

1-2 Product Specifications

	CPU	<ul style="list-style-type: none"> ◆ LGA1200 package: <ul style="list-style-type: none"> - Intel® Xeon® W series processors - 10th Generation Intel® Core™ processors/Intel® Pentium® processors/Intel® Celeron® processors (Go to GIGABYTE's website for the latest CPU support list.) ◆ L3 cache varies with CPU
	Chipset	<ul style="list-style-type: none"> ◆ Intel® W480 Express Chipset
	Memory	<ul style="list-style-type: none"> ◆ Intel® Xeon® W-1290/W-1270 series processors/Intel® Core™ i9/i7 processors: <ul style="list-style-type: none"> - Support for DDR4 2933/2666/2400/2133 MHz ◆ Intel® Xeon® W-1250 series processors/Intel® Core™ i5/i3/Pentium®/Celeron® processors: <ul style="list-style-type: none"> - Support for DDR4 2666/2400/2133 MHz ◆ 4 x DDR4 DIMM sockets supporting up to 128 GB (32 GB single DIMM capacity) of system memory ◆ Dual channel memory architecture ◆ Support for ECC Un-buffered DIMM 1Rx8/2Rx8 memory modules <ul style="list-style-type: none"> * To support ECC, you must install an Intel® Xeon® processor. ◆ Support for non-ECC Un-buffered DIMM 1Rx8/2Rx8/1Rx16 memory modules ◆ Support for Extreme Memory Profile (XMP) memory modules (Go to GIGABYTE's website for the latest supported memory speeds and memory modules.)
	Onboard Graphics	<ul style="list-style-type: none"> ◆ Integrated Graphics Processor-Intel® HD Graphics support: <ul style="list-style-type: none"> - 1 x HDMI port, supporting a maximum resolution of 4096x2160@30 Hz <ul style="list-style-type: none"> * Support for HDMI 1.4 version and HDCP 2.3. - 2 x DisplayPorts, supporting a maximum resolution of 4096x2304@60 Hz <ul style="list-style-type: none"> * Support for DisplayPort 1.4 version, HDCP 2.3, and HDR. ◆ Support for up to 3 displays at the same time ◆ Maximum shared memory of 512 MB
	Audio	<ul style="list-style-type: none"> ◆ Realtek® ALC1220-VB codec <ul style="list-style-type: none"> * The back panel line out jack supports DSD audio. ◆ High Definition Audio ◆ 2/4/5.1/7.1-channel ◆ Support for S/PDIF Out
	LAN	<ul style="list-style-type: none"> ◆ Intel® 2.5GbE LAN chip (2.5 Gbit/1 Gbit/100 Mbit)(LAN2) ◆ Intel® GbE LAN chip (1 Gbit/100 Mbit)(LAN1)
	Expansion Slots	<ul style="list-style-type: none"> ◆ 1 x PCI Express x16 slot, running at x16 (PCIEX16) <ul style="list-style-type: none"> * For optimum performance, if only one PCI Express graphics card is to be installed, be sure to install it in the PCIEX16 slot. ◆ 1 x PCI Express x16 slot, running at x8 (PCIEX8) <ul style="list-style-type: none"> * The PCIEX8 slot shares bandwidth with the PCIEX16 slot. When the PCIEX8 slot is populated, the PCIEX16 slot operates at up to x8 mode. ◆ 2 x PCI Express x16 slots, running at x4 (PCIEX4_1, PCIEX4_2) <ul style="list-style-type: none"> * The PCIEX4_2 slot shares bandwidth with the M2M_SB connector. The PCIEX4_2 slot becomes unavailable when a device is installed in the M2M_SB connector. ◆ 1 x PCI Express x1 slot (All of the PCI Express slots conform to PCI Express 3.0 standard.) ◆ 1 x M.2 Socket 1 connector for an Intel® CNVi wireless module only (CNVi)
	Multi-Graphics Technology	<ul style="list-style-type: none"> ◆ Support for AMD Quad-GPU CrossFire™ and 2-Way AMD CrossFire™ technologies

