

Z370 AORUS Gaming 5



SPECIFICATION:

□ CPU

1. Support for 8th Generation Intel® Core™ i7 processors/Intel® Core™ i5 processors/ Intel® Core™ i3 processors in the LGA1151 package
2. L3 cache varies with CPU

□ Chipset

1. Intel® Z370 Express Chipset

□ Memory

1. 4 x DDR4 DIMM sockets supporting up to 64 GB of system memory
2. Dual channel memory architecture

3. Support for DDR4 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

Onboard Graphics

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.
2. 1 x HDMI port, supporting a maximum resolution of 4096x2160@30 Hz
* Support for HDMI 1.4 version and HDCP 2.2.

Maximum shared memory of 1 GB

Audio

1. Realtek® ALC1220 codec
2. Support for Sound BlasterX 720°
3. High Definition Audio
4. 2/4/5.1/7.1-channel
5. Support for S/PDIF Out

LAN

1. Intel® GbE LAN chip (10/100/1000 Mbit)

Wireless Communication module

1. Intel® Wi-Fi 802.11 a/b/g/n/ac, supporting 2.4/5 GHz Dual-Band
2. BLUETOOTH 4.2, 4.1, BLE, 4.0, 3.0, 2.1+EDR
3. Support for 11ac wireless standard and up to 433 Mbps data rate
* Actual data rate may vary depending on environment and equipment.

□ **Expansion Slots**

1. 1 x PCI Express x16 slot, running at x16 (PCIEX16)
 - * For optimum performance, if only one PCI Express graphics card is to be installed, be sure to install it in the PCIEX16 slot.
2. 1 x PCI Express x16 slot, running at x8 (PCIEX8)
 - * The PCIEX8 slot shares bandwidth with the PCIEX16 slot. When the PCIEX8 slot is populated, the PCIEX16 slot operates at up to x8 mode.
3. 1 x PCI Express x16 slot, running at x4 (PCIEX4)
 - * The PCIEX4 slot shares bandwidth with the M2P_32G connector. The PCIEX4 slot operates at up to x2 mode when a PCIe SSD is installed in the M2P_32G connector.
4. 3 x PCI Express x1 slots
 - * The PCIEX1_3 slot shares bandwidth with the SATA3 1 connector. When the PCIEX1_3 slot is populated, the SATA 3 1 connector becomes unavailable.

(All of the PCI Express slots conform to PCI Express 3.0 standard.)

□ **Storage Interface**

Chipset:

1. 2 x M.2 connectors (Socket 3, M key, type 2242/2260/2280/22110 SATA and PCIe x4/x2 SSD support) (M2M_32G, M2A_32G)
2. 1 x M.2 connector (Socket 3, M key, type 2242/2260/2280 PCIe x4/x2 SSD support) (M2P_32G)
3. 6 x SATA 6Gb/s connectors
4. Support for RAID 0, RAID 1, RAID 5, and RAID 10
 - * Refer to "1-8 Internal Connectors," for the installation notices for the M.2 and SATA connectors.

Intel® Optane™ Memory Ready

□ **Multi-Graphics Technology**

1. Support for NVIDIA® Quad-GPU SLI™ and 2-Way NVIDIA® SLI™ technologies
2. Support for AMD Quad-GPU CrossFire™ and 3-Way/2-Way AMD CrossFire™ technologies

□ **USB**

Chipset+ASMedia® USB 3.1 Gen 2 Controller:

1. 1 x USB Type-C™ port on the back panel, with USB 3.1 Gen 2 support
2. 1 x USB 3.1 Gen 2 Type-A port (red) on the back panel

Chipset:

1. 1 x USB Type-C™ port with USB 3.1 Gen 1 support, available through the internal USB header
2. 6 x USB 3.1 Gen 1 ports (4 ports on the back panel, 2 ports available through the internal USB header)
3. 6 x USB 2.0/1.1 ports (2 ports on the back panel, 4 ports available through the internal USB headers)

□ **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. 1 x water cooling CPU fan header
5. 4 x system fan headers
6. 1 x 3 Amp fan/water cooling pump header
7. 1 x system fan/water cooling pump header
8. 2 x digital LED strip headers
9. 2 x digital LED strip power select jumpers
10. 2 x RGB (RGBW) LED strip headers
11. 3 x M.2 Socket 3 connectors
12. 6 x SATA 6Gb/s connectors
13. 1 x front panel header
14. 1 x front panel audio header
15. 1 x S/PDIF Out header
16. 1 x USB Type-C™ port, with USB 3.1 Gen 1 support
17. 1 x USB 3.1 Gen 1 header
18. 2 x USB 2.0/1.1 headers
19. 1 x Trusted Platform Module (TPM) header (2x6 pin, for the GC-TPM2.0_S module only)
20. 1 x Thunderbolt™ add-in card connector
21. 1 x Clear CMOS jumper
22. 2 x temperature sensor headers

□ **Back Panel Connectors**

1. 1 x PS/2 keyboard/mouse port

2. 2 x SMA antenna connectors (2T2R)
3. 1 x DisplayPort
4. 1 x HDMI port
5. 1 x USB Type-C™ port, with USB 3.1 Gen 2 support
6. 1 x USB 3.1 Gen 2 Type-A port (red)
7. 4 x USB 3.1 Gen 1 ports
8. 2 x USB 2.0/1.1 ports
9. 1 x RJ-45 port
10. 1 x optical S/PDIF Out connector
11. 5 x audio jacks (Center/Subwoofer Speaker Out, Rear Speaker Out, Line In, Line Out, Mic In)

I/O Controller

1. iTE® I/O Controller Chip

H/W Monitoring

1. Voltage detection
2. Temperature detection
3. Fan speed detection
4. Water cooling flow rate detection
5. Overheating warning
6. Fan fail warning
7. Fan speed control
 - * Whether the fan (pump) speed control function is supported will depend on the fan (pump) 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
BIOS Setup
Color Temperature
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
System Information Viewer
USB Blocker
USB DAC-UP 2
V-Tuner

2. Support for Q-Flash
3. Support for Xpress Install

Bundle Software

1. Norton® Internet Security (OEM version)
2. XSplit Gamecaster + Broadcaster (12 months license)
3. cFosSpeed

Operating System

1. Support for Windows 10 64-bit

Form Factor

1. ATX Form Factor; 30.5cm x 24.4cm