ASUS PRIME X670-P WIFI

Artikel	129289
Herstellernummer	90MB1BV0-M0EAY0
EAN	4711081884583

ASUS

PRIME X670-P WIFI
ASUS Prime series motherboards are expertly engineered to unleash the full potential of AMD Ryzen 7000-series processors. Boasting a robust power design, comprehensive cooling solutions and intelligent tuning options, PRIME X670-P WIFI provides users and PC DIY builders with a range of performance optimizations via intuitive software and firmware features.

FLEXIBILITY
Comprehensive controls form the foundation of the ASUS PRIME series. The PRIME X670 motherboard packs flexible tools to tune every aspect of your system, enabling performance tweaks to perfectly match the way you work to maximize productivity.

Intelligent Control

CPU Performance Boost
AMD Precision Boost Overdrive(PBO) pushes the CPU current and voltage budget to opportunistically increase performance. By aggressively tuning the PBO parameters, AMD‘s algorithm can leverage the motherboard’s robust power solution to ramp up performance even higher.

All-Around Energy Efficiency
The Power Saving function contains several settings can easily optimize power consumption and maximize energy savings. You can enable a CPU power limit, darken Aura lighting, and set the fan profile to a power saving mode. You can also toggle the Power Saver plan that is built into Microsoft Windows.

Flexible Air- and Liquid-Cooling Controls
ASUS Fan Xpert 4 software provides comprehensive control over fans and all-in-one (AIO) coolers. Whether cooling with air or water, an Auto-Tuning mode intelligently configures all parameters with a single click. There’s also an Extreme Quiet mode that reduces all fan speeds to below the default minimum to keep your system whisper-quiet when performing light tasks. Fans and AIO coolers can also be controlled via the UEFI BIOS.

Precise Digital Power Control
The Digi+ voltage-regulator module (VRM) delivers real-time control over voltage droop, automatically switching frequency and power-efficiency settings. It also allows you to fine-tune your CPU for ultimate stability and performance.

AI Cooling II
AI Cooling II balances the thermals and acoustics of any build with a single click. A proprietary ASUS algorithm slashes unnecessary noise while running a quick stress test, and then it monitors CPU temperatures to dynamically adjust fans to optimal speeds.

UEFI BIOS
The renowned ASUS UEFI BIOS provides everything you need to configure, tweak and tune your system. It offers intelligently simplified options for PC DIY beginners, as well as comprehensive features for seasoned veterans.

Advanced Tuning for Serious Tweakers
An intuitive Advanced mode offered via the UEFI lets you take complete control. A built-in search feature makes it easy to find options, and various advanced functions let you intelligently make nuanced adjustments so you can dial in performance just the way you want.

Search Function
Quickly and easily find the option or setting you need.

ASUS User Profile
Port configuration settings between different BIOS versions or share them with friends.

Quick and Simple Setup
EZ mode displays vital settings and stats and also offers guided wizards, drag-and-drop functionality, and one-click application of important settings — all to help you get your rig up and running in no time.

Intuitive Graphical Fan Control
Fine-tune individual fan settings simply by dragging a curve with the mouse.

Aura On/Off Mode (Stealth)
Easily enable or disable Aura RGB lighting or every onboard LED, for a subdued aesthetic touch.

COOLING
PRIME X670 series is engineered with multiple onboard heatsinks and an array of hybrid fan headers to ensure your rig stays cool and stable under intense workloads.

M.2 Heatsink
An M.2 heatsink takes care of the M.2 slot, warding off throttling that can occur with M.2 storage during sustained transfers.

VRM Heatsinks and High-quality Thermal Pads
Two massive VRM heatsinks and high-quality thermal pads improve heat transfer from the MOSFETs and chokes for better cooling performance.

Passive Chipset Heatsink
An aluminum passive chipset heatsink ensures optimal cooling for more stable performance. The passive heatsink approach is more durable and longer-lasting, avoiding dust and dirt build-up problems often encountered by conventional active heatsinks with dedicated fan designs.

Cooler by Design
PRIME X670 series features comprehensive cooling controls that are configurable via Fan Xpert 4 software or via the UEFI BIOS.

Multiple Temperature Sources
Each header can dynamically reference four thermal sensors. Fan Xpert 4 allows you to map the temperature of supported ASUS graphics cards to optimize cooling for GPU- and CPU-intensive tasks.

