

INLAND AMD Ryzen 5 4500 + MSI A520M-A PRO

INLAND AMD Ryzen 5 4500 Processor and MSI A520M-A PRO Motherboard Instruction Manual

Model: AMD Ryzen 5 4500 + MSI A520M-A PRO



Image: INLAND AMD Ryzen 5 4500 Processor and MSI A520M-A PRO Motherboard bundle.

1. PRODUCT OVERVIEW

This manual provides detailed instructions for the INLAND AMD Ryzen 5 4500 Unlocked Desktop Processor and MSI A520M-A PRO Gaming Motherboard bundle. This combination is designed to deliver reliable performance for various computing needs, including gaming and general desktop use.

1.1 AMD Ryzen 5 4500 Desktop Processor

- **Cores/Threads:** 6 Cores, 12 Processing Threads
- **Cooler:** Bundled with AMD Wraith Stealth cooler
- **Max Boost Clock:** Up to 4.1 GHz
- **Overclocking:** Unlocked for overclocking
- **Cache:** 11 MB (L2+L3)
- **Memory Support:** DDR4-3200
- **Socket:** Advanced Socket AM4 platform



Image: Packaging for the AMD Ryzen 5 4500 Desktop Processor.

1.2 MSI A520M-A PRO Gaming Motherboard

- **Form Factor:** Micro-ATX
- **CPU Socket:** AM4, supporting AMD Ryzen 5000, 5000 G-Series, 4000 G-Series, 3000 Series, and 3000 G-Series processors
- **Memory:** Supports DDR4 Memory up to 64GB
- **Storage:** 1x M.2 PCIe 3.0 x4 slot, 4 x SATA 6Gb/s ports
- **USB:** AMD Turbo USB 3.2 GEN 1
- **Key Features:** Core Boost, DDR4 Boost, 2oz Thickened Copper PCB, Audio Boost, Turbo M.2, Dragon Center software support.

