

RPi init - image

- [Install image](#), 64 bit OS needed, currently used 32 GB SDcard
 - Currently used 2024-03-15-raspbios-bookworm-arm64.img.xz
- Username: pi
- PWD: pi
 - To be changed for more secure one in the future after debugging
- Enable ssh
 - Pushing key to RPi from remote PC

```
ssh-keygen -t rsa -b 4096
```

```
ssh-copy-id pi@raspberrypi_ip_address
```



RPi init - swap

- Set swap to 4 GB (insufficient RAM for Box64 on RPi zero)
 - Based on [link](#)

```
sudo dphys-swapfile swapoff
```

```
sudo nano /etc/dphys-swapfile
```

```
CONF_SWAPSIZE=4096  
...  
CONF_MAXSWAP=4096
```

```
sudo dphys-swapfile setup
```

```
sudo dphys-swapfile swapon
```

```
sudo reboot
```



RPi init - box64

- Install box64 to run linux applications for x84_64 on ARM
 - Based on [link](#)

```
git clone https://github.com/ptitSeb/box64
```

```
cd box64
```

```
mkdir build; cd build; cmake .. -D RPI3ARM64=1 -D CMAKE_BUILD_TYPE=RelWithDebInfo
```

```
make -j4
```

```
sudo make install
```

```
sudo systemctl restart systemd-binfmt
```

```
sudo reboot
```



RPi init - STM32CubeProgrammer

- Install box64 to run linux applications for x84_64 on ARM

- Based on [link](#)

- Install Java (not sure if mandatory)

```
sudo apt install default-jdk
```

- Install STM32cubeprogrammer on different linux PC and copy paste installation package to Raspberry Pi

```
/home/pi/STM32CubeProgrammer
```

- Set STM32_Programmer_CLI executable

```
chmod +x STM32_Programmer_CLI
```

