

**Z170-A**

Note: The specifications are subject to change without notice.

<b>CPU</b>	LGA1151 socket for 6th Generation Intel® Core™ i7/ i5/ i3/Pentium®/Celeron® Processors Supports 14nm CPU Supports Intel® Turbo Boost Technology 2.0* * The Intel® Turbo Boost Technology 2.0 support depends on the CPU types.
<b>Chipset</b>	Intel® Z170 Express Chipset
<b>Memory</b>	4 x DIMM, max. 64GB, DDR4 3400(O.C.)*/3333(O.C.)*/3200(O.C.)*/3100(O.C.)*/3000(O.C.)*/2933(O.C.)*/2800(O.C.)*/2666(O.C.)*/2600(O.C.)*/2400(O.C.)*/2133 MHz, non-ECC, un-buffered memory Dual channel memory architecture Supports Intel® Extreme Memory Profile (XMP) * Hyper DIMM support is subject to the physical characteristics of individual CPUs. Please refer to Memory QVL(Qualified Vendors List) for details.
<b>Expansion Slots</b>	2 x PCI Express 3.0/2.0 x16 slots (single at x16 or dual at x8/x8 mode) 1 x PCI Express 3.0/2.0 x16 slot* (max. at x4 mode, compatible with PCIe x1 and x4 devices) 3 x PCI Express 3.0/2.0 x1 slots 1 x PCI slot *The PCIe x16_3 slot shares bandwidth with SATA6G_56. The PCIe x16_3 is default set at x2 mode.
<b>VGA</b>	Integrated Graphics Processor- Intel® HD Graphics support Multi-VGA output support: DisplayPort/HDMI/DVI-D/VGA ports Supports DisplayPort 1.2* with max. resolution 4096 x 2304@60HZ/24HZ Supports HDMI 1.4b with max. resolution 4096 x 2160@24Hz / 2560 x 1600@60Hz Supports DVI-D with max. resolution 1920 x 1200@60Hz Supports RGB with max. resolution 1920 x 1200@60Hz Supports Intel® InTru™ 3D/Quick Sync Video/Clear Video HD Technology/Insider™ Supports up to 3 displays simultaneously Maximum shared memory of 512MB *DP 1.2 Multi-Stream Transport compliant, supports DP 1.2 monitor daisy chain up to 3 displays
<b>Multi-GPU support</b>	Supports NVIDIA® 2-Way/Quad-GPU SLI™ Technology (with 2 PCIe x16 graphics card) Supports AMD® 3-Way/Quad-GPU CrossFireX™ Technology
<b>Storage</b>	Intel® Z170 Express Chipset with RAID 0, 1, 5, 10 and Intel Rapid Storage Technology 14 support - 1 x SATA Express port (compatible with 2 x SATA 6.0 Gb/s ports) - 6 x SATA 6.0 Gb/s ports(gray, 2 from SATA Express) - Supports Intel® Smart Response Technology* - 1 x M.2 Socket 3 with M Key**, type 2242/2260/2280/22110 storage devices support (both SATA & PCIe mode)*** * These functions will work depending on the CPU installed. ** Supports PCIe RAID configurations via onboard M.2 and PCIe x16_3. *** M.2 shares SATA mode with SATA Express. Change this item before installing M.2 SATA devices.
<b>LAN</b>	Gigabit Intel LAN connection- 802.3az Energy Efficient Ethernet (EEE) appliance Intel® I219-V Gigabit LAN- Dual interconnect between the integrated Media Access Controller (MAC) and physical layer ASUS LAN Guard ASUS Turbo LAN Utility
<b>Audio</b>	Realtek® ALC892 8-channel high definition audio CODEC featuring Crystal Sound 3 - Power pre-regulator reduces power input noise to ensure consistent performance - Separate layer for left and right track, ensuring both sound deliver equal quality - Top notch audio sensation delivers according to the audio configuration - Audio shielding ensures precise analog/digital separation and greatly reduced multi-lateral interference - EMI protection cover to prevent electrical noise to affect the amplifier quality - Audio Amplifier to enhance the highest quality sound for headphone and speakers - Unique de-pop circuit to reduce start-up popping noise to audio outputs - Premium Japan-made audio capacitors provides warm, natural, and immersive sound with exceptional clarity and - Absolute Pitch 192khz/24bit true BD lossless sound - DTS® Studio Sound™ - DTS® Connect - Supports jack-detection, multi-streaming, front panel jack-retasking (MIC) - Optical S/PDIF out port at back I/O
<b>USB</b>	Intel® Z170 Express Chipset- supports ASUS USB 3.1 Boost - 6 x USB 3.0/2.0 ports (4 ports at mid-board, 2 ports at back panel, blue) - 6 x USB 2.0/1.1 ports (4 ports at mid-board, 2 ports at back panel) ASMedia® USB 3.1 controllers- supports ASUS USB 3.1 Boost and 3A power output - 1 x USB 3.1/3.0/2.0 port at back panel (teal blue, Type-A) - 1 x USB 3.1/3.0/2.0 port at back panel (Type-C)
	<Superb Performance> <b>OC Design - ASUS PRO Clock Technology</b> - Full BCLK range for extreme overclocking performance

