MS-B450M PRO-VDH

MSI B450M PRO-VDH B450 chipset AMD Ryzen AM4 Socket Motherboard

Product Overview

MSI B450M PRO-VDH B450 chipset AMD Ryzen AM4 Socket Motherboard, 4 x DDR4 memory slots, support up to 64GB, 1 x 24-pin ATX main power connector, 1 x 8-pin ATX 12V power connector, 4 x SATA 6Gb/s connectors, 2 x USB 2.0 connectors (supports additional 4 USB 2.0 ports), 1 x USB 3.1 Gen1 connector (supports additional 2 USB 3.1 Gen1 ports), 1 x 4-pin CPU fan connector, 1 x 4-pin system fan connector, 1 x Front panel audio connector, 2 x Front panel connectors, 1 x TPM module connector, 1 x Chassis Intrusion connector, 1 x Serial port connector, 1 x Parallel port connector, 1 x LED strip connector, 1 x Clear CMOS jumper, PS/2, VGA, 2 x USB 2.0, 4 x USB 3.1 Gen1, LAN, HD Audio Connectors, USB 2.0, DVI-D, HDMI, M-ATX Form Factor, 24.4 cm x 24.4 cm



Specifications

Features:

- Supports AMD® Ryzen 1st and 2nd Generation/ Ryzen™ with Radeon™ Vega Graphics/ Athlon™ with Radeon™ Vega Graphics Processors for Socket AM4
- Supports DDR4-3466+(OC) Memory
- Audio Boost: Reward your ears with studio grade sound quality.
- DDR4 Boost: Fully isolated, shielded and optimized DDR4 PCB design to give your DDR4 memory a performance boost.
- Turbo M.2: Delivering Speeds Up to 32Gb/s.
- EZ Debug LED: Easiest way to troubleshoot.
- PCI-E Steel Armor: Protecting VGA cards against bending for better performance, stability and strength.
- X-Boost: Software that auto-detects and allows you to boost the performance of any storage or USB device.
- Core Boost: With premium layout and fully digital power design to support more cores and provide better performance.

MAKING YOUR LIFE EASIER IS OUR BUSINESS
Combining quality you can rely on with top performance and clever business solutions are key aspects of the MSI PRO SERIES motherboards. Engineered to gratify even the most demanding professional, these motherboards will fit in any PC. Making your life easier and supporting your business with super stable, reliable and long-lasting top performance.

Stay cool
Cooling your PC is essential for reliable performance. We've made sure to include enough fan headers with full control to allow you to cool your system to the max.

FULLY CONTROLLABLE FAN HEADERS

MSI motherboards let you manage speeds and temperatures for all your system and CPU fans, giving you full control to set up a cool & silent system. The fan headers are conveniently placed with the most popular CPU coolers in mind.

DC OR PWM MODE WITH HYSTERESIS
MSI fan headers automatically detect fans running in DC or PWM mode for optimal tuning of fan speeds and silence. Hysteresis also makes your fans spin up fluently to make sure your system stays silent, no matter what.

TOTAL CONTROL IN BIOS AND SOFTWARE
Total Fan Control allows you to take control of your fans and check your primary system characteristics in a simplified graphical interface. You can also set up to 4 temperature targets for CPU and motherboard, which will adjust the fan speeds automatically.

Enjoy the latest video standards
Supporting the latest display connectors for new technologies (OLED, HDR) and legacy connectors for beamers, MSI motherboards are designed to make life easier for any professional user.

LEGACY DVI / VGA VIDEO SUPPORT
Professional monitors, TVs, beamers and other displays, are all supported by the DVI & VGA outputs on MSI motherboard. No matter what screen type you want to connect, using a dedicated graphics card or an onboard connector, MSI motherboards have you covered.

4K UHD
Enjoy awesome 4K UHD (2160p ultra-high definition) video playback with MSI motherboards.

HDMI
This motherboard is equipped with a HDMI port supporting the latest 4K Ultra-HD 4096x2160p resolution @ 24Hz to provide a breathtaking visual experience.

Professional sound quality
Get the most immersive sound experience. MSI Audio Boost delivers the highest sound quality through the use of premium quality audio components. This lets you enjoy breathtaking, game-changing sound to create the most dynamic soundscapes.

Be the first to boot up in the morning
This MSI product supports all the latest storage standards. This allows you to connect any ultra-fast storage device, giving you noticeable benefits. Start programs faster, load data faster and increase productivity.

