

Two types of kernel :

monolithic kernel:- it is signal large process runnig entairly in a single address space

Eg:- linux kernel

micro kernel:- it is broken down into separate process known as servers . Some of the servers run in kernel space and some of the servers run in user space .

MAC OS usseses micro kernel

Porting RTLinux on Raspberry pi

VGA :- only video signals transfer

HDMI:- it can transfer the both audio and video signals

RJ45:- LAN cable connector

RCA jack

SD card :- secure digital card

SSH:- secure shell

ssh ip-addr -l logine-name

uname -m :- it display the ARCH name

uname -r :- kernel version

unmae -a :- all information

cat /proc/cpuinfo

- hardware : bcm2708

-processor : 0

.....

cat /var/lib/misc/dnsmasq leases

Repalcng the GPOS kernel from Raspberry pi to RT kernel

Board Bringup images

1.Bootloader

2.kernel

3.RFS(root file system)

GPOS(Linux)	Embedded system(RT Linux)
Bootloader - GRUB	Bootloader -Universal Bootloader
Old bootloader -LILO	U-Boot
Windows – NILDR	Bare Box
	Super ViVI
Kernel image VmLinux-x.x.x	Kernel image zImage,Image ,uImage

Boot partition Fat file system	RFS partition Ext (linux file system)
-Boot loader -kernel (GPOS)	RFS

Micro SD card

coping the RT kernel into Boot partition in place of GPOS kernel

partition checking

sudo bash
homw/pi# fdisk -l

RT kernel image
~/desktop/respberrypi/xxxx/rtpatch

TFTP NFS for raspberry pi

<https://dynamicparallax.wordpress.com/2015/08/20/how-to-setup-raspberry-pi-as-a-tftp-server/>

<https://www.raspberrypi.org/documentation/remote-access/ssh/>

<https://www.wikihow.com/Get-Started-with-the-Raspberry-Pi>