

DDR 3488111f83 cym 24/04/12-12:49:26, fwver: v1.17  
LPDDR4X, 2112MHz  
channel[0] BW=16 Col=10 Bk=8 CS0 Row=16 CS=1 Die BW=16 Size=1024MB  
channel[1] BW=16 Col=10 Bk=8 CS0 Row=16 CS=1 Die BW=16 Size=1024MB  
channel[2] BW=16 Col=10 Bk=8 CS0 Row=16 CS=1 Die BW=16 Size=1024MB  
channel[3] BW=16 Col=10 Bk=8 CS0 Row=16 CS=1 Die BW=16 Size=1024MB  
Manufacturer ID:0x13  
CH0 RX Vref:29.7%, TX Vref:21.8%,0.0%DQ rds:  
h2 I0, h1 I0, h2 I0, h0 I0, h2 I0, h3 I0, h0 I0, h2 I0,  
h1 I0, h1 I0, h1 I0, h2 I0, h1 I0, h0 I2, h1 I0, h0 I0,  
  
CH1 RX Vref:28.5%, TX Vref:21.8%,0.0%DQ rds:  
h0 I0, h2 I0, h1 I0, h2 I0, h2 I0, h3 I0, h1 I0, h2 I0,  
h0 I0, h2 I0, h4 I0, h2 I0, h4 I0, h2 I0, h1 I0, h0 I0,  
  
CH2 RX Vref:28.9%, TX Vref:21.8%,0.0%DQ rds:  
h0 I1, h1 I0, h1 I0, h1 I0, h0 I0, h2 I0, h1 I0, h3 I0,  
h2 I0, h3 I0, h4 I0, h1 I0, h3 I0, h0 I0, h2 I0, h2 I0,  
  
CH3 RX Vref:29.7%, TX Vref:22.8%,0.0%DQ rds:  
h2 I0, h2 I0, h1 I0, h0 I0, h0 I0, h4 I0, h1 I0, h1 I0,  
h0 I0, h1 I0, h1 I0, h4 I0, h3 I0, h2 I0, h2 I0, h0 I0,  
  
stride=0x2, ddr\_config=0x0  
hash ch\_mask0-1 0x20 0x40, bank\_mask0-3 0xa00 0x1400 0x2800 0x0, rank\_mask0 0x0  
change to F1: 528MHz  
change to F2: 1068MHz  
change to F3: 1560MHz  
change to F0: 2112MHz  
out  
U-Boot SPL board init  
U-Boot SPL 2017.09-ge4e124926e-230922 #lxh (Sep 25 2023 - 10:58:38), fwver: v1.1  
3  
unknown raw ID 0 0 0  
unrecognized JEDEC id bytes: 00, 00, 00  
Trying to boot from MMC2  
MMC: no card present  
mmc\_init: -123, time 2  
spl: mmc init failed with error: -123  
Trying to boot from MMC1  
SPL: A/B-slot: \_a, successful: 0, tries-remain: 7  
Trying fit image at 0x4000 sector  
## Verified-boot: 0  
## Checking atf-1 0x00040000 (gzip @0x00240000) ... sha256(d6ebd395c6...) + sha2  
56(64122e141b...) + OK  
## Checking uboot 0x00200000 (gzip @0x00400000) ... sha256(f06a6da535...) + sha2  
56(a4e934b1a1...) + OK  
## Checking fdt 0x00348ce8 ... sha256(53e42b04a3...) + OK  
## Checking atf-2 0xff100000 ... sha256(ce8968e34f...) + OK  
## Checking atf-3 0x000f0000 ... sha256(ce48b69fdd...) + OK  
## Checking optee 0x08400000 (gzip @0x08600000) ... sha256(8bf1e51430...) + sha2  
56(b866e4e4a1...) + OK  
Jumping to U-Boot(0x00200000) via ARM Trusted Firmware(0x00040000)  
Total: 160.353/431.149 ms  
  
INFO: Preloader serial: 2  
NOTICE: BL31: v2.3():v2.3-765-g588059758:derrick.huang, fwver: v1.46  
NOTICE: BL31: Built : 18:13:16, Apr 29 2024  
INFO: spec: 0x1  
INFO: code: 0x88

INFO: ext 32k is not valid  
INFO: ddr: stride-en 4CH  
INFO: GICv3 without legacy support detected.  
INFO: ARM GICv3 driver initialized in EL3  
INFO: valid\_cpu\_msk=0xff bcore0\_rst = 0x0, bcore1\_rst = 0x0  
INFO: l3 cache partition cfg-0  
INFO: system boots from cpu-hwid-0  
INFO: disable memory repair  
INFO: idle\_st=0x21fff, pd\_st=0x11fff9, repair\_st=0xffff70001  
INFO: dfs DDR fsp\_params[0].freq\_mhz= 2112MHz  
INFO: dfs DDR fsp\_params[1].freq\_mhz= 528MHz  
INFO: dfs DDR fsp\_params[2].freq\_mhz= 1068MHz  
INFO: dfs DDR fsp\_params[3].freq\_mhz= 1560MHz  
INFO: BL31: Initialising Exception Handling Framework  
INFO: BL31: Initializing runtime services  
INFO: BL31: Initializing BL32  
I/TC:  
I/TC: OP-TEE version: 3.13.0-791-g185dc3c92 #hisping.lin (gcc version 10.2.1 20201103 (GNU Toolchain for the A-profile Architecture 10.2-2020.11 (arm-10.16))) #2 Tue Apr 16 11:16:18 CST 2024 aarch64, fwver: v1.16  
I/TC: OP-TEE memory: TEEOS 0x200000 TA 0xc00000 SHM 0x200000  
I/TC: Primary CPU initializing  
I/TC: Primary CPU switching to normal world boot  
INFO: BL31: Preparing for EL3 exit to normal world  
INFO: Entry point address = 0x200000  
INFO: SPSR = 0x3c9

U-Boot 2017.09 (Nov 23 2024 - 13:04:29 +0800)