AMD StoreMI
All MSI X470 & B450 motherboards are shipped with STOREMI, the new AMD SSD technology to improve storage performance. This tool helps create a virtual SSD by blending capacity storage, treats flash as primary storage and optimizes data access with monitoring continuously. All these functions can enhance read/write speed for active data and provide fast boot times and application startup.

TURBO M.2
Enjoy a blazing fast system boot up and insanely quick loading of applications and data. Delivering speeds up to 32Gb/s per device using Gen3 x4, Turbo M.2 is over 5 times faster than a regular SATA III connection!

XBOOST YOUR STORAGE PERFORMANCE
This great little tool is very simple to use and automatically detects your storage devices connected to the system. When enabled, X-Boost optimizes your SSDs to keep your system fast and maximize storage performance, saving you a lot of time when loading or transferring data.

SATA MASS STORAGE

We made sure each MSI motherboard comes with enough SATA ports to connect loads of HDDs for long term storage of large files and system backups.

ULTRA-FAST PERFORMANCE, GREAT GAMING EXPERIENCE
All of the next gen storage connectors support NVMe, the fastest storage standard in the world. Simply put, MSI PRO Series motherboards offer the best of the best in storage options & performance.

Immerse yourself into virtual worlds
Integrating the very best of cutting edge technologies on MSI hardware provides a smooth VR ride. Through joint efforts with major VR brands, combined with unique MSI features geared to VR, MSI brings gamers and VR professionals a vivid and realistic experience in which content truly comes alive.

GET READY TO BE OVERWHELMED BY THE REALMS OF VR
From the start of Virtual Reality, MSI has been deeply involved in making VR Ready hardware in each of its product lines. Whether it's a feature-rich motherboard, a framerate boosting graphics card or a blazing fast complete gaming system, a huge set of VR-supporting features awaits you.

OPTIMIZED FOR THE BEST VR BRANDS
Want the best VR experience without any compromise? By closely working with the industry's leading VR vendors, we offer everything you need when exploring the possibilities of VR.

STRAIGHT INTO THE ACTION WITH ONE CLICK TO VR
Both hard- and software need to be in tune for a smooth VR experience. One Click to VR makes it very fast and easy to get primed for VR. A single click sets all your key components to their highest performance and makes sure other software applications won't impact your virtual adventure.

Unmatched memory performance
MSI motherboards are crammed with features to fuel your system's memory with more speed, higher overclockability and increased stability.

Designed for limitless Tuning
Founded on experience and with a long history of creating the best performing motherboards packed with smart features, you can count on this motherboard to deliver the best performance under the most extreme conditions. Countless system tuning and troubleshooting tools are at your disposal to push your system to new heights and satisfy even the most demanding tweaker.

CORE BOOST
Core Boost technology combines MSI's premium layout and optimized power design which allows for faster and undistorted current delivery to the CPU at pin-point precision. Not only supporting multi-core CPU, also creating the perfect conditions for your CPU overclocking.

OVERVOLTAGE PROTECTION
Prevents potential short-circuit damage to the CPU and other critical components.

EZ DEBUG LED
Run into trouble? Onboard LEDs for key components will indicate the source of the problem so you know exactly where to look to get up and running again.

Built on everlasting quality
Using only the finest quality components and integrating the latest technological innovations delivers the best possible professional experience. Rigorous quality testing under the most extreme conditions ensures a super reliable, long-lasting and high performance motherboard.

FORTIFY YOUR SYSTEM WITH PCI-E STEEL ARMOR
MSI PCI Express Steel Armor slots are armed with more solder points on the motherboard for a stronger hold, preventing any damage due to heavy-weight graphics cards. Steel Armor also protects PCI Express signals against electromagnetic interference to provide a pure and reliable signal for the best performance, even when turning it up a notch.

ULTIMATE MOTHERBOARD PROTECTION
We've made sure you can enjoy your system endlessly. MSI motherboards feature Double ESD protection with double layer grounding around the motherboard mounting holes, preventing Electrostatic discharge (ESD) surges from damaging the motherboard.

SUPER STABLE WITH THE HIGHEST QUALITY COMPONENTS
MSI uses the high quality components , which is shielded by the best protection to make sure your system runs smoothly under the most extreme conditions.

SOLID CAP
A key ingredient in high-end motherboard designs, Dark Caps have lower Equivalent Series Resistance (ESR) and an increased lifespan of over 10 years.

DARK CHOKE
A special core design allows the Dark Choke to run at a lower temperature offering better power efficiency and stability.