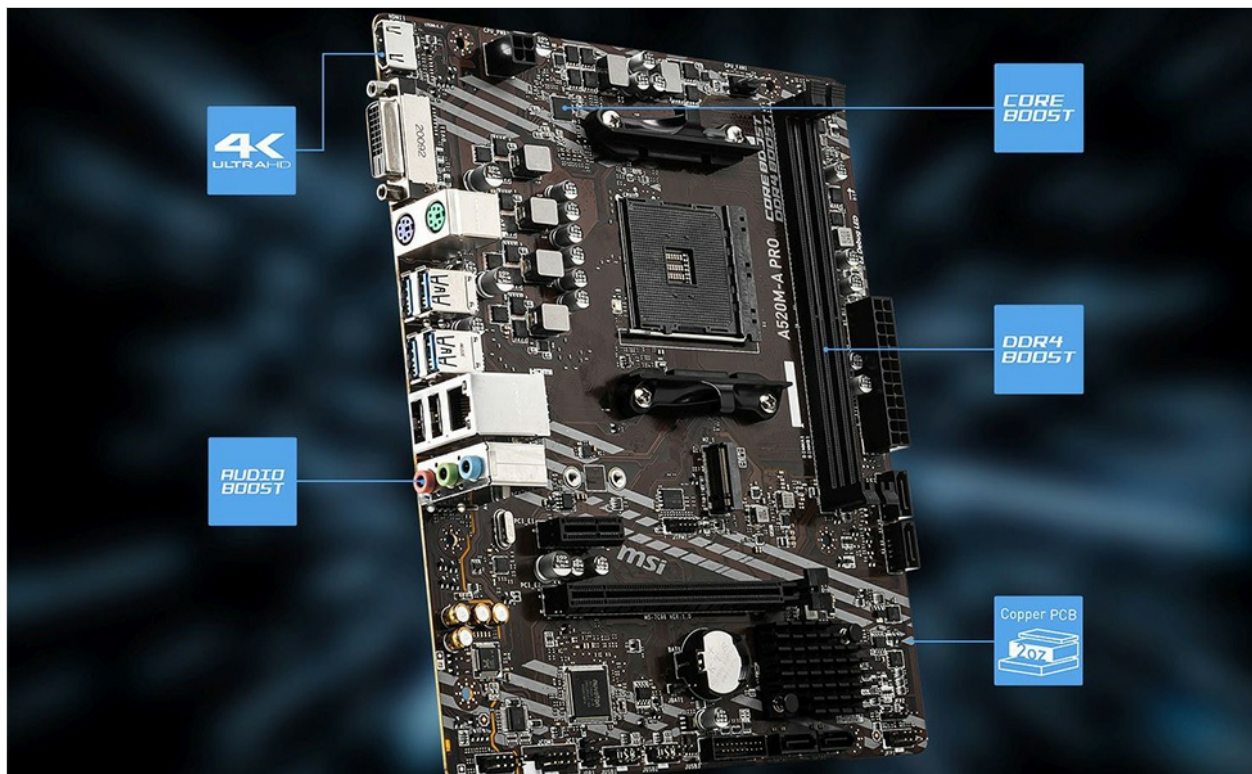


Image: The MSI A520M-A PRO Gaming Motherboard, showcasing its layout and components.

2. SETUP GUIDE

This section outlines the general steps for installing your processor and motherboard. Always refer to the detailed manuals provided by AMD and MSI for specific installation procedures and safety precautions.

2.1 Unpacking and Inspection

Carefully unpack all components. Verify that all items listed in the package contents are present and undamaged.