Model: ELFBoard elf2 Board  
MPIDR: 0x0  
PreSerial: 2, raw, 0xfeb50000  
DRAM: 4 GiB  
System: init  
Relocation Offset: eda15000  
Relocation fdt: eb9fa9c0 - eb9fecd8  
CR: M/C/I  
optee api revision: 2.0  
mmc@fe2c0000: 1, mmc@fe2e0000: 0  
Bootdev(atags): mmc 0  
MMC0: HS400 Enhanced Strobe, 200Mhz  
PartType: EFI  
TEEC: Warning: Could not find security partition  
DM: v2  
boot mode: None  
RESC: 'boot', blk@0x0001a482  
resource: sha256+  
FIT: no signed, no conf required  
DTB: rk-kernel.dtb  
HASH(c): OK  
usb dr\_mode not found  
usb dr\_mode not found  
I2c0 speed: 100000Hz  
vsel-gpios- not found!  
en-gpios- not found!  
vdd\_cpu\_big0\_s0 1000000 uV  
vsel-gpios- not found!  
en-gpios- not found!  
vdd\_cpu\_big1\_s0 1000000 uV

l2c1 speed: 100000Hz  
vsel-gpios- not found!  
en-gpios- not found!  
vdd\_npu\_s0 825000 uV  
spi2: RK806: 2  
ON=0x40, OFF=0x00  
vdd\_gpu\_s0 750000 uV  
vdd\_cpu\_lit\_s0 init 800000 uV  
vdd\_log\_s0 750000 uV  
vdd\_vdenc\_s0 init 750000 uV  
vdd\_ddr\_s0 850000 uV  
Device 'gpio@fd8a0000': seq 0 is in use by 'gpio@fd8a0000'  
Device 'gpio@fec20000': seq 1 is in use by 'gpio@fd8a0000'  
Device 'gpio@fec40000': seq 3 is in use by 'gpio@fec20000'  
\*\*\* Warning - bad CRC, using default environment

get vp0 plane mask:0x5, primary id:2, cursor\_plane:-1, from dts  
get vp1 plane mask:0xa, primary id:3, cursor\_plane:-1, from dts  
get vp2 plane mask:0x140, primary id:8, cursor\_plane:-1, from dts  
get vp3 plane mask:0x280, primary id:9, cursor\_plane:-1, from dts  
Device 'gpio@fec50000': seq 4 is in use by 'gpio@fec40000'  
Could not find baseparameter partition  
Model: ELF 2 Board  
Minidump: init...  
Rockchip UBOOT DRM driver version: v1.0.1  
vp0 have layer nr:2[0 2 ], primary plane: 2  
vp1 have layer nr:2[1 3 ], primary plane: 3  
vp2 have layer nr:2[6 8 ], primary plane: 8  
vp3 have layer nr:2[7 9 ], primary plane: 9  
Using display timing dts  
dsi@fde20000: detailed mode clock 45000 kHz, flags[a]  
  H: 1024 1064 1112 1160  
  V: 0600 0640 0644 0692  
bus\_format: 100e  
VOP update mode to: 1024x600p56, type: MIPI0 for VP3  
VP3 set crtc\_clock to 44118KHz  
Unsupported bt709f at 10bit csc depth, use bt601f instead  
VOP VP3 enable Esmart3[480x272->480x272@272x164] fmt[0] addr[0xedf00000]  
final DSI-Link bandwidth: 294120 Kbps x 4  
Monitor has basic audio support  
Could not find baseparameter partition  
color\_format:1  
hdmi\_select\_link\_config use tmds mode  
mode:1920x1080 bus\_format:0x2025  
hdmi@fde80000: detailed mode clock 148500 kHz, flags[5]  
  H: 1920 2008 2052 2200  
  V: 1080 1084 1089 1125  
bus\_format: 2025  
VOP update mode to: 1920x1080p60, type: HDMI0 for VP0  
dclk:148500,if\_pixclk\_div;2,if\_dclk\_div:4  
VP0 set crtc\_clock to 148500KHz  
VOP VP0 enable Esmart0[480x272->480x272@720x404] fmt[0] addr[0xedf00000]  
CEA mode used vic=16  
mtmdsclock:148500000  
hdptx\_ropll\_cmn\_config bus\_width:16a8c8 rate:1485000  
hdptx phy pll locked!  
dw\_hdmi\_setup HDMI mode  
don't use dsc mode  
dw\_hdmi\_qp use tmds mode  
bus\_width:0x16a8c8,bit\_rate:1485000

```
hdptx phy lane locked!
CLK: (sync kernel. arm: enter 1008000 KHz, init 1008000 KHz, kernel ON/A)
  b0pll 24000 KHz
  b1pll 24000 KHz
  lpll 24000 KHz
  v0pll 24000 KHz
  aupll 786431 KHz
  cppll 1500000 KHz
  gppll 1188000 KHz
  nppll 850000 KHz
  pppll 1100000 KHz
  aclk_center_root 702000 KHz
  pclk_center_root 100000 KHz
  hclk_center_root 396000 KHz
  aclk_center_low_root 500000 KHz
  aclk_top_root 750000 KHz
  pclk_top_root 100000 KHz
  aclk_low_top_root 396000 KHz
Net:   eth0: ethernet@fe1b0000
Hit key to stop autoboot('CTRL+C'):  0
ANDROID: reboot reason: "(none)"
Not AVB images, AVB skip
No valid android hdr
Android image load failed
Android boot failed, error -1.
## Booting FIT Image at 0xe9369580 with size 0x02490400
Fdt Ramdisk skip relocation
## Loading kernel from FIT Image at e9369580 ...
  Using 'conf' configuration
## Verified-boot: 0
  Trying 'kernel' kernel subimage
    Description:  unavailable
    Type:         Kernel Image
    Compression: uncompressed
    Data Start:   0xe93ad780
    Data Size:    38060544 Bytes = 36.3 MiB
    Architecture: AArch64
    OS:           Linux
    Load Address: 0x00400000
    Entry Point:  0x00400000
    Hash algo:    sha256
    Hash
value:
e7cf5e8257fae2acb22210d0fde785174c1f5ea05bdcbc7cdc1ded200bc80
244
  Verifying Hash Integrity ... sha256+ OK
## Loading fdt from FIT Image at e9369580 ...
  Using 'conf' configuration
  Trying 'fdt' fdt subimage
    Description:  unavailable
    Type:         Flat Device Tree
    Compression: uncompressed
    Data Start:   0xe9369d80
    Data Size:    276706 Bytes = 270.2 KiB
    Architecture: AArch64
    Load Address: 0x08300000
    Hash algo:    sha256
    Hash
value:
1575db637005691584651ca2724ccc3d5f6a86a9e4ec741823e7f59892992
d15
  Verifying Hash Integrity ... sha256+ OK
```

```

Loading fdt from 0x08300000 to 0x08300000
Booting using the fdt blob at 0x08300000
Loading Kernel Image from 0xe93ad780 to 0x00400000 ... OK
kernel loaded at 0x00400000, end = 0x0284c200
Using Device Tree in place at 0000000008300000, end 00000000083468e1
## reserved-memory:
  dma-trans@3c000000: addr=3c000000 size=4000000
  cma: addr=10000000 size=10000000
  drm-logo@00000000: addr=edf00000 size=100000
Adding bank: 0x00200000 - 0x08400000 (size: 0x08200000)
Adding bank: 0x09400000 - 0xf0000000 (size: 0xe6c00000)
Adding bank: 0x1f0000000 - 0x200000000 (size: 0x10000000)
Total: 3218.808/3863.408 ms

Starting kernel ...

[ 3.872293] Booting Linux on physical CPU 0x000000000 [0x412fd050]
[ 3.872311] Linux version 5.10.209 (elf@ubuntu) (aarch64-none-linux-gnu-gcc
(
GNU Toolchain for the A-profile Architecture 10.3-2021.07 (arm-10.29)) 10.3.1 20
210621, GNU ld (GNU Toolchain for the A-profile Architecture 10.3-2021.07 (arm-1
0.29)) 2.36.1.20210621) #1 SMP Sat Nov 23 11:43:31 CST 2024
[ 3.875658] random: crng init done
[ 3.883065] Machine model: ELF 2 Board
[ 3.919266] earlycon: uart8250 at MMIO32 0x00000000feb50000 (options "")
[ 3.968625] printk: bootconsole [uart8250] enabled
[ 3.975897] efi: UEFI not found.
[ 3.984591] OF: fdt: Reserved memory: failed to reserve memory for node 'drm-
cubic-lut@00000000': base 0x0000000000000000, size 0 MiB
[ 3.997407] Reserved memory: created CMA memory pool at 0x0000000010000000, s
ize 256 MiB
[ 4.006078] OF: reserved mem: initialized node cma, compatible id shared-dma-
pool
[ 4.079869] Zone ranges:
[ 4.082539] DMA [mem 0x000000000200000-0x00000000ffffffff]
[ 4.089092] DMA32 empty
[ 4.092148] Normal [mem 0x0000000100000000-0x00000001ffffffff]
[ 4.098731] Movable zone start for each node
[ 4.103267] Early memory node ranges
[ 4.107120] node 0: [mem 0x000000000200000-0x00000000083ffffff]
[ 4.113807] node 0: [mem 0x0000000009400000-0x00000000efffffff]
[ 4.120505] node 0: [mem 0x00000001f0000000-0x00000001ffffffff]
[ 4.127132] Initmem setup node 0 [mem 0x000000000200000-0x00000001ffffffff]
[ 4.156212] psci: probing for conduit method from DT.
[ 4.161631] psci: PSCIv1.1 detected in firmware.
[ 4.166549] psci: Using standard PSCI v0.2 function IDs
[ 4.172050] psci: Trusted OS migration not required
[ 4.177247] psci: SMC Calling Convention v1.2
[ 4.182258] percpu: Embedded 30 pages/cpu s83864 r8192 d30824 u122880
[ 4.189264] Detected VIPT I-cache on CPU0
[ 4.193519] CPU features: detected: GIC system register CPU interface
[ 4.200422] CPU features: detected: Virtualization Host Extensions
[ 4.206973] CPU features: detected: ARM errata 1165522, 1319367, or 1530923
[ 4.214471] alternatives: patching kernel code
[ 4.220717] Built 1 zonelists, mobility grouping on. Total pages: 1027656
[ 4.228042] Kernel command line: storagemedia=emmc androidboot.storagemedia=e
mmc androidboot.mode=normal androidboot.verifiedbootstate=orange rw rootwait ea
rlycon=uart8250,mmio32,0xfeb50000 console=ttyFIQ0 irqchip.gicv3_pseudo_nmi=0 roo
t=PARTUUID=614e0000-0000 androidboot.fwver=ddr-v1.17-3488111f83,spl-v1.13,bl31-v