WINDOWS 10 CERTIFIED
With MSI you benefit from great compatibility and a worry-free user experience when using Microsoft Windows 10. With a true dedication to performance, our R&D team has made sure everything works as intended when using the latest version of Microsoft Windows on any MSI product.

Maximize your USB device performance
Transfer lots of data, music and movies over USB faster than ever. MSI offers a wide variety of options to connect and boost your USB 3.1 devices, delivering lightning-fast transfer speeds!

X-BOOST YOUR USB PERFORMANCE
When enabled, X-Boost optimizes your devices for even better transfer speeds and can provide up to 30% increase in USB performance, saving a lot of time when transferring data. This handy tool is very easy to use and automatically detects & optimizes the USB devices connected to your system.

SUPER CHARGE YOUR PHONE & BATTERY-POWERED GEAR
MSI Super Charger USB ports charge any connected device faster. It delivers more power than regular USB ports to your smartphone, tablet, USB peripherals or other battery-powered gear.

DOUBLE ESD PROTECTION
Never worry about damage caused by defective USB devices. The USB ports on MSI motherboards are shielded by a set of protective ICs to prevent damage caused by Electrostatic Discharge (ESD) from plugging/unplugging USB devices.

APPS TO GREATLY IMPROVE EFFICIENCY
With years of experience in creating performance enhancing tools that are easy to use, only the highest quality applications are at your disposal. Use these tools to get the most out of your motherboard and achieve victory when gaming.

A user-friendly BIOS
We made sure our BIOS contains all the latest options and is easy to use for everyone. The extensive features found in CLICK BIOS 5 let you fine-tune your system to deliver reliable maximum performance.

EASY TO READ, HI-RES BIOS FONT

An award-winning, high-resolution, scalable font is used to make CLICK BIOS 5 easy to read, no matter what type of screen you use. The clean design layout, together with this great font makes CLICK BIOS 5 a true next gen UEFI BIOS.

EASY MODE FOR QUICK TWEAKS
When you just want to get back to work, EZ-mode presents you with basic BIOS settings and functions for some quick adjustments. If you feel like spending more time fine-tuning options to boost your system's performance, the Advanced mode is the way to go.

HARDWARE MONITOR WITH FAN CONTROL
Hardware monitor lets you take control of your system and check your primary system vitals in a simplified graphical interface. You can also set up to 4 temperature targets for CPU and motherboard, which will adjust the fan speeds automatically.

MAKE YOUR SSD AS FAST AS NEW WITH SECURE ERASE+
When using an SSD, its performance will slowly decrease over time as more and more data is written onto it. This will slow down Read/Write speeds and increase access times of your SSD, making your system feel sluggish. Using an optimized formatting algorithm, Secure Erase+ lets you enjoy your SSD at maximum speed, making your system feel brand new!

Instantly Optimize and Boost your Performance
CLICK BIOS 5 provides easy access to XMP memory profiles to optimize your system's memory timings and speeds for maximum stability and performance. Safely overclock your CPU with a single button for more performance using MSI OC Genie.

Specifications:

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Specifications	
Product Code	MS-B450M PRO-VDH
Socket	AM4
CPU (Max Support)	Ryzen 7
Chipset	AMD B450 Chipset
DDR4 Memory	1866/ 2133/ 2400/ 2667Mhz (by JEDEC)
	2667/ 2800/ 2933/ 3000/ 3066/ 3200/ 3466 MHz (by A-XMP OC MODE)
Memory Channel	Dual
DIMM Slots	4
Max Memory (GB)	64
PCI-E x16	1
PCI-E Gen	Gen3
PCI-E x1	2
SATAIII	4
M.2 Slot	1
RAID	1/10/2000
TPM (header)	1

LAN	1(Realtek 8111H)
USB 3.1 ports (Front)	2(Gen1)
USB 3.1 ports (Rear)	4(Gen1) Type A
USB 2.0 ports (Front)	4
USB 2.0 ports (Rear)	4
Serial ports(Front)	1
Audio ports (Rear)	3(Realtek ALC892 Codec)
DVI-D	1
VGA	1
HDMI	1
DirectX	12
Form Factor	M-ATX
Operating System	Support for Windows 10 64-bit
	Support for Windows 7 64-bit
	* To support Windows 7 64-bit, you must install an AMD Pinnacle Ridge & Summit Ridge CPU.

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/MS-B450M-PRO-VDH-MSI-B450M-PRO-VDH-B450-chipset-AMD-Ryzen-AM4-Socket-Motherboard-p-209539.php

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