

Dmseg

dmseg stands for display message or display driver, used to troubleshooting on linux, it help us to identify hardware related error and warnings.

Sudo dmseg

print all requirments for linux help to troubleshoot this message print on terminal

```
Activities Terminal Jan 19 10:33 sathish@Ubuntu: ~
sathish@Ubuntu:~$ sudo dmseg
[ 0.000000] Linux version 5.15.0-57-generic (buildd@lcy02-amd64-110) (gcc (Ubuntu 11.3.0-1ubuntu1-22.04) 11.3.0, GNU ld (GNU Binutils for Ubuntu) 2.38)
[ 0.000000] SMP Thu Nov 24 13:43:17 UTC 2022 (Ubuntu 5.15.0-57.63-generic 5.15.74)
[ 0.000000] Command line: BOOT_IMAGE=/boot/vmlinuz-5.15.0-57-generic root=UUID=0852fetc-0b18-4daa-9323-950240de38d6 ro quiet splash
[ 0.000000] KERNEL supported cpus:
[ 0.000000] Intel GenuineIntel
[ 0.000000] AMD AuthenticAMD
[ 0.000000] Hygon HygonGenuine
[ 0.000000] Centaur CentaurHauls
[ 0.000000] Zhaoxin Shanghai
[ 0.000000] [Firmware Bug]: TSC doesn't count with P0 frequency!
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x001: 'x87 floating point registers'
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x002: 'SSE registers'
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x004: 'AVX registers'
[ 0.000000] x86/fpu: xstate offset[2]: 576, xstate_sizes[2]: 256
[ 0.000000] x86/fpu: Enabled xstate features 0x7, context size is 832 bytes, using 'standard' format.
[ 0.000000] signal: max sigframe size: 1776
[ 0.000000] BIOS-provided physical RAM map:
[ 0.000000] BIOS-e820: [mem 0x0000000000000000-0x000000000009fbff] usable
[ 0.000000] BIOS-e820: [mem 0x000000000009fc00-0x000000000009ffff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000000fa000-0x00000000000fffff] reserved
[ 0.000000] BIOS-e820: [mem 0x0000000000100000-0x000000000007ffff] usable
[ 0.000000] BIOS-e820: [mem 0x00000000007ffff000-0x00000000007fffffff] ACPI data
[ 0.000000] BIOS-e820: [mem 0x00000000fec00000-0x00000000fec00fff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000fee00000-0x00000000fee00fff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000fffc0000-0x00000000fffcffff] reserved
[ 0.000000] NX (Execute Disable) protection: active
[ 0.000000] SMBIOS 2.5 present.
[ 0.000000] DMI: Innotek GmbH VirtualBox/VirtualBox, BIOS VirtualBox 12/01/2006
[ 0.000000] Hypervisor detected: KVM
[ 0.000000] kvm-clock: Using msrc 4b564d01 and 4b564d00
[ 0.000000] kvm-clock: cpu 0, msrc 39001001, primary cpu clock
[ 0.000000] kvm-clock: using sched offset of 5183197202 cycles
[ 0.000012] clocksource: kvm-clock: mask: 0xffffffffffffff max_cycles: 0x1cd42e4dffb, max_idle_ns: 881590591483 ns
[ 0.000020] tsc: Detected 2994.370 MHz processor
[ 0.002172] e820: update [mem 0x00000000-0x00000fff] usable ==> reserved
[ 0.002179] e820: remove [mem 0x000a0000-0x000fffff] usable
[ 0.002188] last_pfn = 0x7ffff0 max_arch_pfn = 0x400000000
[ 0.002210] Disabled
[ 0.002211] x86/PAT: MTRRs disabled, skipping PAT initialization too.
[ 0.002215] CPU MTRRs all blank - virtualized system.
[ 0.002218] x86/PAT: Configuration [0-7]: WB WT UC- WB WT UC- UC
[ 0.002275] found SMP MP-table at [mem 0x0009ffff-0x0009ffff]
[ 0.002564] RAMDISK: [mem 0x306f5000-0x34371fff]
[ 0.002575] ACPI: Early table checksum verification disabled
[ 0.002581] ACPI: RSDP 0x000000000000f000 000024 (v02 VBOX )
```

