ROG-STRIX-B550-F-GAMINGWIFI-II

Asus ROG Strix B550-F Gaming WiFi II B550 Chipset AMD Ryzen AM4 Socket ATX Motherboard with WiFi

Product Overview

Asus ROG Strix B550-F Gaming WiFi II AMD B550 Ryzen AM4 Gaming ATX motherboard with PCIe 4.0, 12+2 teamed power stages, Intel 2.5 Gb Ethernet, WiFi 6E, Two-Way AI Noise Cancelation, dual M.2 slots with heatsinks, SATA 6 Gbps, USB 3.2 Gen 2 and Aura Sync RGB lighting



Specifications

Overview:

ROG Strix B550 Gaming series motherboards offer a feature-set usually found in the higher-end ROG Strix X570 Gaming series, including the latest PCIe® 4.0. With robust power delivery and effective cooling, ROG Strix B550 Gaming is well-equipped to handle Zen 3 architecture AMD Ryzen™ CPUs. Boasting futuristic aesthetics and intuitive ROG software, ROG Strix B550-F Gaming WiFi II gives you a head start on your dream build. This platform delivers the power and connectivity that advanced AI PC applications demand.

Features:

- Best gaming connectivity: PCIe® 4.0-ready, dual M.2 slots, USB 3.2 Gen 2 Type-C®, plus HDMI® 2.1 and DisplayPort™ 1.2 output
- Smooth networking: On-board WiFi 6E (802.11ax) and Intel® 2.5 Gb Ethernet with ASUS LANGuard
- Robust power solution: 12+2 teamed power stages with ProCool power connector, high-quality alloy chokes and durable capacitors
- Renowned software: Intuitive dashboards for UEFI BIOS and ASUS AI Networking for easy configuration
- DIY-friendly design: Includes pre-mounted I/O shield, BIOS FlashBack™, Q-LEDs and SafeSlot
- Unmatched personalization: ASUS-exclusive Aura Sync RGB lighting, including Aura RGB and addressable Gen 2 RGB headers
- Industry-leading gaming audio: Two-Way AI Noise Cancelation, SupremeFX S1220A codec, DTS® Sound Unbound™ and Sonic Studio III for immersive sound

Advance Your Gaming Immersion
ROG Strix B550-F Gaming WiFi II is PCIe® 4.0-ready and provides the latest connectivity options for supersmooth networking and blisteringly fast file transfers. Audio enhancements give you a massive advantage, allowing you to pick up on the subtlest of cues for a completely immersive gaming experience.

PCIe 4.0-Ready
ROG Strix B550-F Gaming WiFi II features two M.2 slots, one of which supports the PCIe 4.0 standard to provide maximum storage flexibility and the lightning-fast data speeds. Both M.2 slots support up to the type 22110 socket and NVM Express® RAID for a performance boost.

WiFi 6E
Onboard WiFi 6E technology takes advantage of the newly available radio spectrum in the 6 GHz band. It delivers ultrafast wireless networking speeds and improved capacity as well as better performance in dense wireless environments.

Intel 2.5 Gb Ethernet
Onboard 2.5 Gb Ethernet gives your wired connection a boost, with speeds that are 2.5 times faster than standard Ethernet connections for speedy file transfers, lag-free gaming, and high-res video streaming.

WiFi 6E Antenna
The antenna has two built-in transmitters and receivers to enable faster transmission speeds, and it supports the 2.4, 5 and 6 GHz bands.

Adjustable Design
Four-way positioning enables better signal reception.

Magnetic Base
A powerful magnetic base secures the antenna on the top or side of the PC case.

SupremeFX
Built-in ROG SupremeFX audio technology ensures pristine audio for ROG Strix B550-F Gaming WiFi II. Along with ensuring a flat frequency response for a neutral, detailed sound signature, it offers two front-panel outputs driven by op amps that deliver high-quality audio to gaming headsets.

Audio cover
Effective shielding against electromagnetic interference preserves the integrity of audio signals for the best sound quality.

Audio-line shielding
Blocks electromagnetic interference from the motherboard or add-ons to provide cleaner audio.

Dual OP amplifiers
With two op-amps onboard you're able to pump exceptional audio to your favorite cans, with 32-600ohm-headphone impedance for great flexibility.

Premium audio capacitors
High-quality components produce a warmer, natural sound with exceptional clarity and fidelity.