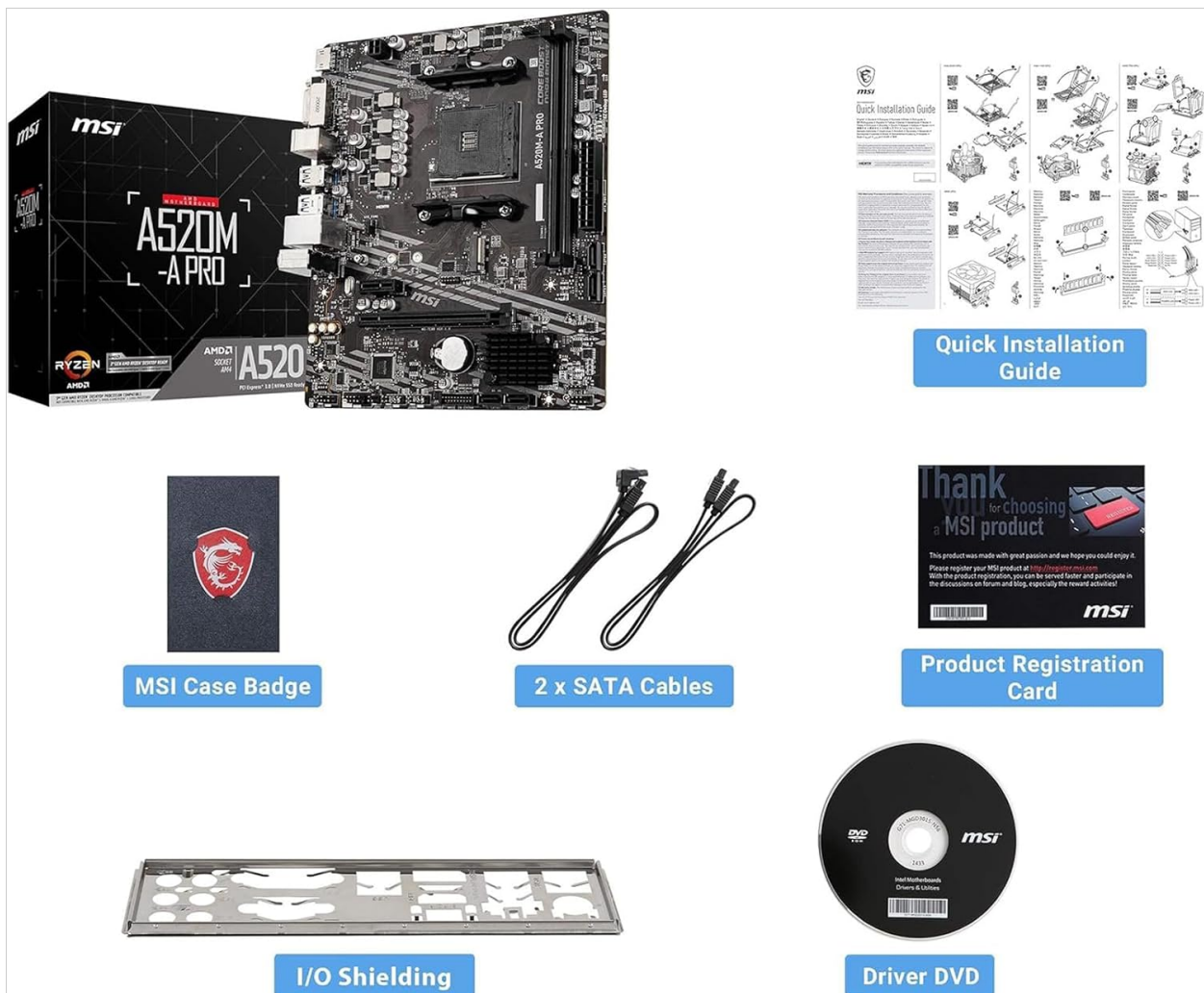


Image: Contents of the MSI A520M-A PRO Motherboard box, including the motherboard, SATA cables, I/O shielding, MSI Case Badge, Quick Installation Guide, Product Registration Card, and Driver DVD.

2.2 CPU Installation

1. Open the CPU socket lever on the motherboard.
2. Align the triangular mark on the AMD Ryzen 5 4500 processor with the mark on the AM4 socket.
3. Gently place the CPU into the socket. Do not force it.
4. Close the socket lever to secure the CPU.

2.3 CPU Cooler Installation

Install the AMD Wraith Stealth cooler according to the instructions provided with the cooler. Ensure proper thermal paste application and secure mounting for optimal heat dissipation.

2.4 RAM (DDR4 Memory) Installation

1. Open the clips on the DDR4 memory slots.
2. Align the notch on the DDR4 memory module with the notch in the slot.
3. Press down firmly on both ends of the memory module until the clips snap into place.
4. For dual-channel performance, install memory modules in the recommended slots (refer to the motherboard manual for specific slot configurations).



Image: A graph illustrating the improved signal purity with MSI's DDR4 Boost technology compared to standard designs.

2.5 Storage Device Installation (M.2 SSD / SATA Drives)

1. **M.2 SSD:** Locate the M.2 slot on the motherboard. Insert the M.2 SSD at an angle and secure it with the provided screw.
2. **SATA Drives:** Connect SATA data cables from your storage drives (HDD/SSD) to the SATA 6Gb/s ports on the motherboard. Connect SATA power cables from your power supply to the drives.

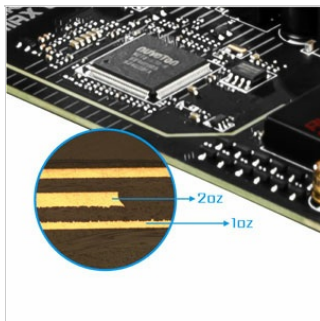


Image: A close-up of the MSI A520M-A PRO motherboard highlighting the Turbo M.2 Gen 3 x4 slot for high-speed storage.

2.6 Power Connections

Connect the 24-pin ATX main power connector and the 8-pin CPU power connector from your power supply to the corresponding ports on the motherboard.

