

## How write image of Jetson Xavier NX at the first time

### Jetson xavier nx (Developer kit) Specifications

**AI performance:** 21 TOPS (INT8)  
**CPU:** 6-core NVIDIA Carmel ARM@v8.2 64-bit CPU 6 MB L2 + 4 MB L3  
**GPU:** NNVIDIA Volta™ architecture 384 NVIDIA@CUDA0 cores and 48 Tensor cores  
**Deep learning accelerator:** 2 NVDLA engines  
**Memory:** 8 GB 128-bit LPDDR4x 51.2GB/s  
**Storage:** microSD (without memory card)  
**Power consumption:** 10 W/15 W  
**Connection:** Gigabit Ethernet, M.2 Key E (WiFi/BT included), M.2 Key M (NVMe)  
**CSI camera:** 2 MIPI CSI-2 D-PHY lanes  
**Video encoding:** 2x 4Kp30 | 6x 1080p60 | 14x 1080p30 (H.265 & H.264)  
**Video decoding:** 2x 4Kp60 | 4x 4Kp30 | 12x 1080p60 | 32x 1080p30 (H.265)  
2x 4Kp30 | 6x 1080p60 | 16x 1080p30 (H.264)  
**Display:** HDMI and DP  
**Vision accelerator:** 7-channel VLIW vision processor  
**USB:** 4x USB 3.1, USB 2.0 Micro-B  
**Network:** 10/100/1000 BASE-T Ethernet  
**Structure size:** 103 mm x 90.5 mm x 34 mm

#### 1.Preparation

##### 1) Power supply cable (necessary)

The standard configuration of Jetson Xavier NX is 19V-2.37A

##### 2) SD card (necessary)

Jetson Xavier NX requires at least 32g SD card, 64G is better.

#### 2.Write image into SD card

Method of Jetson Xavier NX writing system is different from the Jetson TX series, and the image can be directly written to the SD file.

