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Unique Feature	ASRock USB 3.2 Gen2
	- ASRock Front Panel Type-C USB 3.2 Gen2 Header (10 Gb/s)
	- ASRock USB 3.2 Gen2x2 Type-C Port (20 Gb/s)
	- ASRock USB 3.2 Gen2 Type-A Port (10 Gb/s)
	ASRock Super Alloy
	- Premium 60A Power Choke
	- 50A Dr.MOS
	- Nichicon 12K Black Caps (100% Japan made high quality conductive polymer capacitors)
	- Sapphire Black PCB
	- High Density Glass Fabric PCB
	- 8 Layer PCB 2.5G LAN
	Intel <sup>®</sup> 802.11ax Wi-Fi 6E
	ASRock Steel Slot
	ASRock Full Coverage M.2 Heatsink
	ASRock Hyper M.2 (PCIe Gen4x4)
	ASRock Full Spike Protection (for all USB, Audio, LAN Ports)
	ASRock Live Update & APP Shop
CPU	- Supports 10th Gen Intel <sup>®</sup> Core™ Processors and 11th Gen Intel <sup>®</sup> Core™ Processors (LGA1200)
	- Digi Power design
	- 8 Power Phase design
	- Supports Intel <sup>®</sup> Turbo Boost Max 3.0 Technology
	- Supports Intel <sup>®</sup> K-Series unlocked CPUs
Chipset	- Intel <sup>®</sup> Z590
Memory	- Dual Channel DDR4 Memory Technology
	- 2 x DDR4 DIMM Slots
	- 11th Gen Intel <sup>®</sup> Core™ Processors support DDR4 non-ECC, un-buffered memory up to 5066+(OC)*
	- 10th Gen Intel <sup>®</sup> Core™ Processors support DDR4 non-ECC, un-buffered memory up to 4600+(OC)*
	- Supports ECC UDIMM memory modules (operate in non-ECC mode)
	- Max. capacity of system memory: 64GB**
	- Supports Intel <sup>®</sup> Extreme Memory Profile (XMP) 2.0
	*11th Gen Intel <sup>®</sup> Core <sup>™</sup> (i9/i7/i5) support DDR4 up to 3200; Core <sup>™</sup> (i3), Pentium <sup>®</sup> and Celeron <sup>®</sup> support DDR4 up to 2666 nativel 10th Gen Intel <sup>®</sup> Core <sup>™</sup> (i9/i7) support DDR4 up to 2933; Core <sup>™</sup> (i5/i3), Pentium <sup>®</sup> and Celeron <sup>®</sup> support DDR4 up to 2666 natively
	**Due to the operating system limitation, the actual memory size may be less than 4GB for the reservation for system usage under OS. For Windows® 64-bit OS with 64-bit CPU, there is no such limitation.
BIOS	- 128Mb AMI UEFI Legal BIOS with multilingual GUI support
BIOS	- 128Mb AMI UEFI Legal BIOS with multilingual GUI support - ACPI 6.0 Compliant wake up events
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BIOS	
	- ACPI 6.0 Compliant wake up events - SMBIOS 2.7 Support - CPU, CPU GT, VCCSA, DRAM, VPPM, VCCIN AUX, VCCIO, VCCST Voltage Multi-adjustment
BIOS Graphics	- ACPI 6.0 Compliant wake up events - SMBIOS 2.7 Support - CPU, CPU GT, VCCSA, DRAM, VPPM, VCCIN AUX, VCCIO, VCCST Voltage Multi-adjustment - 11th Gen Intel <sup>®</sup> Core™ Processors support Intel <sup>®</sup> Xe Graphics Architecture (Gen 12). 10th Gen Intel <sup>®</sup> Core™
	- ACPI 6.0 Compliant wake up events - SMBIOS 2.7 Support - CPU, CPU GT, VCCSA, DRAM, VPPM, VCCIN AUX, VCCIO, VCCST Voltage Multi-adjustment  - 11th Gen Intel <sup>®</sup> Core™ Processors support Intel <sup>®</sup> Xe Graphics Architecture (Gen 12). 10th Gen Intel <sup>®</sup> Core™ support Gen 9 Graphics
	- ACPI 6.0 Compliant wake up events - SMBIOS 2.7 Support - CPU, CPU GT, VCCSA, DRAM, VPPM, VCCIN AUX, VCCIO, VCCST Voltage Multi-adjustment - 11th Gen Intel <sup>®</sup> Core™ Processors support Intel <sup>®</sup> Xe Graphics Architecture (Gen 12). 10th Gen Intel <sup>®</sup> Core™

	- Supports DisplayPort 1.4 with max. resolution up to 4K x 2K (4096x2304) @ 60Hz - Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio) with HDMI 2.0 Port (Conmonitor is required) - Supports HDCP 2.3 with HDMI 2.0 and DisplayPort 1.4 Ports  *Intel® UHD Graphics Built-in Visuals and the VGA outputs can be supported only with processors which are GPU integrated.
