

Appendix: Flashing Raspberry Pi OS to NVMe SSD (No PC Required)

If you don't have a PCIe-to-USB adapter, you can flash the OS directly to the NVMe SSD from the Pi itself.

Steps

- 1 1. Flash Raspberry Pi OS Lite (64-bit) to a microSD card and boot your Pi 5 from it.
- 2 2. Make sure the NVMe SSD is connected via the official PCIe HAT.
- 3 3. Run: `lsblk` or `sudo fdisk -l` to identify your SSD (e.g., `/dev/sda`).
- 4 4. Install Raspberry Pi Imager: `sudo apt install rpi-imager`
- 5 5. Run `rpi-imager` and choose Raspberry Pi OS 64-bit. Select your NVMe SSD as the target storage.
- 6 6. Alternatively, you can manually download and flash the image using `dd`:

Manual flashing with `dd`:

```
wget https://downloads.raspberrypi.com/raspios_lite_arm64_latest
unzip raspios_lite_arm64_latest
sudo dd if=your_image.img of=/dev/sda bs=4M status=progress
sync
```

7. When done, power off the Pi: `sudo poweroff`

8. *Remove the SD card and boot directly from the SSD!*