



184.95 EUR
incl. 19% VAT, plus [shipping](#)

- Gigabyte Features !
- 2x M.2 slot !
- USB Type-C !
- Displayport/HDMI !

- Supports 9th and 8th Gen Intel® Core™ Processors
- Dual Channel Non-ECC Unbuffered DDR4, 2 DIMMs
- Intel® Optane™ Memory Ready
- 6 Phases IR Digital VRM Solution with PowIRstage
- Advanced Thermal Design with Extended Fin Heatsink
- Onboard Intel® CNVi 802.11ac 2x2 Wave 2 Wi-Fi
- ALC1220-VB Enhance 114dB(Rear)/ 110dB(Front) SNR in Microphone with NICHICON Audio Capacitors
- Intel® Gigabit LAN with cFosSpeed
- RGB FUSION 2.0 with Multi-Zone Addressable LED Light Show Design, Supports Addressable LED & RGB LED Strips
- Smart Fan 5 features Multiple Temperature Sensors and Hybrid Fan Headers with FAN STOP
- Front USB 3.1 Gen 1 Type-C™ Header
- Dual Ultra-Fast M.2 with PCIe Gen3 x4 interface, one with Thermal Guard
- CEC 2019 Ready, Save Power With a Simple Click

CPU

1. Support for 9th and 8th Generation Intel® Core™ i9 processors/Intel® Core™ i7 processors/Intel® Core™ i5 processors/Intel® Core™ i3 processors/Intel® Pentium® processors/Intel® Celeron® processors in the LGA1151 package
2. L3 cache varies with CPU
(Please refer "CPU Support List" for more information.)

Chipset

1. Intel® Z390 Express Chipset

Memory	1. 2 x DDR4 DIMM sockets supporting up to 32 GB of system memory 2. Dual channel memory architecture 3. Support for DDR4 4400(O.C.) / 4333(O.C.) / 4133(O.C.) / 4000(O.C.) / 3866(O.C.) / 3800(O.C.) / 3733(O.C.) / 3666(O.C.) / 3600(O.C.) / 3466(O.C.) / 3400(O.C.) / 3333(O.C.) / 3300(O.C.) / 3200(O.C.) / 3000(O.C.) / 2800(O.C.) / 2666 / 2400 / 2133 MHz memory modules 4. Support for ECC Un-buffered DIMM 1Rx8/2Rx8 memory modules (operate in non-ECC mode) 5. Support for non-ECC Un-buffered DIMM 1Rx8/2Rx8/1Rx16 memory modules 6. Support for Extreme Memory Profile (XMP) memory modules (Please refer "Memory Support List" for more information.)
Onboard Graphics	Integrated Graphics Processor+MegaChips MCDP2800 chip: 1. 1 x HDMI port, supporting a maximum resolution of 4096x2160@60 Hz * Support for HDMI 2.0 version, HDCP 2.2, and HDR. Integrated Graphics Processor-Intel® HD Graphics support: 1. 1 x DisplayPort, supporting a maximum resolution of 4096x2304@60 Hz * Support for DisplayPort 1.2 version, HDCP 2.2, and HDR. Maximum shared memory of 1 GB Actual support may vary by CPU.
Audio	1. Realtek® ALC1220-VB codec * The back panel line out jack supports DSD audio. 2. High Definition Audio 3. 2/4/5.1/7.1-channel 4. Support for S/PDIF Out
LAN	1. Intel® GbE LAN chip (10/100/1000 Mbit) 1. Intel® CNVi interface Wi-Fi 802.11a/b/g/n/ac, supporting 2.4/5 GHz Dual-Band 2. BLUETOOTH 5
Wireless Communication module	3. Support for 11ac 160 MHz wireless standard and up to 1.73 Gbps data rate * Actual data rate may vary depending on environment and equipment.
Expansion Slots	1. 1 x PCI Express x16 slot, running at x16 2. 1 x M.2 Socket 1 connector for an Intel® CNVi wireless module only (CNVI) Chipset:
Storage Interface	1. 1 x M.2 connector (Socket 3, M key, type 2242/2260/2280 SATA and PCIe x4/x2 SSD support) (M2P) 2. 1 x M.2 connector on the back of the motherboard (Socket 3, M key, type 2260/2280 SATA and PCIe x4/x2 SSD support) (M2M) 3. 4 x SATA 6Gb/s connectors 4. Support for RAID 0, RAID 1, RAID 5, and RAID 10 * Refer to "1-7 Internal Connectors," for the installation notices for the M.2 and SATA connectors. Intel® Optane™ Memory Ready