	11th Gen Intel <sup>®</sup> Core™ Processors support HDMI 2.0. 10th Gen Intel <sup>®</sup> Core™ Processors support HDMI 1.4.
Audio	- 7.1 CH HD Audio (Realtek ALC897 Audio Codec) - Supports Surge Protection - Nahimic Audio
LAN	1 x 2.5 Gigabit LAN 10/100/1000/2500 Mb/s (Dragon RTL8125BG) - Supports Dragon 2.5G LAN Software - Smart Auto Adjust Bandwidth Control - Visual User Friendly UI - Visual Network Usage Statistics - Optimized Default Setting for Game, Browser, and Streaming Modes - User Customized Priority Control - Supports Wake-On-LAN - Supports Lightning/ESD Protection - Supports Energy Efficient Ethernet 802.3az - Supports PXE 1 x Gigabit LAN 10/100/1000 Mb/s (Intel® I219V) - Supports Wake-On-LAN - Supports Lightning/ESD Protection - Supports Lightning/ESD Protection - Supports Energy Efficient Ethernet 802.3az - Supports Energy Efficient Ethernet 802.3az
Wireless LAN	- Intel® 802.11ax Wi-Fi 6E Module - Supports IEEE 802.11a/b/g/n/ax - Supports Dual-Band 2x2 160MHz with extended 6GHz band support* - 2 antennas to support 2 (Transmit) x 2 (Receive) diversity technology - Supports Bluetooth 5.2 + High speed class II - Supports MU-MIMO  *Wi-Fi 6E (6GHz band) is not currently enabled by default due to the different regulation status of each country. It will be activated (I countries) through Windows® Update and software update once available. The update is expected to be in the middle of 2021.
Slots	11th Gen Intel <sup>®</sup> Core™ Processors  - 1 x PCI Express 4.0 x16 Slot*  10th Gen Intel <sup>®</sup> Core™ Processors  - 1 x PCI Express 3.0 x16 Slot*  - 1 x PCI Express 3.0 x16 Slot*  - 1 x Vertical M.2 Socket (Key E) with the bundled WiFi-802.11ax PCIe WiFi module (on the rear I/O)  *Supports PCIe riser cards to extend one x16 slot to two x8 slots Supports NVMe SSD as boot disks
Storage	- 4 x SATA3 6.0 Gb/s Connectors - 1 x Hyper M.2 Socket (M2_1), supports M Key type 2280 M.2 PCI Express module up to Gen4x4 (64 Gb/s) (S works with 11th Gen Intel <sup>®</sup> Core™ processors only)* - 1 x Ultra M.2 Socket (M2_2), supports M Key type 2280 M.2 SATA3 6.0 Gb/s module and M.2 PCI Express m

	Gen3 x4 (32 Gb/s)*
	*Supports Intel <sup>®</sup> Optane™ Technology Supports NVMe SSD as boot disks Supports ASRock U.2 Kit
RAID	- Supports RAID 0, RAID 1, RAID 5 and RAID 10 for SATA storage devices - Supports RAID 0 and RAID 1 for M.2 NVMe storage devices*
	*RAID function for PCle mode SSD in M2_1 is only available with Intel <sup>®</sup> SSD installed.