2.7 Front Panel and Peripheral Connections

Connect your case's front panel connectors (power button, reset button, USB ports, audio jacks) to the appropriate headers on the motherboard. Connect external peripherals like keyboard, mouse, and monitor to the rear I/O panel.

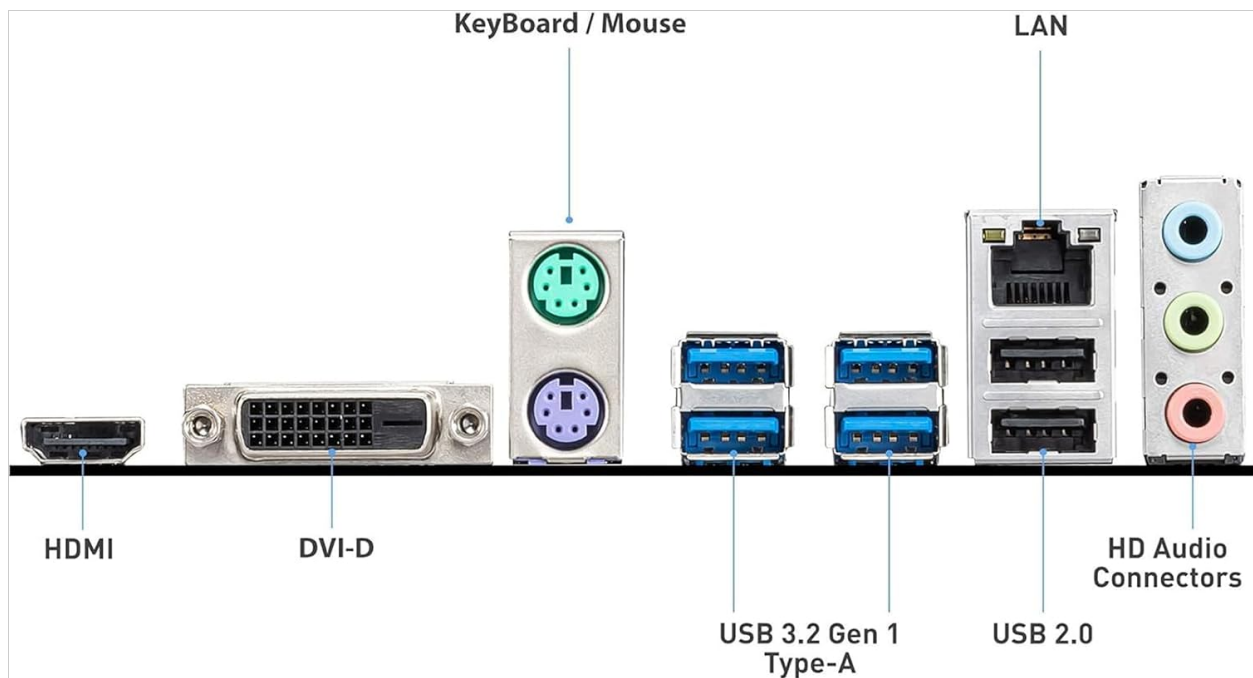


Image: A detailed view of the MSI A520M-A PRO motherboard's rear I/O panel, showing HDMI, DVI-D, Keyboard/Mouse (PS/2), LAN, USB 3.2 Gen 1 Type-A, USB 2.0, and HD Audio Connectors.

3. OPERATING INSTRUCTIONS

3.1 Initial Boot-Up

1. Ensure all connections are secure.
2. Connect your monitor, keyboard, and mouse.
3. Power on your system.
4. The system should display the BIOS/UEFI splash screen.

3.2 BIOS/UEFI Setup

During boot-up, press the designated key (usually **Del** or **F2**) to enter the BIOS/UEFI setup. Here you can configure boot order, system time, and other advanced settings. Ensure your memory is running at its advertised speed by enabling XMP/DOCP profiles if applicable.

3.3 Operating System Installation

Insert your operating system installation media (USB drive or DVD) and follow the on-screen prompts to install your preferred OS (e.g., Windows 10/11).

