	PRIME B450-PLUS
Note: The specifications are	subject to change without notice.
CPU	AM4 socket for AMD Ryzen™ 2 <sup>nd</sup> Generation/ Ryzen™ with Radeon™ Vega
CFU	Graphics/ Rvzen™ 1 <sup>st</sup> Generation Processors
	Supports CPU up to 8 cores*
	* Due to CPU limitation, CPU cores supported varies by processor.
	** Refer to www.asus.com for the AMD CPU support list.
Chipset	AMD B450 Chipset
	AMD Ryzen™ 2 <sup>nd</sup> Generation Processors/AMD Ryzen™ with Radeon™ Vega Graphics/ Ryzen™
	1st Generation Processors
	4 x DIMM, max. 64GB, DDR4 3200(O.C.)/3000(O.C.)/2800(O.C)/2666/2400/2133 MHz, un-
Memory	buffered memory
	Dual Channel memory architecture
	* ECC memory(ECC mode) support varies by CPU.
	** Refer to www.asus.com for the Memory QVL (Qualified Vendors List).
	AMD Ryzen™ 2 <sup>nd</sup> Generation/ Ryzen™ 1 <sup>st</sup> Generation Processors
	1 x PCI Express 3.0 x16 slot(max.@x16 mode)
Expansion Slots	AMD Ryzen™ with Radeon™ Vega Graphics Processors
	1 x PCI Express 3.0 x16 slot(max.@x8 mode)
	AMD B450 Chipset:
	1 x PCI Express 2.0 x 16 slots (max. at x4 mode)
	3 x PCI Express 2.0 x1 slots
Multi-GPU support	Supports AMD CrossFireX™ Technology
	Integrated Graphics in the AMD Ryzen™ with Radeon™ Vega Graphics Processors
	Multi-VGA output support: DVI, HDMI port
VGA	- Supports DVI with a maximum resolution of 1920 x 1200 @60Hz
	- Supports HDMI 2.0b with a maximum resolution of 4096 x 2160 @60Hz
	- Maximum shared memory of 2048 MB
	AMD B450 Chipset
	- 4 x Serial ATA 6.0 Gb/s connectors with RAID 0, RAID 1 and RAID 10 support
	AMD Ryzen™ 2nd Generation/ Ryzen™ with Radeon™ Vega Graphics/ Ryzen™ 1st
	Generation Processors
	-2 x Serial ATA 6.0 Gb/s connectors with RAID 0, RAID 1 and RAID 10 support
Storage	
	AMD Ryzen™ 2 <sup>nd</sup> Generation/ Ryzen™ with Radeon™ Vega Graphics/ Ryzen™ 1 <sup>st</sup>
	Generation Processors
	- 1 x M.2 socket 3 with M Key, Type 2242/2260/2280/22110(PCIE 3.0 x4 and SATA
	modes)storage devices support*
	*The M.2 Socket shares bandwidth with the SATA_5/6 ports, and therefore the SATA_5/6 ports cannot be used when an M.2 device is installed.
LAN	Realtek® 8111H Gigabit LAN Controller
LAIT	Realtek® ALC 887-VD2 8-Channel High Definition Audio CODEC
	- LED-illuminated design: Brighten up your build with the gorgeous illuminated audio
Audio	trace path.
	- Audio Shielding: Ensures precision analog/digital separation and greatly reduces multi-
	lateral interference
	- Dedicated audio PCB layers: Separate layers for left and right channels to guard the
	quality of the sensitive audio signals
	- Premium Japanese audio capacitors: Provide warm, natural and immersive sound with
	exceptional clarity and fidelity

	- Supports jack-detection and front panel jack-retasking
	*Use a chassis with HD audio module in the front panel to support an 8-channel audio
	output.