sudo dmseg | less (show all messages fit on screen)

```
Activities Terminal Jan 19 10:41 sathish@Ubuntu: ~
sathish@Ubuntu:~$ sudo dmseg | less
[ 0.000000] Linux version 5.15.0-57-generic (buildd@lcy02-amd64-110) (gcc (Ubuntu 11.3.0-1ubuntu1-22.04) 11.3.0, GNU ld (GNU Binutils for Ubuntu) 2.38)
[ 0.000000] SMP Thu Nov 24 13:43:17 UTC 2022 (Ubuntu 5.15.0-57.63-generic 5.15.74)
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[ 0.000000] x86/fpu: Supporting XSAVE feature 0x002: 'SSE registers'
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[ 0.000000] x86/fpu: xstate offset[2]: 576, xstate_sizes[2]: 256
[ 0.000000] x86/fpu: Enabled xstate features 0x7, context size is 832 bytes, using 'standard' format.
[ 0.000000] signal: max sigframe size: 1776
[ 0.000000] BIOS-provided physical RAM map:
[ 0.000000] BIOS-e820: [mem 0x0000000000000000-0x000000000009fbff] usable
[ 0.000000] BIOS-e820: [mem 0x000000000009fc00-0x000000000009ffff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000000fa000-0x00000000000fffff] reserved
[ 0.000000] BIOS-e820: [mem 0x0000000000100000-0x000000000007ffff] usable
[ 0.000000] BIOS-e820: [mem 0x00000000007ffff000-0x00000000007fffffff] ACPI data
[ 0.000000] BIOS-e820: [mem 0x00000000fec00000-0x00000000fec00fff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000fee00000-0x00000000fee00fff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000fffc0000-0x00000000fffcffff] reserved
[ 0.000000] NX (Execute Disable) protection: active
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[ 0.000000] DMI: Innotek GmbH VirtualBox/VirtualBox, BIOS VirtualBox 12/01/2006
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[ 0.000012] clocksource: kvm-clock: mask: 0xffffffffffffff max_cycles: 0x1cd42e4dffb, max_idle_ns: 881590591483 ns
[ 0.000020] tsc: Detected 2994.370 MHz processor
[ 0.002172] e820: update [mem 0x00000000-0x00000fff] usable ==> reserved
[ 0.002179] e820: remove [mem 0x000a0000-0x000fffff] usable
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[ 0.002275] found SMP MP-table at [mem 0x0009ffff-0x0009ffff]
[ 0.002564] RAMDISK: [mem 0x306f5000-0x34371fff]
[ 0.002575] ACPI: Early table checksum verification disabled
```

sudo dmesg | grep -i memory (using grep to check specify)

sathish@Ubuntu:~\$ sudo dmesg | grep -i memory

[sudo] password for sathish:

```
[ 0.002629] ACPI: Reserving FACP table memory at [mem 0x7fff00f0-0x7fff01e3]
[ 0.002631] ACPI: Reserving DSDT table memory at [mem 0x7fff0610-0x7fff2962]
[ 0.002633] ACPI: Reserving FACS table memory at [mem 0x7fff0200-0x7fff023f]
[ 0.002634] ACPI: Reserving FACS table memory at [mem 0x7fff0200-0x7fff023f]
[ 0.002635] ACPI: Reserving APIC table memory at [mem 0x7fff0240-0x7fff029b]
[ 0.002637] ACPI: Reserving SSDT table memory at [mem 0x7fff02a0-0x7fff060b]
[ 0.003630] Early memory node ranges
[ 0.011143] PM: hibernation: Registered nosave memory: [mem 0x00000000-0x00000fff]
[ 0.011146] PM: hibernation: Registered nosave memory: [mem 0x0009f000-0x0009ffff]
[ 0.011148] PM: hibernation: Registered nosave memory: [mem 0x000a0000-0x000effff]
[ 0.011150] PM: hibernation: Registered nosave memory: [mem 0x000f0000-0x000fffff]
[ 0.026881] Memory: 1952196K/2096696K available (16393K kernel code, 4378K rwd
data, 10812K rodata, 3232K init, 6568K bss, 144240K reserved, 0K cma-reserved)
[ 0.088661] Freeing SMP alternatives memory: 40K
[ 0.212946] x86/mm: Memory block size: 128MB
[ 1.293120] Freeing initrd memory: 61940K
[ 1.316520] Freeing unused decrypted memory: 2036K
[ 1.317425] Freeing unused kernel image (initmem) memory: 3232K
[ 1.334214] Freeing unused kernel image (text/rodata gap) memory: 2036K
[ 1.334683] Freeing unused kernel image (rodata/data gap) memory: 1476K
[ 3.343230] [TTM] Zone kernel: Available graphics memory: 1011608 KiB
[ 3.343521] vmwgfx 0000:00:02.0: [drm] Legacy memory limits: VRAM = 16384 kB, FIFO = 2048 kB, surface = 507904 kB
[ 3.343539] vmwgfx 0000:00:02.0: [drm] Maximum display memory size is 16384 KiB
```

