

Creating a SD Card Image from Scratch

Lets create an image that looks like the following

Image to Copy

```
sudo parted Nacho\'s\ Image.img unit B print
```

Model: (file)

Disk /share/CACHEDEV1_DATA/tv/incoming/nacho/Nacho\'s Image.img: 63864569856B

Sector size (logical/physical): 512B/512B

Partition Table: msdos

Disk Flags:

Number	Start	End	Size	Type	File system	Flags
1	4194304B	63963135B	59768832B	primary	fat16	boot, lba
2	63963136B	63864569855B	63800606720B	primary	ext4	

Create a blank image

```
dd if=/dev/zero of=image.img bs=1G count=55
```

Add partitions

```
parted image.img
```

```
(parted) mklabel
```

```
mklabel
```

```
New disk label type? msdos
```

```
msdos
```

```
Warning: The existing disk label on
```

```
/image.img will be destroyed and all
```

```
data on this disk will be lost. Do you want to continue?
```

```
Yes/No? y
```

```
y
```

```
(parted) unit B
```

unit B

(parted) **mkpart**
mkpart
Partition type? primary/extended? **primary**
primary
File system type? [ext2]? **fat16**
fat16
Start? **4194304B**
4194304B
End? **63963135B**
63963135B

(parted) **mkpart**
mkpart
Partition type? primary/extended? **primary**
primary
File system type? [ext2]? **ext4**
ext4
Start? **63963136B**
63963136B
End? **100%**
100%

(parted) **print**
print
Model: (file)
Disk /image.img: 59055800320B
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Disk Flags:

Number	Start	End	Size	Type	File system	Flags
1	4194304B	63963135B	59768832B	primary		lba
2	63963136B	59055800319B	58991837184B	primary		

(parted) **set 1 boot on**

```
set 1 boot on
```

```
(parted) print
```

```
print
```

```
Model: (file)
```

```
Disk /image.img: 59055800320B
```

```
Sector size (logical/physical): 512B/512B
```

```
Partition Table: msdos
```

```
Disk Flags:
```

Number	Start	End	Size	Type	File system	Flags
1	4194304B	63963135B	59768832B	primary		boot, lba
2	63963136B	59055800319B	58991837184B	primary		

```
(parted) quit
```

Mount the partition to a loopback device

```
losetup -o 4194304 -f image.img
```

Copy contents from one device to another

```
dd if=/dev/loop5 of=/dev/loop6 bs=1K
```

Make filesystem on partition

```
mkfs -t ext4 /dev/loop6
```

```
or
```

```
mke2fs -t ext4 /dev/loop6
```

Mount the partition

```
sudo mount -t ext4 -o loop,offset=63963136 image.img p2
```

Copy contents from one folder to out newly mounted partition

```
rsync -av <source> p2
```