	<p><b>5-Way Optimization</b>  - Whole system optimization with a single click! Perfectly consolidates better CPU performance, power saving, digital power control, system cooling and app usages.</p> <p><b>DIGI+ VRM</b>  -CPU Power: Digital 8-phase power design  -iGPU Power: Digital 2-phase power design</p> <p><b>TPU</b>  - Auto Tuning, TPU, GPU Boost, 2-level TPU switch</p> <p><b>EPU</b>  - EPU</p> <p><b>Fan Xpert 3</b> featuring Fan Auto Tuning function and multiple thermistors selection for optimized system cooling  <b>Turbo App</b> featuring system performance tuning, network priority, and audio scene configuration for selected applications.</p> <p><b>UEFI BIOS</b>  - Most advanced options with fast response time</p> <p><b>Special Memory O.C. Design</b>  - Superb memory O.C. capability under full load by minimizing the coupling noise and signal reflection effect</p> <p><b>PC Cleaner</b>  - Fast and easy way to get rid of unnecessary junk files.</p> <p><b>&lt;Remote Entertainment&gt;</b>  <b>Remote GO!</b>  - Remote GO! Function: Cloud GO!, Remote Desktop, Remote Keyboard &amp; Mouse, File Transfer  - Wi-Fi GO! &amp; NFC Remote app for portable smartphone/tablet, supporting iOS 7 &amp; Android 4.0 systems</p> <p><b>Media Streamer</b>  - Pipe music or movies from your PC to a smart TV, your entertainment goes wherever you go!  - Media Streamer app for portable smartphone/tablet, supporting iOS 7 &amp; Android 4.0 systems</p> <p><b>HyStream</b>  - Stream iOS devices' screen on your PC screen.*  * Contact your device vendor for supporting information.</p> <p><b>&lt;eSports Champions&gt;</b>  <b>Turbo LAN</b>  - Fast and smooth online gaming with lower pings and less lags  <b>Crystal Sound 3</b>  - Hear the cleanest sound with dedicated audio design onboard!  <b>Turbo APP</b>  - Tailored app performance, network priority and audio configuration for your needs</p> <p><b>&lt;EZ DIY&gt;</b>  <b>Push Notice</b>  - Monitor your PC status with smart devices in real time</p> <p><b>USB BIOS Flashback Card</b> supported</p> <p><b>UEFI BIOS EZ Mode</b> featuring friendly graphics user interface  - CrashFree BIOS 3  - EZ Flash 3</p> <p><b>ASUS Q-Design</b>  - ASUS Q-LED (CPU, DRAM, VGA, Boot Device LED)  - ASUS Q-Slot  - ASUS Q-DIMM  - ASUS Q-Connector</p>
<p><b>ASUS Exclusive Features</b></p>	<p>Special Features:</p> <p><b>ASUS 5X Protection</b>  - ASUS DIGI+ VRM - 8 Phase digital power design  - ASUS Enhanced DRAM Overcurrent Protection - Short circuit damage prevention  - ASUS ESD Guards - Enhanced ESD protection  - ASUS High-Quality 5K-Hour Solid Capacitors - 2.5x long lifespan with excellent durability  - ASUS Stainless Steel Back I/O - 3x more durable corrosion-resistant coating</p> <p>- Mobo Connect  - LAN Guard  - USB 3.1 Boost  - Ai Charger+  - AI Suite 3  - MemOK!  - EZ XMP</p>
<p><b>ASUS Special Features</b></p>	<p>Quiet Thermal Design:  - ASUS Fan Xpert 3  - ASUS Fanless Design: Heat-sink solution</p>
<p><b>ASUS Quiet Thermal Solution</b></p>	<p>Precision Tweaker 2:  - CPU Core/Cache Voltage: Adjustable CPU Core/Cache Voltage at 0.005V increment  - CPU Graphics Voltage: Adjustable CPU Graphics voltage at 0.005V increment  - CPU VCCIO Voltage: Adjustable CPU VCCIO Voltage at 0.0125V increment  - CPU System Agent Voltage: Adjustable CPU System Agent Voltage at 0.0125V increment  - DRAM Voltage: 152-step Memory voltage control</p>
<p><b>ASUS Exclusive Overclocking</b></p>	

