Intel BOXNUC7I3BNK

Intel NUC Kit BOXNUC7I3BNK Slim User Manual

Model: BOXNUC7I3BNK

1. INTRODUCTION

This manual provides essential information for the proper setup, operation, and maintenance of your Intel NUC Kit BOXNUC7I3BNK Slim. Please read this manual thoroughly before using the device to ensure optimal performance and safety.

The Intel NUC Kit is a compact, customizable mini PC designed for a wide range of applications, from home entertainment to office productivity. This 'Slim' version is designed without internal space for a 2.5-inch SATA drive, relying on M.2 SSD storage.

2. SAFETY INFORMATION

- Always disconnect the power adapter before cleaning or performing any internal maintenance.
- Do not expose the device to water or excessive moisture.
- Ensure proper ventilation to prevent overheating. Do not block ventilation openings.
- Use only the power adapter supplied with the Intel NUC Kit or a compatible replacement.
- Avoid placing the device on unstable surfaces.
- Refer all servicing to qualified service personnel.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- Intel NUC Kit BOXNUC7I3BNK Slim unit
- AC Power Adapter with regional plugs
- VESA Mount Bracket with screws
- Quick Start Guide (not included in this manual)

Image 3.1: The Intel NUC Kit BOXNUC7I3BNK Slim, its power adapter with various regional plugs, and a VESA mounting bracket.

4. SETUP

4.1. Installing Internal Components (RAM and M.2 SSD)

The Intel NUC Kit BOXNUC7I3BNK Slim requires user-supplied RAM and an M.2 SSD for full functionality. Follow these steps:

1. **Prepare the NUC:** Place the NUC on a clean, flat, static-free surface.
2. **Remove the Bottom Cover:** Unscrew the four screws on the bottom of the NUC and carefully lift off the bottom cover.
3. **Install RAM:** Locate the two SODIMM slots. Gently insert the RAM modules (DDR4-2133MHz, 1.2V) into the slots at a 45-degree angle, then push down until they click into place.
4. **Install M.2 SSD:** Locate the M.2 slot. Insert the M.2 SSD (22x42 or 22x80 form factor) into the slot, then secure it with the small screw provided in the NUC kit.
5. **Replace the Bottom Cover:** Align the bottom cover and secure it with the four screws.

Image 4.1: The Intel NUC Kit BOXNUC7I3BNK Slim with its top cover partially removed, revealing the internal components and slots

4.2. Connecting Peripherals

Connect your peripherals to the appropriate ports:

- **Monitor:** Connect your display to the HDMI port or the USB-C (DisplayPort 1.2) port on the rear panel.
- **Keyboard and Mouse:** Connect to any available USB 3.0 ports (front or rear).
- **Network:** Connect an Ethernet cable to the RJ45 port for wired network access.
- **Audio:** Connect speakers or headphones to the 3.5mm audio jack on the front panel.
- **Power:** Connect the power adapter to the DC-in jack on the rear panel, then plug the adapter into a power outlet.

4.3. Operating System Installation

After installing RAM and an M.2 SSD, and connecting peripherals, you will need to install an operating system (e.g., Windows 10, Linux). This typically involves creating a bootable USB drive with your chosen OS installer and following the on-screen prompts during boot-up.

5. OPERATING THE NUC

5.1. Powering On/Off

- **Power On:** Press the power button located on the front panel. The power button will illuminate.
- **Power Off:** Use the operating system's shutdown function. Alternatively, press and hold the power button for 4 seconds to force a shutdown (use only when necessary).

5.2. Front Panel Overview

Image 5.1: The front panel of the Intel NUC Kit BOXNUC7I3BNK Slim, showing the USB 3.0 ports, audio jack, and power button with blue illumination.

- **USB 3.0 Ports (x2):** For connecting USB devices such as keyboards, mice, and external storage.
- **Headphone/Microphone Jack:** For audio input and output.
- **Power Button:** To turn the NUC on or off.

5.3. Rear Panel Overview

Image 5.2: The rear panel of the Intel NUC Kit BOXNUC7I3BNK Slim, displaying the DC-in, HDMI, Ethernet, USB 3.0, and USB-C ports.