```

```
1.46,bl32-v1.16,u-boot-11/23/2024
[ 4.261499] Dentry cache hash table entries: 524288 (order: 10, 4194304
bytes
, linear)
[ 4.270072] Inode-cache hash table entries: 262144 (order: 9, 2097152 bytes,
linear)
[ 4.278364] mem auto-init: stack:off, heap alloc:off, heap free:off
[ 4.290906] software IO TLB: mapped [mem 0x00000000e9f00000-
0x00000000edf00000] (64MB)
[ 4.329523] Memory: 3661076K/4175872K available (19520K kernel code, 3568K rw
data, 7080K rodata, 6912K init, 598K bss, 252652K reserved, 262144K cma-
reserved
)
[ 4.344744] SLUB: HWalign=64, Order=0-3, MinObjects=0, CPUs=8, Nodes=1
[ 4.351724] ftrace: allocating 59761 entries in 234 pages
[ 4.427804] ftrace: allocated 234 pages with 5 groups
[ 4.433400] rcu: Hierarchical RCU implementation.
[ 4.438382] rcu: RCU event tracing is enabled.
[ 4.443196] rcu: RCU dyntick-idle grace-period acceleration is enabled.
[ 4.450377] Rude variant of Tasks RCU enabled.
[ 4.455244] rcu: RCU calculated value of scheduler-enlistment delay is 30 jif
fies.
[ 4.466889] NR_IRQS: 64, nr_irqs: 64, preallocated irq: 0
[ 4.475042] GICv3: GIC: Using split EOI/Deactivate mode
[ 4.480648] GICv3: 480 SPIs implemented
[ 4.484743] GICv3: 0 Extended SPIs implemented
[ 4.489508] GICv3: Distributor has no Range Selector support
[ 4.495532] GICv3: 16 PPIs implemented
[ 4.499914] GICv3: CPU0: found redistributor 0 region 0:0x00000000fe680000
[ 4.507318] ITS [mem 0xfe640000-0xfe65ffff]
[ 4.511842] ITS@0x00000000fe640000: allocated 8192 Devices @1f01f0000 (indire
ct, esz 8, psz 64K, shr 0)
[ 4.521918] ITS@0x00000000fe640000: allocated 32768 Interrupt Collections @1f
0200000 (flat, esz 2, psz 64K, shr 0)
[ 4.532993] ITS: using cache flushing for cmd queue
[ 4.538236] ITS [mem 0xfe660000-0xfe67ffff]
[ 4.542745] ITS@0x00000000fe660000: allocated 8192 Devices @1f0220000 (indire
ct, esz 8, psz 64K, shr 0)
[ 4.552736] ITS@0x00000000fe660000: allocated 32768 Interrupt Collections @1f
0230000 (flat, esz 2, psz 64K, shr 0)
[ 4.563802] ITS: using cache flushing for cmd queue
[ 4.569199] GICv3: using LPI property table @0x00000001f0240000
[ 4.575623] GIC: using cache flushing for LPI property table
[ 4.581602] GICv3: CPU0: using allocated LPI pending table @0x00000001f025000
0
[ 4.589366] rcu: Offload RCU callbacks from CPUs: (none).
[ 4.703419] arch_timer: cp15 timer(s) running at 24.00MHz (phys).
[ 4.709798] clocksource: arch_sys_counter: mask: 0xffffffffffffff max_cycles:
0x588fe9dc0, max_idle_ns: 440795202592 ns
[ 4.721265] sched_clock: 56 bits at 24MHz, resolution 41ns, wraps every 43980
46511097ns
[ 4.730826] Console: colour dummy device 80x25
[ 4.735611] Calibrating delay loop (skipped), value calculated using timer fr
equency.. 48.00 BogoMIPS (lpj=80000)
[ 4.746530] pid_max: default: 32768 minimum: 301
[ 4.751544] Mount-cache hash table entries: 8192 (order: 4, 65536 bytes, line
ar)
```

```
[ 4.759476] Mountpoint-cache hash table entries: 8192 (order: 4, 65536 bytes,
linear)
[ 4.768919] rcu: Hierarchical SRCU implementation.
[ 4.774648] Platform MSI: msi-controller@fe640000 domain created
[ 4.781069] Platform MSI: msi-controller@fe660000 domain created
[ 4.787730] PCI/MSI: /interrupt-controller@fe600000/msi-controller@fe640000 d
omain created
[ 4.796569] PCI/MSI: /interrupt-controller@fe600000/msi-controller@fe660000 d
omain created
[ 4.805422] EFI services will not be available.
[ 4.810425] smp: Bringing up secondary CPUs ...
I/TC: Secondary CPU 1 initializing
I/TC: Secondary CPU 1 switching to normal world boot
I/TC: Secondary CPU 2 initializing
I/TC: Secondary CPU 2 switching to normal world boot
I/TC: Secondary CPU 3 initializing
I/TC: Secondary CPU 3 switching to normal world boot
I/TC: Secondary CPU 4 initializing
I/TC: Secondary CPU 4 switching to normal world boot
I/TC: Secondary CPU 5 initializing
I/TC: Secondary CPU 5 switching to normal world boot
I/TC: Secondary CPU 6 initializing
I/TC: Secondary CPU 6 switching to normal world boot
I/TC: Secondary CPU 7 initializing
I/TC: Secondary CPU 7 switching to normal world boot
[ 4.823297] Detected VIPT I-cache on CPU1
[ 4.823319] GICv3: CPU1: found redistributor 100 region 0:0x00000000fe6a0000
[ 4.823333] GICv3: CPU1: using allocated LPI pending table @0x00000001f026000
0
[ 4.823368] CPU1: Booted secondary processor 0x0000000100 [0x412fd050]
[ 4.831507] Detected VIPT I-cache on CPU2
[ 4.831525] GICv3: CPU2: found redistributor 200 region 0:0x00000000fe6c0000
[ 4.831538] GICv3: CPU2: using allocated LPI pending table @0x00000001f027000
0
[ 4.831571] CPU2: Booted secondary processor 0x0000000200 [0x412fd050]
[ 4.839694] Detected VIPT I-cache on CPU3
[ 4.839711] GICv3: CPU3: found redistributor 300 region 0:0x00000000fe6e0000
[ 4.839723] GICv3: CPU3: using allocated LPI pending table @0x00000001f028000
0
[ 4.839753] CPU3: Booted secondary processor 0x0000000300 [0x412fd050]
[ 4.847858] CPU features: detected: Spectre-v4
[ 4.847860] CPU features: detected: Spectre-BHB
[ 4.847861] Detected PIPT I-cache on CPU4
[ 4.847871] GICv3: CPU4: found redistributor 400 region 0:0x00000000fe700000
[ 4.847877] GICv3: CPU4: using allocated LPI pending table @0x00000001f029000
0
[ 4.847897] CPU4: Booted secondary processor 0x0000000400 [0x414fd0b0]
[ 4.855977] Detected PIPT I-cache on CPU5
[ 4.855987] GICv3: CPU5: found redistributor 500 region 0:0x00000000fe720000
[ 4.855993] GICv3: CPU5: using allocated LPI pending table @0x00000001f02a000
0
[ 4.856014] CPU5: Booted secondary processor 0x0000000500 [0x414fd0b0]
[ 4.864094] Detected PIPT I-cache on CPU6
[ 4.864104] GICv3: CPU6: found redistributor 600 region 0:0x00000000fe740000
[ 4.864111] GICv3: CPU6: using allocated LPI pending table @0x00000001f02b000
0
[ 4.864130] CPU6: Booted secondary processor 0x0000000600 [0x414fd0b0]
[ 4.872200] Detected PIPT I-cache on CPU7
[ 4.872209] GICv3: CPU7: found redistributor 700 region 0:0x00000000fe760000
[ 4.872216] GICv3: CPU7: using allocated LPI pending table @0x00000001f02c000
```

