MACHINIST X99 V9S+

MACHINIST X99 V9S+ M-ATX Motherboard Instruction Manual

Brand: MACHINIST | Model: X99 V9S+

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, setup, and troubleshooting of your MACHINIST X99 V9S+ M-ATX Motherboard. Please read this guide thoroughly before proceeding with installation to ensure optimal performance and system stability.

2. KEY FEATURES & SPECIFICATIONS

- **CPU Socket:** LGA 2011-3, supporting Intel Xeon E5 V3/V4 series processors and Core i7 5th/6th Gen processors (e.g., E5-1660 V3, E5-2666 V3, E5-2670 V3, E5-2650 V3, E5-2698 V3, E5-1620 V4, E5-2630 V4, E5-2640 V4, E5-2686 V4, E5-2690 V4, i7-5960X, i7-6900K).

- **Chipset:** Intel C612.

- **Memory:** 4-Channel DDR4 slots, compatible with ECC, RECC, and non-ECC DDR4 memory. Maximum capacity: 4 x 32GB (128GB total). Server memory and desktop memory cannot be used together. Core i7 series processors are not compatible with Desktop RAM.

- **Storage:** 3 x NVME M.2 slots (PCIe 3.0 X4 bandwidth, up to 3600MB/s). NGFF M.2 drives are not supported. 6 x SATA 3.0 ports.

- **Expansion Slots:** 1 x PCIe 3.0 X16 slot, 1 x PCIe 3.0 X4 slot.

- **Network:** 1 x Gigabit LAN interface.

- **USB:** USB 3.0 and USB 2.0 ports.

- **Audio:** HD Audio.

- **Power Supply:** 6-phase power supply.

- **Cooling:** VRM cooling fan and heat dissipation armor protection.

- **Other:** 1 x TPM M.2 interface (supports only ASUS 14PIN TPM module).

Visual Overview

Image: Overview of the MACHINIST X99 V9S Intel Motherboard, highlighting its design and key components.

3. SETUP & INSTALLATION

3.1 CPU Installation

Carefully align your LGA 2011-3 CPU with the socket on the motherboard. Ensure the CPU is seated correctly before closing the retention mechanism. Do not force the CPU into the socket.

