

Writing Disk Images on Windows

Goal: Copy an installed OS file-system image onto a drive that you will install into a LANforge system that lacks display hardware.

Many LANforge ICE WAN emulator machines are embedded systems that lack display hardware. Installing an OS using only the serial console can be very inconvenient. The easy solution is to perform the installation on similar hardware that does have display hardware, and then move the drive to the embedded device. Here, we learn how to use Etcher on Windows to write a compressed disk image to an mSATA drive plugged into a USB3 adapter.



1. Here we're using [Etcher](#) which handles compressed file system images without any trouble. There are other programs (like [Win32 Disk Imager](#) or [dd for windows](#)) but those are more complex to use.
2. Items we'll want:
 - A. 30GB or larger mSATA drive

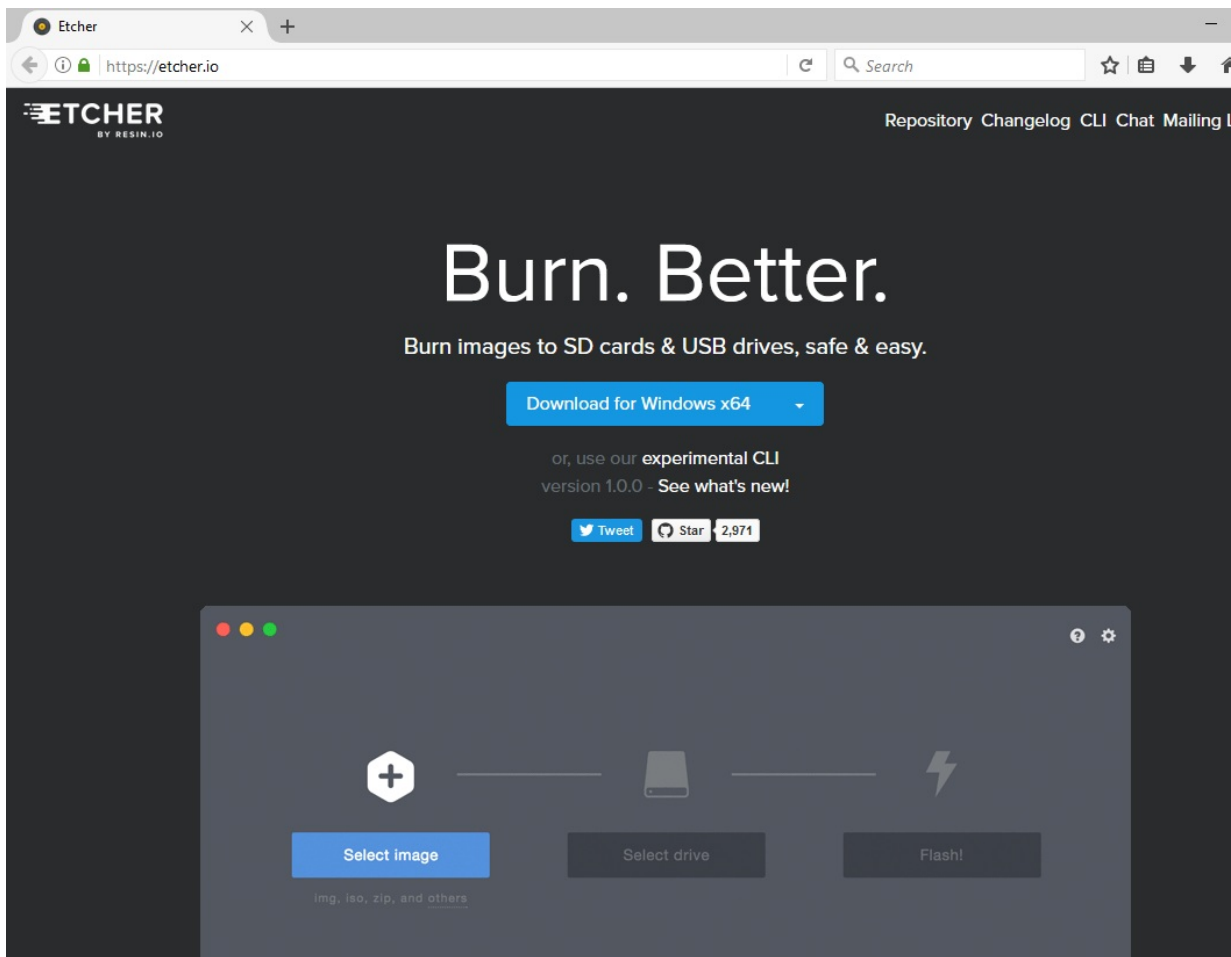


- B. USB3 mSATA drive adapter

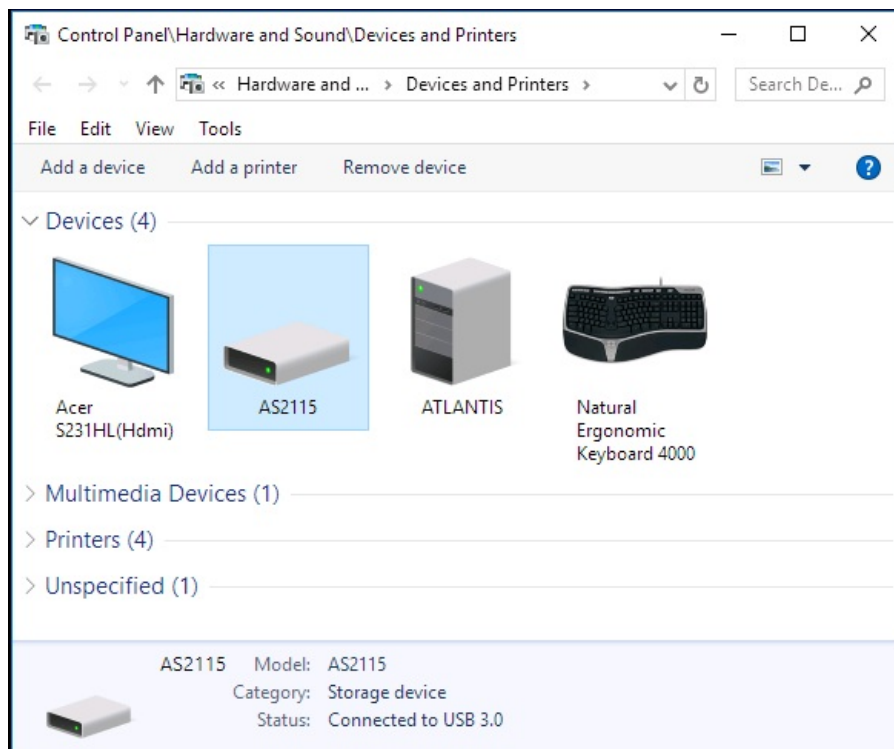


- C. The [image writing program Etcher](#)