Two-way AI Noise Cancelation
This powerful ASUS-exclusive utility leverages a massive deep-learning database to reduce background noise from the microphone* and incoming audio while preserving voices. Distracting keyboard clatter, mouse clicks and other ambient noises are removed so you can hear and be heard with perfect clarity while gaming or during calls.

SONIC STUDIO III
Sonic Studio supports HRTF-based (head-related transfer function*) virtual surround for VR headsets, casting an immersive aural landscape that draws you deeper into the action. The intuitive Sonic Studio interface also offers a range of EQ options and one-click presets, allowing you to tailor acoustics to suit personal preferences or the characteristics of your headset.

SONIC STUDIO LINK

The new Sonic Studio Link allows you to apply Sonic Studio effects on all playback devices. Simply press the Sonic Studio Link button to enjoy the effect on any connected device.

SONIC STUDIO VIRTUAL MIXER
Mix your voice and video game audio together using this software specifically designed for streaming applications. A variety of settings and monitoring.

APP-SPECIFIC PROFILES
Apply customized audio settings to various applications, so that each is perfectly tuned to the way you want to listen.

DTS: Sound Unbound DTS logo
ROG Strix B550 series motherboards are pre-loaded with the DTS® Sound Unbound™ app that envelops you in audio as never before, conjuring whole new levels of immersion for extraordinary gaming and entertainment experiences. By leveraging Windows Sonic spatial technology, DTS Sound Unbound delivers audio in a virtual 3D space - putting you right in the middle of the soundscape, where you can sense the location and direction of every gunshot, footstep or other sound in your virtual environment.

STEREO SOUND
Discrete left and right audio channels enable headphone or two-speaker setup.

SURROUND SOUND
Audio is split and served over multiple speaker channels - e.g., 5.1 or 7.1 - to create an enveloping experience on a single, logical plane.

SPATIAL SOUND
A virtual audio 'sphere' effect creates astonishing 360 degrees immersion - with you at the center, where sounds seem to travel in all directions.

ALL-ROUND PERFORMANCE
ROG Strix B550-F Gaming WiFi II provides robust power delivery to fuel Ryzen's cores, comprehensive cooling, and support for faster memory - so it has everything you need to load up your build with high-performance components for playing in the big leagues.

POWER DESIGN
Digital power control and an array of power stages ensure ROG Strix B550-F Gaming WiFi II has the muscle to control the latest AMD CPUs.

Procool POWER CONNECTOR
The ProCool socket is built to exacting specifications to ensure flush contact with the PSU power lines, enabling lower impedance and better heat dissipation.

DIGI+ POWER CONTROL
ASUS DIGI+ Power Control is an innovative set of controllers for digital VRM and DRAM Voltage. These controllers offer ultra precise memory and voltage tuning for optimal system efficiency, stability and performance.

TEAMED POWER STAGES
12+2 power stages combine high-side and low-side MOSFETs and drivers into a single package, delivering the power and efficiency that the latest AMD CPUs demand.

ALLOY CHOKE & DURABLE CAPACITOR
Superior chokes and durable capacitors are engineered to resist extreme temperatures and provide up to 110% better performance than the industry standard.

SIX-LAYER PCB
The 6-layer PCB quickly dissipates heat around the VRM to improve overall system stability and give the CPU more overclocking headroom.

Cooler by Design
ROG Strix B550 series features the most comprehensive cooling options ever, configurable via Fan Xpert 4 or the UEFI BIOS.

CPU Fan Header
A dedicated pair of PWM/DC fan headers for CPU coolers

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

M.2 Heatsink
Keeps the M.2 SSD at the optimum operating temperature for consistent performance and reliability.

4-pin PWM/DC Fan Header
All onboard headers support auto-detection of PWM or DC fans

VRM Heatsink
MOS heatsink provides large contact area for MOSFETs and chokes

Thermal Pad
High-quality thermal pad helps transfer heat from inductor and phase array to heatsink

ASUS OptiMem II
To provide AMD's latest CPUs unfettered access to memory bandwidth, motherboard trace routing has been reimagined with the ROG Strix B550-F Gaming WiFi II. Integrated OptiMem II technology carefully maps memory signal pathways across PCB layers to reduce vias, and it also adds shielding zones that significantly reduce crosstalk. To further enhance overclocking headroom for fully stacked memory configurations, a highly customized Daisy Chain layout delivers time-aligned signaling.

Play Your Own Style
The cyberpunk-inspired aesthetics of ROG Strix B550-F Gaming WiFi II are accentuated by the bold slashes and cybertext. By pairing your rig with other products from the diverse ROG ecosystem, you can create a fully customized gaming setup that reflects your personal style.

