



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

- Gigabyte Features !
- 2x M.2 slot !
- USB Type-C !
- PCIe 4.0 !

- Supports 11th and 10th Gen Intel® Core™ Series Processors
- Dual Channel Non-ECC Unbuffered DDR4, 4 DIMMs
- Direct 8+1 Phases Digital VRM Solution with 50A DrMOS
- Shielded Memory Routing for Better Memory Overclocking
- Enlarged VRM Heatsink with Air-Flow Grooving to increased surface contact
- Dual Ultra-Fast NVMe PCIe 4.0\*/3.0 x4 M.2
- Intel® GbE LAN with cFosSpeed Internet Accelerator Software
- USB 3.2 Gen2 and USB Type-C® for Fast and Versatile Connections
- Pre-installed IO Shield for easy and quick installation
- RGB FUSION 2.0 Supports Addressable LED & RGB LED Strips
- Smart Fan 6 Features Multiple Temperature Sensors , Hybrid Fan Headers with FAN STOP
- Q-Flash Plus Update BIOS without Installing the CPU, Memory and Graphics Card

<b>CPU</b>	<p>LGA1200 package:</p> <ol style="list-style-type: none"><li>11th Generation Intel® Core™ i9 processors / Intel® Core™ i7 processors / Intel® Core™ i5 processors</li><li>10th Generation Intel® Core™ i9 processors / Intel® Core™ i7 processors / Intel® Core™ i5 processors / Intel® Core™ i3 processors / Intel® Pentium® processors / Intel® Celeron® processors*</li></ol> <p>* Limited to processors with 4 MB Intel® Smart Cache, Intel® Celeron® G5xx5 family.</p> <p>3. L3 cache varies with CPU (Please refer to "CPU Support List" for more information.)</p>
<b>Chipset</b>	<p>Intel® Z590 Express Chipset</p> <ol style="list-style-type: none"><li>11th Generation Intel® Core™ i9/i7/i5 processors: Support for DDR4 5333(O.C.) / DDR4 5133(O.C.) / DDR4 5000(O.C.) / 4933(O.C.) / 4800(O.C.) / 4700(O.C.) / 4600(O.C.) / 4500(O.C.) / 4400(O.C.) / 4300(O.C.) / 4266(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 / 3000 / 2933 / 2800 / 2666 / 2400 / 2133 MHz</li><li>10th Generation Intel® Core™ i9/i7 processors: Support for DDR4 2933/2666/2400/2133 MHz memory modules</li><li>10th Generation Intel® Core™ i5/i3/Pentium®/Celeron® processors: Support for DDR4 2666/2400/2133 MHz memory modules</li></ol>
<b>Memory</b>	<ol style="list-style-type: none"><li>4 x DDR4 DIMM sockets supporting up to 128 GB (32 GB single DIMM capacity) of system memory</li><li>Dual channel memory architecture</li><li>Support for ECC Un-buffered DIMM 1Rx8/2Rx8 memory modules (operate in non-ECC mode)</li><li>Support for non-ECC Un-buffered DIMM 1Rx8/2Rx8/1Rx16 memory modules</li><li>Support for Extreme Memory Profile (XMP) memory modules (Go to GIGABYTE's website for the latest supported memory speeds and memory modules.)</li></ol> <p>Integrated Graphics Processor-Intel® HD Graphics support:</p> <ol style="list-style-type: none"><li>1 x DVI-D port, supporting a maximum resolution of 1920x1200@60 Hz * The DVI-D port does not support D-Sub connection by adapter.</li><li>1 x HDMI port, supporting a maximum resolution of 4096x2160@30 Hz * Support for HDMI 1.4 version and HDCP 2.3.</li><li>1 x DisplayPort, supporting a maximum resolution of 4096x2304@60 Hz * Support for DisplayPort 1.2 version and HDCP 2.3 (Graphics specifications may vary depending on CPU support.)</li></ol> <p>Support for up to 3 displays at the same time</p>
<b>Onboard Graphics</b>	