0  
[ 4.872236] CPU7: Booted secondary processor 0x0000000700 [0x414fd0b0]  
[ 4.872281] smp: Brought up 1 node, 8 CPUs  
[ 5.070131] SMP: Total of 8 processors activated.  
[ 5.075175] CPU features: detected: Privileged Access Never  
[ 5.081155] CPU features: detected: LSE atomic instructions  
[ 5.087151] CPU features: detected: User Access Override  
[ 5.092758] CPU features: detected: 32-bit EL0 Support  
[ 5.098165] CPU features: detected: Common not Private translations  
[ 5.104812] CPU features: detected: RAS Extension Support  
[ 5.110618] CPU features: detected: Data cache clean to the PoU not required  
for I/D coherence  
[ 5.119847] CPU features: detected: CRC32 instructions  
[ 5.125341] CPU features: detected: Speculative Store Bypassing Safe (SSBS)  
[ 5.132672] CPU features: detected: RCpc load-acquire (LDAPR)  
[ 5.161816] CPU: All CPU(s) started at EL2  
[ 5.167301] devtmpfs: initialized  
[ 5.178878] Registered cp15\_barrier emulation handler  
[ 5.184012] Registered setend emulation handler  
[ 5.188658] clocksource: jiffies: mask: 0xffffffff max\_cycles: 0xffffffff, ma  
x\_idle\_ns: 6370867519511994 ns  
[ 5.198555] futex hash table entries: 2048 (order: 5, 131072 bytes, linear)  
[ 5.207142] pinctrl core: initialized pinctrl subsystem  
[ 5.212594] DMI not present or invalid.  
[ 5.216558] NET: Registered protocol family 16  
[ 5.221712] DMA: preallocated 512 KiB GFP\_KERNEL pool for atomic allocations  
[ 5.228903] DMA: preallocated 512 KiB GFP\_KERNEL|GFP\_DMA pool for atomic allo  
cations  
[ 5.237070] Registered FIQ tty driver  
[ 5.240853] thermal\_sys: Registered thermal governor 'fair\_share'  
[ 5.240854] thermal\_sys: Registered thermal governor 'step\_wise'  
[ 5.247029] thermal\_sys: Registered thermal governor 'user\_space'  
[ 5.253124] thermal\_sys: Registered thermal governor 'power\_allocator'  
[ 5.259391] thermal thermal\_zone1: power\_allocator: sustainable\_power will be  
estimated  
[ 5.274137] thermal thermal\_zone2: power\_allocator: sustainable\_power will be  
estimated  
[ 5.282276] thermal thermal\_zone3: power\_allocator: sustainable\_power will be  
estimated  
[ 5.290404] thermal thermal\_zone4: power\_allocator: sustainable\_power will be  
estimated  
[ 5.298542] thermal thermal\_zone5: power\_allocator: sustainable\_power will be  
estimated  
[ 5.306661] thermal thermal\_zone6: power\_allocator: sustainable\_power will be  
estimated  
[ 5.314778] cpuidle: using governor menu  
[ 5.318824] hw-breakpoint: found 6 breakpoint and 4 watchpoint registers.  
[ 5.325789] ASID allocator initialised with 65536 entries  
[ 5.332257] ramoops: dmesg-0 0x20000@0x00000000000110000  
[ 5.337561] ramoops: console 0x80000@0x00000000000130000  
[ 5.342864] ramoops: pmsg 0x50000@0x000000000001b0000  
[ 5.348090] printk: console [ramoops-1] enabled  
[ 5.352686] pstore: Registered ramoops as persistent store backend  
[ 5.358947] ramoops: using 0xf0000@0x110000, ecc: 0  
[ 5.391277] rockchip-gpio fd8a0000.gpio: probed /pinctrl/gpio@fd8a0000  
[ 5.398051] rockchip-gpio fec20000.gpio: probed /pinctrl/gpio@fec20000  
[ 5.404791] rockchip-gpio fec30000.gpio: probed /pinctrl/gpio@fec30000  
[ 5.411547] rockchip-gpio fec40000.gpio: probed /pinctrl/gpio@fec40000  
[ 5.418295] rockchip-gpio fec50000.gpio: probed /pinctrl/gpio@fec50000  
[ 5.424948] rockchip-pinctrl pinctrl: probed pinctrl

```
[ 5.438769] fiq_debugger fiq_debugger.0: IRQ fiq not found
[ 5.444327] fiq_debugger fiq_debugger.0: IRQ wakeup not found
[ 5.450139] fiq_debugger_probe: could not install nmi irq handler
[[ 5.456344] printk: console [ttyFIQ0] enabled
 5.456344] printk: console [ttyFIQ0] enabled
[ 5.465086] printk: bootconsole [uart8250] disa[ 5.465086] printk: bootcon
sole [uart8250] disabled
bled
[ 5.474936] Registered fiq debugger ttyFIQ0
[ 5.475111] vcc4v0_sys: supplied by vcc12v_dcin
[ 5.475180] vcc_1v1_nldo_s3: supplied by vcc4v0_sys
[ 5.475241] vcc5v0_sys: supplied by vcc12v_dcin
[ 5.475396] vbus5v0_typec0: supplied by vcc5v0_sys
[ 5.475515] vbus5v0_typec1: supplied by vcc5v0_sys
[ 5.475553] vcc3v3_sys: supplied by vcc5v0_sys
[ 5.475613] vcc1v8_sys: supplied by vcc3v3_sys
[ 5.475669] vcc3v3_pcie30: supplied by vcc5v0_sys
[ 5.475727] vcc3v3-pcie20: supplied by vcc5v0_sys
[ 5.475793] vcc3v3_sdmmc: supplied by vcc5v0_sys
[ 5.481625] bt_wake: supplied by vcc5v0_sys
[ 5.481715] dsi0_en: supplied by vcc5v0_sys
[ 5.481796] dsi1_en: supplied by vcc5v0_sys
[ 5.482001] iommu: Default domain type: Translated
[ 5.484124] SCSI subsystem initialized
[ 5.484173] usbcore: registered new interface driver usbfs
[ 5.484182] usbcore: registered new interface driver hub
[ 5.484192] usbcore: registered new device driver usb
[ 5.484272] mc: Linux media interface: v0.10