	AMD Ryzen™ 2 <sup>nd</sup> Generation/ Ryzen™ with Radeon™ Vega Graphics/ Ryzen™ 1 <sup>st</sup> - 3 x USB 3.1 Gen1 (up to 5Gbps) ports (2 Type A at back+ 1 Type C at back)
	AMD B450 Chipset:
USB	- 2 x USB 3.1 Gen 2 (up to 10 Gbps) ports (2 ports at back)
	- 2 x USB 3.1 Gen 1 (up to 5Gbps) ports (2 ports at mid-board)
	- 6 x USB 2.0 ports (2 ports at back,4 ports at mid-board)
	Dependable Stability
	ASUS 5X PROTECTION III
	- ASUS SafeSlot Core - Fortified PCIe Slot prevents damage
	- ASUS LANGuard: Protects against LAN surges, lightning strikes and static-electricity
	discharges
	- ASUS Overvoltage Protection: World-class circuit-protecting power design
	- ASUS Stainless-Steel Back I/O: 3X corrosion-resistance for greater durability!
	- ASUS DIGI+ VRM: 6 Phase digital power design  Superb performance
	UEFI BIOS
	- Most advanced options with fast response time
	ASUS Fan Xpert 4 Core
	- Advanced fan and liquid controls for ultimate cooling and quietness
	Gaming Scenario
ASUS Unique Features	Audio Features
	- Audio that roars on the battlefield
	ASUS Exclusive Features
	- ASUS AI Charger
	- ASUS File Transfer
	- ASUS AI Suite 3
	- ASUS PC Cleaner
	Easy PC DIY
	Safe motherboard mounting
	- Component-free areas to minimize damage risk
	Q-Design
	- ASUS Q-DIMM
	- ASUS Q-Slot
	UEFI BIOS EZ Mode
	- featuring friendly graphics user interface
	- ASUS CrashFree BIOS 3
	- ASUS EZ Flash 3
	Quiet Thermal Design:
ASUS Quiet Thermal Solution	- Stylish Fanless Design: MOS Heat-sink & Chipset Heat-sink solution
	- ASUS Fan Xpert 4 core
	1 x PS/2 Keyboard/Mouse Combo port
	1 x DVI port
	1 x HDMI 2.0 port
	1 x LAN (RJ-45) port
Back Panel I/O Ports	2 x USB 3.1 Gen 2 (up to 10 Gbps) ports(Type A,teal blue)
	1 x USB 3.1 Gen 1 (up to 5 Gbps) port (Type C)

	2 x USB 3.1 Gen 1 (up to 5 Gbps) ports(Type A, blue)
	2 x USB 2.0/1.1 ports
	3 x Audio jacks support 8-channel audio output
	1 x USB 3.1 Gen 1 (up to 5Gbps) connector supports additional 2 USB 3.1 Gen 1 ports
	2 x USB 2.0/1.1 connectors support additional 4 USB 2.0/1.1 ports
	6 x SATA 6.0 Gb/s connectors
	1 x M.2 Socket 3 for M Key, type 2242/2260/2280 devices support(both SATA & PCIE
	mode)
	1 x COM connector
	1 x Aura RGB Strip header
	1 x CPU Fan connector
Internal I/O Connectors	3 x 4-pin Chassis Fan connectors for both 3-pin(DC mode) and 4-pin(PWM mode)
	coolers control
	1 x Front panel audio connector
	1 x 24-pin EATX Power connector
	1 x 8-pin EATX 12V Power connector
	1 x 2-pin Clear CMOS
	1 x System Panel connector
	1 x S/PDIF out header
	1 x AIO pump header
BIOS	128 Mb Flash ROM, UEFI AMI BIOS, PnP, SM BIOS 3.1, ACPI 6.1, Multi-language BIOS, ASUS EZ Flash 3, ASUS CrashFree BIOS 3, F3 My Favorite, Last Modified log, F12 PrintScreen,F4 AURA ON/OFF, F9 Search and ASUS DRAM SPD (Serial Presence Detect) memory information
Manageability	WOL by PME, PXE
	2 x Serial ATA 6.0Gb/s cables
Accessories	1 x I/O shield
	1 x M.2 screw package
	1 x User's manual
	1 x Support DVD
	Drivers
Support DVD	ASUS Utilities
	ASUS Update
	Anti-virus software (OEM version)
Operating System Support	Windows® 10 (64-bit)
Form Factor	ATX Form Factor, 12"x 9.2" (30.5cm x 23.4cm)