LGA 2011-V3 CPU Socket

Compatible with Intel 5th/6th gen Core i7 processors and Xeon E5 V3/V4 series processors. (I7 series processors are not compatible with Desktop RAM.)
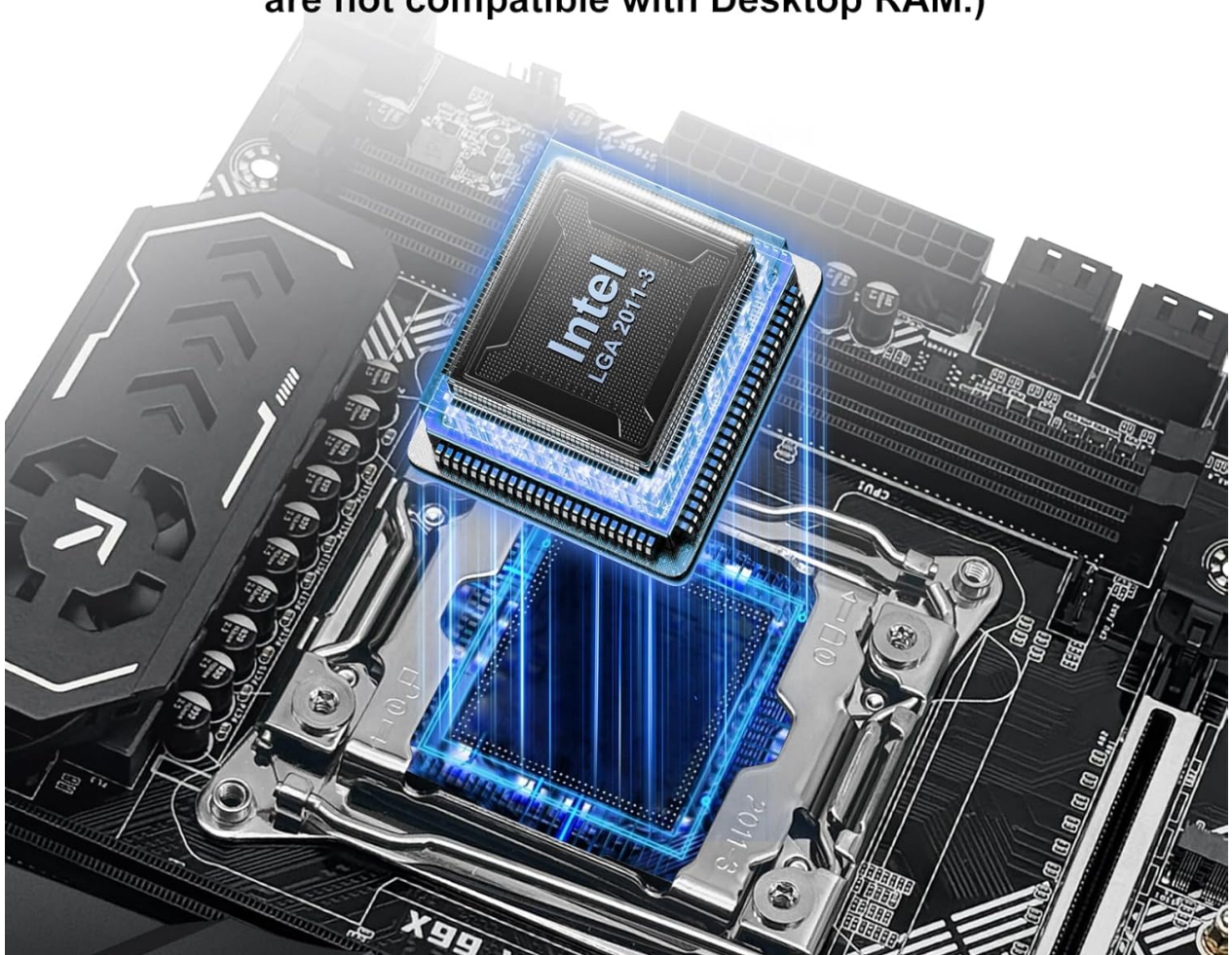
3.2 Memory (RAM) Installation

Insert DDR4 memory modules into the 4-Channel DDR4 slots. Ensure the notches on the RAM modules align with the slots. Press down firmly on both ends of the module until the clips snap into place. Refer to the motherboard's silkscreen for recommended slot population order for optimal performance.