AIO Pump Header
A dedicated PWM/DC header for self-contained water-cooling setups.

Smart Protection
A dedicated integrated circuit protects each fan header from overheating and overcurrent.

4-Pin PWM/DC Fan
Each onboard header supports auto-detection of PWM or DC fans.

PERFORMANCE
The PRIME X670 series is built to handle the high core counts and bandwidth demands of AMD processors. ASUS X670 motherboard provides all the fundamentals to boost daily productivity, so your system will be ready for action with stable power, intuitive cooling and flexible data transfer options.

Robust Power Design
Stable power is essential to extract every last bit of performance out of AMD processors. The PRIME X670-P WIFI is geared to cater to the demands of these high-core-count CPUs.

ProCool Connectors
Proprietary connectors augment the motherboard's link to the PSU with 4 pin+8 pin connectors that pass 12 volts of power directly to the processors. Each jack features solid pins that can handle more current than hollow-pin connectors.

12+2 DrMOS Power Stages
12+2 DrMOS power stages combine high-side and low-side MOSFETS and drivers into packages rated for 60 amperes each, delivering power, efficiency, stability and performance to current and future AMD processors.

Six-Layer PCB Design
Multiple PCB layers optimize heat management for critical components, providing more headroom to push CPUs beyond stock speeds.

Stack Cool 3+
2-ounce copper layers draw heat away from critical components to keep them at their optimal operating temperatures and provide more headroom to push CPUs beyond stock speeds.

DDR5 Performance Enhancement
Comprehensive memory tuning options are the cornerstone of PRIME motherboards. With the PRIME X670-P WIFI, you can extract all of the potential out of your DDR5 modules, whether they're from an extreme-speed kit or an entry-level set that would otherwise be locked.

For entry-level modules without EXPOTM memory support, we've got you covered.

For those who want to fly past stock DDR5 speeds, the PRIME X670-P WIFI is primed and ready for enthusiast-grade kits courtesy of vast AMD Extended Profiles for Overclocking (EXPOTM) support. Seasoned veterans can further tweak performance via the extensive array of settings in the UEFI.

ASUS OptiMem II
Revisions to the motherboard's trace routing provide the latest Intel processors with unrestricted access to memory bandwidth. ASUS OptiMem II technology carefully maps memory signal pathways across different PCB layers to reduce vias and adds shielding zones that significantly reduce crosstalk.

Benefits of ASUS OptiMem II:

- Improved memory stability and compatibility
- Allows lower memory latencies at equivalent voltages
- Improved memory frequency margin

Motherboards with OptiMem II technology were tested with Synopsys HSPICE simulation software

Storage
PCIe 5.0 M.2 Support
PRIME X670-P WIFI offers a total of three M.2 slots, the first one supports data-transfer speeds of up to 128Gbps via PCIe 5.0, enabling quicker boot-up and app load times with OS or application drives.

*Actual transmission speeds will be lower than the theoretical maximum speed.

Connectivity

PCIe 4.0 Slot
Prime X670 motherboards offer PCIe 4.0 Slot connectivity for the latest GPUs. The wide bandwidth and superfast transmission speeds allow you to create feature-rich builds that can handle high loads effortlessly.

USB 3.2 Gen 2x2 Type-C®
A batch of USB ports support high-end rigs loaded with peripherals, including a rear USB Type-C® connector with ultrafast USB 3.2 Gen 2x2 for transmission speeds of up to 20Gbps.

Front USB Type-C®
A full complement of USB ports support high-end rigs loaded with peripherals, including a front-panel USB 3.2 Gen 1 Type-C® connector that provides data transfer speeds of up to 5Gbps.

USB4 ® Support
PRIME X670 motherboard features USB4® support via a Thunderbolt™ (USB4®) header. With an ASUS add-on card*, PRIME motherboards can enable bi-directional speeds of up to 40 Gbps on a single cable, while providing power to fast-charge device. Additionally, this card has a daisy-chain function for multi-screen connection and supports up to dual displays with 4K resolution. *ASUS add-on card is sold separately. WiFi 6 The WiFi 6 module is compatible with the 802.11ax standard and pushes theoretical peak bandwidth up to an incredible 1.2Gbps. Perhaps more importantly for power users, it's optimized for more efficient operation on crowded networks with a lot of competing traffic. Pair your motherboard with ASUS WiFi 6 routers to fully experience the networking potential of WiFi 6 *Actual speed varies, and depends on networking

WiFi 6
The WiFi 6 module is compatible with the 802.11ax standard and pushes theoretical peak bandwidth up to an incredible 1.2Gbps. Perhaps more importantly for power users, it's optimized for more efficient operation on crowded networks with a lot of competing traffic. Pair your motherboard with ASUS WiFi 6 routers to fully experience the networking potential of WiFi 6.