sudo dmesg | grep -i usb (using grep to check specify)

sathish@Ubuntu:~\$ sudo dmesg | grep -i usb

```
[ 0.349702] ACPI: bus type USB registered
[ 0.349702] usbcore: registered new interface driver usbfs
[ 0.349702] usbcore: registered new interface driver hub
[ 0.349702] usbcore: registered new device driver usb
[ 0.409752] ehci_hcd: USB 2.0 'Enhanced' Host Controller (EHCI) Driver
[ 0.411021] ehci-pci 0000:00:0b.0: new USB bus registered, assigned bus
number 1
[ 0.425134] ehci-pci 0000:00:0b.0: USB 2.0 started, EHCI 1.00
[ 0.425272] usb usb1: New USB device found, idVendor=1d6b, idProduct=0002,
bcdDevice= 5.15
[ 0.425278] usb usb1: New USB device strings: Mfr=3, Product=2,
SerialNumber=1
[ 0.425282] usb usb1: Product: EHCI Host Controller
[ 0.425286] usb usb1: Manufacturer: Linux 5.15.0-57-generic ehci_hcd
[ 0.425288] usb usb1: SerialNumber: 0000:00:0b.0
[ 0.425489] hub 1-0:1.0: USB hub found
[ 0.426094] ohci_hcd: USB 1.1 'Open' Host Controller (OHCI) Driver
[ 0.428043] ohci-pci 0000:00:06.0: new USB bus registered, assigned bus
number 2
[ 0.493303] usb usb2: New USB device found, idVendor=1d6b, idProduct=0001,
bcdDevice= 5.15
[ 0.493311] usb usb2: New USB device strings: Mfr=3, Product=2,
SerialNumber=1
[ 0.493314] usb usb2: Product: OHCI PCI host controller
[ 0.493316] usb usb2: Manufacturer: Linux 5.15.0-57-generic ohci_hcd
[ 0.493318] usb usb2: SerialNumber: 0000:00:06.0
[ 0.493468] hub 2-0:1.0: USB hub found
[ 0.494018] uhci_hcd: USB Universal Host Controller Interface driver
[ 0.951759] usb 2-1: new full-speed USB device number 2 using ohci-pci
[ 1.282030] usb 2-1: New USB device found, idVendor=80ee, idProduct=0021,
bcdDevice= 1.00
```

```
[ 1.282041] usb 2-1: New USB device strings: Mfr=1, Product=3, SerialNumber=0
[ 1.282044] usb 2-1: Product: USB Tablet
[ 1.282046] usb 2-1: Manufacturer: VirtualBox
[ 1.643880] usbcore: registered new interface driver usbhid
[ 1.643885] usbhid: USB HID core driver

[ 2.024982] input: VirtualBox USB Tablet as
/devices/pci0000:00/0000:00:06.0/usb2/2-1/2-1:1.0/0003:80EE:0021.0001/input/
input6

[ 2.025954] hid-generic 0003:80EE:0021.0001: input,hidraw0: USB HID v1.10
Mouse [VirtualBox USB Tablet] on usb-0000:00:06.0-1/input0

[ 3562.850126] Modules linked in: ip6t_REJECT nf_reject_ipv6 xt_hl ip6_tables
ip6t_rt ipt_REJECT nf_reject_ipv4 xt_LOG nf_log_syslog xt_comment binfmt_misc
nft_limit xt_limit xt_addrtype xt_tcpudp xt_conntrack nf_conntrack
nf_defrag_ipv6 nf_defrag_ipv4 nft_compat nft_counter snd_intel8x0 intel_rapl_msr
snd_ac97_codec nf_tables libcrc32c nfnetlink ac97_bus nls_iso8859_1 snd_pcm
intel_rapl_common snd_seq_midi snd_seq_midi_event crct10dif_pclmul
ghash_clmulni_intel snd_rawmidi aesni_intel joydev crypto_simd cryptd snd_seq
input_leds snd_seq_device serio_raw snd_timer snd soundcore vboxguest mac_hid
sch_fq_codel vmwgfx ttm drm_kms_helper cec rc_core fb_sys_fops syscopyarea
sysfillrect sysimgblt msr parport_pc ppdev lp parport ramoops drm reed_solomon
pstore_blk pstore_zone efi_pstore ip_tables x_tables autofs4 hid_generic usbhid
crc32_pclmul hid ahci psmouse libahci i2c_piix4 e1000 pata_acpi video

sathish@Ubuntu:~$
```

