

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

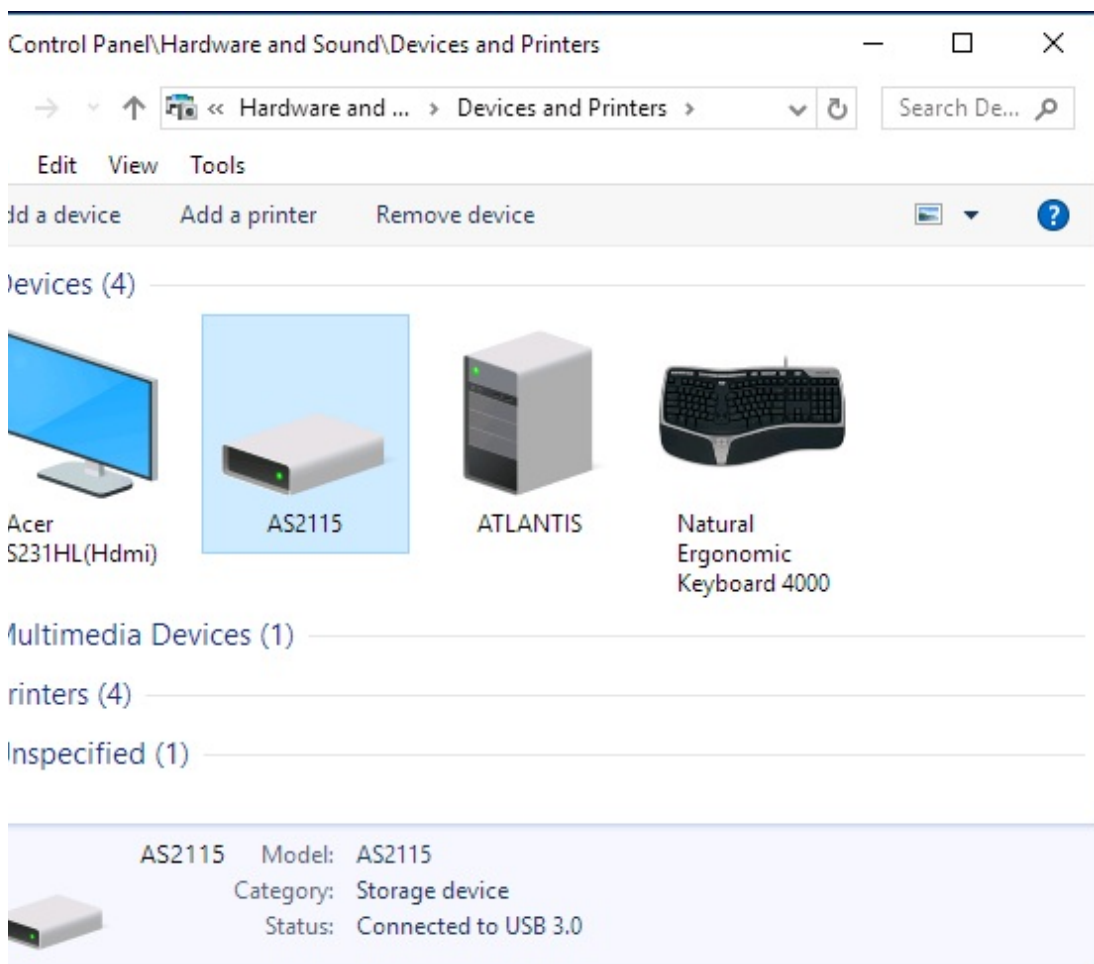


C. The image writing program Etcher

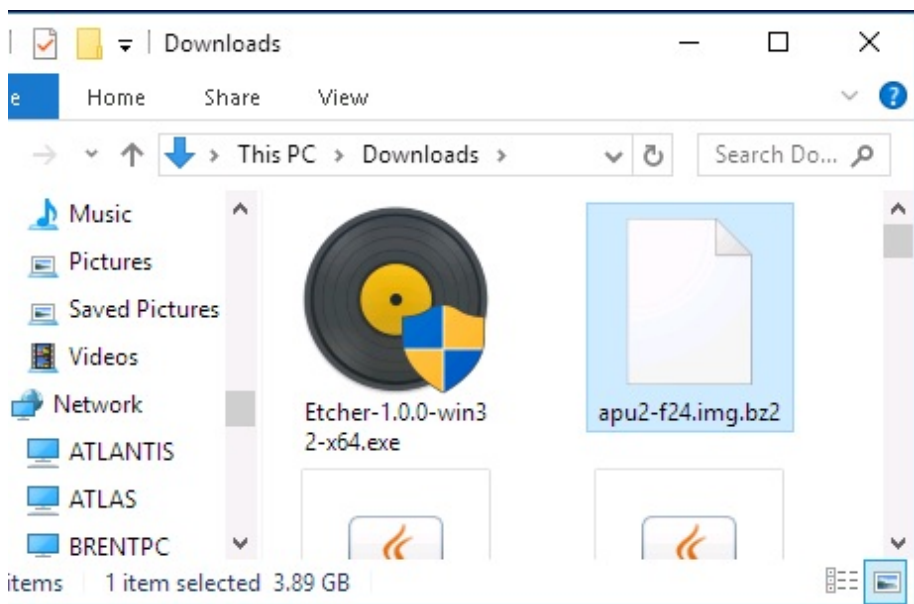
3. Download and install Etcher

A screenshot of a web browser showing the Etcher website. The browser's address bar displays "https://etcher.io". The website has a dark background with the text "Burn. Better." in large white font. Below this, it says "Burn images to SD cards & USB drives, safe & easy." There is a blue button that says "Download for Windows x64" with a dropdown arrow. Below the button, it says "or, use our experimental CLI version 1.0.0 - See what's new!". There are also social media buttons for "Tweet", "Star" (with a GitHub icon), and "2,971". At the bottom of the screenshot, a preview of the Etcher application interface is shown. It has a dark grey background with three main steps: "Select image" (with a plus icon and a blue button), "Select drive" (with a drive icon and a grey button), and "Flash!" (with a lightning bolt icon and a grey button). Below the "Select image" button, it says "img, iso, zip, and others".

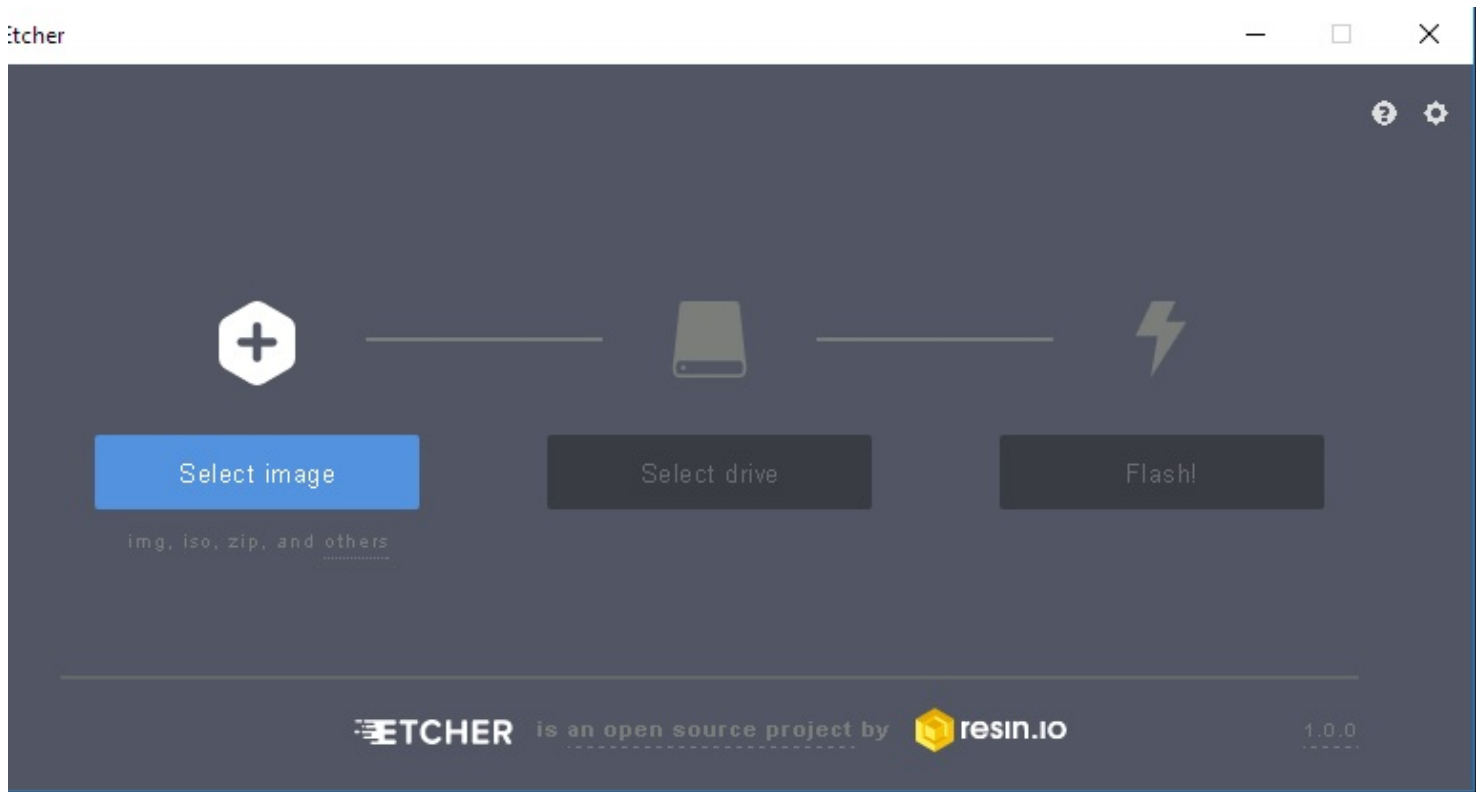
4. Identify your drive in **Control Panel** → **Hardware and Sound** → **Hardware and Printers**.