<b>Features</b>	- PCH Core Voltage: 88-step Chipset voltage control
	<b>SFS (Stepless Frequency Selection)</b>
	- BCLK/PCIE frequency tuning from 40MHz up to 500MHz at 0.01MHz increment
	<b>Overclocking Protection:</b>
	- ASUS C.P.R.(CPU Parameter Recall)
<b>Back Panel I/O Ports</b>	1 x PS/2 Keyboard/mouse combo port
	1 x DisplayPort
	1 x HDMI port
	1 x DVI-D
	1 x RGB
	1 x Optical S/PDIF out
	1 x Intel LAN (RJ45) port
	1 x USB 3.1/3.0/2.0 ports (teal blue, Type A)
	1 x USB 3.1/3.0/2.0 ports (Type C)
	2 x USB 3.0/2.0 ports (blue)
	2 x USB 2.0 ports
	8-channel Audio I/O ports

<b>Internal I/O Connectors</b>	2 x USB 3.0/2.0 connectors support additional 4 USB ports (19-pin)
	2 x USB 2.0/1/1 connectors support additional 4 USB ports
	1 x M.2 Socket 3 (for M Key, type 2242/2260/2280/22110 storage devices)
	1 x SATA Express connectors (gray)
	4 x SATA 6.0Gb/s connectors (gray)
	1 x CPU Fan connector (4-pin) for both 3-pin(DC mode) and 4-pin(PWM mode) CPU coolers control with auto detection
	1 x CPU OPT Fan connector (4-pin)
	1 x Water Pump header (4-pin)
	4 x Chassis Fan connectors (4-pin) for both 3-pin(DC mode) and 4-pin(PWM mode) coolers control
	1 x Front panel audio connector (AAFP)
	1 x BIOS Flashback connector
	1 x S/PDIF out header
	1 x Thunderbolt header (5-pin) for ASUS ThunderboltEX series support
	1 x TPM connector
	1 x COM port
	1 x 24-pin EATX Power connector
	1 x 8-pin EATX 12V Power connector
	1 x System Panel(Q-Connector)
	1 x MemOK! button
	1 x Clear CMOS jumper
1 x DRCT(Direct Key) connector	
1 x TPU switch (advanced two-stage adjustments)	
1 x EZ XMP switch	
1 x Power-on button	
1 x 5-pin EXT_FAN(Extension Fan) connector	
<b>BIOS</b>	128 Mb Flash ROM, UEFI AMI BIOS, PnP, DMI3.0, WfM2.0, SM BIOS 3.0, ACPI 5.0, Multi-language BIOS, ASUS EZ Flash 3, CrashFree BIOS 3, F11 EZ Tuning Wizard, F6 Qfan Control, F3 My Favorites, Quick Note, Last Modified log,
<b>Manageability</b>	WfM 2.0, DMI 3.0, WOL by PME, PXE
<b>Accessories</b>	3 x Serial ATA 6.0Gb/s cables
	1 x ASUS SLI bridge connector
	1 x Q-connector
	1 x M.2 screw package
	1 x CPU installation tool
	1 x User's manual
1 x Z170 Series Exclusive Feature manual	
<b>Support DVD</b>	Drivers
	ASUS Utilities
	EZ Update
	Anti-virus software (OEM version)
<b>Operating System Support</b>	Windows® 10*
	Windows® 8.1*
	Windows® 7
	*64-bit supported only
<b>Form Factor</b>	ATX Form Factor, 12"x 9.6" (30.5cm x 24.4cm)