

phyCORE-AM57x SD/phyCORE-AM57x Create Bootable SD Card

<https://develop.phytec.com/phycore-am57x/latest/software-development/how-to-guides/create-a-bootable-sd-card>

BSPPD20.1.2

phyCORE AM57x SD

ubunturootsudo

-
- SD
 - SD
 - boot
 -
- PD18

- SD8GB
- Linux
 - ubuntu 18 64
 - sd
 -
 - sd
 -
-
- <http://ftp.phytec.cn/> yocto

SD

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- MLO
 - bootloader
 - MLO
- u-boot.img
 -
- tisk-rootfs-image-am57xx-phycore-kit.tar.xz
 -
- create-sdcard.sh
 -

SD

create-sdcard.sh

```
chmod +x create-sdcard.sh
```

```
bob@bob-VirtualBox:~/Desktop/am57x$ chmod +x create-sdcard.sh
```

SD

```

bob@bob-VirtualBox:~/Desktop/am57x$ dmesg | tail
[ 418.015151] usbcore: registered new interface driver uas
[ 419.049030] scsi 3:0:0:0: Direct-Access      Sony      Card_R/W          1.00 PQ: 0 ANSI: 0 CCS
[ 419.049920] sd 3:0:0:0: Attached scsi generic sg2 type 0
[ 419.684139] sd 3:0:0:0: [sdb] 7626752 512-byte logical blocks: (3.90 GB/3.64 GiB)
[ 419.700829] sd 3:0:0:0: [sdb] Write Protect is off
[ 419.700835] sd 3:0:0:0: [sdb] Mode Sense: 03 00 00 00
[ 419.717431] sd 3:0:0:0: [sdb] No Caching mode page found
[ 419.717442] sd 3:0:0:0: [sdb] Assuming drive cache: write through
[ 419.796731]   sdb: sdb1 sdb2
[ 419.865729] sd 3:0:0:0: [sdb] Attached SCSI removable disk

```

SDsdb

```
sudo ./create-sdcard.sh
```

```

bob@bob-VirtualBox:~/Desktop/am57x$ sudo ./create-sdcard.sh
[sudo] password for bob:

#####

This script will create a bootable SD card from custom or pre-built binaries.

The script must be run with root permissions and from the bin directory of
the SDK

Example:
$ sudo ./create-sdcard.sh

Formatting can be skipped if the SD card is already formatted and
partitioned properly.

#####

Available Drives to write images to:

#  major   minor    size   name
1:    8       16   3813376 sdb

Enter Device Number or n to exit:

```

sdb1

```
Enter Device Number or n to exit: 1
```

```
sdb was selected
```

```
/dev/sdb is an sdx device
```

```
Unmounting the sdb drives
```

```
unmounted /dev/sdb1
```

```
unmounted /dev/sdb2
```

```
Current size of sdb1 52724 bytes
```

```
Current size of sdb2 825045 bytes
```

```
#####
```

```
    Select 2 partitions if only need boot and rootfs (most users).
```

```
    Select 3 partitions if need SDK & other content on SD card. This is  
    usually used by device manufacturers with access to partition tarballs.
```

```
    ****WARNING**** continuing will erase all data on sdb
```

```
#####
```

```
Number of partitions needed [2/3] :
```

```
Number of partitions needed [2/3] : 2
```

```
Now partitioning sdb with 2 partitions...
```

```
#####
```

```
Now making 2 partitions
```

```
#####
```

```
1024+0 records in
1024+0 records out
1048576 bytes (1.0 MB, 1.0 MiB) copied, 2.88808 s, 363 kB/s
DISK SIZE - 3904897024 bytes
```

```
#####
```

```
Partitioning Boot
```

```
#####
```

```
mkfs.fat 3.0.28 (2015-05-16)
mkfs.fat: warning - lowercase labels might not work properly with DOS or Windows
```

```
#####
```

```
Partitioning rootfs
```

```
#####
```

```
mke2fs 1.42.13 (17-May-2015)
Creating filesystem with 931072 4k blocks and 232928 inodes
Filesystem UUID: 47942c80-4fbc-4dc4-8387-3b2919821b7a
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736
```

```
Allocating group tables: done
Writing inode tables: done
Creating journal (16384 blocks): done
Writing superblocks and filesystem accounting information: done
```

```
#####
```


```
Partitioning is now done
Continue to install filesystem or select 'n' to safe exit
```

```
**Warning** Continuing will erase files any files in the partitions
```

```
#####
```

```
Would you like to continue? [y/n] :
```

```
n
```

 The file /dev/sdb2 does not exist and no size was specified.

boot

SD

```
mkdir sd
```

```
bob@bob-VirtualBox:~/Desktop/am57x$ mkdir sd
```

SDsd

```
sudo mount /dev/sdb1 sd
```

```
bob@bob-VirtualBox:~/Desktop/am57x$ sudo mount /dev/sdb1 sd
```

MLOu-boot

```
sudo cp MLO u-boot.img sd/
```

```
bob@bob-VirtualBox:~/Desktop/am57x$ sudo cp MLO u-boot.img sd/
```

SD

```
sync  
sudo umount sd/
```

```
bob@bob-VirtualBox:~/Desktop/am57x$ sync  
bob@bob-VirtualBox:~/Desktop/am57x$ sudo umount sd/
```

sd

```
sudo mount /dev/sdb2 sd
```

```
bob@bob-VirtualBox:~/Desktop/am57x$ sudo mount /dev/sdb2 sd/
```

SD

 1.5G6GSD

```
sudo tar -Jxf tisd-k-rootfs-image-am57xx-phycore-kit.tar.xz -C sd/ && sync
```

```
bob@bob-VirtualBox:~/Desktop/am57x$ sudo tar -Jxf tisd-k-rootfs-image-am57xx-phycore-kit.tar.xz -C sd/ && sync
```



```
sudo rm -rf sd/*
```

```
tar
```

```
sudo umount sd/
```

```
bob@bob-VirtualBox:~/Desktop/am57x$ sudo umount sd/
```

<https://develop.phytec.com/phycore-am57x/latest/using-peripherals/boot-switch>

PD18

[BSP-Yocto-TISDK-AM57xx-PD18.1.0 Quickstart#Yocto-TISDK-AM57xx-PD18.1.0Quickstart-BootinglePre-builtImages](#)

```
sfdisk: invalid option -- 'D'
Usage:
  sfdisk [options] <dev> [[-N] <part>]
  sfdisk [options] <command>
Display or manipulate a disk partition table.
```

https://e2e.ti.com/support/arm/sitara_arm/f/791/t/509510