[ 5.484278] videodev: Linux video capture interface: v2.00
[ 5.484296] pps_core: LinuxPPS API ver. 1 registered
[ 5.484299] pps_core: Software ver. 5.3.6 - Copyright 2005-2007 Rodolfo Giome
tti <giometti@linux.it>
[ 5.484304] PTP clock support registered
[ 5.484315] EDAC MC: Ver: 3.0.0
[ 5.484531] arm-scmi firmware:scmi: SCMI Notifications - Core Enabled.
[ 5.484556] arm-scmi firmware:scmi: SCMI Protocol v2.0 'rockchip:' Firmware v
ersion 0x0
[ 5.485249] Advanced Linux Sound Architecture Driver Initialized.
[ 5.485368] Bluetooth: Core ver 2.22
[ 5.485376] NET: Registered protocol family 31
[ 5.485379] Bluetooth: HCI device and connection manager initialized
[ 5.485382] Bluetooth: HCI socket layer initialized
[ 5.485385] Bluetooth: L2CAP socket layer initialized
[ 5.485390] Bluetooth: SCO socket layer initialized
[ 5.486594] rockchip-cpuinfo cpuinfo: SoC : 35881000
[ 5.486597] rockchip-cpuinfo cpuinfo: Serial : 46ea6c6255cd5df1
[ 5.486779] clocksource: Switched to clocksource arch_sys_counter
[ 5.687388] NET: Registered protocol family 2
[ 5.687452] IP idents hash table entries: 65536 (order: 7, 524288 bytes, line
ar)
[ 5.688311] tcp_listen_portaddr_hash hash table entries: 2048 (order: 3, 3276
8 bytes, linear)
[ 5.688374] TCP established hash table entries: 32768 (order: 6, 262144
bytes
, linear)
[ 5.688511] TCP bind hash table entries: 32768 (order: 7, 524288 bytes, linea
r)
[ 5.688777] TCP: Hash tables configured (established 32768 bind 32768)
[ 5.688808] UDP hash table entries: 2048 (order: 4, 65536 bytes, linear)
```

```

[ 5.688860] UDP-Lite hash table entries: 2048 (order: 4, 65536 bytes, linear)
[ 5.688942] NET: Registered protocol family 1
[ 5.689129] RPC: Registered named UNIX socket transport module.
[ 5.689133] RPC: Registered udp transport module.
[ 5.689135] RPC: Registered tcp transport module.
[ 5.689137] RPC: Registered tcp NFSv4.1 backchannel transport module.
[ 5.689364] PCI: CLS 0 bytes, default 64
[ 5.689989] rockchip-thermal fec00000.tsadc: Missing rockchip,grf property
[ 5.690302] rockchip-thermal fec00000.tsadc: tsadc is probed successfully!
[ 5.690795] hw perfevents: enabled with armv8_pmu3 PMU driver, 7 counters available
[ 5.692119] Initialise system trusted keyrings
[ 5.692156] workingset: timestamp_bits=62 max_order=20 bucket_order=0
[ 5.693210] squashfs: version 4.0 (2009/01/31) Phillip Lougher
[ 5.693348] NFS: Registering the id_resolver key type
[ 5.693354] Key type id_resolver registered
[ 5.693356] Key type id_legacy registered
[ 5.693367] ntfs: driver 2.1.32 [Flags: R/O].
[ 5.693400] jffs2: version 2.2. (NAND) 漏 2001-2006 Red Hat, Inc.
[ 5.693475] fuse: init (API version 7.32)
[ 5.693561] SGI XFS with security attributes, no debug enabled
[ 5.710214] NET: Registered protocol family 38
[ 5.710219] Key type asymmetric registered
[ 5.710221] Asymmetric key parser 'x509' registered
[ 5.710233] Block layer SCSI generic (bsg) driver version 0.4 loaded (major 242)
[ 5.710236] io scheduler mq-deadline registered
[ 5.710239] io scheduler kyber registered
[ 5.710534] rockchip-csi2-dphy-hw fedc0000.csi2-dphy0-hw: csi2 dphy hw probe successfully!
[ 5.710586] rockchip-csi2-dphy-hw fedc8000.csi2-dphy1-hw: csi2 dphy hw probe successfully!
[ 5.714120] rockchip-hdptx-phy-hdmi fed60000.hdmiphy: hdptx phy init success
[ 5.715566] rk-pcie fe190000.pcie: invalid prsnt-gpios property in node
[ 5.715585] rk-pcie fe190000.pcie: no vpcie3v3 regulator found
[ 5.715666] rk-pcie fe170000.pcie: invalid prsnt-gpios property in node
[ 5.715805] pwm-backlight backlight-dsi0: supply power not found, using dummy regulator
[ 5.716029] rk-pcie fe190000.pcie: IRQ msi not found
[ 5.716039] rk-pcie fe190000.pcie: use outband MSI support
[ 5.716046] rk-pcie fe190000.pcie: Missing *config* reg space
[ 5.716067] rk-pcie fe190000.pcie: host bridge /pcie@fe190000 ranges:
[ 5.716103] rk-pcie fe190000.pcie:          err 0x00f4000000..0x00f40fffff -> 0x00f4000000
[ 5.716122] rk-pcie fe190000.pcie:          IO 0x00f4100000..0x00f41fffff -> 0x00f4100000
[ 5.716142] rk-pcie fe190000.pcie:          MEM 0x00f4200000..0x00f4ffffff -> 0x00f4200000
[ 5.716154] rk-pcie fe190000.pcie:          MEM 0x0a00000000..0x0a3fffffff -> 0x0a00000000
[ 5.716172] iep: Module initialized.
[ 5.716182] rk-pcie fe190000.pcie: Missing *config* reg space
[ 5.716196] mpp_service mpp-srv: unknown mpp version for missing VCS info
[ 5.716199] mpp_service mpp-srv: probe start
[ 5.716207] rk-pcie fe190000.pcie: invalid resource
[ 5.716234] rk-pcie fe170000.pcie: IRQ msi not found
[ 5.716237] rk-pcie fe170000.pcie: use outband MSI support
[ 5.716240] rk-pcie fe170000.pcie: Missing *config* reg space
[ 5.716244] rk-pcie fe170000.pcie: host bridge /pcie@fe170000 ranges:
[ 5.716253] rk-pcie fe170000.pcie:          err 0x00f2000000..0x00f20fffff -> 0x00f2000000

