Procesador

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

L3 cache varies with CPU

(Please refer "CPU Support List" for more information.)

Chipset

Intel® Z390 Express Chipset

Memoria

4 x DDR4 DIMM sockets supporting up to 128GB (32GB single DIMM capacity) of system memory\*\*

\*\* Please note that the support for system total memory size depends on the CPU installed.

Dual channel memory architecture

Support for DDR4 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(O.C.) / 3000(O.C.) / 2800(O.C.) / 2666 / 2400 / 2133 MHz memory modules

Support for ECC Un-buffered DIMM 1Rx8/2Rx8 memory modules (operate in non-ECC mode)

Support for non-ECC Un-buffered DIMM 1Rx8/2Rx8/1Rx16 memory modules

Support for Extreme Memory Profile (XMP) memory modules

(Please refer "Memory Support List" for more information.)

Gráficos Integrados

Integrated Graphics Processor-Intel® HD Graphics support:

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

Actual support may vary by CPU.

Audio

Realtek® ALC1220-VB codec

\* 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

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

Puertos de Expansión

- 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.
- 1 x PCI Express x16 slot, running at x4 (PCIEX4)
- 4 x PCI Express x1 slots
- \* The PCIEX4 slot shares bandwidth with the PCIEX1\_3 slot. When the PCIEX1\_3 slot is populated, the PCIEX4 slot operates at up to x2 mode.

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

Tecnología Multi-Gráficos

Support for AMD Quad-GPU CrossFire™ and 2-Way AMD CrossFire™ technologies

Interfaz de Almacenamiento

Chipset:

- $1 \times M.2$  connector (Socket 3, M key, type 2242/2260/2280/22110 SATA and PCIe x4/x2 SSD support) (M2A)
- 1 x M.2 connector (Socket 3, M key, type 2242/2260/2280 SATA and PCIe x4/x2 SSD support) (M2M)

6 x SATA 6Gb/s connectors

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:

- 2 x USB 3.1 Gen 2 Type-A ports (red) on the back panel
- 1 x USB Type-C™ port with USB 3.1 Gen 1 support, available through the internal USB header
- 6 x USB 3.1 Gen 1 ports (4 ports on the back panel, 2 ports available through the internal USB header)

Chipset+2 USB 2.0 Hubs:

8 x USB 2.0/1.1 ports (4 ports on the back panel, 4 ports available through the internal USB headers)

Conectores Internos de E/S

1 x 24-pin ATX main power connector

1 x 8-pin ATX 12V power connector

1 x 4-pin ATX 12V power connector

2 x M.2 Socket 3 connectors

6 x SATA 6Gb/s connectors

1 x CPU fan header

1 x water cooling CPU fan header

3 x system fan/water cooling pump headers

2 x digital LED strip headers

2 x digital LED strip power select jumpers

2 x RGB LED strip headers

1 x front panel header

1 x front panel audio header

1 x USB Type-C<sup>™</sup> port, with USB 3.1 Gen 1 support

1 x USB 3.1 Gen 1 header

2 x USB 2.0/1.1 headers

1 x S/PDIF Out header

1 x Trusted Platform Module (TPM) header (2x6 pin, for the GC-TPM2.0\_S module only)

1 x Thunderbolt™ add-in card connector

1 x Clear CMOS jumper

Conectores del Panel Trasero

4 x USB 2.0/1.1 ports

1 x HDMI port

4 x USB 3.1 Gen 1 ports

2 x USB 3.1 Gen 2 Type-A ports (red)

1 x RJ-45 port

1 x optical S/PDIF Out connector
5 x audio jacks
Controlador de E/S
iTE® I/O Controller Chip
Monitorización H/W
Voltage detection
Temperature detection
Fan speed detection
Water cooling flow rate detection
Overheating warning
Fan fail warning
Fan speed control
* Whether the fan (pump) speed control function is supported will depend on the fan (pump) you install.
BIOS
2 x 128 Mbit flash
Use of licensed AMI UEFI BIOS
Support for DualBIOS™
PnP 1.0a, DMI 2.7, WfM 2.0, SM BIOS 2.7, ACPI 5.0
Características Únicas
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
V-Tuner
Support for Q-Flash
Support for Xpress Install
Software Incluido
Norton® Internet Security (OEM version)
cFosSpeed
Sistema Operativo
Support for Windows 10 64-bit
Diseño
ATX Form Factor; 30.5cm x 24.4cm
Otras Descripciones
Due to different Linux support condition provided by chipset vendors, please download Linux driver from chipset vendors' website or 3rd party website.
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.