

uBMC SD Card Install Guide.

Requirements.

Linux PC with a relatively new version of any major distribution. And an user account with sudo without password

Software required:

```
minicom
dosfstools
parted
util-linux
```

An SD TF card of at least 2GB in size.

A USB card reader.

The release tar.gz file

Install procedure.

1. Connect the usb card reader, insert the SD TF card, and determine the device name of the card reader. For example:

`dmesg|grep sd`

2. Copy the UBMC_x.x.x.x_BUILD_XXXX-MAKESD.tar.gz to a local folder to the Linux PC.

```
untar UBMC_x.x.x.x_BUILD_XXXX-MAKESD.tar.gz
cd UBMC_x.x.x.x_BUILD_XXXX-MAKESD
./is_make_sd_install.sh sdx #replace the sdx with the usb card reader
device name for example sdc
```

Example output

```
Using ./UBMC_0.5.0.0_BUILD_7198.img
Building SD card for install
--> Zero out first 1MB
1+0 records in
1+0 records out
1048576 bytes (1.0 MB) copied, 0.0428465 s, 24.5 MB/s
--> repartitioning /dev/sdc
mkfs.fat 3.0.20 (12 Jun 2013)
--> Copying images to /dev/sdc1
----> Copying ./MLO to /dev/sdc1
----> Copying ./u-boot.img to /dev/sdc1
----> Copying ./boot.scr to /dev/sdc1
----> Copying ./zImage to /dev/sdc1
----> Copying ./dt.dtb to /dev/sdc1
----> Copying ./rootfs.cpio.uboot to /dev/sdc1
----> Copying ./UBMC_0.5.0.0_BUILD_7198.img to /dev/sdc1
boot.scr dt.dtb MLO rootfs.cpio.uboot UBMC_0.5.0.0_BUILD_7198.img u-boot.img
zImage
--> Ejecting /dev/sdc
```

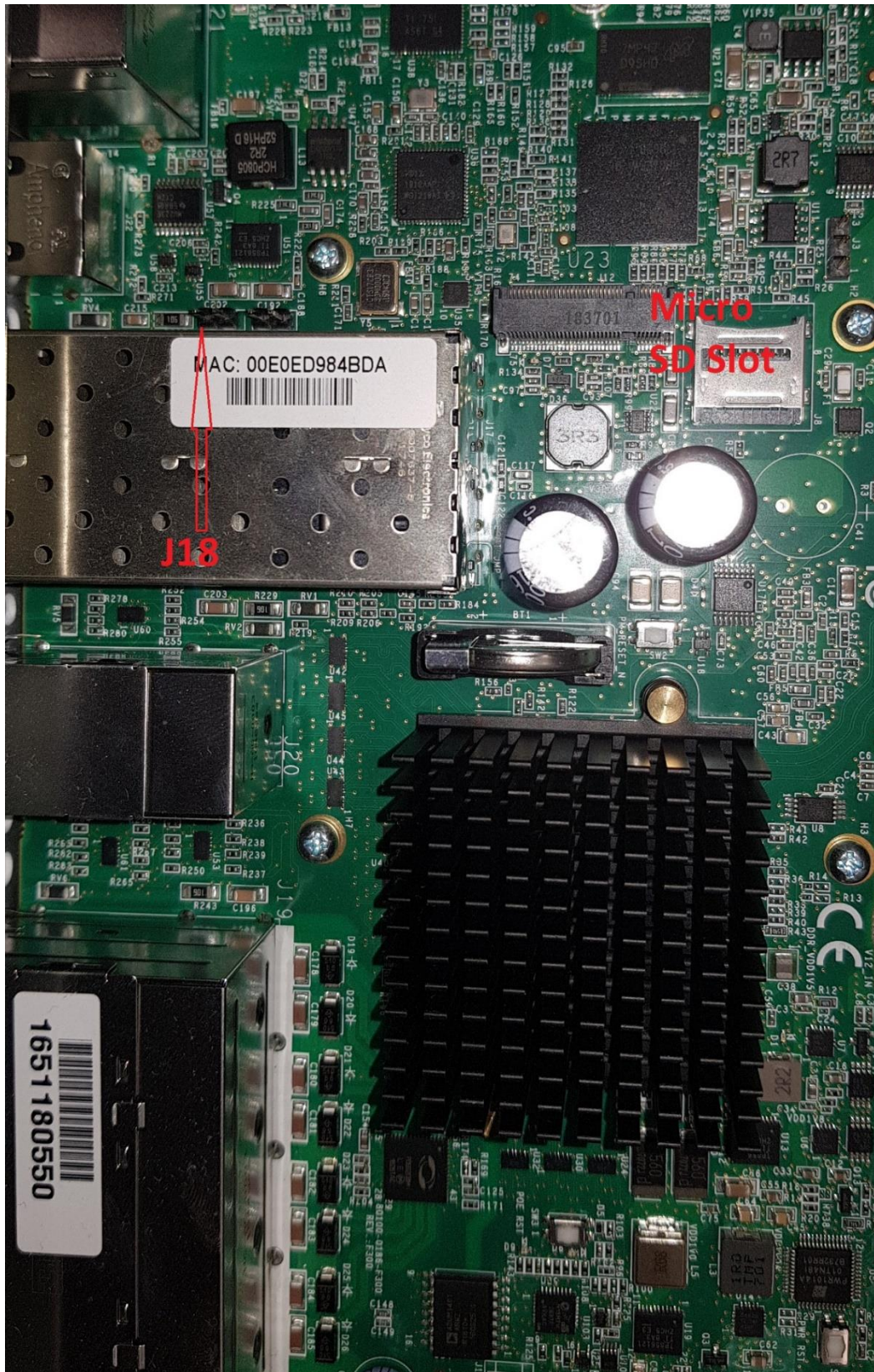
--> You can now remove the SD card, and put it into the product for installation
--> Done