Realtek 2.5 Gb Ethernet
Realtek 2.5 Gb Ethernet reduces CPU overhead and offers exceptionally high TCP and UDP throughput for faster, smoother data transfers.

LANGuard
ASUS LANGuard is a hardware-level network protection feature that integrates advanced signal-coupling technology and premium anti-EMI surface-mounted capacitors to improve throughput and ensure a more reliable connection.

CUSTOMIZATION
The PRIME X670 series adds the nuanced details that improve every experience, from exclusive codecs that provide pristine audio quality to intuitive RGB lighting controls that let you customize your system to create a uniquely personal look.

Outstanding Audio
Combined onboard features deliver elevated audio
Intelligent design and premium hardware create audio quality unlike anything you've ever experienced.

Audio Shielding
Audio shielding ensures precision analog/digital separation and greatly reduced multi-lateral interference.

Dedicated Audio PCB Layers
Separate layers for left and right tracks ensures both channels deliver consistent, equal quality.

Premium Audio Capacitors
Provides warm, natural, and immersive sound with exceptional clarity and fidelity.

Personalization

Aura Sync
Outshine the Competition
A well-tuned enthusiast system deserves a matching aesthetic. ASUS Aura offers full RGB lighting control with a variety of functional presets for the built-in RGB LEDs as well as strips and devices connected to the onboard RGB headers — and it can all be synced with an ever-growing portfolio of Aura-capable hardware.

Addressable Gen 2 Headers
Three addressable Gen 2 headers are capable of detecting the number of LEDs on second-gen addressable RGB devices, allowing the software to automatically tailor lighting effects to specific devices. The new headers also offer backward-compatibility with existing Aura RGB gear.

Armoury Crate
Within a single intuitive interface, Armoury Crate offers easily customized Aura Sync RGB settings for every compatible device in your arsenal , plus controls for an ever-growing family of ASUS products, including keyboard and mouse preferences. Armoury Crate also integrates product registration and a news feed so that you never miss updates of interest to the ASUS community.

DIY Friendly

Q-LED Core
The Q-LED Core display produces light patterns by power LED during the Power-On Self-Test (POST) that can help users troubleshoot potential issues.

Q-Latch
The innovative Q-Latch makes it easy to install or remove an M.2 SSD without the need for specific tools. The design employs a simple locking mechanism to secure the drive and neatly eliminate traditional screws.

BIOS FlashBack™
BIOS FlashBack™ is the simplest and safest (UEFI) BIOS update method. Simply drop the (UEFI) BIOS file onto a FAT32 formatted USB stick, plug it into the USB BIOS FlashBack™ port and press the button. Updates can even be performed without a memory or a CPU installed.

SafeSlot Core+
PCIe 4.0 is 2x faster than PCIe 3.0, so we adapted our SMT manufacturing process for the faster SafeSlot Core+, to ensure the highest data speeds. SafeSlot Core+ is a reinforced metal sheath added to a PCIe slot to keep a card firmly installed.

Overvoltage Protection
World-class circuit-protecting power design
An exclusive circuit design with built-in voltage regulators to protect your motherboard from damage caused by unexpected high-level voltages from unstable or inferior power supplies.

THIS CHANGES EVERYTHING.
FROM THIS NEW PLATFORM, YOU CAN SEE THE FUTURE
Build your next rig with an AMD Ryzen™ 7000 Series processor and PRIME X670-P WIFI to experience advanced performance. With up to 16 “Zen 4” cores and 32 threads, boost clocks of up to 5.7GHz, and 80MB cache, the AMD Ryzen™ 7000 Series keeps you ahead of the game.1

You’ll also gain access to new features for gamers with AMD Socket AM5, from the speed of DDR5 memory to the increased bandwidth of PCIe® 5.0. AMD Ryzen™ 7000 Series processors and AMD socket AM5 motherboards are unlocked for overclocking to personalize your experience. Gain even more performance when you overclock your DDR5 memory with AMD EXPO™ technology.2

Stainless-Steel Back I/O
3X corrosion-resistance for greater durability
Corrosion-resistant stainless-steel back I/O panels bonded with chromium oxide have a lifespan that's three times longer than ordinary panels.