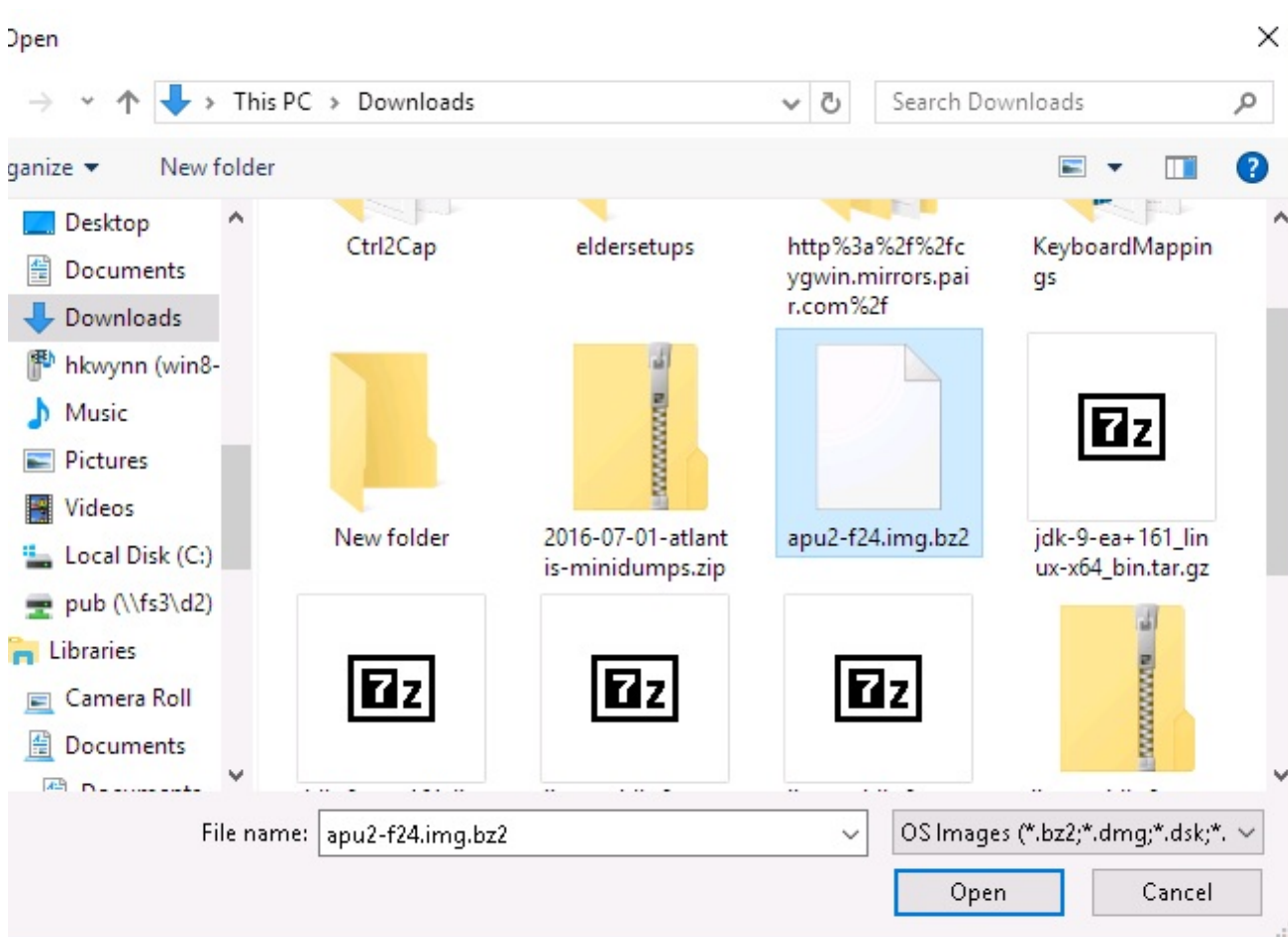
5. Download your image file:



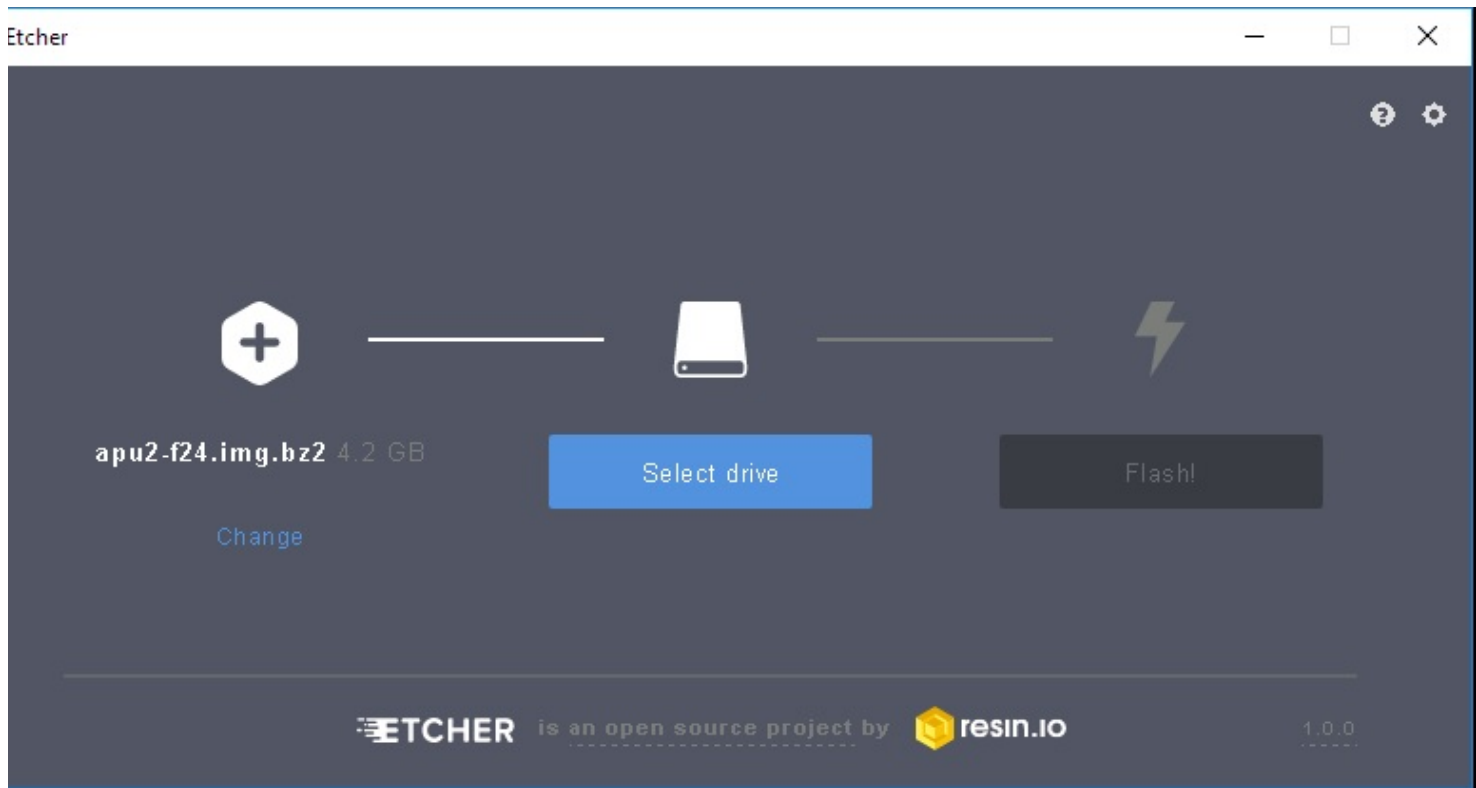
6. Start Etcher