4-Channel DDR4 Slots

Support DDR4 ECC, DDR4 RECC and DDR4 Desktop Memory, the maximum memory capacity is 128GB (32GB*4). E5 V3 supports up to 2133MHz, E5 V4 supports up to 2400MHz, not support overclocking.
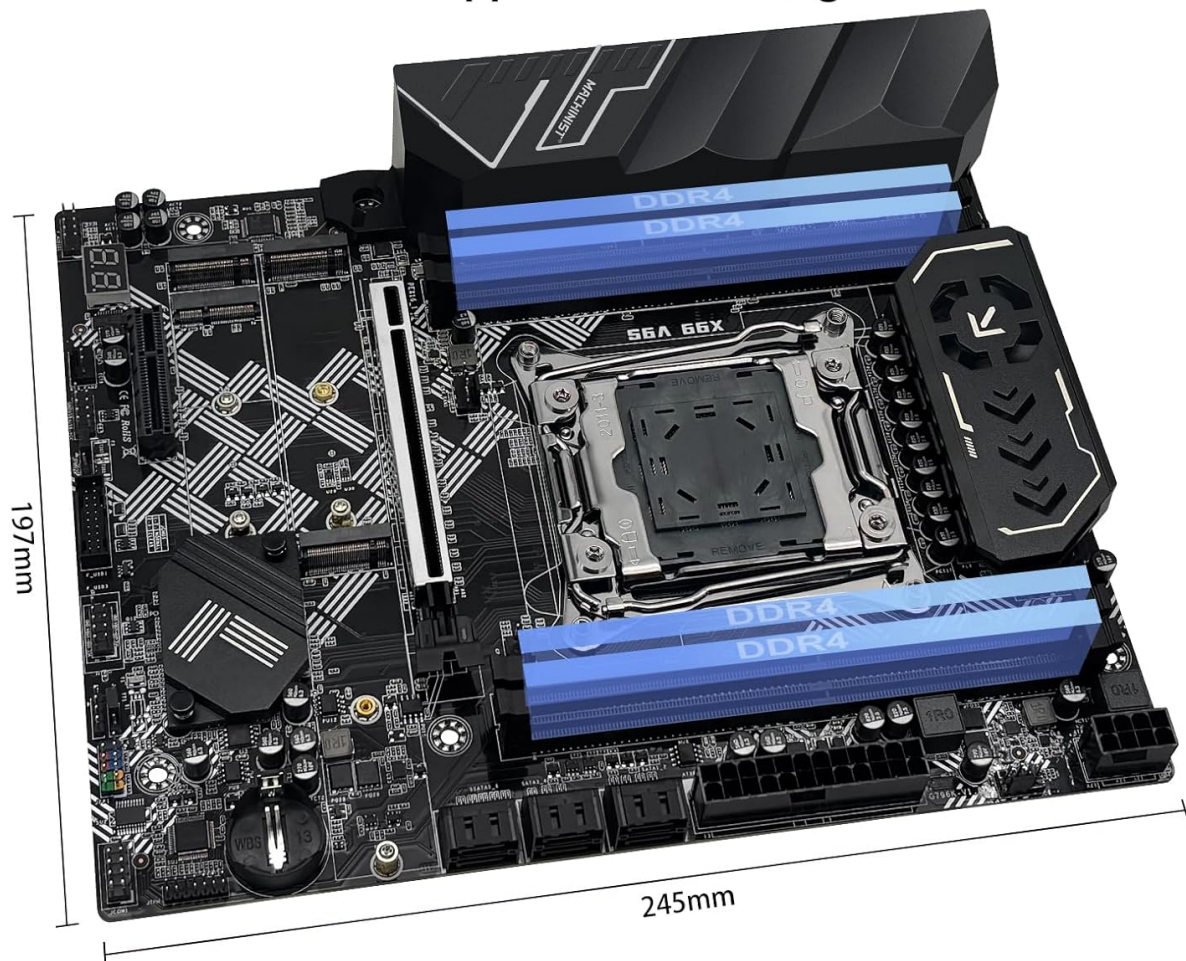
Image: View of the motherboard highlighting the 4-Channel DDR4 memory slots.

3.3 Storage (NVME M.2 & SATA) Installation

For NVME M.2 SSDs, insert the drive into one of the 3 NVME M.2 slots and secure it with the provided screw. For SATA drives, connect the SATA data cable to the motherboard's SATA 3.0 ports and to your storage device. Connect the SATA power cable from your power supply to the drive.

