## Preparing the SD Card and Booting INP3201 Board

**Note**: The following steps need to be executed when booting the board for the very first time.

1. Using a 16GB or 32GB SDCARD, connect to a Linux PC/LAPTOP using a card reader.
2. Create a new FAT partition in SDCARD – sdcard is enumerated as /dev/sda

|  |
| --- |
| sudo fdisk /dev/sda  //For creating a new partition type n  Command (m for help): n <enter>  //Select default primary partition  Select (p(default) - primary (1 primary, 0 extended, 3 free),  e – extended(container for logical partitions)): <enter>  //Use default partition number 1  Partition number (1 - 4, default 1): <enter>  First sector (2048 – 62333951, default 2048): <enter>  Last sector, +/-sectors or +/-size{K,M,G,T,P} (2048 – 62333951, default 62333951): <enter>  //Created a new partition 1 of ‘Linux’ and size of 29.7 GiB.  //For writing the changes to SDCARD type w  Command (m for help): w <enter> |

A screenshot of a computer program

Description automatically generated with medium confidence

Figure 5: Create a new FAT partition

1. Create FAT filesystem on this new partition

|  |
| --- |
| sudo mkfs.vfat /dev/sda1 |



Figure 6: Create FAT filesystem

1. Copy the pre-built MMC u-boot image given in the T31ZX SDK to SDCARD

SDK u-boot path: *T31ZX\_files/T31ZX-Battery-Camera/NDA/SDK/firmware/sdcard\_uboot*

|  |
| --- |
| sudo dd if=t31z\_sdcard\_uboot\_uart1\_v1.bin of=/dev/sda1 bs=1024 seek=17 |

A picture containing text, screenshot, font

Description automatically generated

Figure 7: Pre-build MMC u-boot image

1. Insert the SD card into the SD card slot of INP3201. Power ON the INP3201 by pressing the boot-select button to boot the uboot