Undeniably ROG Strix
ROG Strix B550-F Gaming WiFi II embodies the ROG spirit with eye-catching aesthetics, including the next-generation distorted ROG eye logo and recessed cybertext patterning etched on the I/O shroud. These new designs move ROG Strix boldly into the future, while clearly reflecting the series' gaming roots.

OUTSHINE THE COMPETITION
ROG Strix motherboards deliver sterling performance and superior aesthetics to outshine the competition. They also feature built-in ASUS Aura technology that enables full RGB lighting control and a variety of presets for embedded RGB LEDs as well as lighting strips connected to onboard RGB headers. In addition, all lighting can be easily synced with an ever-growing portfolio of Aura-capable ASUS hardware.

Pre-mounted I/O shield
Patented I/O shield is finished in sleek matte black and comes pre-mounted to make it easy to install on the motherboard.

CERTIFIED COMPATIBILITY
ROG Strix motherboards undergo an extensive certification program to ensure the very best compatibility with the widest

range of components and devices. For a smooth build process, refer to our list of guaranteed-compatible components.

THE ROG STRIX ECOSYSTEM AWAITS
Level up your game with ROG Strix. Enjoy complementary aesthetics, control and compatibility across AIO coolers, cases, peripherals, and much more. ROG offers more choices than any other brand.

ROG Gives You More
ROG-exclusive software utilities deliver intuitive audio tuning and gaming enhancements that allow you to configure your gaming build the way you want.

UEFI BIOS
The renowned ROG UEFI (BIOS) provides everything you need to configure, tweak, and tune your rig. It offers intelligently simplified options for newcomers to PC DIY, as well as comprehensive features for seasoned veterans.

Advanced Mode
When you're ready for a deeper dive into the configuration of your system, delve into the UEFI's Advanced mode and take complete control. Each section is intuitively organized, and a built-in search feature makes it easy to find the options you need. Advanced functions are coded with the intelligence to adapt to your settings, and when you're ready to take charge, parameters have the granularity to dial in performance just the way you want.

EZ Mode
Designed to simplify setup, EZ mode presents all the vital settings and stats on a single page. With guided wizards, drag-and-drop functionality, and one-click application of important settings, your rig will be up and running in no time.

AI Networking
The proprietary ROG GameFirst VI utility is designed to help all users - beginners, experts, and everyone in between - optimize network settings to ensure smooth online gameplay. New to this generation, GameFirst VI features AI-enhanced identification and boost technology to ensure faster and smarter network optimization.

Identification
GameFirst VI analyzes your usage patterns and the digital signatures of your applications and compares them to a database of over 200,000 apps. The database is regularly updated to ensure that apps are recognized.

Boost
GameFirst VI intelligently switches application priority and adjusts bandwidth accordingly, depending on the situation. When gaming, it accelerates and prioritizes game packets to give you supersmooth online gameplay - even when you're streaming high-quality video to your audience or transferring large files.

Visualization
An intuitive graph gives you an overview of the network in real time. Simply click on the tab to view current bandwidth usage of each application, geolocation status of each network connection, and an analysis of each WiFi channel.

NETWORK INSIGHT
WiFi Quick Assist analyzes network information - including real-time bandwidth use - to generate a graph that provides a clear overview of current network status. When paired with a ROG router, WiFi Quick Assist lets you quickly scan your WiFi network to find the best channel; then you can use Game Boost to prioritize gaming devices and packets.

ADAPTIVE INTELLIGENCE
GameFirst VI analyzes current app usage and adjusts bandwidth accordingly to ensure smoother online experiences, even when multitasking.

GAMING FIRST MODE

Gaming First mode leverages a massive application database and an analysis of your frequently used apps to prioritize gaming network traffic. This reduces jitter and decreases ping to give you lag-free online gaming.

AIDA64 EXTREME
ROG Strix B550-F Gaming WiFi II includes a 60-day AIDA64 Extreme subscription. This industry-leading system information tool provides detailed information about installed hardware and software, and it also provides benchmarks for measuring performance of the entire system or individual components. AIDA64 Extreme includes a monitoring and diagnostics feature to detect and prevent hardware issues. All vital system sensors can be tracked in real time, allowing voltage readings, fan speeds, and temperature information to be displayed on the desktop or sent to dedicated displays or to the OLED panels of ROG AIO liquid coolers*.