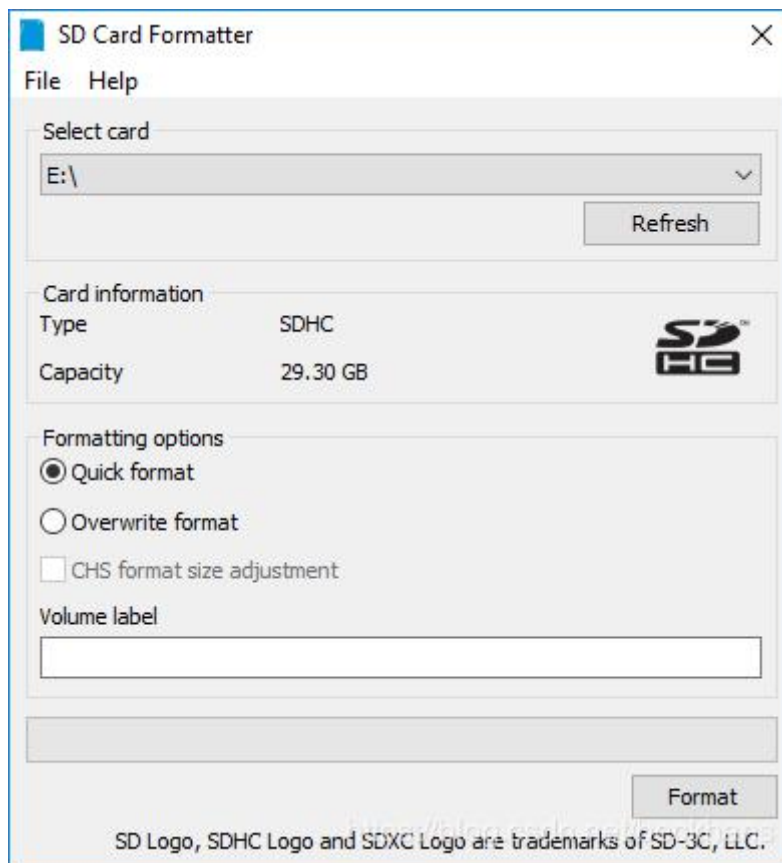
##### 1)Download image

**NVIDIA Link:**

<https://developer.nvidia.com/embedded/downloads>

##### 2)Format SD card

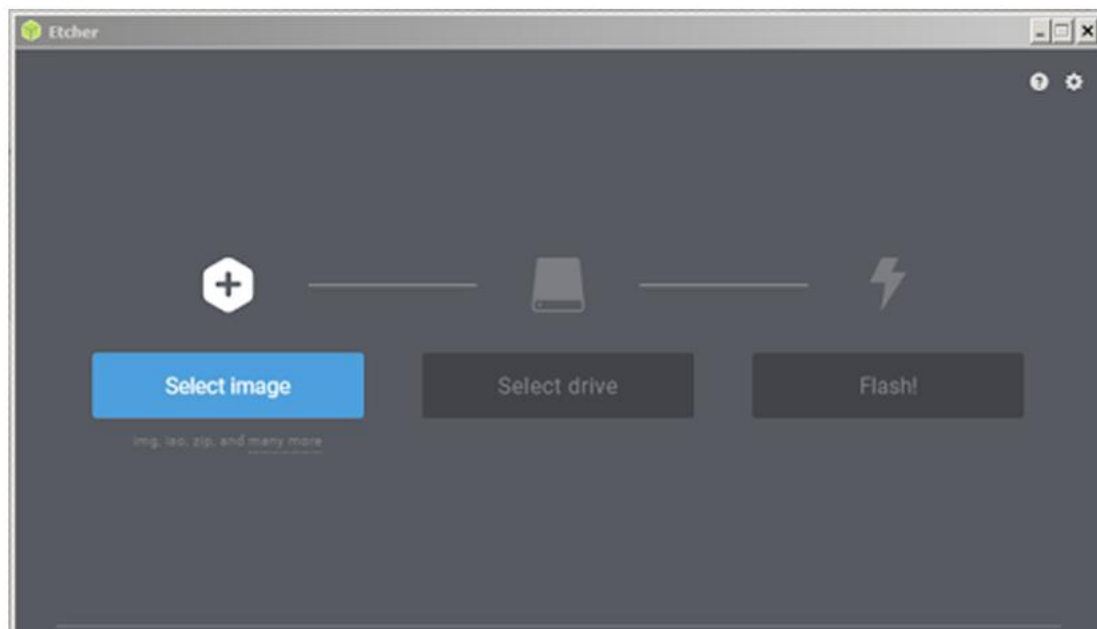
Format SD card by SD Card Formatter.exe

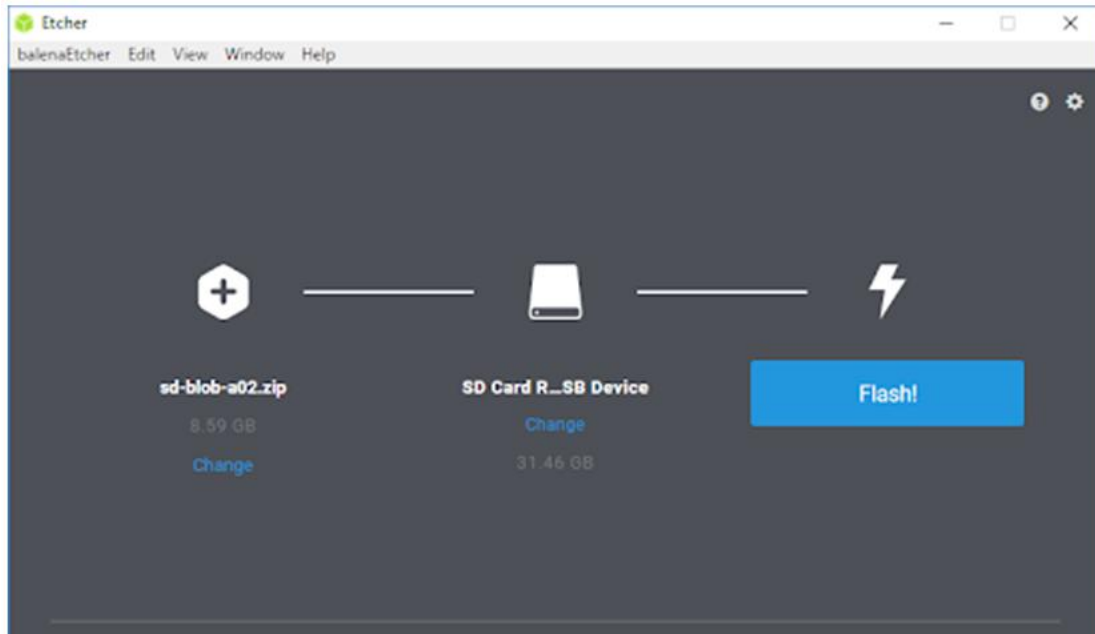


### 3) Write image

Writing image by balenaEtcher , it need about 30 minute.

Link: <https://www.balena.io/etcher/>





4. After the programming is completed, insert the SD card into the Jetson Xavier NX and open power switch.
5. We can complete some setting, for example: Language, time, etc.