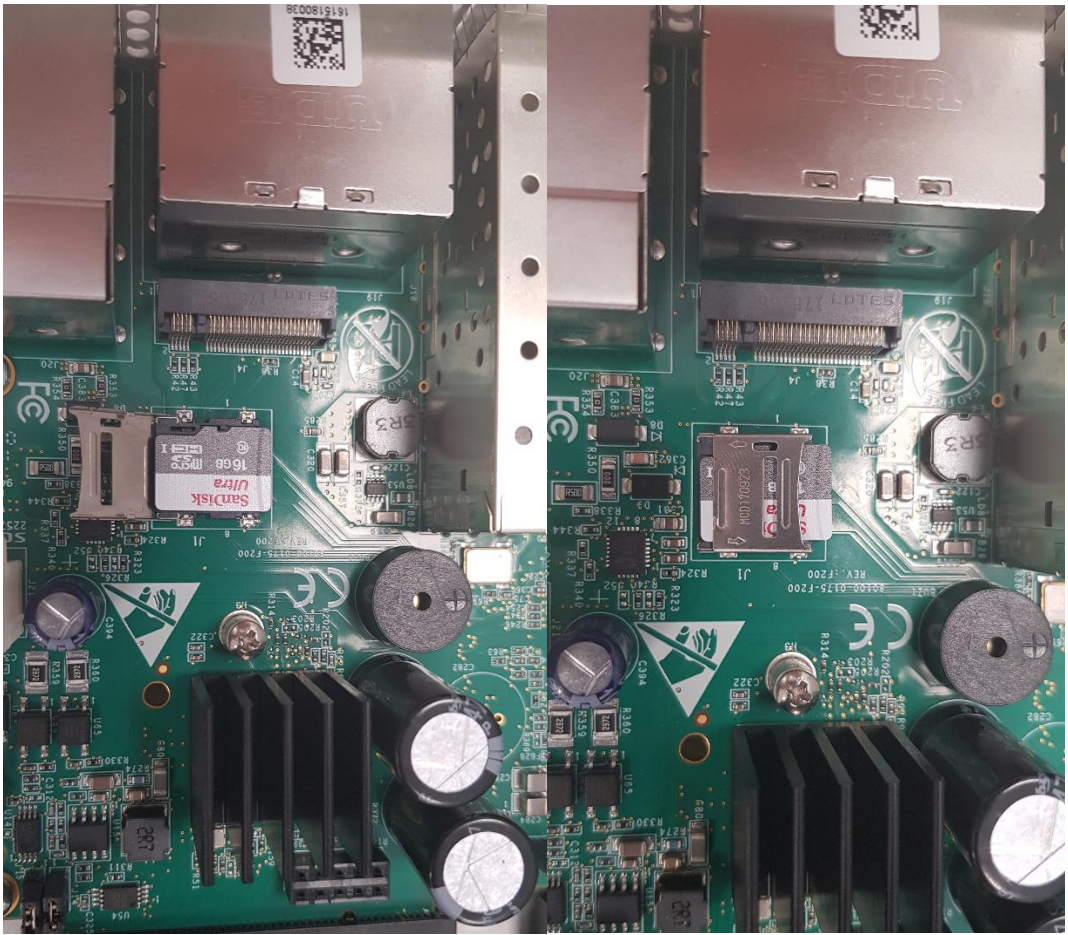
3. Prepare veCPE

- Disconnect the Power from the the veCPE.
- Open the upper cover of the veCPE (remove 6 screws)



- Remove the TF card from the card reader, and put it to the ubmc TF card slot.
- Put a jumper on J18. This force uBMC to boot from SD TF card.





4. Setup minicom console

Connect the console cable to the veCPE front panel, and the USB side to the Linux os.

Setup minicom to use ttyUSB0, (it could be ttyUSB1/2/3 if multiple cables are connected).

```
| A - Serial Device      : /dev/ttyUSB0
| C - Callin Program     :
| D - Callout Program    :
| E - Bps/Par/Bits       : 115200 8N1
| F - Hardware Flow Control : No
| G - Software Flow Control : No
```

5. Software installation

Power on the veCPE.

After the uBMC bootup, wait until a message is displayed as below

```
Start system installation? [Y/N]
```

Press Y and the installation will start. Wait until you see the following,

```
Installation of UBMC image finished, you can now reboot
Can not get terminal info from /proc/cmdline
Welcome to Silicom IS Platform
localhost login:
```

6. Disconnect the power from the Power of the veCPE, and remove the J18 jumper, and remove the SD TF card.

7. First time configuration

Connect the power.

During uBMC bootup, uBMC booting process will be shown, but after uBMC boot is finished, console will be switched to the veCPE host.