Zusammenfassung

PRIME X670-P WIFI
ASUS Prime series motherboards are expertly engineered to unleash the full potential of AMD Ryzen 7000-series processors. Boasting a robust power design, comprehensive cooling solutions and intelligent tuning options, PRIME X670-P WIFI provides users and PC DIY builders with a range of performance optimizations via intuitive software and firmware features.

FLEXIBILITY
Comprehensive controls form the foundation of the ASUS PRIME series. The PRIME X670 motherboard packs flexible tools to tune every aspect of your system, enabling performance tweaks to perfectly match the way you work to maximize productivity.

Intelligent Control

CPU Performance Boost
AMD Precision Boost Overdrive(PBO) pushes the CPU current and voltage budget to opportunistically increase performance. By aggressively tuning the PBO parameters, AMD‘s algorithm can leverage the motherboard’s robust power solution to ramp up performance even higher.

All-Around Energy Efficiency
The Power Saving function contains several settings can easily optimize power consumption and maximize energy savings. You can enable a CPU power limit, darken Aura lighting, and set the fan profile to a power saving mode. You can also toggle the Power Saver plan that is built into Microsoft Windows.

Flexible Air- and Liquid-Cooling Controls
ASUS Fan Xpert 4 software provides comprehensive control over fans and all-in-one (AIO) coolers. Whether cooling with air or water, an Auto-Tuning mode intelligently configures all parameters with a single click. There’s also an Extreme Quiet mode that reduces all fan speeds to below the default minimum to keep your system whisper-quiet when performing light tasks. Fans and AIO coolers can also be controlled via the UEFI BIOS.

Precise Digital Power Control
The Digi+ voltage-regulator module (VRM) delivers real-time control over voltage droop, automatically switching frequency and power-efficiency settings. It also allows you to fine-tune your CPU for ultimate stability and performance.

AI Cooling II
AI Cooling II balances the thermals and acoustics of any build with a single click. A proprietary ASUS algorithm slashes unnecessary noise while running a quick stress test, and then it monitors CPU temperatures to dynamically adjust fans to optimal speeds.

UEFI BIOS
The renowned ASUS UEFI BIOS provides everything you need to configure, tweak and tune your system. It offers intelligently simplified options for PC DIY beginners, as well as comprehensive features for seasoned veterans.

Advanced Tuning for Serious Tweakers
An intuitive Advanced mode offered via the UEFI lets you take complete control. A built-in search feature makes it easy to find options, and various advanced functions let you intelligently make nuanced adjustments so you can dial in performance just the way you want.

Search Function
Quickly and easily find the option or setting you need.

ASUS User Profile
Port configuration settings between different BIOS versions or share them with friends.

Quick and Simple Setup
EZ mode displays vital settings and stats and also offers guided wizards, drag-and-drop functionality, and one-click application of important settings — all to help you get your rig up and running in no time.

Intuitive Graphical Fan Control
Fine-tune individual fan settings simply by dragging a curve with the mouse.

Aura On/Off Mode (Stealth)
Easily enable or disable Aura RGB lighting or every onboard LED, for a subdued aesthetic touch.

COOLING
PRIME X670 series is engineered with multiple onboard heatsinks and an array of hybrid fan headers to ensure your rig stays cool and stable under intense workloads.

M.2 Heatsink
An M.2 heatsink takes care of the M.2 slot, warding off throttling that can occur with M.2 storage during sustained transfers.

VRM Heatsinks and High-quality Thermal Pads
Two massive VRM heatsinks and high-quality thermal pads improve heat transfer from the MOSFETs and chokes for better cooling performance.

Passive Chipset Heatsink
An aluminum passive chipset heatsink ensures optimal cooling for more stable performance. The passive heatsink approach is more durable and longer-lasting, avoiding dust and dirt build-up problems often encountered by conventional active heatsinks with dedicated fan designs.

Cooler by Design
PRIME X670 series features comprehensive cooling controls that are configurable via Fan Xpert 4 software or via the UEFI BIOS.