```

```

0f200000
[ 5.716257] rk-pcie fe170000.pcie: IO 0x00f2100000..0x00f21fffff -> 0x0
0f2100000
[ 5.716262] rk-pcie fe170000.pcie: MEM 0x00f2200000..0x00f2ffffff -> 0x0
0f2200000
[ 5.716266] rk-pcie fe170000.pcie: MEM 0x0980000000..0x09bffffff -> 0x0
980000000
[ 5.716286] rk-pcie fe170000.pcie: Missing *config* reg space
[ 5.716304] rk-pcie fe170000.pcie: invalid resource
[ 5.716942] mpp_vdpu2 fdb50400.vdpu: Adding to iommu group 1
[ 5.717085] mpp_vdpu2 fdb50400.vdpu: probe device
[ 5.717151] mpp_vdpu2 fdb50400.vdpu: reset_group->rw_sem_on=0
[ 5.717155] mpp_vdpu2 fdb50400.vdpu: reset_group->rw_sem_on=0
[ 5.717170] mpp_vdpu2 fdb50400.vdpu: probing finish
[ 5.717296] mpp_vepu2 jpege-ccu: probing start
[ 5.717300] mpp_vepu2 jpege-ccu: probing finish
[ 5.717366] mpp_vepu2 fdba0000.jpege-core: Adding to iommu group 5
[ 5.717455] mpp_vepu2 fdba0000.jpege-core: probing start
[ 5.717517] mpp_vepu2 fdba0000.jpege-core: attach ccu success
[ 5.717531] mpp_vepu2 fdba0000.jpege-core: probing finish
[ 5.717598] mpp_vepu2 fdba4000.jpege-core: Adding to iommu group 6
[ 5.717692] mpp_vepu2 fdba4000.jpege-core: probing start
[ 5.717748] mpp_vepu2 fdba4000.jpege-core: attach ccu success
[ 5.717760] mpp_vepu2 fdba4000.jpege-core: probing finish
[ 5.717825] mpp_vepu2 fdba8000.jpege-core: Adding to iommu group 7
[ 5.717920] mpp_vepu2 fdba8000.jpege-core: probing start
[ 5.717975] mpp_vepu2 fdba8000.jpege-core: attach ccu success
[ 5.717987] mpp_vepu2 fdba8000.jpege-core: probing finish
[ 5.718043] mpp_vepu2 fdbac000.jpege-core: Adding to iommu group 8
[ 5.718141] mpp_vepu2 fdbac000.jpege-core: probing start
[ 5.718194] mpp_vepu2 fdbac000.jpege-core: attach ccu success
[ 5.718207] mpp_vepu2 fdbac000.jpege-core: probing finish
[ 5.718375] mpp_iep2 fdbb0000.iep: Adding to iommu group 9
[ 5.718473] mpp_iep2 fdbb0000.iep: probe device
[ 5.718540] mpp_iep2 fdbb0000.iep: allocate roi buffer failed
[ 5.718548] mpp_iep2 fdbb0000.iep: probing finish
[ 5.718678] mpp_jpgdec fdb90000.jpegd: Adding to iommu group 4
[ 5.718817] mpp_jpgdec fdb90000.jpegd: probe device
[ 5.718892] mpp_jpgdec fdb90000.jpegd: probing finish
[ 5.719101] mpp_rkvdec2 fdc30000.rkvdec-ccu: rkvdec-ccu, probing start
[ 5.719134] mpp_rkvdec2 fdc30000.rkvdec-ccu: ccu-mode: 1
[ 5.719137] mpp_rkvdec2 fdc30000.rkvdec-ccu: probing finish
[ 5.719181] mpp_rkvdec2 fdc38100.rkvdec-core: Adding to iommu group 12
[ 5.719333] mpp_rkvdec2 fdc38100.rkvdec-core: rkvdec-core, probing start
[ 5.719394] mpp_rkvdec2 fdc38100.rkvdec-core: shared_niu_a is not found!
[ 5.719397] rkvdec2_init:1024: No niu aclk reset resource define
[ 5.719400] mpp_rkvdec2 fdc38100.rkvdec-core: shared_niu_h is not found!
[ 5.719403] rkvdec2_init:1027: No niu hclk reset resource define
[ 5.719417] mpp_rkvdec2 fdc38100.rkvdec-core: no regulator, devfreq is disabl
ed
[ 5.719444] mpp_rkvdec2 fdc38100.rkvdec-core: core_mask=00010001
[ 5.719447] mpp_rkvdec2 fdc38100.rkvdec-core: attach ccu as core 0
[ 5.719571] mpp_rkvdec2 fdc38100.rkvdec-core: sram_start 0x00000000fff001000
[ 5.719573] mpp_rkvdec2 fdc38100.rkvdec-core: rcb_iova 0x00000000fff00000
[ 5.719576] mpp_rkvdec2 fdc38100.rkvdec-core: sram_size 491520
[ 5.719579] mpp_rkvdec2 fdc38100.rkvdec-core: rcb_size 1048576
[ 5.719582] mpp_rkvdec2 fdc38100.rkvdec-core: min_width 512
[ 5.719586] mpp_rkvdec2 fdc38100.rkvdec-core: rcb_info_count 20
[ 5.719589] mpp_rkvdec2 fdc38100.rkvdec-core: [136, 24576]
[ 5.719591] mpp_rkvdec2 fdc38100.rkvdec-core: [137, 49152]

