1200 @60Hz 1 x LAN Port 5 x Audio Jacks 1 x S/PDIF Out Port
INTERNAL I/O	1 x USB 3.0 Header 1 x USB 2.0 Header 4 x SATA III Connector (6Gb/s) 1 x U.2 32Gb/s Connector 1 x M.2 Key M 32Gb/s Connector, support M.2 type 2260/ 2280 SATA 6Gb/s & PCI-E Storage(on the back of the motherboard) 1 x Front Audio Header 1 x Front Panel Header 1 x CPU Fan Connector 1 x System Fan Connector 1 x 5050 LED Header
H/W MONITORING	CPU / System Temperature Monitoring CPU / System Fan Monitoring Smart / Manual CPU / System Fan Control System Voltage Monitoring
DIMENSION	Mini ITX Form Factor Dimension: 17cm x 17cm (W x L)
OS SUPPORT	Supports Windows 7 / 8.1(x64) / 10(x64)
BUNDLE SOFTWARE	Racing GT Utility BullGuard BIO-Remote2
ACCESSORIES	4 x SATA Cable 1 x I/O Shield 1 x DVD Driver 1 x User Manual
FEATURES	Supports PURO Hi-Fi Supports 100% Solid capacitor BIO-FLASHER Supports Charger Booster Supports BIOS Online Update

OVERVIEW



Intel B150 chipset

The Intel® B150 chipset is a single-chipset design to support socket 1151 Intel® 6th generation Intel® Core[™] processor-based platform. Provides excellent performance and increased bandwidth and stability. Intel® B150 chipset can also enable iGPU function, letting users enjoy the latest Intel® integrated graphic performance. The PC platform features improved adaptive performance that adds speed when you need it. When combined with advanced system responsiveness, the platform delivers the ultimate PC experience.

Hi-Fi



You can easily enjoy high-quality and awesome sound.

	Hi-Fi Resistor Metal-oxide film resistors are made of metal oxides such as tin oxide. The electric characteristics are greater stability and reliability than regular metal film resistors when operating in an extremely broad working temperature range. This special component is used in applications with high endurance audio demands.
	Hi-Fi Cap BIOSTAR Hi-Fi series motherboards come with high quality 'Non-Polarized Electrolysis Electric audio capacitors' for each audio channel circuit. The customized audio capacitors deliver low noise, low distortion, and wide bandwidth to achieve the highest sound resolution and sound expansion. The critical component will ensure the most realistic sound effects to gaming enthusiasts.
	Hi-Fi 110dB+ Embrace exceptional sound quality for the win with 110dB SNR and stylish and efficient EMI shield blocks electromagnetic interference to help provide cleaner audio. It has achieved a signal-to-noise ratio (SNR) of 110dB, yielding almost loss- less audio form rear audio connectors.
HDMI	HDMI 4K2K The new 4K2K resolution enables high-definition image display with four times the resolution of full HD, 4K2K display is faithfully express bright, highly detailed content that fills the entire screen with lifelike images. Connectivity with PCs via a single HDMI cable for displaying 4K2K data.
	DVI DVI is better than VGA for LCD displays since it is digital while VGA is analog. For LCD displays, the picture is digitized pixel per pixel. Through DVI, the panel gets data for each pixel, so the picture generated in the Graphics device matches the pixels on the panel itself.
	DX12 DirectX 12 introduces the next version of Direct3D, the graphics API at the heart of DirectX. Direct3D is one of the most critical pieces of a game or game engine, and we've redesigned it to be faster and more efficient than ever before. Direct3D 12 enables richer scenes, more objects, and full utilization of modern GPU hardware.
UPPER SPEED / S OBP	USB 3.0 Experience Fastest data transfers at 5 Gbps with USB 3.0the new latest connectivity standard. Built to connect easily with next-generation components and peripherals, USB 3.0 transfers data 10X faster and backward compatible with previous USB 2.0 components.
PGLOM2	PCIe M.2 32Gb/s PCI-e M.2 32Gb/s delivers the highest bandwidth and lower latency. It is 3 times faster compared with PCI-e M.2 10Gb/s.
U.2 CONNECTOR 32 Gb/s	PCIe U.2 Connector PCIe U.2 connector supports PCIe 3.0 x4 NVMe storage. It delivers the fast bandwidth up to 32Gb/s with stable data transfer and low latency as well. Meanwhile, it is almost 5 times faster than the speed of SATA III interface with 6Gb/s.

