B450M PRO-VDH V2

MSI B450M PRO-VDH V2 AMD B450 Chipset Socket AMD Ryzen AM4 Motherboard

Product Overview

MSI B450M PRO-VDH V2 AMD B450 Chipset Socket AMD Ryzen AM4 Motherboard, 4 x DDR4 memory slots, support up to 64GB, 4 x DDR4 memory slots, support up to 64GB, Supports 1866/ 2133/ 2400/ 2667Mhz (by JEDEC), Supports 2667/ 2800/ 2933/ 3000/ 3066/ 3200/ 3466 MHz (by A-XMP OC MODE), 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, 2 x 4-pin system fan connectors, 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 RGB LED strip connector, 1 x Clear CMOS jumper, PS/2, VGA Port, 2 x USB 2.0 Port, 4 x USB 3.1 Gen1, LAN Port, HD Audio Connectors, DVI-D Port, HDMI Port, m-ATX Form Factor, 24.4 cm x 24.4 cm



Specifications

Features:

DIY FRIENDLY
MSI motherboards feature tons of convenient and smart design, such as convenient pin-header keep out zone, friendly SATA & USB location and so on, so DIY users can pick and choose any gaming rig they want.

STAY COOL FOR RELIABLE SYSTEM
Cooling your PC is essential for reliable performance. MSI motherboards feature excellent power design with solid and heavy heatsink. We've made sure to include enough fan headers with full control to allow you to cool your system any way you want.

FULLY CONTROLLABLE IN BIOS AND SOFTWARE
MSI motherboards let you manage speeds and temperatures for all your system and CPU fans. Total Fan Control allows you 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.

AUTODETECT 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.

OPTIMIZED FOR WATER COOLING
Designed to support the most popular All-In-One & customized water cooling solutions on the market. A dedicated water pump

PIN header supports up to 2 amp, giving you full control of the water pump speed. A clearly marked 'keep-out-zone' allows for easy and safe installation and a perfect fit.

USER FRIENDLY DESIGN
MSI motherboards feature tons of convenient and smart design for DIY users, countless system tuning and troubleshooting tools are at your disposal to push your system to new heights and satisfy even the most demanding tweaker. Makes it so easy to install your own motherboard without any issue.

Keep out zone
MSI motherboards circuitry ensure the case standoff keep out zones are pure and clean, preventing any component contact or damage to the motherboard.

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.

Maximum Compatibility
Every MSI motherboards are certified by strict mechanic that feature convenient pin-header keep out zone, friendly SATA & USB location for compatibility with the widest range of components and devices, so DIY user can pick and choose the components they want. More than that, we offer a dedicated Qualified Vendor List (QVL) for the most critical part - memory. Combining with MSI DDR4 Boost technology, we provide the maximum compatibility even over clocking, so you confirm and choose any gaming rig as you want.

Ryzen processors support
MSI AM4 motherboards perfectly support AMD Ryzen processors. Combining MSI Core Boost, you can release maximum performance no matter what CPU you use.

EXTREME STABILITY & COMPATIBILITY TESTING
MSI conducts thorough memory testing with the most popular memory brands under extreme conditions to ensure your system runs stable no matter what. Our memory partners include brands like Corsair, Crucial, Kingston, G.Skill and many more to optimize memory modules, configurations and even improve overclocking.

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. Moreover, we made sure our BIOS contains all the latest options and is easy to use for everyone. The extensive features let you fine-tune your system to deliver reliable maximum performance.

X-BOOST YOUR STORAGE
This unique and exclusive software allows you to boost the performance of any storage or USB device connected to your system. Simply use X-BOOST's Easy or Advanced mode to tune your system speed increased, higher system responsiveness and faster loading of data.

TAKE COMMAND OF YOUR SYSTEM
MSI's Command Center software is the perfect tool to get the most out of your motherboard. With an intuitive interface, Command Center allows you to tune settings to increase system stability, maximize performance and optimize your system's cooling features.

INSTANT SYSTEM STARTUP WITH MSI FAST BOOT & GO2BIOS
With the latest operating systems supporting UEFI fast booting methods, we have added a "Fast Boot" option to take full advantage of this. Simply enable "Fast Boot" either in the BIOS or with the convenient application for faster boot times. Avoid having to mash your DEL/F2 button to get into the BIOS with the Go2BIOS button in the MSI Fast Boot application. Your PC

will automatically go to the BIOS on the next reboot for quick. Some models even have an onboard Go2BIOS button.

Click Bios 5
We made sure our BIOS contains all the latest options and is easy to use for everyone. The extensive features let you fine-tune your system to deliver reliable maximum performance when gaming.

A-XMP
A-XMP simplifies RAM overclocking on AMD motherboards.

M-FLASH
Allows user to conveniently flash, or upgrade the BIOS from the CMOS Setup Utility.

HARDWARE MONITOR
Shows you critical hardware information in real-time; temperature, usage, clock speed, and voltage.