Multiple Temperature Sources
Each header can dynamically reference four thermal sensors. Fan Xpert 4 allows you to map the temperature of supported ASUS graphics cards to optimize cooling for GPU- and CPU-intensive tasks.

AIO Pump Header
A dedicated PWM/DC header for self-contained water-cooling setups.

Smart Protection
A dedicated integrated circuit protects each fan header from overheating and overcurrent.

4-Pin PWM/DC Fan
Each onboard header supports auto-detection of PWM or DC fans.

PERFORMANCE
The PRIME X670 series is built to handle the high core counts and bandwidth demands of AMD processors. ASUS X670 motherboard provides all the fundamentals to boost daily productivity, so your system will be ready for action with stable power, intuitive cooling and flexible data transfer options.

Robust Power Design
Stable power is essential to extract every last bit of performance out of AMD processors. The PRIME X670-P WIFI is geared to cater to the demands of these high-core-count CPUs.

ProCool Connectors
Proprietary connectors augment the motherboard's link to the PSU with 4 pin+8 pin connectors that pass 12 volts of power directly to the processors. Each jack features solid pins that can handle more current than hollow-pin connectors.

12+2 DrMOS Power Stages

12+2 DrMOS power stages combine high-side and low-side MOSFETS and drivers into packages rated for 60 amperes each, delivering power, efficiency, stability and performance to current and future AMD processors.

Six-Layer PCB Design
Multiple PCB layers optimize heat management for critical components, providing more headroom to push CPUs beyond stock speeds.

Stack Cool 3+
2-ounce copper layers draw heat away from critical components to keep them at their optimal operating temperatures and provide more headroom to push CPUs beyond stock speeds.

DDR5 Performance Enhancement
Comprehensive memory tuning options are the cornerstone of PRIME motherboards. With the PRIME X670-P WIFI, you can extract all of the potential out of your DDR5 modules, whether they're from an extreme-speed kit or an entry-level set that would otherwise be locked.

For entry-level modules without EXPOTM memory support, we've got you covered.

For those who want to fly past stock DDR5 speeds, the PRIME X670-P WIFI is primed and ready for enthusiast-grade kits courtesy of vast AMD Extended Profiles for Overclocking (EXPOTM) support. Seasoned veterans can further tweak performance via the extensive array of settings in the UEFI.

ASUS OptiMem II
Revisions to the motherboard's trace routing provide the latest Intel processors with unrestricted access to memory bandwidth. ASUS OptiMem II technology carefully maps memory signal pathways across different PCB layers to reduce vias and adds shielding zones that significantly reduce crosstalk.

Benefits of ASUS OptiMem II:

- Improved memory stability and compatibility
- Allows lower memory latencies at equivalent voltages
- Improved memory frequency margin

Motherboards with OptiMem II technology were tested with Synopsys HSPICE simulation software

Storage
PCIe 5.0 M.2 Support
PRIME X670-P WIFI offers a total of three M.2 slots, the first one supports data-transfer speeds of up to 128Gbps via PCIe 5.0, enabling quicker boot-up and app load times with OS or application drives.

*Actual transmission speeds will be lower than the theoretical maximum speed.

Connectivity

PCIe 4.0 Slot
Prime X670 motherboards offer PCIe 4.0 Slot connectivity for the latest GPUs. The wide bandwidth and superfast transmission speeds allow you to create feature-rich builds that can handle high loads effortlessly.

USB 3.2 Gen 2x2 Type-C®
A batch of USB ports support high-end rigs loaded with peripherals, including a rear USB Type-C® connector with ultrafast USB 3.2 Gen 2x2 for transmission speeds of up to 20Gbps.

Front USB Type-C®
A full complement of USB ports support high-end rigs loaded with peripherals, including a front-panel USB 3.2 Gen 1 Type-C® connector that provides data transfer speeds of up to 5Gbps.