Use ctrl+X to switch between the veCPE console and the uBMC console.

```
=====Switching to UBMC console=====
```

```
Welcome to Silicom IS Platform
ubmc01 login:
```

User: is_admin

Password: 1qaz2wsX

Configure inband interface to use dhcp

Connect a cable to one of the inband from panel ports (4 ports stack together)sho

```
ubmc01 login: is_admin
Password:
ubmc01> enable
ubmc01# configure
ubmc01(config)# management interface eth0 ipv4 dhcp
ubmc01(config)# write memory
```

in order to check the IP address which was assigned by the dhcp server:

```
ubmc01(config)# show management state
Management Interface Info:
Info
eth0      Link encap:Ethernet  HWaddr C8:DF:84:C8:E4:85
          inet addr:192.168.1.36  Bcast:192.168.1.255  Mask:255.255.255.0
          inet6 addr: fe80::cadf:84ff:fec8:e485/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:3613 errors:0 dropped:397 overruns:0 frame:0
          TX packets:212 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:278141 (271.6 KiB)  TX bytes:196478 (191.8 KiB)
          Interrupt:43

eth1      Link encap:Ethernet  HWaddr C8:DF:84:C8:E4:87
          inet6 addr: fe80::cadf:84ff:fec8:e487/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:51 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 B)  TX bytes:14266 (13.9 KiB)
```