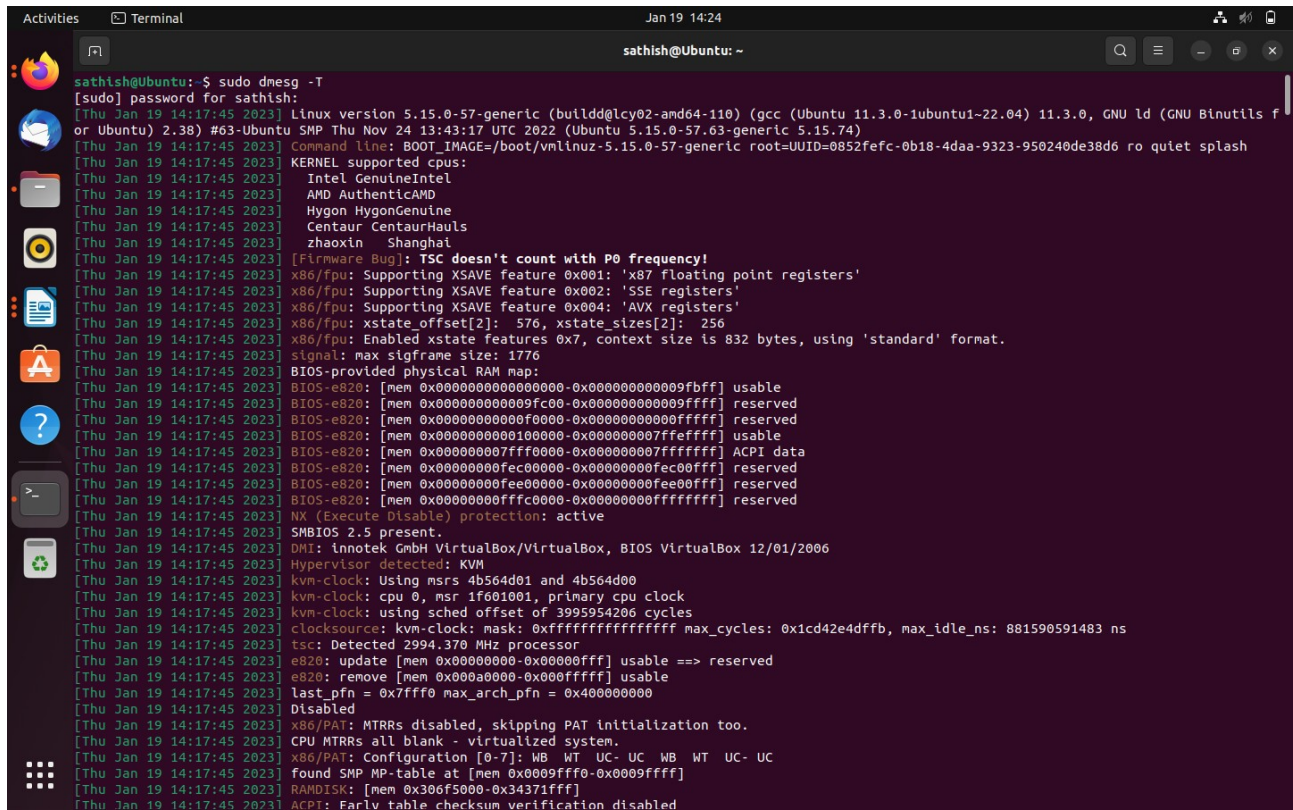
sudo cat /var/log/kern.log | less (view as log file)

```
Jan 10 22:37:05 Ubuntu kernel: [ 0.000000] Linux version 5.15.0-57-generic (buildd@lcy02-amd64-110) (gcc (Ubuntu 11.3.0-1ubuntu1-22.04) 11.3.0, GNU
ld (GNU Binutils for Ubuntu) 2.38) #63-Ubuntu SMP Thu Nov 24 13:43:17 UTC 2022 (Ubuntu 5.15.0-57.63-generic 5.15.74)
Jan 10 22:37:05 Ubuntu kernel: [ 0.000000] Command line: BOOT_IMAGE=/boot/vmlinuz-5.15.0-57-generic root=UUID=0852feca-0b18-4daa-9323-950240de38d6
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Jan 10 22:37:05 Ubuntu kernel: [ 0.000000] KERNEL supported cpus:
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Jan 10 22:37:05 Ubuntu kernel: [ 0.000000] BIOS-e820: [mem 0x00000000-0x00000000+0x00000000] reserved
Jan 10 22:37:05 Ubuntu kernel: [ 0.000000] BIOS-e820: [mem 0x00000000-0x00000000+0x00000000] usable
Jan 10 22:37:05 Ubuntu kernel: [ 0.000000] BIOS-e820: [mem 0x00000000-0x00000000+0x00000000] ACPI data
Jan 10 22:37:05 Ubuntu kernel: [ 0.000000] BIOS-e820: [mem 0x00000000-0x00000000+0x00000000] reserved
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Jan 10 22:37:05 Ubuntu kernel: [ 0.000000] Hypervisor detected: KVM
Jan 10 22:37:05 Ubuntu kernel: [ 0.000000] kvm-clock: Using msrs 4b564d01 and 4b564d00
