



ASUS X670E / X670 Motherboards

Brand/Series		ROG			ROG Strix				ProArt	TUF Gaming		Prime			
Model		ROG CROSSHAIR X670E EXTREME	ROG CROSSHAIR X670E HERO	ROG CROSSHAIR X670E GENE	ROG STRIX X670E-E GAMING WIFI	ROG STRIX X670E-F GAMING WIFI	ROG STRIX X670E-A GAMING WIFI	ROG STRIX X670E-I GAMING WIFI	ProArt X670E-CREATOR WIFI	TUF GAMING X670E-PLUS WIFI	TUF GAMING X670E-PLUS	PRIME X670E-PRO WIFI	PRIME X670E-P WIFI	PRIME X670-P	
Photo															
CPU socket		AM5													
Chipset		X670													
Form factor		EATX	ATX	mATX	ATX	ATX	ATX	Mini-ITX	ATX	ATX	ATX	ATX	ATX	ATX	
Power architecture		20+2 (110A)	18+2 (110A)	16+2 (110A)	18+2 (110A)	16+2 (90A)	16+2 (70A)	10+2 (110A)	16+2(70A)	14+2(70A)	14+2(70A)	14+2(70A)	12+2 (60A)	12+2 (60A)	
Memory	# Slots, Maximum capacity	4 x DIMM, Max. 128GB, DDR5	4 x DIMM, Max. 128GB, DDR5	2 x DIMM, Max. 64GB, DDR5	4 x DIMM, Max. 128GB, DDR5	4 x DIMM, Max. 128GB, DDR5	4 x DIMM, Max. 128GB, DDR5	2 x DIMM, Max. 64GB, DDR5	4 x DIMM, Max. 128GB, DDR5	4 x DIMM, Max. 128GB, DDR5	4 x DIMM, Max. 128GB, DDR5	4 x DIMM, Max. 128GB, DDR5	4 x DIMM, Max. 128GB, DDR5	4 x DIMM, Max. 128GB, DDR5	
	OptiMem	OptiMem II	OptiMem II	OptiMem II	OptiMem II	OptiMem II	OptiMem II	OptiMem II	OptiMem II	OptiMem II	OptiMem II	OptiMem II	OptiMem II	OptiMem II	
Graphics output		USB4	HDMI 2.1 / USB4	USB4	HDMI 2.1 / DP 1.4	HDMI 2.1 / DP 1.4	HDMI 2.1 / DP 1.4	HDMI 2.1 / USB4	HDMI 2.1 / USB4	HDMI 2.1 / DP 1.4	HDMI 2.1 / DP 1.4	HDMI 2.1 / DP 1.4	HDMI 2.1 / DP 1.4	HDMI 2.1 / DP 1.4	
Expansion slots	PCIe 5.0 x16	2 x PCIe 5.0 x16 (8x16 or x8/x8)	2 x PCIe 5.0 x16 (8x16 or x8/x8)	1 x PCIe 5.0 x16 (8x16)	2 x PCIe 5.0 x16 (8x16 or x8/x4)	1 x PCIe 5.0 x16	1 x PCIe 5.0 x16 (8x16)	1 x PCIe 5.0 x16 (8x16)	2 x PCIe 5.0 x16 (8x16 or x8/x8)	1 x PCIe 5.0 x16	1 x PCIe 5.0 x16	1 x PCIe 5.0 x16	—	—	
	PCIe 4.0 x16	—	—	—	1 x PCIe 4.0 x16 (8x4)	1 x PCIe 4.0 x16 (8x4)	1 x PCIe 4.0 x16 (8x4)	—	1 x PCIe 4.0 x16 (8x2)	1 x PCIe 4.0 x16 (8x4)	1 x PCIe 4.0 x16 (8x4)	1 x PCIe 4.0 x16 (8x4)	1 x PCIe 4.0 x16 (8x4)	2 x PCIe 4.0 x16 (8x4)	