```

[ 5.719594] mpp\_rkvdec2 fdc38100.rkvdec-core: [141, 90112]  
[ 5.719597] mpp\_rkvdec2 fdc38100.rkvdec-core: [140, 49152]  
[ 5.719599] mpp\_rkvdec2 fdc38100.rkvdec-core: [139, 180224]  
[ 5.719602] mpp\_rkvdec2 fdc38100.rkvdec-core: [133, 49152]  
[ 5.719604] mpp\_rkvdec2 fdc38100.rkvdec-core: [134, 8192]  
[ 5.719607] mpp\_rkvdec2 fdc38100.rkvdec-core: [135, 4352]  
[ 5.719610] mpp\_rkvdec2 fdc38100.rkvdec-core: [138, 13056]  
[ 5.719612] mpp\_rkvdec2 fdc38100.rkvdec-core: [142, 291584]  
[ 5.719629] mpp\_rkvdec2 fdc38100.rkvdec-core: probing finish  
[ 5.719669] mpp\_rkvdec2 fdc48100.rkvdec-core: Adding to iommu group 13  
[ 5.719806] mpp\_rkvdec2 fdc48100.rkvdec-core: rkvdec-core, probing start  
[ 5.719868] mpp\_rkvdec2 fdc48100.rkvdec-core: shared\_niu\_a is not found!  
[ 5.719871] rkvdec2\_init:1024: No niu aclk reset resource define  
[ 5.719874] mpp\_rkvdec2 fdc48100.rkvdec-core: shared\_niu\_h is not found!  
[ 5.719876] rkvdec2\_init:1027: No niu hclk reset resource define  
[ 5.719886] mpp\_rkvdec2 fdc48100.rkvdec-core: no regulator, devfreq is disabled  
[ 5.719913] mpp\_rkvdec2 fdc48100.rkvdec-core: core\_mask=00020002  
[ 5.719927] mpp\_rkvdec2 fdc48100.rkvdec-core: attach ccu as core 1  
[ 5.720063] mpp\_rkvdec2 fdc48100.rkvdec-core: sram\_start 0x00000000ff079000  
[ 5.720066] mpp\_rkvdec2 fdc48100.rkvdec-core: rcb\_iova [0x00000000ffe00000  
[ 5.720068] mpp\_rkvdec2 fdc48100.rkvdec-core: sram\_size 487424  
[ 5.720071] mpp\_rkvdec2 fdc48100.rkvdec-core: rcb\_size 1048576  
[ 5.720074] mpp\_rkvdec2 fdc48100.rkvdec-core: min\_width 512  
[ 5.720077] mpp\_rkvdec2 fdc48100.rkvdec-core: rcb\_info\_count 20  
[ 5.720080] mpp\_rkvdec2 fdc48100.rkvdec-core: [136, 24576]  
[ 5.720083] mpp\_rkvdec2 fdc48100.rkvdec-core: [137, 49152]  
[ 5.720085] mpp\_rkvdec2 fdc48100.rkvdec-core: [141, 90112]  
[ 5.720088] mpp\_rkvdec2 fdc48100.rkvdec-core: [140, 49152]  
[ 5.720091] mpp\_rkvdec2 fdc48100.rkvdec-core: [139, 180224]  
[ 5.720093] mpp\_rkvdec2 fdc48100.rkvdec-core: [133, 49152]  
[ 5.720096] mpp\_rkvdec2 fdc48100.rkvdec-core: [134, 8192]  
[ 5.720098] mpp\_rkvdec2 fdc48100.rkvdec-core: [135, 4352]  
[ 5.720101] mpp\_rkvdec2 fdc48100.rkvdec-core: [138, 13056]  
[ 5.720103] mpp\_rkvdec2 fdc48100.rkvdec-core: [142, 291584]  
[ 5.720127] mpp\_rkvdec2 fdc48100.rkvdec-core: probing finish  
[ 5.720255] mpp\_rkvenc2 rkvinc-ccu: probing start  
[ 5.720259] mpp\_rkvenc2 rkvinc-ccu: probing finish  
[ 5.720335] mpp\_rkvenc2 fdbd0000.rkvenc-core: Adding to iommu group 10  
[ 5.720443] mpp\_rkvenc2 fdbd0000.rkvenc-core: probing start  
[ 5.720527] mpp\_rkvenc2 fdbd0000.rkvenc-core: dev\_pm\_opp\_set\_regulators: no regulator (venc) found: -19  
[ 5.720539] rkvinc\_init:1918: failed to add venc devfreq  
[ 5.720557] mpp\_rkvenc2 fdbd0000.rkvenc-core: attach ccu as core 0  
[ 5.720572] mpp\_rkvenc2 fdbd0000.rkvenc-core: probing finish  
[ 5.720613] mpp\_rkvenc2 fdbe0000.rkvenc-core: Adding to iommu group 11  
[ 5.720722] mpp\_rkvenc2 fdbe0000.rkvenc-core: probing start  
[ 5.720790] mpp\_rkvenc2 fdbe0000.rkvenc-core: dev\_pm\_opp\_set\_regulators: no regulator (venc) found: -19  
[ 5.720797] rkvinc\_init:1918: failed to add venc devfreq  
[ 5.720833] mpp\_rkvenc2 fdbe0000.rkvenc-core: attach ccu as core 1  
[ 5.720847] mpp\_rkvenc2 fdbe0000.rkvenc-core: probing finish  
[ 5.721150] mpp\_av1dec: Adding child /av1d@fdc70000  
[ 5.721285] mpp\_av1dec: register device av1d-master  
[ 5.721295] mpp\_av1dec av1d-master: av1\_iommu\_of\_xlate,784  