Jan 10 22:37:05 Ubuntu kernel: [ 0.000000] kvm-clock: cpu 0, msr 19201001, primary cpu clock
Jan 10 22:37:05 Ubuntu kernel: [ 0.000000] kvm-clock: using sched offset of 4793295925 cycles
Jan 10 22:37:05 Ubuntu kernel: [ 0.000011] clocksource: kvm-clock: mask: 0xffffffffffffffff max_cycles: 0x1cd42e4dffb, max_idle_ns: 881590591483 ns
Jan 10 22:37:05 Ubuntu kernel: [ 0.000019] tsc: Detected 2994.372 MHz processor
Jan 10 22:37:05 Ubuntu kernel: [ 0.002263] e820: update [mem 0x00000000-0x00000fff] usable ==> reserved
Jan 10 22:37:05 Ubuntu kernel: [ 0.002274] e820: remove [mem 0x00000000-0x00000fff] usable
Jan 10 22:37:05 Ubuntu kernel: [ 0.002284] last_pfn = 0x7ffff0 max_arch_pfn = 0x400000000
Jan 10 22:37:05 Ubuntu kernel: [ 0.002309] Disabled
Jan 10 22:37:05 Ubuntu kernel: [ 0.002310] x86/PAT: MTRRs disabled, skipping PAT initialization too.
Jan 10 22:37:05 Ubuntu kernel: [ 0.002314] CPU MTRRs all blank - virtualized system.
Jan 10 22:37:05 Ubuntu kernel: [ 0.002318] x86/PAT: Configuration [0-7]: WB WT UC- UC WB WT UC- UC
Jan 10 22:37:05 Ubuntu kernel: [ 0.002375] found SMP MP-table at [mem 0x0009ffff-0x0009ffff]
Jan 10 22:37:05 Ubuntu kernel: [ 0.002757] RAMDISK: [mem 0x3070b000-0x3437cfff]
```