NVME M.2 Slots

Equipped with 3 NVME M.2 slots (PCIe 3.0 X4 bandwidth), maximum speed up to 3600MB/S. NGFF M.2 drives are not supported.
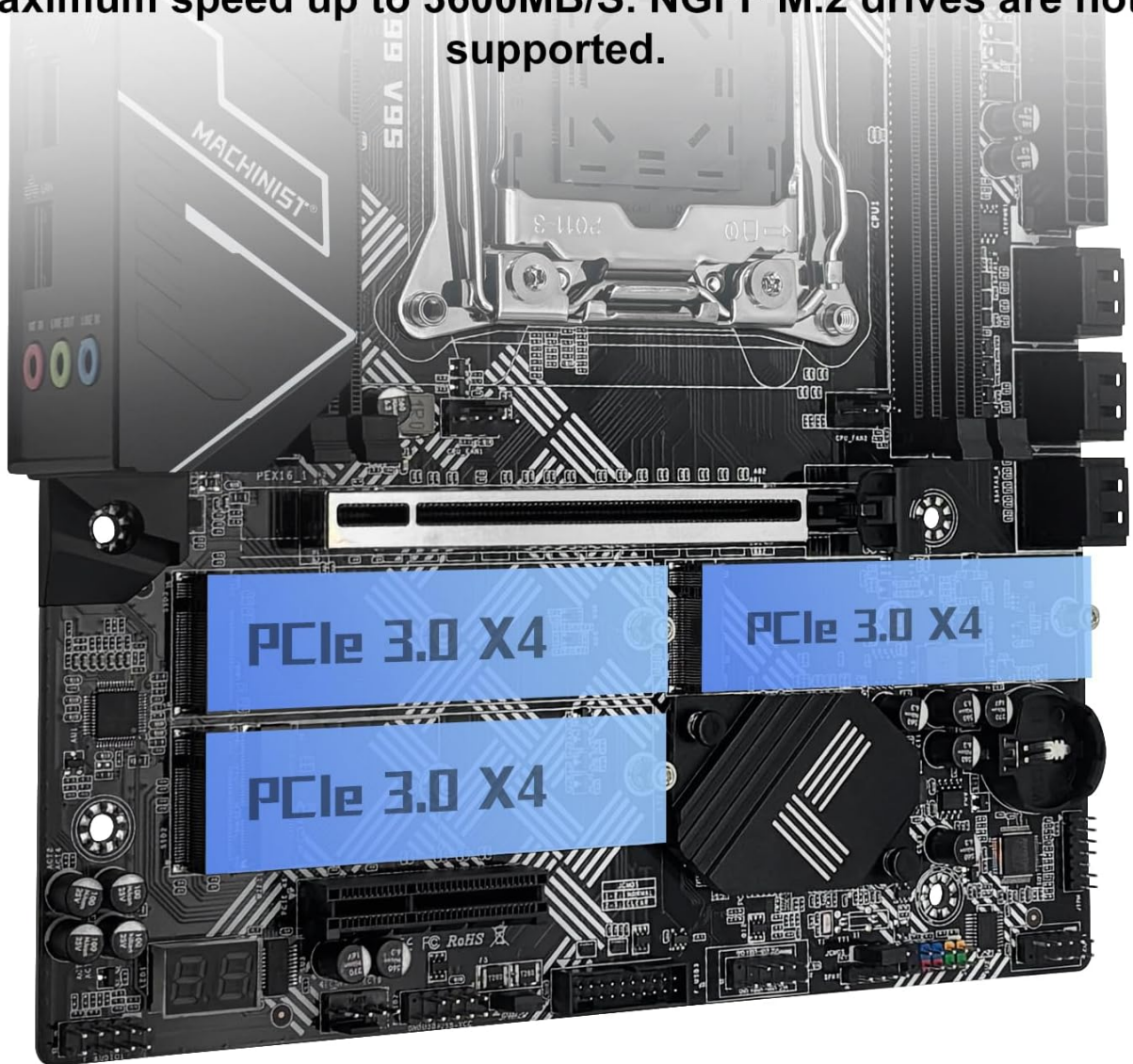

Image: Close-up of the motherboard showing the NVME M.2 slots.

3.4 Expansion Card (PCIe) Installation

Insert your graphics card or other PCIe expansion cards into the appropriate PCIe 3.0 X16 or PCIe 3.0 X4 slots. Ensure the card is fully seated and secured with the case's retention mechanism.