	<p>Storage Interface</p> <ul style="list-style-type: none"> ◆ 1 x M.2 connector (Socket 3, M key, type 2280/22110 PCIe x4/x2 SSD support) (M2A_CPU) ◆ 1 x M.2 connector (Socket 3, M key, type 2280/22110 SATA and PCIe x4/x2 SSD support) (M2M_SB) ◆ 8 x SATA 6Gb/s connectors (SATA3 0~7) ◆ Support for RAID 0, RAID 1, RAID 5, and RAID 10 <ul style="list-style-type: none"> * Refer to "1-8 Internal Connectors," for the installation notices for the M.2 and SATA connectors. ◆ Intel® Optane™ Memory Ready ◆ ASMedia® ASM1061 chip: <ul style="list-style-type: none"> - 2 x SATA 6Gb/s connectors (GSATA3 0~1), supporting AHCI mode only
	<p>USB</p> <ul style="list-style-type: none"> ◆ Chipset: <ul style="list-style-type: none"> - 1 x USB Type-C™ port with USB 3.2 Gen 2 support, available through the internal USB header - 1 x USB 3.2 Gen 2 Type-A port (red) on the back panel - 3 x USB 3.2 Gen 1 ports on the back panel - 6 x USB 2.0/1.1 ports (4 ports on the back panel, 2 ports available through the internal USB header) ◆ Chipset+1 USB 3.2 Hub: <ul style="list-style-type: none"> - 3 x USB 3.2 Gen 1 ports (1 port onboard, 2 ports available through the internal USB header)
	<p>Internal Connectors</p> <ul style="list-style-type: none"> ◆ 1 x 24-pin ATX main power connector ◆ 1 x 8-pin ATX 12V power connector ◆ 1 x 4-pin ATX 12V power connector ◆ 1 x PMBUS (Power Information Detection) header ◆ 2 x M.2 Socket 3 connectors ◆ 10 x SATA 6Gb/s connectors ◆ 2 x SATA DOM power connectors ◆ 2 x SATA detection headers ◆ 1 x CPU fan header ◆ 1 x water cooling CPU fan header ◆ 2 x system fan headers ◆ 2 x system fan/water cooling pump headers ◆ 1 x front panel header ◆ 1 x front panel audio header ◆ 1 x USB 3.2 Gen 1 port (USB30_OB) ◆ 1 x USB Type-C™ header, with USB 3.2 Gen 2 support ◆ 1 x USB 3.2 Gen 1 header ◆ 1 x USB 2.0/1.1 header ◆ 2 x Thunderbolt™ add-in card connectors ◆ 1 x Trusted Platform Module header (For the GC-TPM2.0 SPI/GC-TPM2.0 SPI 2.0 module only) ◆ 2 x serial port headers ◆ 2 x temperature sensor headers ◆ 1 x power button ◆ 1 x reset button

 Internal Connectors	<ul style="list-style-type: none"> ◆ 1 x Clear CMOS button ◆ 1 x Clear CMOS jumper ◆ 1 x Q-Flash Plus button
 Back Panel Connectors	<ul style="list-style-type: none"> ◆ 1 x PS/2 keyboard/mouse port ◆ 1 x HDMI port ◆ 2 x DisplayPorts ◆ 1 x USB 3.2 Gen 2 Type-A port (red) ◆ 3 x USB 3.2 Gen 1 ports ◆ 4 x USB 2.0/1.1 ports ◆ 2 x RJ-45 ports ◆ 1 x optical S/PDIF Out connector ◆ 5 x audio jacks
 I/O Controller	<ul style="list-style-type: none"> ◆ iTE® I/O Controller Chip
 Hardware Monitor	<ul style="list-style-type: none"> ◆ Voltage detection ◆ Temperature detection ◆ Fan speed detection ◆ Overheating warning ◆ Fan fail warning ◆ Fan speed control <p style="margin-left: 20px;">* Whether the fan (pump) speed control function is supported will depend on the fan (pump) you install.</p>
 BIOS	<ul style="list-style-type: none"> ◆ 1 x 256 Mbit flash ◆ Use of licensed AMI UEFI BIOS ◆ PnP 1.0a, DMI 2.7, WfM 2.0, SM BIOS 2.7, ACPI 5.0
 Unique Features	<ul style="list-style-type: none"> ◆ Support for APP Center <p style="margin-left: 20px;">* Available applications in APP Center may vary by motherboard model. Supported functions of each application may also vary depending on motherboard specifications.</p> <ul style="list-style-type: none"> - @BIOS - System Information Viewer <ul style="list-style-type: none"> ◆ Support for Q-Flash Plus ◆ Support for Q-Flash ◆ Support for Xpress Install
 Bundled Software	<ul style="list-style-type: none"> ◆ Norton® Internet Security (OEM version) ◆ cFosSpeed
 Operating System	<ul style="list-style-type: none"> ◆ Support for Windows 10 64-bit
 Form Factor	<ul style="list-style-type: none"> ◆ ATX Form Factor; 30.5cm x 24.4cm

* GIGABYTE reserves the right to make any changes to the product specifications and product-related information without prior notice.



Please visit GIGABYTE's website for support lists of CPU, memory modules, SSDs, and M.2 devices.



Please visit the **SupportUtility List** page on GIGABYTE's website to download the latest version of apps.