USB4 ® Support
PRIME X670 motherboard features USB4® support via a Thunderbolt™ (USB4®) header. With an ASUS add-on card*, PRIME motherboards can enable bi-directional speeds of up to 40 Gbps on a single cable, while providing power to fast-charge device. Additionally, this card has a daisy-chain function for multi-screen connection and supports up to dual displays with 4K resolution. *ASUS add-on card is sold separately. WiFi 6 The WiFi 6 module is compatible with the 802.11ax standard and pushes theoretical peak bandwidth up to an incredible 1.2Gbps. Perhaps more importantly for power users, it's optimized for more efficient operation on crowded networks with a lot of competing traffic. Pair your motherboard with ASUS WiFi 6 routers to fully experience the networking potential of WiFi 6 *Actual speed varies, and depends on networking

WiFi 6
The WiFi 6 module is compatible with the 802.11ax standard and pushes theoretical peak bandwidth up to an incredible 1.2Gbps.

Perhaps more importantly for power users, it's optimized for more efficient operation on crowded networks with a lot of competing traffic. Pair your motherboard with ASUS WiFi 6 routers to fully experience the networking potential of WiFi 6.

Realtek 2.5 Gb Ethernet
Realtek 2.5 Gb Ethernet reduces CPU overhead and offers exceptionally high TCP and UDP throughput for faster, smoother data transfers.

LANGuard
ASUS LANGuard is a hardware-level network protection feature that integrates advanced signal-coupling technology and premium anti-EMI surface-mounted capacitors to improve throughput and ensure a more reliable connection.

CUSTOMIZATION
The PRIME X670 series adds the nuanced details that improve every experience, from exclusive codecs that provide pristine audio quality to intuitive RGB lighting controls that let you customize your system to create a uniquely personal look.

Outstanding Audio
Combined onboard features deliver elevated audio
Intelligent design and premium hardware create audio quality unlike anything you've ever experienced.

Audio Shielding
Audio shielding ensures precision analog/digital separation and greatly reduced multi-lateral interference.

Dedicated Audio PCB Layers
Separate layers for left and right tracks ensures both channels deliver consistent, equal quality.

Premium Audio Capacitors
Provides warm, natural, and immersive sound with exceptional clarity and fidelity.

Personalization

Aura Sync
Outshine the Competition
A well-tuned enthusiast system deserves a matching aesthetic. ASUS Aura offers full RGB lighting control with a variety of functional presets for the built-in RGB LEDs as well as strips and devices connected to the onboard RGB headers — and it can all be synced with an ever-growing portfolio of Aura-capable hardware.

Addressable Gen 2 Headers
Three addressable Gen 2 headers are capable of detecting the number of LEDs on second-gen addressable RGB devices, allowing the software to automatically tailor lighting effects to specific devices. The new headers also offer backward-compatibility with existing Aura RGB gear.

Armoury Crate
Within a single intuitive interface, Armoury Crate offers easily customized Aura Sync RGB settings for every compatible device in your arsenal , plus controls for an ever-growing family of ASUS products, including keyboard and mouse preferences. Armoury Crate also integrates product registration and a news feed so that you never miss updates of interest to the ASUS community.

DIY Friendly

Q-LED Core
The Q-LED Core display produces light patterns by power LED during the Power-On Self-Test (POST) that can help users troubleshoot potential issues.

Q-Latch
The innovative Q-Latch makes it easy to install or remove an M.2 SSD without the need for specific tools. The design employs a simple locking mechanism to secure the drive and neatly eliminate traditional screws.

BIOS FlashBack™
BIOS FlashBack™ is the simplest and safest (UEFI) BIOS update method. Simply drop the (UEFI) BIOS file onto a FAT32 formatted USB stick, plug it into the USB BIOS FlashBack™ port and press the button. Updates can even be performed without a memory or a CPU installed.

SafeSlot Core+
PCIe 4.0 is 2x faster than PCIe 3.0, so we adapted our SMT manufacturing process for the faster SafeSlot Core+, to ensure the highest data speeds. SafeSlot Core+ is a reinforced metal sheath added to a PCIe slot to keep a card firmly installed.

Overvoltage Protection

World-class circuit-protecting power design
An exclusive circuit design with built-in voltage regulators to protect your motherboard from damage caused by unexpected high-level voltages from unstable or inferior power supplies.