PCIe Expansion Slots

Equipped with 1 PCIe 3.0 X16 slot, 1 PCIe 3.0 X4 slot. The metal sheath is added to the PCIe slot to keep a card firmly installed.
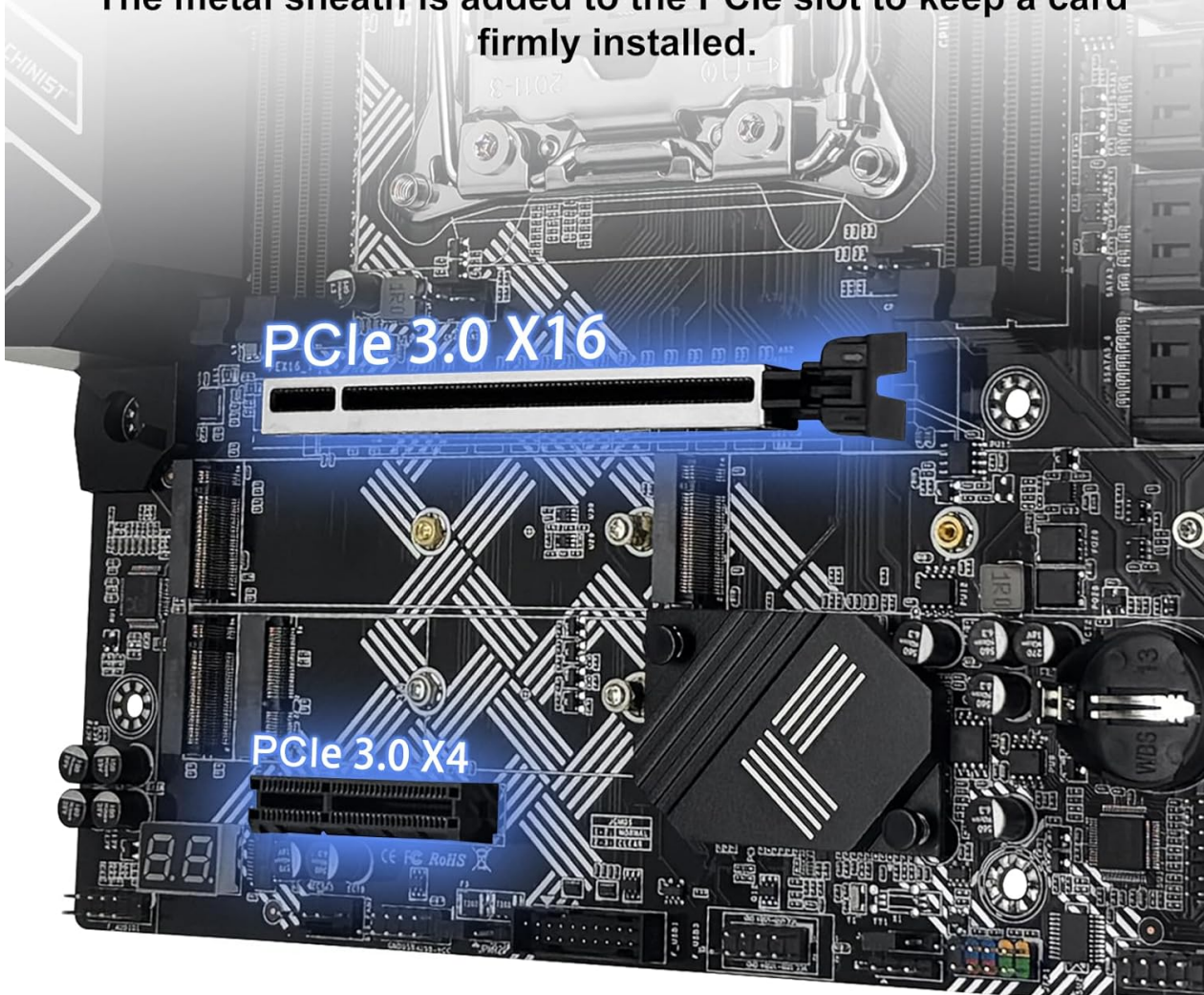

Image: The motherboard's PCIe expansion slots, including PCIe 3.0 X16 and PCIe 3.0 X4.

3.5 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. Ensure all power connections are secure.