`sudo dmesg -c` (used for print then clear)

`sudo dmesg -C` (used for clear msg without clear)

`sudo dmesg -T` (Print message with time)



```
sathish@Ubuntu: ~  
$ sudo dmesg -T  
[sudo] password for sathish:  
[Thu Jan 19 14:17:45 2023] Linux version 5.15.0-57-generic (build@lcy02-amd64-110) (gcc (Ubuntu 11.3.0-1ubuntu1-22.04) 11.3.0, GNU ld (GNU Binutils f  
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[Thu Jan 19 14:17:45 2023] BIOS-e820: [mem 0x00000000000100000-0x000000000007fffff] usable  
[Thu Jan 19 14:17:45 2023] BIOS-e820: [mem 0x000000000007ffff000-0x000000000007fffffff] ACPI data  
[Thu Jan 19 14:17:45 2023] BIOS-e820: [mem 0x0000000000fec00000-0x0000000000fec0fffff] reserved  
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[Thu Jan 19 14:17:45 2023] kvm-clock: cpu 0, msr 1f601001, primary cpu clock  
[Thu Jan 19 14:17:45 2023] kvm-clock: using sched offset of 3995954206 cycles  
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[Thu Jan 19 14:17:45 2023] RAMDISK: [mem 0x306f5000-0x34371fff]  
[Thu Jan 19 14:17:45 2023] ACPI: Early table checksum verification disabled
```

`sudo lshw` (list all hardware details)

sathish@Ubuntu:~\$ sudo lshw

ubuntu

description: Computer

product: VirtualBox

vendor: innotek GmbH

version: 1.2

serial: 0

width: 64 bits

capabilities: smbios-2.5 dmi-2.5 smp vsyscall32

configuration: family=Virtual Machine uuid=0fd8ada5-4153-4ea2-88b6-a2b91e3971df

*-core

description: Motherboard
product: VirtualBox
vendor: Oracle Corporation
physical id: 0
version: 1.2
serial: 0

*-firmware

description: BIOS
vendor: innotek GmbH
physical id: 0
version: VirtualBox
date: 12/01/2006
size: 128KiB
capacity: 128KiB
capabilities: isa pci cdboot bootselect int9keyboard int10video acpi

*-memory

description: System memory
physical id: 1
size: 2GiB

*-cpu

product: AMD Ryzen 5 4600H with Radeon Graphics
vendor: Advanced Micro Devices [AMD]
physical id: 2
bus info: cpu@0
version: 23.96.1
width: 64 bits

lshw -short (give shortern message of lshw)

sathish@Ubuntu:~\$ sudo lshw -short

H/W path	Device	Class	Description
=====			
		system	VirtualBox
/0		bus	VirtualBox
/0/0		memory	128KiB BIOS
/0/1		memory	2GiB System memory
/0/2		processor	AMD Ryzen 5 4600H with Radeon Graphics
/0/100		bridge	440FX - 82441FX PMC [Natoma]
/0/100/1		bridge	82371SB PIIX3 ISA [Natoma/Triton II]
/0/100/1/0		input	PnP device PNP0303
/0/100/1/1		input	PnP device PNP0f03
/0/100/1.1	scsi1	storage	82371AB/EB/MB PIIX4 IDE
/0/100/1.1/0.0.0	/dev/cdrom	disk	CD-ROM
/0/100/2	/dev/fb0	display	SVGA II Adapter
/0/100/3	enp0s3	network	82540EM Gigabit Ethernet Controller
/0/100/4	input7	input	VirtualBox mouse integration
/0/100/5	card0	multimedia	82801AA AC'97 Audio Controller
/0/100/6		bus	KeyLargo/Intrepid USB
/0/100/6/1	usb2	bus	OHCI PCI host controller
/0/100/7		bridge	82371AB/EB/MB PIIX4 ACPI
/0/100/b USB2 EHCI Controller		bus	82801FB/FBM/FR/FW/FRW (ICH6 Family)
/0/100/b/1	usb1	bus	EHCI Host Controller
/0/100/d Controller [AHCI mode]	scsi2	storage	82801HM/HEM (ICH8M/ICH8M-E) SATA
/0/100/d/0.0.0	/dev/sda	disk	26GB VBOX HARDDISK
/0/100/d/0.0.0/1	/dev/sda1	volume	1023KiB BIOS Boot partition