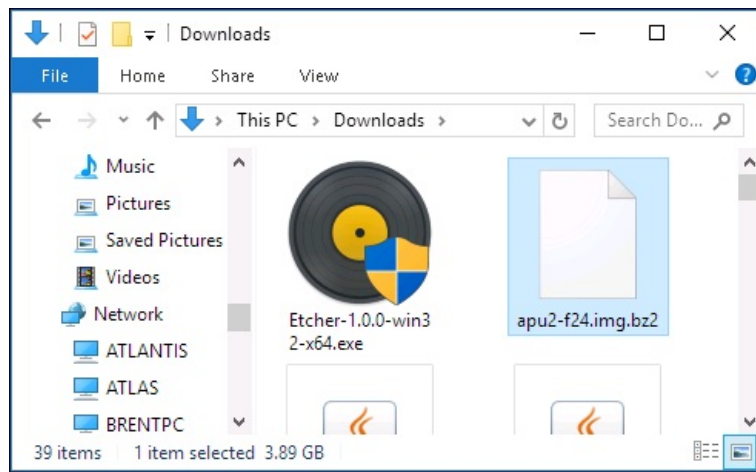
3. Download and install Etcher



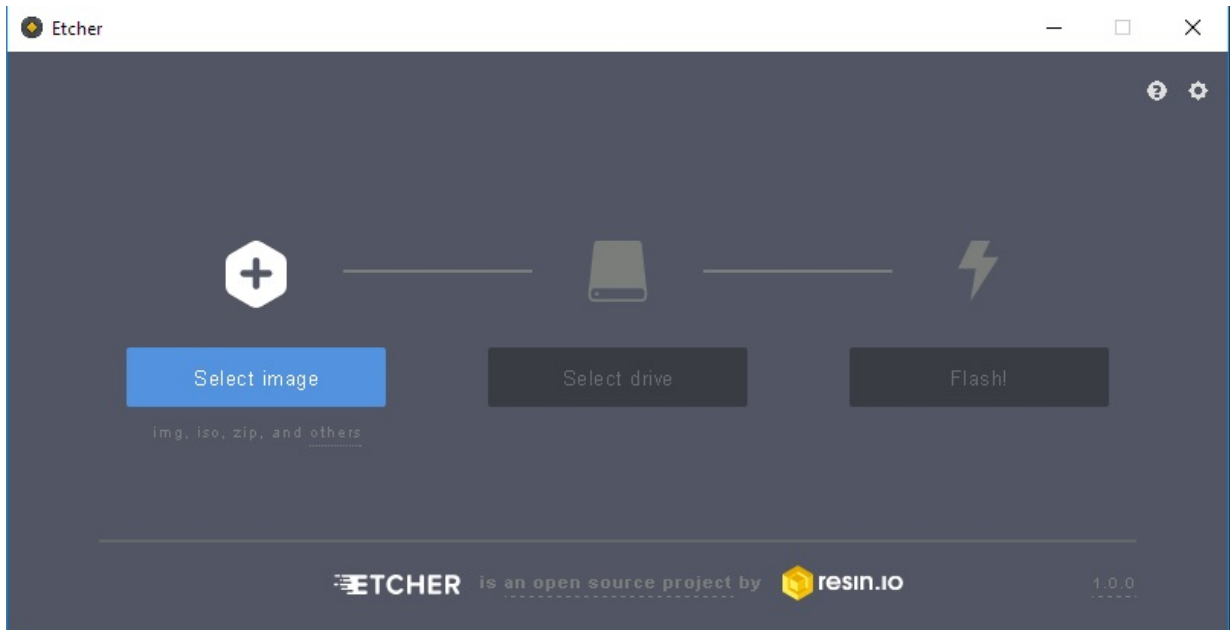
4. Identify your drive in **Control Panel** → **Hardware and Sound** → **Hardware and Printers**.



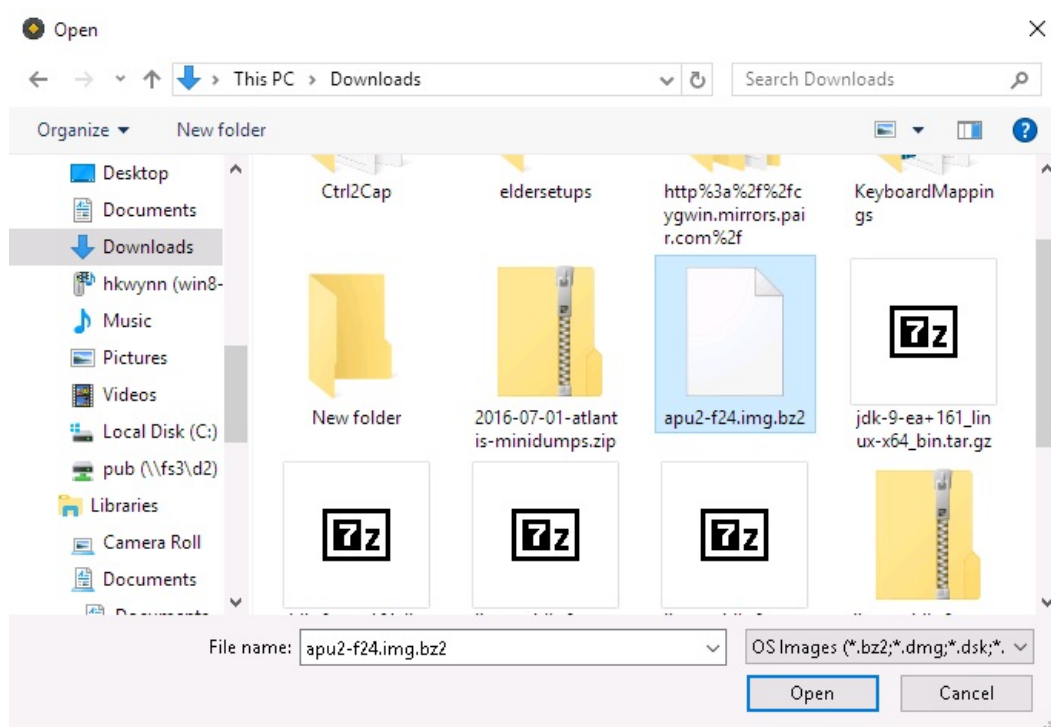
5. Download your image file:



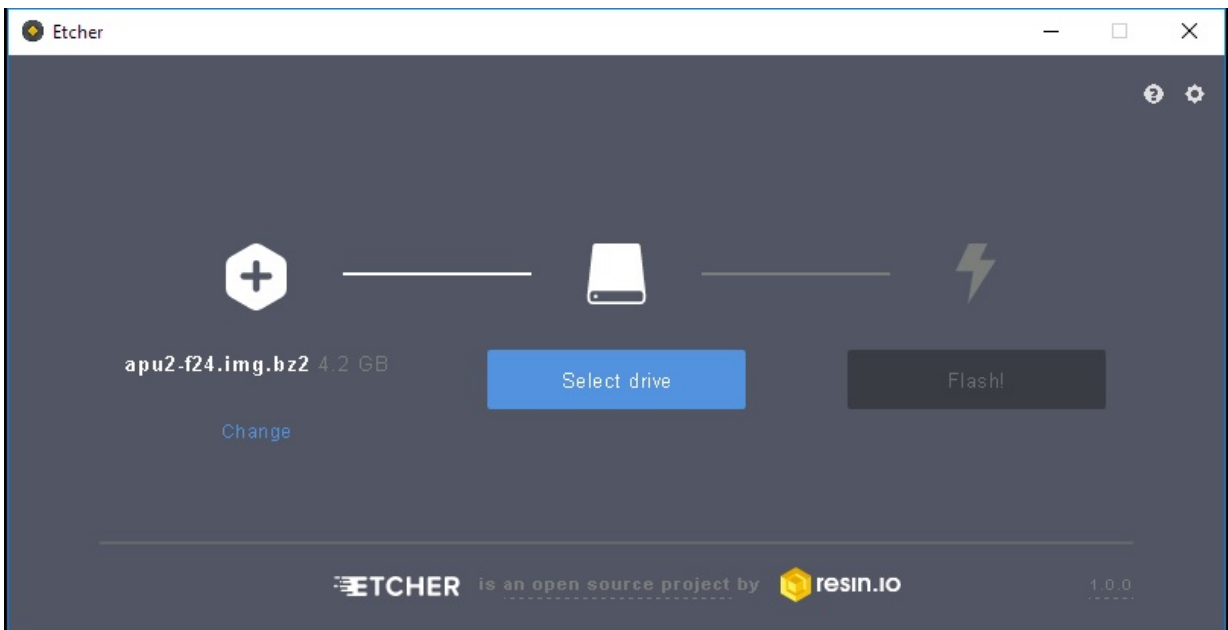
6. Start Etcher



7. Select the compressed image:

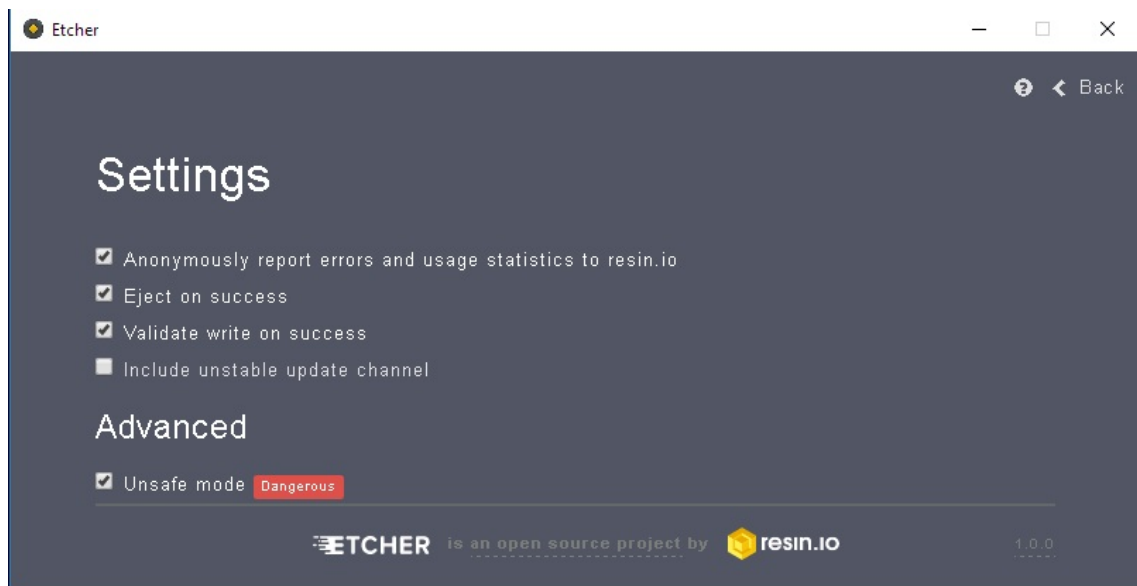


8. Select the removable drive

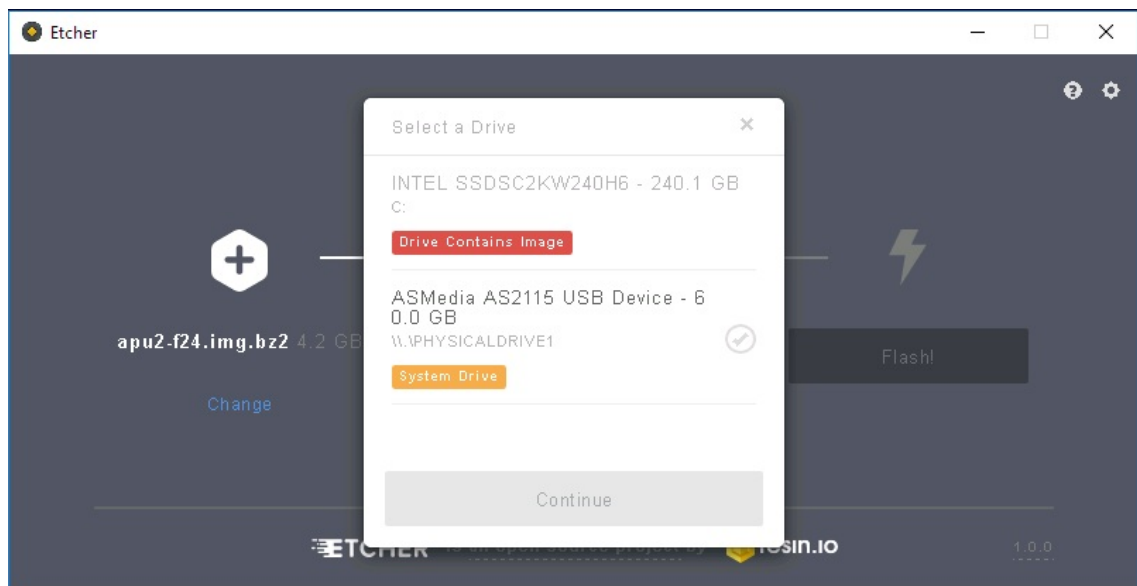


9. You might have to enable unsafe mode if the drive you plugged in has previously been used

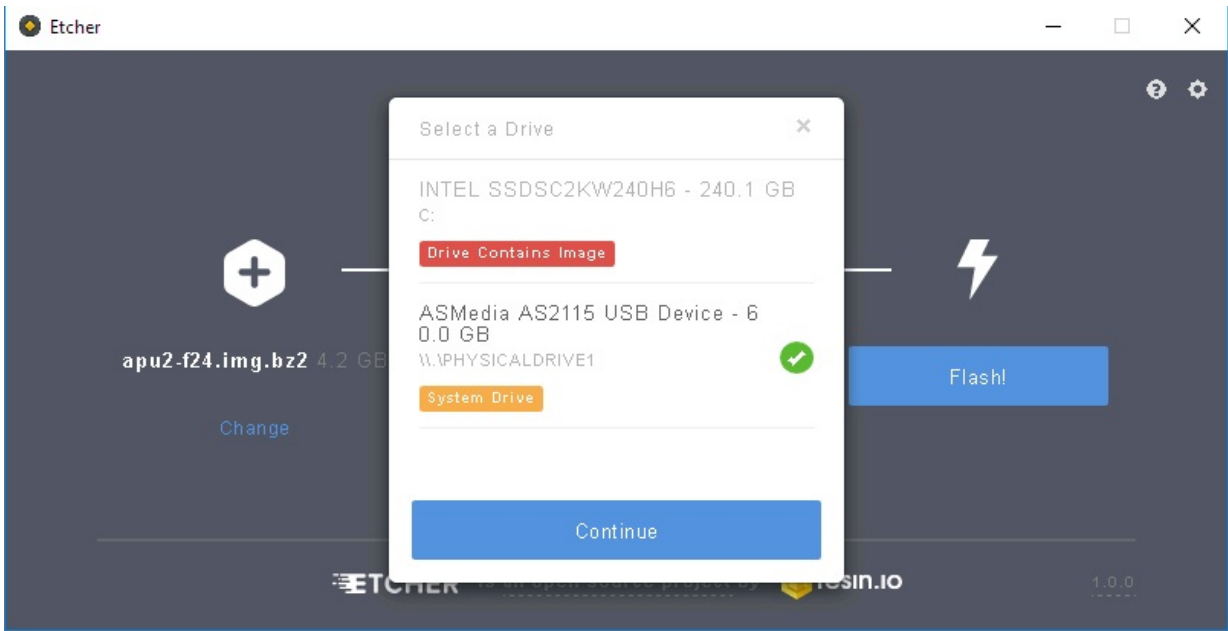