3.6 Front Panel & Peripheral Connections

Connect your case's front panel connectors (power button, reset button, USB ports, audio jacks) to the corresponding headers on the motherboard. Refer to the motherboard diagram for correct pin assignments.
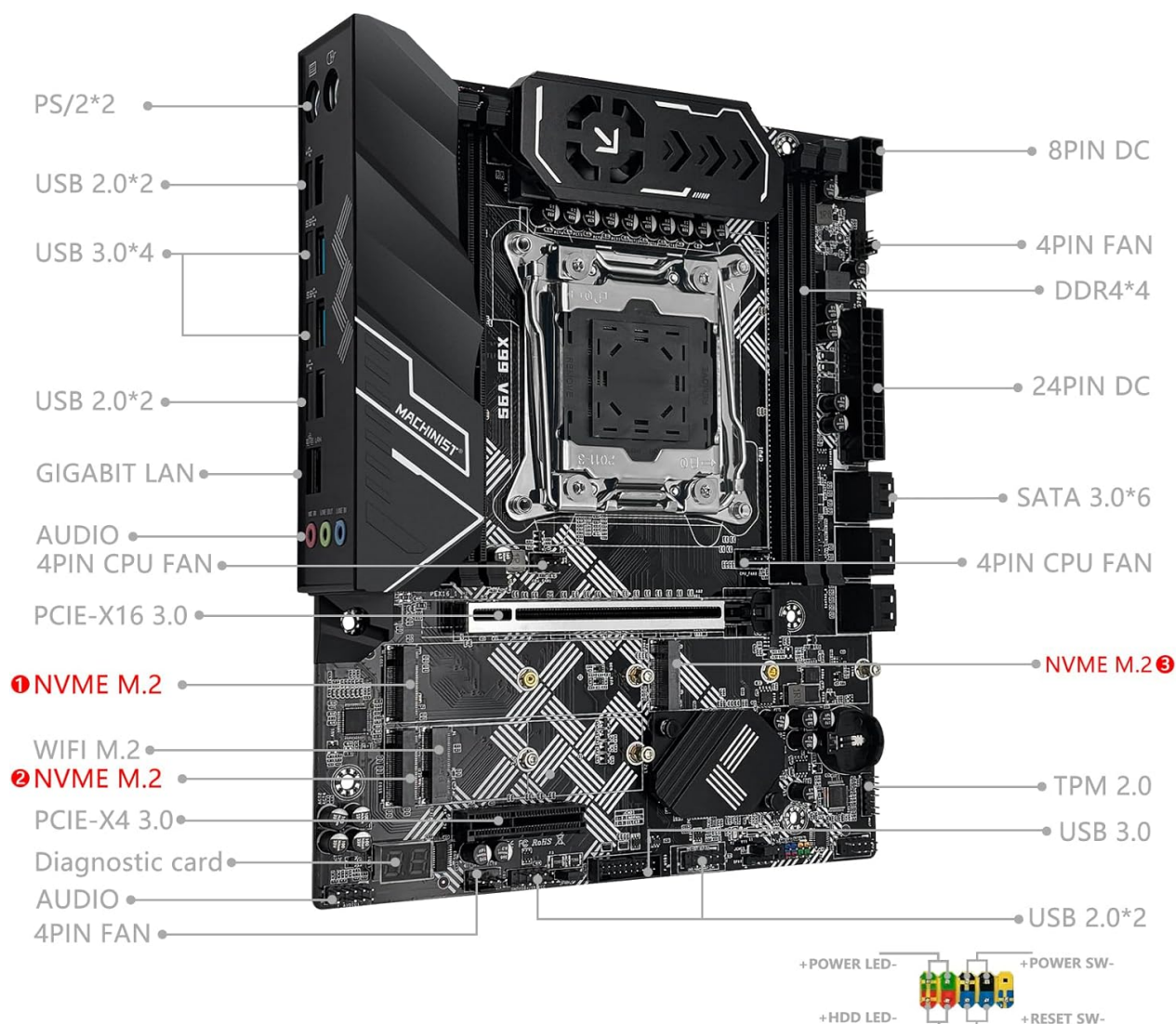
X99 V9S Parameters

- PS/2*2
- USB 2.0*2
- USB 3.0*4
- USB 2.0*2
- GIGABIT LAN
- AUDIO
- 4PIN CPU FAN
- PCIE-X16 3.0
- ❶ NVME M.2
- WIFI M.2
- ❷ NVME M.2
- PCIE-X4 3.0
- Diagnostic card
- AUDIO
- 4PIN FAN

- 8PIN DC
- 4PIN FAN
- DDR4*4
- 24PIN DC
- SATA 3.0*6
- 4PIN CPU FAN
- NVME M.2 ❸
- TPM 2.0
- USB 3.0
- USB 2.0*2

+POWER LED-   +POWER SW-
+HDD LED-   +RESET SW-

Image: Detailed diagram of the X99 V9S motherboard parameters, showing various ports and headers.