Armoury Crate
Armoury Crate is a new software utility designed to give you centralized control of supported gaming products, making it easy to tune the look and feel of your system. From a single intuitive interface, Armoury Crate lets you easily customize RGB lighting and effects for compatible devices and synchronize them with Aura Sync to create a unified lighting scheme across your system. You can also use Armoury Crate to download the user manual, drivers and software. In addition, Armoury Crate features a dedicated product registration page as well as a news feed to help you stay in touch with the gaming community.

RAMCACHE III
RAMCache III software turns milliseconds into microseconds to boost game-load times. Fully compatible with the latest NVM Express® storage options, its uniquely intelligent technology effectively caches an entire storage device so that favorite games and apps launch at breakneck speeds.

Specifications:

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Specifications	
Product Code	ROG-STRIX-B550-F-GAMINGWIFI-II
CPU	AMD Ryzen 5000 Series/ 5000 G-Series/ 4000 G-Series/ 3000 Series Desktop Processors
Memory	AMD Ryzen 5000 and 3000 Series Desktop Processors
	4 x DIMM, Max. 128GB, DDR4 4800(O.C.) / 4666(O.C.) / 4600(O.C.) / 4400(O.C.) / 4266(O.C.) / 4133(O.C.) / 4000(O.C.) / 3866(O.C.) / 3733(O.C.) / 3600(O.C.) / 3466(O.C.) / 3400(O.C.) / 3200 / 3000 / 2933 / 2800 / 2666 / 2400 / 2133 MHz, Un-buffered Memory
	AMD Ryzen 5000 and 4000 G-Series Processors
	4 x DIMM, Max. 128GB, DDR4 5100(O.C) / 4866(O.C.) / 4600(O.C) / 4466(O.C.) / 4400(O.C) / 4266(O.C.) / 4133(O.C.) / 4000(O.C.) / 3866(O.C.) / 3600(O.C.) / 3466(O.C.) / 3200 / 3000 / 2800 / 2666 / 2400 / 2133 MHz, Un-buffered Memory
	ECC Memory (ECC mode) support varies by CPU.
Graphics	1 x DisplayPort 1.2
	1 x HDMI port
	*Graphics specifications may vary between CPU types.

Expansion Slots	AMD Ryzen 5000 and 3000 Series/ 5000 and 4000 G-Series Desktop Processors
	1 x PCIe 4.0 x16 SafeSlot (supports x16 mode)
	AMD B550 chipset
	1 x PCIe 3.0 x16 slot (supports x4 mode)
	3 x PCIe 3.0 x1 slots
	*Share bandwidth with PCIe3.0 x1_1, PCIe3.0 x1_2, PCIe3.0 x1_3
Storage	Supports 2 x M.2 slots and 6 x SATA 6Gb/s ports
	Total supports 2 x M.2 slots and 6 x SATA 6Gb/s ports
	AMD Ryzen 5000 and 3000 Series/ 5000 and 4000 G-Series Desktop Processors
	M.2_1 slot (Key M), type 2242/2260/2280/22110 (supports PCIe 4.0 x4 & SATA modes)
	AMD B550 Chipset:
	M.2_2 slot (Key M), type 2242/2260/2280/22110 (supports PCIe 3.0 x4 & SATA modes)
	6 x SATA 6Gb/s ports
	Support RAID 0, 1, 10
	* When the M.2_2 Slot is populated, SATA6G_5/6 ports will be disabled.
Ethernet	1 x Intel 2.5Gb Ethernet
	1 x Intel I225-V 2.5Gb Ethernet
	ASUS LANGuard
Wireless & Bluetooth	Wi-Fi 6E
	2x2 Wi-Fi 6E (802.11 a/b/g/n/ac/ax)
	Supports 2.4/5/6GHz frequency band
	Bluetooth v5.2
	* WiFi 6E 6GHz regulatory may vary between countries, and function will be ready in Windows 11 or later.
USB	Rear USB: Total 8 ports
	2 x USB 3.2 Gen 2 ports (1 x Type-A + 1 x USB Type-C)
	4 x USB 3.2 Gen 1 ports (4 x Type-A)
	2 x USB 2.0 ports
	Front USB: Total 6 ports
	1 x USB 3.2 Gen 1 header supports additional 2 USB 3.2 Gen 1 ports
	2 x USB 2.0 headers support additional 4 USB 2.0 ports