THIS CHANGES EVERYTHING.
FROM THIS NEW PLATFORM, YOU CAN SEE THE FUTURE
Build your next rig with an AMD Ryzen™ 7000 Series processor and PRIME X670-P WIFI to experience advanced performance. With up to 16 “Zen 4” cores and 32 threads, boost clocks of up to 5.7GHz, and 80MB cache, the AMD Ryzen™ 7000 Series keeps you ahead of the game.1

You’ll also gain access to new features for gamers with AMD Socket AM5, from the speed of DDR5 memory to the increased bandwidth of PCIe® 5.0. AMD Ryzen™ 7000 Series processors and AMD socket AM5 motherboards are unlocked for overclocking to personalize your experience. Gain even more performance when you overclock your DDR5 memory with AMD EXPO™ technology.2

Stainless-Steel Back I/O
3X corrosion-resistance for greater durability
Corrosion-resistant stainless-steel back I/O panels bonded with chromium oxide have a lifespan that's three times longer than ordinary panels.

ASUS PRIME X670-P WIFI, AMD, Socket AM5, DDR5-SDRAM, 128 GB, DIMM, Dual-channel

ASUS PRIME X670-P WIFI. Processor manufacturer: AMD, Processor socket: Socket AM5. Supported memory types: DDR5-SDRAM, Maximum internal memory: 128 GB, Memory slots type: DIMM. Supported storage drive interfaces: M.2, SATA III, Supported storage drive types: HDD & SSD, RAID levels: 0, 1, 10. Maximum resolution: 3840 x 2160 pixels. Ethernet interface type: 2.5 Gigabit Ethernet, Fast Ethernet, Gigabit Ethernet, Top Wi-Fi standard: Wi-Fi 6 (802.11ax), Wi-Fi standards: 802.11a, 802.11b, 802.11g, Wi-Fi 4 (802.11n), Wi-Fi 5 (802.11ac), Wi-Fi 6 (802.11ax)

Merkmale

Graphics

Maximum resolution	3840 x 2160 pixels

Other features

Weight	1.22 kg

BIOS

BIOS type	UEFI AMI
BIOS memory size	256 Mbit

Processor

Processor manufacturer	AMD
Processor socket	Socket AM5

Weight & dimensions

Width	305 mm
Depth	244 mm

Expansion slots

Storage controllers

Supported storage drive types	HDD & SSD
Supported storage drive interfaces	M.2, SATA III
Number of storage drives supported	9
RAID support	Y
RAID levels	0, 1, 10

Features

Motherboard chipset	AMD X670
Audio output channels	7.1 channels
Component for	PC
Motherboard form factor	ATX
Motherboard chipset family	AMD
Windows operating systems supported	Windows 10 x64, Windows 11 x64

Network

Ethernet LAN	Y
Ethernet interface type	2.5 Gigabit Ethernet, Fast Ethernet, Gigabit Ethernet
Wi-Fi	Y
Top Wi-Fi standard	Wi-Fi 6 (802.11ax)
Wi-Fi standards	802.11a, 802.11b, 802.11g, Wi-Fi 4 (802.11n), Wi-Fi 5 (802.11ac), Wi-Fi 6 (802.11ax)
Bluetooth	Y

PCI Express x1 (Gen 3.x) slots	1
PCI Express x16 (Gen 4.x) slots	3
Number of M.2 (M) slots	3

Packaging data

Package width	338 mm
Package depth	68 mm
Package height	273 mm
Package weight	1.9 kg

Bluetooth version	5.2

Rear panel I/O ports

USB 2.0 ports quantity	2
USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity	4
USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity	3
USB 3.2 Gen 2x2 Type-C ports quantity	1
Ethernet LAN (RJ-45) ports	1
PS/2 ports quantity	1
HDMI ports quantity	1
DisplayPorts quantity	1

Memory

Supported memory types	DDR5-SDRAM
Number of memory slots	4
Memory slots type	DIMM
Memory channels	Dual-channel
ECC	Y
Non-ECC	Y
Supported memory clock speeds	4800,5100,5200,5400,5600,5800,6000,6200,6400 MHz
Maximum internal memory	128 GB
Unbuffered memory	Y

Internal I/O

USB 2.0 connectors	2
USB 3.2 Gen 1 (3.1 Gen 1) connectors	3
Number of SATA III connectors	6
S/PDIF out connector	Y
Front panel audio connector	Y
ATX Power connector (24-pin)	Y
CPU fan connector	Y
Number of chassis fan connectors	3
Peripheral (Molex) power connectors (4-pin)	1
EPS power connector (8-pin)	Y
Number of COM connectors	1
TPM connector	Y
Thunderbolt headers	1