A. in Settings, enable **Unsafe mode**



B. Select the removable drive

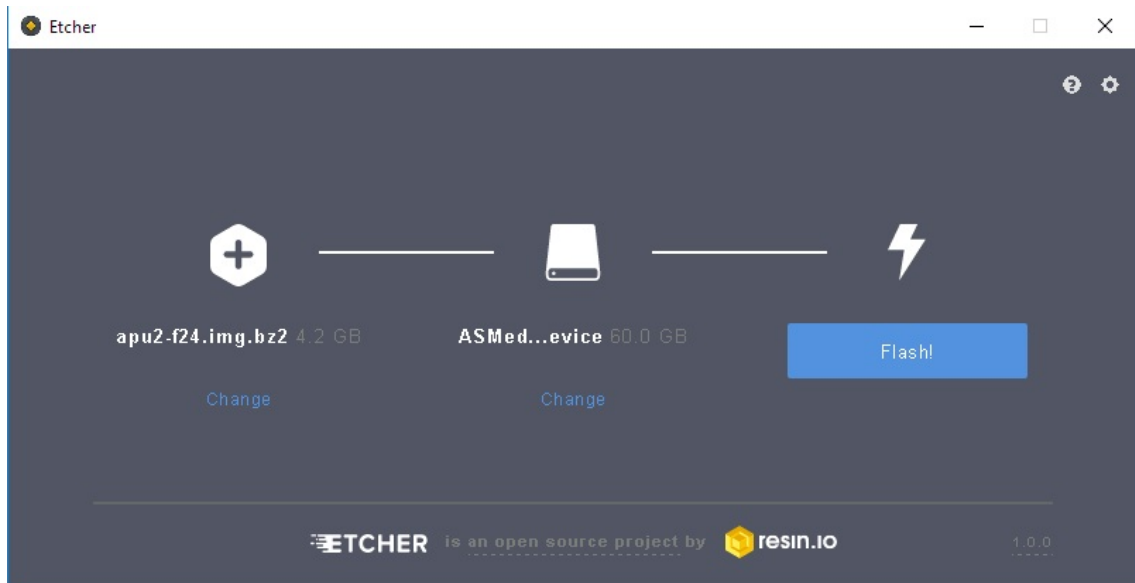


10. Select the removable drive



11. Write image.

A. click **Flash**



B. It might take 20 minutes to write a 20GB (uncompressed) image.

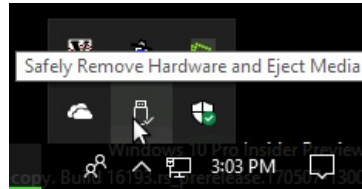


12. Make coffee.

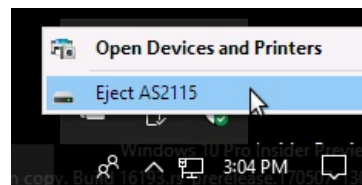


13. When the image is finished writing, close etcher and use the Safely Eject Thing dialog in the system tray.

A. right click



B. select device



14. Unplug your drive from the computer, remove the msata drive drive from the USB caddy and then install into your embedded device