	PCIe 4.0 x4	1 x PCIe 4.0 x4	—	—	—	—	—	—	—	1 x PCIe 4.0 x4	1 x PCIe 4.0 x4	1 x PCIe 4.0 x4	—	—	
	PCIe x1 4.0 or 3.0	—	1 x PCIe 4.0 x1	1 x PCIe 4.0 x1	—	1 x PCIe 3.0 x1	1 x PCIe 3.0 x1	—	—	—	—	—	1 x PCIe 3.0 x1	1 x PCIe 3.0 x1	
Storage & Connectivity	SATA 6Gbps	6	6	4	4	4	4	2 from FPS-II	4	4	4	4	6	6	
	M.2	1 x 22110 (PCIe 5.0 x4) from ROG GEN-Z.2 1 x 22110 (PCIe 4.0 x4) from ROG GEN-Z.2 1 x 22110 (PCIe 5.0 x4) from PCIe 5.0 M.2 Card 2 x 2280 (PCIe 5.0 x4)	2 x 2280 (PCIe 5.0 x4) 1 x 22110 (PCIe 5.0 x4) from ROG GEN-Z.2 2 x 2280 (PCIe 4.0 x4)	1 x 22110 (PCIe 5.0 x4) from ROG GEN-Z.2 1 x 22110 (PCIe 4.0 x4) from ROG GEN-Z.2 1 x 2280 (PCIe 5.0 x4)	1 x 22110 (PCIe 5.0 x4) 2 x 2280 (PCIe 5.0 x4) 1 x 2280 (PCIe 4.0 x4)	2 x 2280 (PCIe 5.0 x4) 1 x 22110 (PCIe 4.0 x4) 1 x 2280 (PCIe 4.0 x4)	2 x 2280 (PCIe 5.0 x4) 1 x 22110 (PCIe 4.0 x4) 1 x 2280 (PCIe 4.0 x4)	1 x 2280 (PCIe 5.0 x4) 1 x 22110 (PCIe 4.0 x4) 1 x 2280 (PCIe 4.0 x4)	2 x 2280 (PCIe 5.0 x4) 1 x 22110 (PCIe 4.0 x4) 1 x 2280 (PCIe 4.0 x4)	1 x 2280 (PCIe 5.0 x4) 2 x 2280 (PCIe 4.0 x4) 1 x 22110 (PCIe 3.0 x4 & SATA)	1 x 2280 (PCIe 5.0 x4) 2 x 2280 (PCIe 4.0 x4) 1 x 22110 (PCIe 3.0 x4 & SATA)	1 x 2280 (PCIe 5.0 x4) 2 x 2280 (PCIe 4.0 x4) 1 x 22110 (PCIe 3.0 x4 & SATA)	1 x 2280 (PCIe 5.0 x4) 1 x 22110 (PCIe 4.0 x4) 1 x 2280 (PCIe 4.0 x4)	1 x 2280 (PCIe 5.0 x4) 1 x 22110 (PCIe 4.0 x4) 1 x 2280 (PCIe 4.0 x4)	1 x 2280 (PCIe 5.0 x4) 1 x 22110 (PCIe 4.0 x4) 1 x 2280 (PCIe 4.0 x4)
	Front Panel Type-C Connector	1 x USB 3.2 Gen 2x2 (with Quick Charge 4+) 1 x USB 3.2 Gen 2	1 x USB 3.2 Gen 2x2 (with Quick Charge 4+)	1 x USB 3.2 Gen 2x2 (with Quick Charge 4+)	1 x USB 3.2 Gen 2x2	1 x USB 3.2 Gen 2x2	1 x USB 3.2 Gen 2x2	1 x USB 3.2 Gen 2	1 x USB 3.2 Gen 2x2 (with Quick Charge 4+)	1 x USB 3.2 Gen 2	1 x USB 3.2 Gen 2	1 x USB 3.2 Gen 2	1 x USB 3.2 Gen 1	1 x USB 3.2 Gen 1	1 x USB 3.2 Gen 1
	USB [®]	2	2	2	—	—	—	2	2	—	—	—	—	—	—
	USB 3.2 Gen 2x2	2 (10GB, 10GB)	2 (10GB, 10GB)	1 (10GB)	2 (10GB, 10GB)	2 (10GB, 10GB)	2 (10GB, 10GB)	—	2 (10GB, 10GB)	1 (10GB, 10GB)	1 (10GB)	1 (10GB)	1 (10GB)	1 (10GB)	1 (10GB)