<b>Audio</b>	<ol style="list-style-type: none"><li>1. Realtek® Audio CODEC</li><li>2. High Definition Audio</li><li>3. 2/4/5.1/7.1-channel</li></ol> <p>* To configure 7.1-channel audio, you need to open the audio software and select Device advanced settings &gt; Playback Device to change the default setting first. Please visit GIGABYTE's website for details on configuring the audio software.</p>
<b>LAN</b>	<ol style="list-style-type: none"><li>4. Support for S/PDIF Out</li></ol> <p>Intel® GbE LAN chip (1000 Mbit/100 Mbit)</p> <ol style="list-style-type: none"><li>1. 1 x PCI Express x16 slot, running at x16 (PCIEX16)</li></ol> <p>* For optimum performance, if only one PCI Express graphics card is to be installed, be sure to install it in the PCIEX16 slot. (The PCIEX16 slot conforms to PCI Express 4.0 standard.)(Note)</p>
<b>Expansion Slots</b>	<ol style="list-style-type: none"><li>2. 1 x PCI Express x16 slot, running at x4 (PCIEX4)</li><li>3. 1 x PCI Express x1 slot</li></ol> <p>(The PCIEX4 and PCIEX1 slots conform to PCI Express 3.0 standard.)</p>
<b>Multi-Graphics Technology</b>	<ol style="list-style-type: none"><li>1. Support for AMD Quad-GPU CrossFire™ and 2-Way AMD CrossFire™ technologies</li></ol>
<b>Storage Interface</b>	<p>CPU:</p> <ol style="list-style-type: none"><li>1. 1 x M.2 connector (Socket 3, M key, type 2260/2280 PCIe 4.0 x4/x2 SSD support) (M2P_CPU)(Note)</li></ol> <p>Chipset:</p> <ol style="list-style-type: none"><li>1. 1 x M.2 connector (Socket 3, M key, type 2260/2280/22110 SATA and PCIe 3.0 x4/x2 SSD support) (M2A_SB)</li><li>2. 6 x SATA 6Gb/s connectors</li></ol> <p>Support for RAID 0, RAID 1, RAID 5, and RAID 10</p> <p>* Refer to "1-7 Internal Connectors," for the installation notices for the M.2 and SATA connectors.</p>
<b>USB</b>	<p>Intel® Optane™ Memory Ready</p> <p>Chipset:</p> <ol style="list-style-type: none"><li>1. 1 x USB Type-C® port on the back panel, with USB 3.2 Gen 1 support</li><li>2. 1 x USB 3.2 Gen 2 Type-A port (red) on the back panel</li><li>3. 6 x USB 3.2 Gen 1 ports (4 ports on the back panel, 2 ports available through the internal USB header)</li><li>4. 4 x USB 2.0/1.1 ports available through the internal USB headers</li></ol>

### Internal I/O Connectors

1. 1 x 24-pin ATX main power connector
2. 1 x 8-pin ATX 12V power connector
3. 1 x CPU fan header
4. 3 x system fan headers
5. 2 x addressable LED strip headers
6. 2 x RGB LED strip headers
7. 6 x SATA 6Gb/s connectors
8. 2 x M.2 Socket 3 connectors
9. 1 x front panel header
10. 1 x front panel audio header
11. 1 x S/PDIF Out header
12. 1 x USB 3.2 Gen 1 header
13. 2 x USB 2.0/1.1 headers
14. 2 x Thunderbolt™ add-in card connectors
15. 1 x Trusted Platform Module header (For the GC-TPM2.0 SPI/GC-TPM2.0 SPI 2.0 module only)
16. 1 x serial port header
17. 1 x Clear CMOS jumper
18. 1 x Q-Flash Plus button

■All fan headers are subject to support AIO\_Pump, Pump and high performance fan with the capability of delivering up to 2A/12V @ 24W.

1. 1 x PS/2 keyboard/mouse port
2. 1 x USB Type-C® port, with USB 3.2 Gen 1 support
3. 1 x USB 3.2 Gen 2 Type-A port (red)
4. 4 x USB 3.2 Gen 1 ports
5. 1 x DVI-D port
6. 1 x DisplayPort
7. 1 x HDMI port
8. 1 x RJ-45 port
9. 3 x audio jacks

### Back Panel Connectors

### I/O Controller

1. iTE® I/O Controller Chip
1. Voltage detection
2. Temperature detection
3. Fan speed detection

### H/W Monitoring

4. Fan fail warning
  5. Fan speed control
- \* Whether the fan speed control function is supported will depend on the fan you install.

### BIOS

1. 1 x 256 Mbit flash
2. Use of licensed AMI UEFI BIOS
3. 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.
- @BIOS  
EasyTune  
Fast Boot  
Game Boost  
ON/OFF Charge  
RGB Fusion  
Smart Backup  
System Information Viewer

**Bundle Software**

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

**Operating System**

1. Support for Windows 10 64-bit

**Form Factor**

1. Micro ATX Form Factor; 24.4cm x 24.4cm

**Remark**

1. Supported by 11th Generation processors only.
2. Due to different Linux support condition provided by chipset vendors, please download Linux driver from chipset vendors' website or 3rd party website.
3. 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.