Connector	- 1 x RGB LED Header*
	- 1 x Addressable LED Header**
	- 1 x CPU Fan Connector (4-pin)***
	- 1 x Chassis Fan Connector (4-pin)****
	- 1 x Chassis/Water Pump Fan Connector (4-pin) (Smart Fan Speed Control)*****
	- 1 x 24 pin ATX Power Connector
	- 1 x 8 pin 12V Power Connector (Hi-Density Power Connector)
	- 1 x Front Panel Audio Connector
	- 1 x USB 2.0 Header (Supports 2 USB 2.0 ports) (Supports ESD Protection)
	- 1 x USB 3.2 Gen1 Header (Supports 2 USB 3.2 Gen1 ports) (Supports ESD Protection)
	- 1 x Front Panel Type C USB 3.2 Gen2 Header (Supports ESD Protection)
	*Support in total up to 12V/3A, 36W LED Strip
	**Support in total up to 5V/3A, 15W LED Strip
	***The CPU Fan Connector supports the CPU fan of maximum 1A (12W) fan power.
	****The Chassis Fan Connector supports the chassis fan of maximum 1A (12W) fan power.
	*****The Chassis/Water Pump Fan supports the water cooler fan of maximum 2A (24W) fan power. CHA_FAN1/WP can auto detect if 3-pin or 4-pin fan is in use.
Rear Panel I/O	- 2 x Antenna Ports
	- 1 x HDMI Port
	- 1 x DisplayPort 1.4
	- 1 x USB 3.2 Gen2x2 Type-C Port (20 Gb/s) (Supports ESD Protection)
	- 4 x USB 3.2 Gen2 Type-A Ports (10 Gb/s) (Supports ESD Protection)
	- 1 x USB 2.0 Port (Supports ESD Protection)
	- 2 x RJ-45 LAN Ports with LED (ACT/LINK LED and SPEED LED)
	- HD Audio Jacks: Line in / Front Speaker / Microphone
Software and UEFI	Software
	- ASRock Motherboard Utility (A-Tuning)
	- ASRock Dragon 2.5G LAN Software
	- ASRock Polychrome SYNC*
	UEFI
	- ASRock EZ Mode
	- ASRock Full HD UEFI
	- ASRock My Favorites in UEFI
	- ASRock Instant Flash
	- ASRock Internet Flash
	- ASRock Easy RAID Installer
	*These utilities can be downloaded from ASRock Live Update & APP Shop.
Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version), Google Chrome Browser and Toolbar

Accessories	- Quick Installation Guide, Support CD, I/O Shield - 2 x SATA Data Cables - 2 x ASRock WiFi 2.4/5/6 GHz Antennas - 2 x Screws for M.2 Sockets
Hardware Monitor	<ul> <li>- Fan Tachometer: CPU, Chassis, Chassis/Water Pump Fans</li> <li>- Quiet Fan (Auto adjust chassis fan speed by CPU temperature): CPU, Chassis, Chassis/Water Pump Fans</li> <li>- Fan Multi-Speed Control: CPU, Chassis, Chassis/Water Pump Fans</li> <li>- Voltage monitoring: +12V, +5V, +3.3V, CPU Vcore</li> </ul>
Form Factor	- Mini-ITX Form Factor: 6.7-in x 6.7-in, 17.0 cm x 17.0 cm - 8 Layer PCB
OS	- Microsoft <sup>®</sup> Windows <sup>®</sup> 10 64-bit
Certifications	- FCC, CE - ErP/EuP ready (ErP/EuP ready power supply is required)

The specification is subject to change without notice in advance. The brand and product names are trademarks of their respective companies. Any configuration other than origina specification is not guaranteed.