

Biostar N68S3+

Biostar N68S3+ Motherboard User Manual

Model: N68S3+

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Biostar N68S3+ Micro ATX motherboard. The N68S3+ is designed to support AMD Socket AM3 processors and DDR3 memory, offering a reliable foundation for personal computer systems.

2. PACKAGE CONTENTS

Please verify that all items are present in your motherboard package:

- Biostar N68S3+ Motherboard
- I/O Shield
- SATA Data Cables
- Driver CD
- User Manual (this document)

If any items are missing or damaged, please contact your retailer for assistance.

3. SETUP AND INSTALLATION

3.1 Motherboard Layout



Image Description: An overhead view of the Biostar N68S3+ Micro ATX motherboard. Key components visible include the Socket

AM3 CPU socket at the center, two red DDR3 DIMM slots to the right, a black PCIe x16 slot, two red PCI slots, four red SATA ports, a yellow IDE connector, and various power connectors and headers. The rear I/O panel shows PS/2 ports, a VGA port, USB ports, a LAN port, and audio jacks.

3.2 CPU Installation

1. Locate the Socket AM3 on the motherboard.
2. Lift the CPU socket lever.
3. Carefully align the CPU with the socket, ensuring the golden triangle on the CPU matches the triangle on the socket. Do not force the CPU into the socket.
4. Lower the CPU gently into the socket.
5. Push the lever back down to secure the CPU.
6. Apply thermal paste and install the CPU cooler according to its manufacturer's instructions.

3.3 Memory Installation

The motherboard supports DDR3-1333/1066/800 DIMMs in dual-channel configuration, with a maximum capacity of 8GB (4GB per DIMM).

1. Open the clips at both ends of the DIMM slot.
2. Align the memory module with the slot, ensuring the notch on the module matches the key in the slot.
3. Press down firmly on both ends of the memory module until the clips snap into place.
4. For dual-channel operation, install memory modules in both available slots.

3.4 Expansion Card Installation

The N68S3+ features one PCI-Express x16 slot and two PCI slots.

1. Remove the corresponding metal bracket from your PC case.
2. Align the expansion card with the desired slot (PCIe x16 for graphics cards, PCI for other peripherals).
3. Press the card firmly into the slot until it is fully seated.
4. Secure the card with a screw to the PC case.

3.5 Storage Device Connection

Connect your storage devices to the motherboard:

- **SATA Devices:** Use SATA data cables to connect SATA hard drives or SSDs to the four SATA2 ports.
- **IDE Devices:** Connect older IDE hard drives or optical drives to the single IDE connector using a ribbon cable. Ensure the master/slave jumpers on the devices are set correctly.

3.6 Power Supply Connection

Connect the main 24-pin ATX power connector and the 4-pin ATX 12V CPU power connector from your power supply to the corresponding sockets on the motherboard.

3.7 Front Panel Connections

Connect the power switch, reset switch, HDD LED, power LED, front panel USB ports, and front panel audio jacks to their respective headers on the motherboard. Refer to the motherboard diagram for exact pin assignments.

4. OPERATING INSTRUCTIONS

4.1 Initial Boot-up

After assembling all components and connecting peripherals, power on your system. The system should display the BIOS POST screen. If no display appears, refer to the Troubleshooting section.

4.2 BIOS Setup

To enter the BIOS setup utility, press the **DEL** key repeatedly during the initial boot sequence. Within the BIOS, you can configure various system settings, including boot order, CPU settings, memory timings, and integrated peripherals. It is recommended to verify that your DDR3 memory is detected at its correct speed (e.g., 1333MHz) and adjust it manually if necessary, as some systems may default to a lower speed.

4.3 Driver Installation

After installing your operating system, install the necessary drivers for the motherboard's components. Use the provided driver CD or download the latest drivers from the official Biostar website for optimal performance and stability.

5. MAINTENANCE

Proper maintenance ensures the longevity and stable operation of your motherboard:

- **Keep it Clean:** Regularly clean dust from inside your PC case, especially from heatsinks and fans, to prevent overheating. Use compressed air for best results.
- **Ensure Airflow:** Maintain good airflow within your PC case by ensuring cables are neatly managed and fans are functioning correctly.
- **BIOS Updates:** Check the Biostar website periodically for BIOS updates. While this model may have limited updates, newer versions can improve compatibility and stability. Exercise caution when updating BIOS.
- **Component Checks:** Periodically check all cable connections to ensure they are secure.

6. TROUBLESHOOTING

This section addresses common issues you might encounter:

- **No Display:** Ensure your monitor is connected and powered on. Check that your graphics card (if installed) is properly seated and connected to power. If using integrated graphics, ensure no discrete card is interfering.
- **System Won't Boot:** Verify all power connections (24-pin ATX, 4-pin CPU). Reseat memory modules and expansion cards. Check for any loose cables.
- **LAN Not Functioning:** Ensure the Ethernet cable is securely connected. Check for proper driver installation. If the issue persists, the onboard LAN controller may be faulty; consider using a PCI Ethernet card.
- **Memory Not Detected at Correct Speed:** Enter BIOS setup and manually set the memory frequency to the rated speed (e.g., 1333MHz) if it defaults to a lower value.
- **System Instability/Crashes:** Check CPU and GPU temperatures. Ensure all drivers are up to date. Test memory modules individually.

7. SPECIFICATIONS

Feature	Specification
CPU Socket	Socket AM3 (Supports AMD Phenom II X4/X3/X2 & Athlon II X4/X3/X2/Sempron Processors, up to 95W CPU, HyperTransport 2G)
Chipset	nVidia MCP68S
Memory	2x DDR3 DIMMs, Dual Channel, 1333/1066/800 MHz, Max Capacity 8GB
Expansion Slots	1x PCI-Express x16 Slot, 2x PCI Slots
Storage	4x SATA2 Ports (Support RAID 0, 1, 5, 10), 1x IDE Connector
Audio	Realtek ALC662 6-Channel HD Audio CODEC
LAN	Realtek RTL8201CL 10/100Mbit Ethernet
USB Ports	6x USB 2.0 Ports (4 rear, 2 by headers)
Rear I/O Ports	2x PS/2 Ports, 1x VGA Port, 1x Serial Port, 1x RJ45 LAN Port, Audio I/O Jacks
Form Factor	Micro ATX (9.6 x 7.5 inches)
Dimensions	9.6 x 7.5 x 2 inches
Item Weight	1.5 pounds
Date First Available	December 23, 2010

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation included with your purchase or visit the official Biostar website. Keep your proof of purchase for warranty claims. Biostar provides support for product-related inquiries and technical assistance.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question