Audio	ROG SupremeFX 7.1-Channel High Definition Audio CODEC S1220A
	- Impedance sense for front and rear headphone outputs
	- Jack-detection, Multi-streaming, Front Panel Jack-retasking
	- High quality 120 dB SNR stereo playback output and 113 dB SNR recording input
	- Supports up to 32-Bit/192kHz playback
	Audio Features
	- SupremeFX Shielding Technology
	- Dual OP Amplifiers
	- Premium audio capacitors
	- Audio cover
	* Due to limitations in HDA bandwidth, 32-Bit/192 kHz is not supported for 8-Channel audio.
Back Panel I/O Ports	2 x USB 3.2 Gen 2 ports (1 x Type-A + 1 x USB Type-C)
	4 x USB 3.2 Gen 1 ports (4 x Type-A)
	2 x USB 2.0 ports
	1 x Wi-Fi Module
	1 x DisplayPort
	1 x HDMI port
	1 x Intel I225-V 2.5G Ethernet
	1 x Optical S/PDIF out
	5 x Audio jacks
	1 x BIOS FlashBack button

Internal I/O Connectors	Fan and cooling related
	1 x 4-Pin AIO_Pump header
	1 x 4-Pin CPU fan header
	1 x 4-Pin CPU_OPT fan header
	3 x 4-Pin Chassis fan headers
	Power related
	1 x 24-pin main power connector
	1 x 8-pin +12V power connector
	1 x 4-pin +12V power connector
	Storage related
	2 x M.2 slots (Key M)
	6 x SATA 6Gb/s ports
	USB ports
	1 x USB 3.2 Gen 1 header supports additional 2 USB 3.2 Gen 1 ports
	2 x USB 2.0 headers support additional 4 USB 2.0 ports
	Miscellaneous
	1 x Addressable Gen 2 header
	2 x AURA RGB headers
	1 x Clear CMOS header
	1 x Front panel audio header (AAFP)
	1 x 20-3 pin System Panel header with Chassis intrude function
	1 x Thermal sensor header
	1 x Thunderbolt header

Special Features	ASUS Q-Design
	- ASUS Q-DIMM
	- ASUS Q-LED (DRAM [yellow], CPU [red], VGA [white], Boot Device [yellow green)
	- ASUS Q-Slot
	ASUS Thermal Solution
	- M.2 heatsink
	AURA Sync
	- AURA RGB headers
	- Addressable Gen 2 RGB headers
	ASUS EZ DIY
	- BIOS FlashBack button
	- BIOS FlashBack LED
	- Clear CMOS header
	- ProCool
	- Pre-mounted I/O shield
	- SafeSlot

Software Features	ROG Exclusive Software
	- RAMCache III
	- ROG CPU-Z
	- GameFirst VI
	- Sonic Studio III + Sonic Studio Virtual Mixer
	- Sonic Radar III
	- DTS Sound Unbound
	- Overwolf
	- Anti-virus software
	ASUS Exclusive Software Features
	Armoury Crate
	- AIDA64 Extreme (60 days free trial)
	- Aura Creator
	- Aura Sync
	- Two-Way AI Noise Cancelation
	AI Suite 3:
	- Performance And Power Saving Utility
	EPU
	DIGI+ VRM
	Fan Xpert 4
	TurboV EVO
	- EZ update
	WinRAR
	DAEMON Tools
	Norton Anti-virus software (Free Trial version)
	UEFI BIOS
	ASUS EZ DIY
	- ASUS CrashFree BIOS 3
	- ASUS EZ Flash 3
	- ASUS UEFI BIOS EZ Mode
BIOS	256 Mb Flash ROM, UEFI AMI BIOS
Manageability	WOL by PME, PXE

Accessories	Cables
	1 x Addressable RGB extension cable
	4 x SATA 6Gb/s cables
	Miscellaneous
	1 x ASUS Wi-Fi moving antennas
	1 x Cable ties pack
	1 x M.2 Rubber Package
	1 x M.2 SSD screw package
	1 x ROG key chain
	1 x ROG Strix stickers
	1 x ROG Strix thank you card
	Installation Media
	1 x Support DVD
	Documentation
	1 x User manual
Operating System	Windows 11, Windows 10 64-bit
Form Factor	ATX
	30.5cm x 24.4cm

Product Information Online

For the latest product information, availability and purchasing details, please visit the product page:

Product page:
https://www.comx-computers.co.za/ROG-STRIX-B550-F-GAMINGWIFI-II-Asus-ROG-Strix-B550-F-Gaming-WiFi-II-B550-Chipset-p-307665.php

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