	USB 3.2 Gen 2	10 (8A10GB, 10GB)	9 (8A10GB)	6 (8A10GB)	12 (10A+2C 8B)	9 (7A20GB)	8 (7A10GB)	6 (5A8B, 10GB, 10GB ROG STRIX HIVE)	7 (7A8B)	5 (1C3A8B, 10GB)	5 (1C3A8B, 10GB)	5 (1C3A8B, 10GB)	5 (1C3A8B, 10GB)	3 (2A8B)	3 (2A8B)
USB 3.2 Gen 1	4 (4GB)	4 (4GB)	2 (2GB)	2 (2A8B)	2 (2A8B)	3 (1A8B, 2A8B)	2 (2A8B)	7 (1A8B, 2A8B)	7 (5A8B, 2A8B)	7 (5A8B, 2A8B)	7 (4A10GB, 2A8B)	9 (4A8B, 4A+10GB)	9 (4A8B, 4A+10GB)	9 (4A8B, 4A+10GB)	
USB 2.0	4 (4GB)	6 (6GB)	6 (2GB, 4GB)	6 (2A8B, 4A8B)	6 (2A8B, 4A8B)	6 (2A8B, 4A8B)	6 (3A8B, 3B8B-II, 1A8B ROG STRIX HIVE)	2 (1A8B, 2A8B)	6 (6A8B)	6 (6A8B)	6 (6A8B)	6 (2GB, 4GB)	6 (2GB, 4GB)	6 (2GB, 4GB)	
Wireless	Wi-Fi 6E	Wi-Fi 6E	Wi-Fi 6E	Wi-Fi 6E	Wi-Fi 6E	Wi-Fi 6E	Wi-Fi 6E	Wi-Fi 6E	Wi-Fi 6E	Wi-Fi 6E	Wi-Fi 6E	Wi-Fi 6E	Wi-Fi 6E	1 x V-M.2 slot (Key E)	
Networking	Ethernet	1 x Intel [®] 2.5 Gb 1 x Marvel [®] 10 Gb	1 x Intel [®] 2.5 Gb	1 x Intel [®] 2.5 Gb	1 x Intel [®] 2.5 Gb	1 x Intel [®] 2.5 Gb	1 x Intel [®] 2.5 Gb	1 x Intel [®] 2.5 Gb	1 x Intel [®] 2.5 Gb 1 x Marvel [®] 10 Gb	1 x Realtek 2.5 Gb	1 x Realtek 2.5 Gb	1 x Realtek 2.5 Gb	1 x Realtek 2.5 Gb	1 x Realtek 2.5 Gb	
	Audio codec	ALC 4082	ALC 4082	ALC 4080	ALC 4080	ALC 4080	ALC 4080	ALC 4050	Realtek S1220A	Realtek S1220A	Realtek S1220A	Realtek S1220A	Realtek ALC 897, 3pack	Realtek ALC 897, 3pack	
	Impedance sense	V	V	V	V	V	V	V	V	V	V	V	—	—	
	DAC/AMP	ESS [®] ES9218 QUAD DAC	ESS [®] ES9218 QUAD DAC	Savitech SV3H712 AMP	Savitech SV3H712 AMP	Savitech SV3H712 AMP	Savitech SV3H712 AMP	ESS [®] ES9280 QUAD DAC	Internal AMP	Internal AMP	Internal AMP	Internal AMP	Internal AMP	—	—
	Audio cover	V	V	V	V	V	V	V	V	V	V	V	V	V	
	LED illuminated audio jacks	V	—	—	—	—	—	—	—	—	—	—	—	—	
	Premium capacitors	V	V	V	V	V	V	V	V	V	V	V	V	V	