3.4 Driver Installation

After OS installation, install the necessary drivers for your motherboard and components. Use the provided driver DVD or download the latest drivers from the MSI and AMD official websites for optimal performance and stability.

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Video: An overview of the MSI A520M-A PRO Motherboard, highlighting its features and design. This video demonstrates the physical aspects and key functionalities of the motherboard.

4. MAINTENANCE

4.1 System Cleaning

Regularly clean your computer's interior to prevent dust buildup, which can lead to overheating and reduced performance. Use compressed air to clear dust from fans, heatsinks, and vents. Ensure the system is powered off and unplugged before cleaning.

4.2 BIOS/UEFI Updates

Periodically check the MSI website for BIOS/UEFI updates. Updates can improve system stability, compatibility, and performance. Follow the instructions provided by MSI carefully when performing a BIOS update to avoid system damage.

4.3 Driver Updates

Keep your drivers updated, especially for the chipset, graphics card (if installed), and other peripherals. Latest drivers often include performance enhancements and bug fixes.

5. TROUBLESHOOTING

This section addresses common issues you might encounter. For more complex problems, consult the MSI motherboard manual or contact technical support.

5.1 No Power / No Boot

- Check all power connections (24-pin ATX, 8-pin CPU, GPU if applicable).
- Ensure the power supply is switched on.
- Verify that the front panel power button cable is correctly connected to the motherboard.

5.2 No Display Output

- Ensure your monitor is connected to the correct display output (motherboard or discrete graphics card).
- Check if the monitor is powered on and set to the correct input source.
- Reseat the graphics card (if installed) and RAM modules.

5.3 System Instability / Crashes

- Check CPU and GPU temperatures using monitoring software. Overheating can cause instability.
- Ensure all drivers are up to date.
- Run memory diagnostic tools to check for faulty RAM.

5.4 EZ Debug LED

The MSI A520M-A PRO motherboard features EZ Debug LEDs. These LEDs indicate the status of key components (CPU, DRAM, VGA, BOOT) during startup. If an issue occurs, the corresponding LED will remain lit, helping you identify the problematic component.

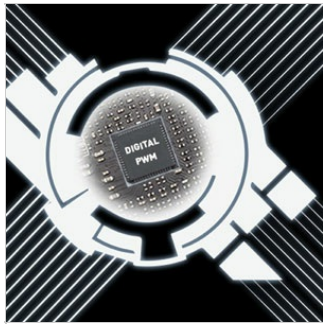


Image: A close-up of the MSI A520M-A PRO motherboard showing the EZ Debug LEDs for BOOT, VGA, DRAM, and CPU, which illuminate to indicate system status during POST.

6. SPECIFICATIONS

Feature	Specification
Brand	INLAND
CPU Socket	Socket AM4
Compatible Devices	Personal Computer
RAM Memory Technology	DDR4
Compatible Processors	AMD Ryzen 5000 Series, 5000 G-Series, 4000 G-Series, 3000 Series and 3000 G-Series
Chipset Type	AMD A520
Memory Clock Speed	4400 MHz (Max OC)
Platform	Windows 10, Windows 11
Motherboard Model Name	A520M-A PRO
CPU Model	Ryzen 5 4500
Memory Storage Capacity (Max)	64 GB (Motherboard supports up to 128 GB)
Main Power Connector Type	24-Pin
Graphics Card Interface	PCI Express
Memory Slots Available	2
Total SATA Ports	4
Total USB Ports	12 (various types)
Number of Ethernet Ports	1

Feature	Specification
Total Number of HDMI Ports	1
Total PCIe Ports	1 (PCIe 3.0 x16)

7. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation included with your product or visit the official websites of INLAND, AMD, and MSI. Warranty terms and conditions may vary by region and component.

MSI Support: <https://www.msi.com/support>

AMD Support: <https://www.amd.com/support>