/0/100/d/0.0.0/2	/dev/sda2	volume	512MiB Windows FAT volume
/0/100/d/0.0.0/3	/dev/sda3	volume	24GiB EXT4 volume
/1	input0	input	Power Button
/2	input1	input	Sleep Button
/3	input2	input	AT Translated Set 2 keyboard
/4	input4	input	Video Bus
/5	input5	input	ImExPS/2 Generic Explorer Mouse

lshw -Class (specific hardware) 0r lshw -c (specific hardware)

sathish@Ubuntu:~\$ sudo lshw -class cpu

*-cpu

product: AMD Ryzen 5 4600H with Radeon Graphics

vendor: Advanced Micro Devices [AMD]

physical id: 2

bus info: cpu@0

version: 23.96.1

width: 64 bits

capabilities: fpu fpu_exception wp vme de pse tsc msr pae mce cx8 apic
sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ht syscall nx mmxext
fxsr_opt rdtscp x86-64 constant_tsc rep_good nopl nonstop_tsc cpuid extd_apicid
tsc_known_freq pni pclmulqdq ssse3 cx16 sse4_1 sse4_2 x2apic movbe popcnt aes
xsave avx rdrand hypervisor lahf_lm cmp_legacy cr8_legacy abm sse4a misalignsse
3dnowprefetch ssbd vmcall fsgsbase bmi1 avx2 bmi2 rdseed clflushopt arat

sathish@Ubuntu:~\$ sudo lshw -C Network

*-network

description: Ethernet interface

product: 82540EM Gigabit Ethernet Controller

vendor: Intel Corporation

physical id: 3

bus info: pci@0000:00:03.0

logical name: enp0s3

version: 02

serial: 08:00:27:f7:20:86

size: 1Gbit/s

capacity: 1Gbit/s

width: 32 bits

clock: 66MHz

capabilities: pm pcix bus_master cap_list ethernet physical tp 10bt 10bt-fd 100bt 100bt-fd 1000bt-fd autonegotiation

configuration: autonegotiation=on broadcast=yes driver=e1000
driverversion=5.15.0-57-generic duplex=full ip=10.0.2.15 latency=64 link=yes
mingnt=255 multicast=yes port=twisted pair speed=1Gbit/s

resources: irq:19 memory:f0200000-f021ffff ioport:d020(size=8)

sathish@Ubuntu:~\$

list pci

sathish@Ubuntu:~\$ sudo lspci

00:00.0 Host bridge: Intel Corporation 440FX - 82441FX PMC [Natoma] (rev 02)

00:01.0 ISA bridge: Intel Corporation 82371SB PIIX3 ISA [Natoma/Triton II]

00:01.1 IDE interface: Intel Corporation 82371AB/EB/MB PIIX4 IDE (rev 01)

00:02.0 VGA compatible controller: VMware SVGA II Adapter

00:03.0 Ethernet controller: Intel Corporation 82540EM Gigabit Ethernet
Controller (rev 02)

00:04.0 System peripheral: InnoTek Systemberatung GmbH VirtualBox Guest Service

00:05.0 Multimedia audio controller: Intel Corporation 82801AA AC'97 Audio
Controller (rev 01)

00:06.0 USB controller: Apple Inc. KeyLargo/Intrepid USB

00:07.0 Bridge: Intel Corporation 82371AB/EB/MB PIIX4 ACPI (rev 08)

00:0b.0 USB controller: Intel Corporation 82801FB/FBM/FR/FW/FRW (ICH6 Family)
USB2 EHCI Controller

00:0d.0 SATA controller: Intel Corporation 82801HM/HEM (ICH8M/ICH8M-E) SATA
Controller [AHCI mode] (rev 02)

df (disk free) -h used for show size

```
sathish@Ubuntu:~$ sudo df -h
```

Filesystem	Size	Used	Avail	Use%	Mounted on
tmpfs	198M	1.6M	197M	1%	/run
/dev/sda3	24G	14G	9.2G	60%	/
tmpfs	988M	0	988M	0%	/dev/shm
tmpfs	5.0M	4.0K	5.0M	1%	/run/lock
/dev/sda2	512M	5.3M	507M	2%	/boot/efi
tmpfs	198M	4.7M	193M	3%	/run/user/1000