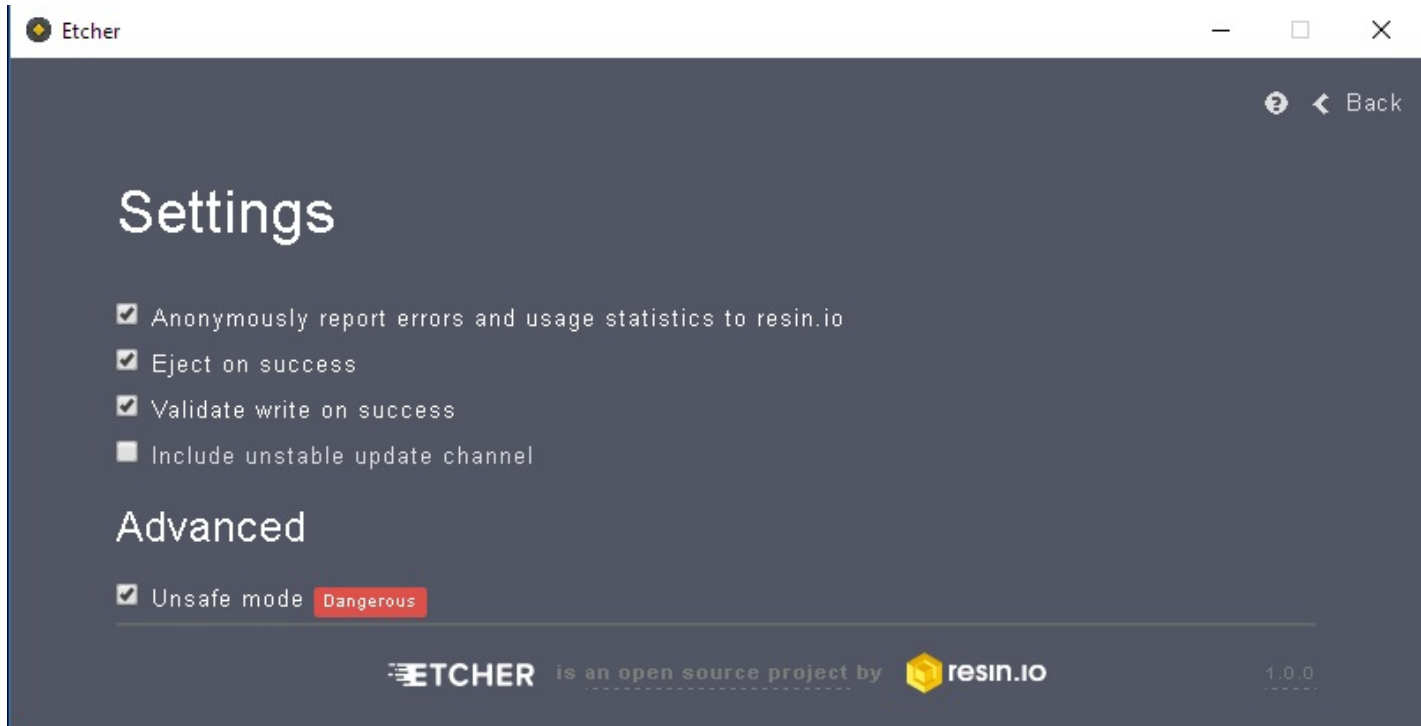
7. Select the compressed image:



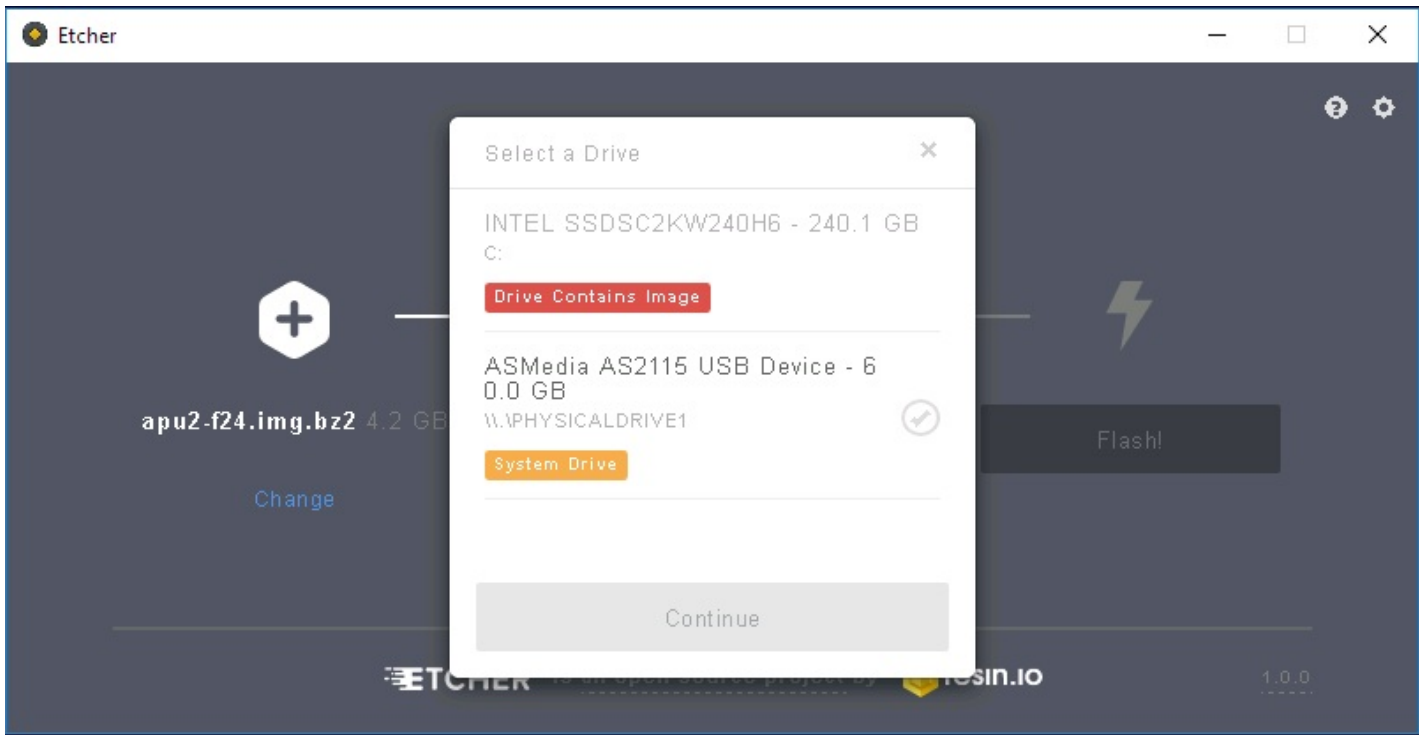
8. Select the removable drive



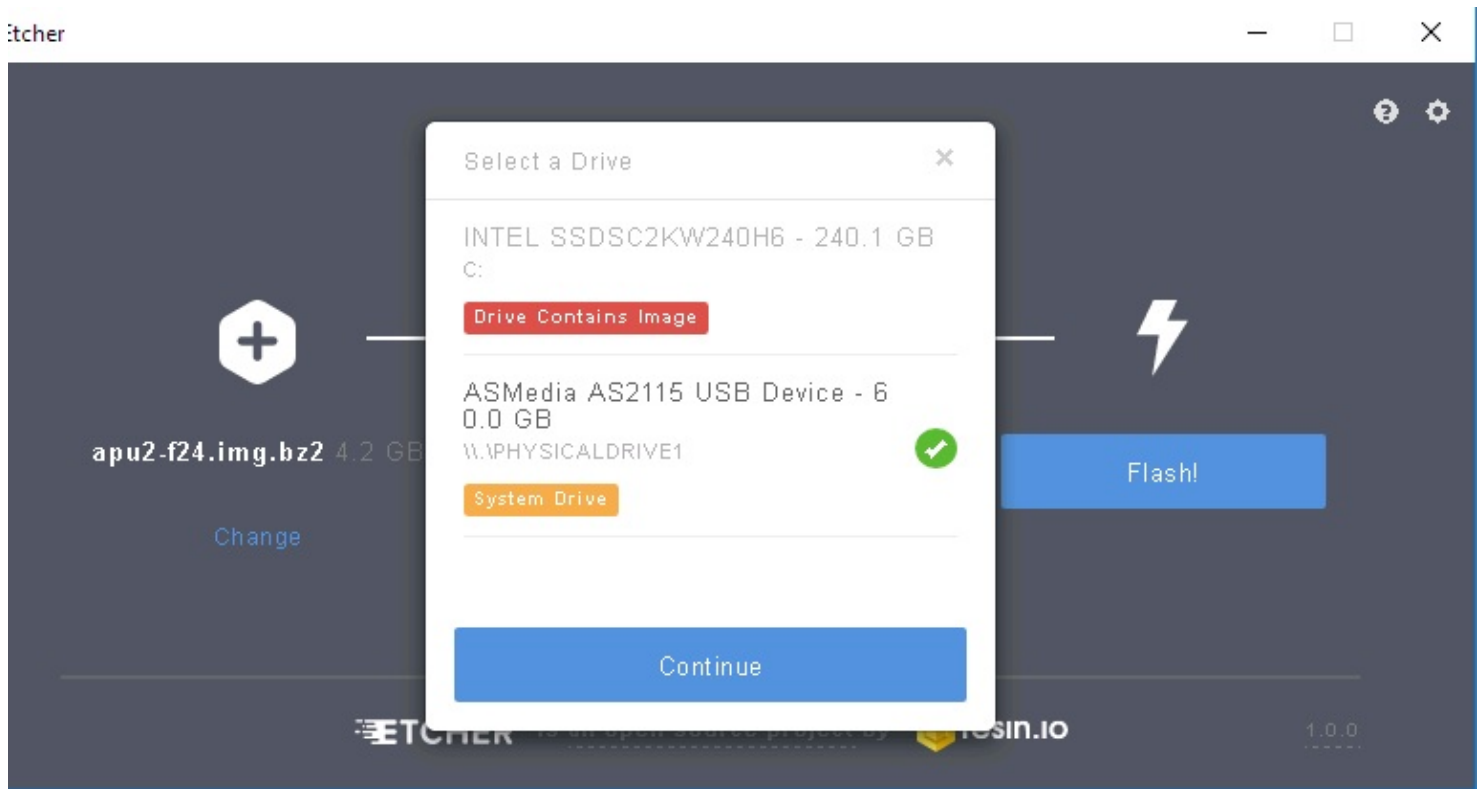
9. You might have to enable unsafe mode if the drive you plugged in has previously been used
- A. in *Settings*, enable **Unsafe mode**



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.

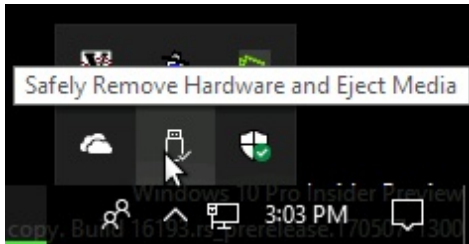


12. Make coffee.

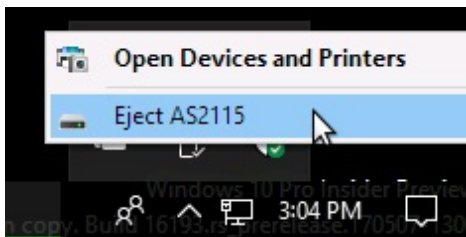


13. When the image is finished writing, close etcher and use the Safely Eject Thing dialog in the system tray.

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

*Candela Technologies, Inc., 2417 Main Street, Suite 201, Ferndale, WA 98248, USA
www.candelatech.com | sales@candelatech.com | +1.360.380.1618*