Upgrading my 64GB Steam Deck with a 1TB NVMe SSD

The need for more storage space on the Steam Deck seems to be a universal issue. I've found myself in the same boat after getting my hands on a 64GB model during the Steam Summer Sale. With just a few games installed (Hades, Disco Elysium, and Hollow Knight), I found myself hitting the storage limit. I decided it was high time for an upgrade.

Step 1: Preparing for the Upgrade

I ordered a Sabrent 2230 M.2 NVMe Gen 4 1TB drive from Amazon. If you're in the same boat and need to expand your storage, here's how I navigated the process.

Before you get started, make sure you have a prying tool - a guitar pick or something similar would do. I used a prying tool from an iFixIt kit I had on hand. It's also essential to have a compatible screwdriver for the backplate screws.

Step 2: Opening the Steam Deck

Once the new drive arrived, I started by removing the 8 screws from the back plate of the Steam Deck. Prying it open was the next challenge. The best place to start is from the top, near the right bumper (R1). Trust me on this one; I learned the hard way and caused some minor cosmetic damage by trying from the bottom and left sides.

Once you've pried the top open, the rest comes apart pretty easily. Remember to disconnect the battery and press the power button multiple times to ensure all capacitors are drained. This will help to prevent any potential damage to the device or the drive.

Step 3: Installing the New Drive

There was another minor hiccup here. The electronic shielding on the old eMMC drive didn't fit on the new Sabrent drive due to the heat plate with branding. To resolve this, I slightly tore off the end, which was attached with adhesive, and wrapped the new drive with it. Then, it was just a matter of putting everything back together.

Step 4: Preparing the Recovery Flash Drive

Next up, you'll need to prepare a recovery flash drive. I used Rufus for this and downloaded the 2GB recovery image from the Steam website. I encountered an issue here as the Rufus website was down, so I downloaded it from SourceForge.net instead. The image was written to the flash drive in about 10 minutes.

Step 5: Booting into Recovery Mode

Booting the Steam Deck into recovery mode can be a little tricky. Make sure you press the power button and keep the volume down button pressed until you hear the startup sound. Then release the power button.

At this point, I experienced a slight hiccup. My flash drive wasn't recognized in any of the boot options. I think I might have accidentally flashed it in MBR instead of GPT. Using another, albeit slower, flash drive fixed the problem. It took around 15-20 minutes due to the slower drive speed.

The Steam Deck controls didn't work in the recovery OS, so I had to use the touchscreen. The process took quite a while, approximately 40 minutes, due to the slow flash drive speed.

Step 6: Restarting the Deck and Finalizing Setup

After the recovery process was complete, I restarted the Deck. The presence of the Steam Deck logo confirmed that the device was booting up from the drive. I was greeted with the setup screen next.

Interestingly, the Steam Deck's controls didn't work initially, but the touchscreen did. After going through the setup process and connecting to the internet for updates, the controls started working perfectly.

Conclusion

And voila! My Steam Deck was upgraded successfully to 1TB storage, and everything runs flawlessly and fast. This has allowed me to install much larger games such as Witcher III and even test out Diablo IV. The process may be slightly tedious, but it's well worth it for the extra space. I'm already thinking about the potential of adding a memory card, but that might be a project for another day once I get through my current gaming backlog.

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