Carger	Charger Booster Charger booster is the best and efficient charger solution for apple devices such as iPad, iPhone. Basically, Charger booster Technology is able to boost the charging time to be more efficiency and faster once any apple goods connecting to our Motherboard. With charger booster technology, you are able to charge your apple devices up to 42 % faster.
PCie 3.0	PCIe 3.0 PCIe 3.0 is the ubiquitous and general-purpose PCI Express I/O standard. At 8GT/s bit rate, the interconnect performance bandwidth is doubled over PCIe 2.0, while preserving compatibility with software and mechanical interfaces.
Super Durable Ferrite Choke	Super Durable Ferrite Choke Super Durable Ferrite Choke brings the benefits of higher current capacity, lower energy loss and better power stability.
SOLID CAPS	Super Durable Solid Caps The best quality solid state capacitors with ultra low ESR design, the Super Durable Solid Caps doubles the lifespan.
Moistureproof PCB	Moistureproof of PCB The popularity of PC usage and working environment is getting deteriorating and moist (rural, coastal, etc.). The PCB will be oxidizing easily by damp or absorbed moisture, and ionic migration or CAF (Conductive Anodic Filament) will be generated. Moisture-proof PCB meets high density and high reliability requirements for moisture proof.
Low RdsOn P-Pak MOS	Low RdsOn P-Pak MOS Low resistance design can significantly reduce the current out of energy loss. Low temperature, small size, excellent thermal conductivity.
	Super Anti-Surge Protection BIOSTAR exclusive Anti-Surge design provides the best protection of board and extends the product life. Having the latest model of "Transient Voltage Suppressor" on- board can effectively protect the board circuit, reducing the shocks caused by ESD as well as other damages arising from overvoltage transients to enhance system durability.
SUPER-LAN SURGE-PROTECTION	Super LAN Surge Protection Super LAN Surge Protection, providing LAN port with more advanced antistatic protection capabilities by adding an integrated chip to strengthen electrical stability and prevent damage from lightning strikes and electrical surges. SLSP (Super LAN Surge Protection) series motherboard upgrades the existing system protection standards with maximum 4X protection comparing to other board makers.
ESD PROTECTION	ESD Protection ESD (Electrostatic Discharge) is the major factor to destroy the PC by electrical overstress (EOS) condition. ESD occurred by PC users when touch any devices connect to a PC, which may result in damage to the motherboard or parts. ESD protection is designed to protect the motherboard and equipment from damage by EOS.

USB Polyswitch

On board dedicated power fuse to help prevent USB port failure. It prevents USB Port overcurrent and safe guard your system and device lifespan. ISR olyswitch OC / OV / OH Protection OC / OV / OH Protection design detects overvoltage conditions and prevents voltage surges from spreading in real time. It also actively cuts off the overvoltage supply to protect your system. VIVID LED DI Racing Series exclusively features on-board LED design. Via the creative Vivid LED DJ application, you can control and modify the colours of LED on MOS heatsink and on the edge of board. When you play music, it can perform LED light show, following melody. Moreover, Vivid LED DJ features options for designing LED visual effect, including Normal, Eco, and Sports mode on your own. Racing Series with Vivid LED DJ make your PC a coolest gaming base ever. 5050 LED FUN BIOSTAR Racing motherboard comes with the exclusive 5050 LED FUN feature for DIY lovers. You can connect LED strip with on-board 5050 header directly and control it via Vivid LED DI

	control it via vivid LED DJ.
	UEFI BIOS Unified Extensible Firmware Interface (UEFI) is a brand new framework that provides a revolutionary interface. It is a modern clear and easy-to-use graphical user interface. The UEFI comes with a colorful easy-understand icons leads users into the setup layer directly.
Header Zone	Header Zone Users can easily assemble their own computer, a simple-swap data discs and other accessories.
	HDMI The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.

*The specification and pictures are subject to change without notice and the package contents may differ by area or your motherboard version!