TOTAL FAN CONTROL
Check and manage speeds and temperatures for all your system and CPU fans.

SECURE ERASE+
Using an optimized formatting algorithm, lets you enjoy your SSD at maximum speed, making your system feel brand new!

MEMORY TRY IT
Best way to get maximum speed out of your system memory and gaming performance.

SEARCH & FAVORITES
A permanent search & favorite option in the top right corner can be used to find what you need.

SSD not fast enough? Try MSI® RAMDISK
MSI motherboards include RAMDisk, allowing you to create a virtual drive from your system RAM memory. Instantly load your software, speed up your browser or your page file to significantly speed up your system!

- Speed up system performance, over 25x faster than a SATA SSD
- Speed up games, apps and browser
- Increase SSD lifespan

ENHANCED PERFORMANCE
MSI motherboards featured all the latest solution for enthusiast gamers and prosumers. CPU and memory enhancement and fast storage and USB transfer speed are ready to be on the battlefield.

LOOKING COOL WHILE KEEPING COOL
High quality materials and smart fan optimizations contribute to cooling all essential components, which is key to making sure your system runs stable and delivers the best performance at all times.

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.

UNMATCHED MEMORY PERFORMANCE
Optimized layout design and a fully isolated memory circuitry ensures perfect stability and performance. you never have to

worry about your system crashing during games with MSI DDR4 BOOST.

EASY overclocking with XMP profile
The XMP (Extreme Memory Profiles) in MSI BIOS are tested and certified by MSI OC lab. It is easy to enable with auto power settings to get the best memory speed and stability.

Fast and Future-ready Storage
MSI motherboards support all the latest storage standards, which allows users to connect any ultra-fast storage device. Start games faster, load levels faster and have a real advantage over your enemies.

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.

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.

IN-STUDIO ADVANTAGE
MSI motherboards provide the most fascinating in-studio advantages, designed to satisfy any professional workflow. Elevate your listening pleasure and network connection with MSI Audio & LAN. Enjoy extreme sound quality and uninterrupted online experience.

SOUND THAT PULLS YOU INTO THE GAME
Reward your ears with studio grade sound quality. MSI Audio Boost delivers the highest sound quality through the use of premium quality audio components. This lets you enjoy breathtaking, studio quality sound to create the most immersive sound experience.

ISOLATED AUDIO DESIGN
EMI-shielded HD audio processors let you enjoy the purest sound quality in front and rear connectors.

SEPARATED AUDIO LAYERS FOR CLEAN LEFT & RIGHT CHANNELS
Using separated layers in the PCB ensures equally pristine sound quality for both left and right audio channels.

DE-POP PROTECTION
Audio Boost protects your ears by eliminating those annoying loud popping sounds when you plug/unplug devices or turn your PC on/off.

EXHILARATING AND INSPIRING
Each MSI motherboard is built based on the specific topic in order to match different tastes and favors. Furthermore, MSI also adopts the modern style to design the heatsink through huge surface and sleek but simple cuts in order to make the heatsink and appearance looks ripped and powerful. Combined with neutral color, such as black, grey and silver, as the main background, MSI motherboard can perfect fit different RGB LED effects and strongly shows the gamers tunes.

MAKE YOUR PC MORE THAN YOU THINK
PRO Series motherboards combine stable functionality and high quality assembly for clever business solutions. Designed to satisfy any professional workflow, PRO Series motherboards make life easier for businesses and office use.

LOYAL COMRADE

MSI has developed the motherboard market for many years. With rich R&D experience and a long history, the company continuously creates the best performance and humanized motherboard to help users meet the pursuit of high quality components and the stable, reliable and long-lasting system performance.

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 for a pure gaming experience and even higher overclocking.

SUPER STABLE GAMING 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
With their aluminum core design and Japanese made quality, Solid CAPs are made for high-end design motherboard. Not only do Solid CAPs could provide lower Equivalent Series Resistance (ESR), but also work firmly for over-10-year.

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

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.

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.

Specifications:

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Specifications	
Product Code	B450M PRO-VDH V2
Socket	AM4
CPU (Max Support)	Ryzen 7
Chipset	AMD B450 Chipset
DDR4 Memory	Supports 1866/ 2133/ 2400/ 2667Mhz (by JEDEC)
	Supports 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
TPM (header)	1
LAN	10/100/1000*1
USB 3.1 ports (Front)	2(Gen1, Type A)
USB 3.1 ports (Rear)	4(Gen1, Type A)
USB 2.0 ports (Front)	4
USB 2.0 ports (Rear)	2
Serial ports(Front)	1
Parallel Port(Front)	1
Audio ports (Rear)	Realtek ALC892 Codec
DVI-D	1
VGA	1
HDMI	1
DirectX	12
Form Factor	m-ATX
CrossFire	Y
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/B450M-PRO-VDH-V2-MSI-B450M-PRO-VDH-V2-AMD-B450-Chipset-Socket-AMD-Ryzen-AM4-Motherboard-p-223059.php

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