3.7 Clear CMOS

To clear CMOS, disconnect the motherboard's power. Locate the CMOS clear jumper and pull out the jumper cap on pins "1" and "2". Install it on pins "2" and "3" for 5 seconds. Then, place it back on pins "1" and "2".

How to Clear CMOS

Disconnect the power of the motherboard, there is no need to remove the CMOS battery.
Locate the CMOS clear jumper and pull out the jumper cap on pins "1" and "2" and install it on
pins "2" and "3". After 5 seconds, place it back on pins "1" and "2".

1 Install battery, cut off power

2 Original State ⇄ Resetting

Image: Visual guide on how to clear the CMOS settings on the motherboard.

4. OPERATING INSTRUCTIONS

4.1 BIOS/UEFI Setup

Upon first boot, access the BIOS/UEFI setup by pressing the designated key (usually DEL or F2) during startup. Configure boot order, system time, and other essential settings. Save changes and exit to proceed with operating system installation.

4.2 Driver Installation

After installing your operating system, install the necessary drivers for the chipset, LAN, audio, and any other integrated components. Drivers are typically available on the manufacturer's website.

5. MAINTENANCE

To ensure the longevity and stable operation of your motherboard, regularly perform the following maintenance tasks:

- Keep the system clean and free of dust by using compressed air.
- Ensure all cables and components are securely connected.
- Monitor system temperatures to prevent overheating.
- Update BIOS/UEFI firmware and drivers as recommended by the manufacturer.

6. TROUBLESHOOTING

6.1 No Power / Fans Don't Spin

If the system does not power on and fans do not spin:

- Verify motherboard and CPU power connections.
- Confirm CPU and memory model compatibility and condition.
- Ensure memory modules are properly seated.
- If the issue persists, clear the CMOS (refer to Section 3.7).

6.2 No Display (Fans Spin, Keyboard Lights Unresponsive)

If there is no display but fans spin and keyboard lights remain unresponsive when pressing Caps Lock:

- Verify motherboard and CPU power connections.
- Ensure memory modules are properly seated.
- Confirm CPU and memory model compatibility and condition.
- If issues persist, clear the CMOS (refer to Section 3.7).

6.3 No Display (Fans Spin, Keyboard Lights Respond)

If there is no display but fans are spinning and the Caps Lock indicator lights up when pressing Caps Lock:

- Verify the monitor is powered on and the display data cable is securely connected.
- Check the condition of the display cable, GPU, and monitor.
- If the issue persists, clear the CMOS (refer to Section 3.7).

7. PACKAGE CONTENTS

The retail package for the MACHINIST X99 V9S+ M-ATX Motherboard typically includes:

- 1 x MACHINIST X99 V9S+ M-ATX Motherboard
- 1 x LGA 2011-v3 Cooler Bracket
- 1 x SATA Cable
- 1 x I/O Shield

Note: The CR2032 battery for the motherboard is not included and must be purchased separately. A physical user manual is also not included in the package; this digital document serves as the primary instruction guide.

Image: Contents of the MACHINIST X99 V9S+ M-ATX Motherboard retail box.

8. OFFICIAL PRODUCT VIDEOS

8.1 X99 Motherboard Overview

Video: A detailed overview of an X99 motherboard, showcasing its features and design. This video provides a general understanding of X99 series motherboards.

8.2 Product Overview Video

Video: A general product overview video, highlighting various aspects and components of the motherboard. This video offers a visual tour of the product.

9. WARRANTY & SUPPORT

For specific warranty information and support, please refer to the product listing on Amazon or contact MACHINIST customer service directly. Protection plans may be available for purchase separately.