USB	Chipset: 1 x USB Type-C™ port with USB 3.1 Gen 1 support, available through the internal USB header 1 x USB Type-C™ port on the back panel, with USB 3.1 Gen 2 support 1 x USB 3.1 Gen 2 Type-A port (red) on the back panel 6 x USB 3.1 Gen 1 ports (4 ports on the back panel, 2 ports available through the internal USB header) 2 x USB 2.0/1.1 ports available through the internal USB header
Internal I/O Connectors	1 x 24-pin ATX main power connector 1 x 8-pin ATX 12V power connector 1 x CPU fan header 2 x system fan headers 1 x digital LED strip header 1 x digital LED strip power select jumper 1 x RGB LED strip header 4 x SATA 6Gb/s connectors 2 x M.2 Socket 3 connectors 1 x front panel header 1 x front panel audio header 1 x speaker header 1 x USB Type-C™ port, with USB 3.1 Gen 1 support 1 x USB 3.1 Gen 1 header 1 x USB 2.0/1.1 header 1 x Trusted Platform Module (TPM) header (2x6 pin, for the GC-TPM2.0_S module only) 1 x Clear CMOS jumper 1 x chassis intrusion header
Back Panel Connectors	1 x DisplayPort 1 x HDMI port 1 x USB Type-C™ port, with USB 3.1 Gen 2 support 1 x USB 3.1 Gen 2 Type-A port (red) 4 x USB 3.1 Gen 1 ports 1 x RJ-45 port 2 x SMA antenna connectors (2T2R) 1 x optical S/PDIF Out connector 5 x audio jacks
I/O Controller	1. iTE® I/O Controller Chip
H/W Monitoring	1. Voltage detection 2. Temperature detection 3. Fan speed detection 4. Overheating warning 5. Fan fail warning 6. Fan speed control * Whether the fan speed control function is supported will depend on the cooler you install.
BIOS	1. 2 x 128 Mbit flash 2. Use of licensed AMI UEFI BIOS 3. Support for DualBIOS™ 4. PnP 1.0a, DMI 2.7, WfM 2.0, SM BIOS 2.7, ACPI 5.0

Unique Features

1. Support for APP Center
 - * Available applications in APP Center may vary by motherboard model. Supported functions of each application may also vary depending on motherboard specifications.
- 3D OSD
- @BIOS
- AutoGreen
- Cloud Station
- EasyTune
- Easy RAID
- Fast Boot
- Game Boost
- ON/OFF Charge
- Platform Power Management
- RGB Fusion
- Smart Backup
- Smart Keyboard
- Smart TimeLock
- Smart HUD
- Smart Survey
- System Information Viewer
- USB Blocker

Bundle Software

2. Support for Q-Flash
3. Support for Xpress Install
1. Norton® Internet Security (OEM version)
2. cFosSpeed

Operating System
Form Factor

1. Support for Windows 10 64-bit
1. Mini-ITX Form Factor; 17.0cm x 17.0cm

Remark

1. Due to different Linux support condition provided by chipset vendors, please download Linux driver from chipset vendors' website or 3rd party website.
2. Most hardware/software vendors may no longer offer drivers to support Win9X/ME/2000/XP. If drivers are available from the vendors, we will update them on the GIGABYTE website.