	Audio effects	Sonic Studio III Sonic Studio Virtual Mixer Sonic Radar III DTS [®] Sound Unbound	Sonic Studio III Sonic Studio Virtual Mixer Sonic Radar III DTS [®] Sound Unbound	Sonic Studio III Sonic Studio Virtual Mixer Sonic Radar III DTS [®] Sound Unbound	Sonic Studio III Sonic Studio Virtual Mixer Sonic Radar III DTS [®] Sound Unbound	Sonic Studio III Sonic Studio Virtual Mixer Sonic Radar III DTS [®] Sound Unbound	Sonic Studio III Sonic Studio Virtual Mixer Sonic Radar III DTS [®] Sound Unbound	Sonic Studio III Sonic Studio Virtual Mixer Sonic Radar III DTS [®] Sound Unbound	Sonic Studio III Sonic Studio Virtual Mixer Sonic Radar III DTS [®] Sound Unbound	—	DTS Audio Processing	DTS Audio Processing	DTS [®] X [™] Ultra	—	—
Cooling	Onboard fan headers	8 ROG FAN CONTROLLER (bundled)	8	7	8	8	8	3	8	7	7	7	6	6	
	Heatsinked M.2	5	5	3	4	4	4	2	4	3	3	4	1	1	
	M.2 backplate	2	3	1	1	1	1	—	1	—	—	—	—	—	
Dynamic OC Switcher	V	V	V	V	V	V	V	V	V	V	V	V	—	—	
AI Overclocking	V	V	V	V	V	V	V	V	V	V	V	V	—	—	
AI Cooling II	V	V	V	V	V	V	V	V	V	V	V	V	V	V	
AI Networking (GameFirst VI)	V	V	V	V	V	V	V	V	CreationFirst	—	—	—	—	—	
Two-Way AI Noise-Cancellation	V	V	V	V	V	V	V	V	V	V	V	V	V	V	
DIY Friendly	M.2 Q-Latch	V	V	V	V	V	V	V	V	V	V	V	V	V	
	PCIe Slot Q-Release	V	V	V	V	V	V	V	V	V	V	V	V	V	
	PCIe 5.0 SafeSlot	V	V	V	V	V	V	V	V	V	V	V	V	V	
	SafeDIMM	V	V	V	V	V	V	V	V	V	V	V	V	V	
Pre-mount I/O shield	V	V	V	V	V	V	V	V	V	V	V	V	V		
BIOS FlashBack™	V	V	V	V	V	V	V	V	V	V	V	V	V		
Aura Sync	V	V	V	V	V	V	V	V	V	V	V	V	V		
Aura lighting control	3 x ARGB + 1 x RGB	3 x ARGB + 1 x RGB	2 x ARGB + 1 x RGB	3 x ARGB + 1 x RGB	3 x ARGB + 1 x RGB	3 x ARGB + 1 x RGB	3 x ARGB + 1 x RGB	1 x ARGB+1 x RGB	3 x ARGB + 1 x RGB	3 x ARGB + 1 x RGB	3 x ARGB + 1 x RGB	3 x ARGB + 1 x RGB	3 x ARGB + 2 x RGB	3 x ARGB + 2 x RGB	
CPU power connector	8+8 Pin ProCool II	8+8 Pin ProCool II	8+8 Pin ProCool II	8+8 Pin ProCool II	8+8 Pin ProCool II	8+8 Pin ProCool II	8+8 Pin ProCool II	8 Pin ProCool II	8+8 Pin ProCool	8+8 Pin ProCool	8+8 Pin ProCool	8+8 Pin ProCool	8+4 Pin ProCool	8+4 Pin ProCool	
COM port/ header	—	—	—	—	—	—	—	—	1	1	1	1	1	1	
TPM	Firmware TPM	Firmware TPM	Firmware TPM	Firmware TPM	Firmware TPM	Firmware TPM	Firmware TPM	Firmware TPM	Firmware TPM	Firmware TPM	Firmware TPM	TPM header	TPM header	TPM header	