- **DC-in Jack:** For connecting the power adapter.
- **HDMI Port:** For connecting to a display.
- **Ethernet Port (RJ45):** For wired network connection.
- **USB 3.0 Ports (x2):** For connecting USB devices.
- **USB-C Port (with DisplayPort 1.2 and USB 3.1 Gen2):** For connecting to a display or high-speed USB devices.
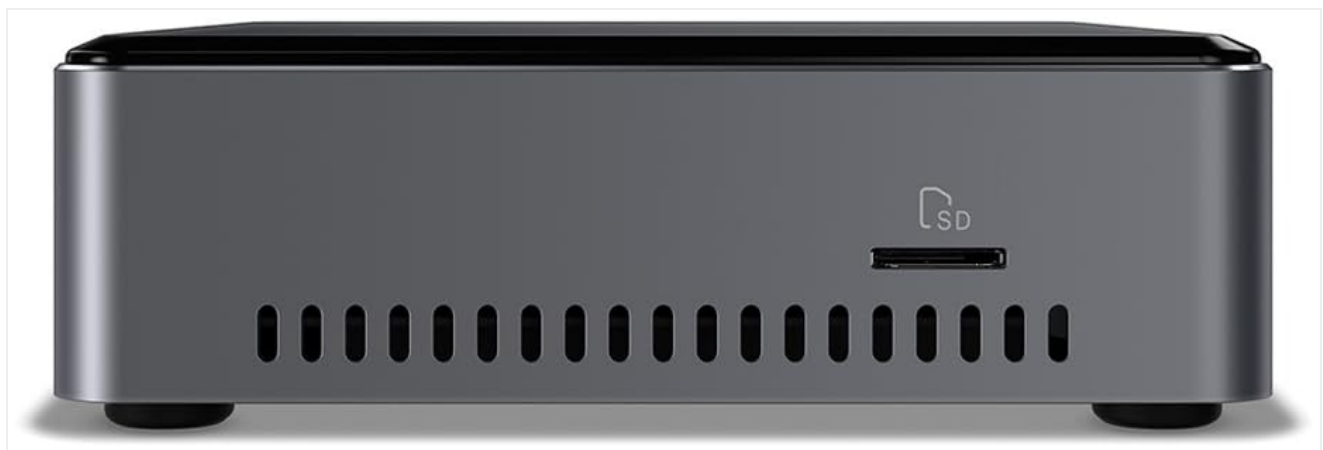
5.4. Side Panel Overview

Image 5.3: The side panel of the Intel NUC Kit BOXNUC7I3BNK Slim, featuring an SD card slot for expandable storage.

- **SD Card Slot:** For inserting SD memory cards.

6. MAINTENANCE

6.1. Cleaning

To maintain optimal performance, periodically clean the exterior of your NUC:

- Use a soft, dry cloth to wipe down the exterior.
- For stubborn marks, slightly dampen the cloth with water or a mild cleaning solution.
- Do not spray cleaners directly onto the device.
- Use compressed air to clear dust from ventilation openings, ensuring the NUC is powered off during this process.

6.2. Software Updates

Regularly update your operating system, drivers, and BIOS to ensure security, stability, and performance. Visit the Intel support website for the latest drivers and BIOS updates specific to your NUC model.

7. TROUBLESHOOTING

This section addresses common issues you might encounter:

- **No Power:** Ensure the power adapter is securely connected to both the NUC and a working power outlet. Test the outlet with another device.
- **No Display:** Verify that the monitor is powered on and correctly connected to the NUC. Try a different display cable or monitor if available. Ensure the correct input source is selected on your monitor.
- **Operating System Not Loading:** Check that RAM and M.2 SSD are correctly installed. Ensure the boot order in the BIOS is set to boot from your M.2 SSD or OS installation media.
- **Peripheral Not Detected:** Try connecting the peripheral to a different USB port. Ensure drivers for the peripheral are installed.
- **Overheating:** Ensure the NUC has adequate ventilation and that the vents are not blocked. Clean any dust from the vents.

For more detailed troubleshooting, refer to the Intel support website or contact Intel customer support.

8. SPECIFICATIONS

Key specifications for the Intel NUC Kit BOXNUC7I3BNK Slim:

Feature	Specification
Brand	Intel
Model	BOXNUC7I3BNK
CPU Model	Intel Core i3 (7th Gen)
CPU Speed	2.4 GHz
Graphics Coprocessor	Intel HD Graphics 620
Memory Storage Capacity	Up to 32 GB (DDR4 SODIMM, user-supplied)
Storage Type	M.2 SSD (user-supplied)
Operating System	None (user-supplied, e.g., Windows 10)
Personal Computer Design Type	Mini PC
Connectivity	USB 3.1 Gen2 (10 Gbps), DisplayPort 1.2 (via USB-C), HDMI, Ethernet, Wi-Fi, Bluetooth

Image 8.1: The compact size of the Intel NUC Kit BOXNUC7I3BNK Slim, shown next to a tennis ball for scale, with approximate dimensions of 4.5 inches wide and 1.4 inches high.

9. WARRANTY AND SUPPORT

Intel NUC Kits typically come with a limited warranty. For specific warranty terms and conditions, please refer to the documentation included with your product or visit the official Intel website. Keep your proof of purchase for warranty claims.

For technical support, driver downloads, BIOS updates, and additional documentation, please visit the official Intel Support website. You can usually find support resources by searching for your specific NUC model (BOXNUC7I3BNK) on their site.

Intel Support Website: https://www.intel.com/content/www/us/en/support/products/89187/mini-pcs/intel-nuc-kits.html