[ 5.721306] av1\_iommu\_probe\_device,736, consumer : av1d-master, supplier : fdca0000.iommu  
[ 5.721311] mpp\_av1dec av1d-master: Adding to iommu group 17  
[ 5.721442] mpp\_av1dec av1d-master: probing start  
[ 5.721518] mpp\_av1dec av1d-master: probing finish

```
[ 5.721536] mpp_service mpp-srv: probe success
[ 5.727357] dma-pl330 fea10000.dma-controller: Loaded driver for PL330 DMAC-2
41330
[ 5.727363] dma-pl330 fea10000.dma-controller:          DBUFF-128x8bytes Num_Cha
ns-8 Num_Per-32 Num_Events-16
[ 5.727816] dma-pl330 fea30000.dma-controller: Loaded driver for PL330 DMAC-2
41330
[ 5.727821] dma-pl330 fea30000.dma-[controller:          DBUFF-128x8bytes Num_Cha
ns-8 Num_Per-32 Num_Events-16
[ 5.728291] dma-pl330 fed10000.dma-controller: Loaded driver for PL330 DMAC-2
41330
[ 5.728296] dma-pl330 fed10000.dma-controller:          DBUFF-128x8bytes Num_Cha
ns-8 Num_Per-32 Num_Events-16
[ 5.728656] rockchip-pvtm fda40000.pvtm: pvtm@0 probed
[ 5.728689] rockchip-pvtm fda50000.pvtm: pvtm@1 probed
[ 5.728716] rockchip-pvtm fda60000.pvtm: pvtm@2 probed
[ 5.728744] rockchip-pvtm fdaf0000.pvtm: pvtm@3 probed
[ 5.728771] rockchip-pvtm fdb30000.pvtm: pvtm@4 probed
[ 5.729083] rockchip-system-monitor rockchip-system-monitor: system monitor p
robe
[ 5.729563] Serial: 8250/16550 driver, 10 ports, IRQ sharing disabled
[ 5.729850] febc0000.serial: ttyS9 at MMIO 0xfebc0000 (irq = 104, base_baud =
1500000) is a 16550A
[ 5.731040] rockchip-vop2 fdd90000.vop: Adding to iommu group 16
[ 5.735874] rockchip-vop2 fdd90000.vop: [drm:vop2_bind] vp0 assign plane
mask

: 0x5, primary plane phy id: 2
[ 5.735881] rockchip-vop2 fdd90000.vop: [drm:vop2_bind] vp1 assign plane
mask

: 0xa, primary plane phy id: 3
[ 5.735885] rockchip-vop2 fdd90000.vop: [drm:vop2_bind] vp2 assign plane
mask

: 0x140, primary plane phy id: 8
[ 5.735890] rockchip-vop2 fdd90000.vop: [drm:vop2_bind] vp3 assign plane
mask

: 0x280, primary plane phy id: 9
[ 5.742590] rockchip-drm display-subsystem: bound fdd90000.vop (ops 0xfffffc
0094213d0)
[ 5.742883] dwhdmi-rockchip fde80000.hdmi: registered ddc I2C bus driver
[ 5.743128] rockchip-drm display-subsystem: bound fde80000.hdmi (ops 0xfffff
c00942ff58)
[ 5.743157] dw-mipi-dsi2 fde20000.dsi: [drm:dw_mipi_dsi2_bind] *ERROR* Failed
to find panel or bridge: -517
[ 5.746611] panel-simple-dsi fde20000.dsi.0: supply power not found, using du
mmy regulator
[ 5.748387] brd: module loaded
[ 5.750226] loop: module loaded
[ 5.750338] zram: Added device: zram0
[ 5.750417] lkdtm: No crash points registered, enable through debugfs
[ 5.750677] system_heap: orders[0] = 6
[ 5.750680] system_heap: orders[1] = 4
[ 5.750683] system_heap: orders[2] = 0
[ 5.752002] rockchip-spi feb20000.spi: no high_speed pinctrl state
[ 5.752819] rk806 spi2.0: chip id: RK806,ver:0x2, 0x1
[ 5.752995] rk806 spi2.0: ON: 0x40 OFF:0x0
[ 5.754348] vdd_gpu_s0: supplied by vcc5v0_sys
```

```
[ 5.755299] vdd_cpu_lit_s0: supplied by vcc5v0_sys
[ 5.755821] vdd_log_s0: supplied by vcc5v0_sys
[ 5.756289] vdd_vdenc_s0: supplied by vcc5v0_sys
[ 5.756812] vdd_ddr_s0: supplied by vcc5v0_sys
[ 5.757111] vdd2_ddr_s3: supplied by vcc5v0_sys
[ 5.757574] vdd_2v0_pldo_s3: supplied by vcc5v0_sys
[ 5.757991] vcc_3v3_s3: supplied by vcc5v0_sys
[ 5.758394] vddq_ddr_s0: supplied by vcc5v0_sys
[ 5.758869] vcc_1v8_s3: supplied by vcc5v0_sys
[ 5.759292] vdd_0v75_s3: supplied by vcc_1v1_nldo_s3
[ 5.759758] vdd_ddr_pll_s0: supplied by vcc_1v1_nldo_s3
[ 5.760164] avdd_0v75_s0: supplied by vcc_1v1_nldo_s3
[ 5.760564] vdd_0v85_s0: supplied by vcc_1v1_nldo_s3
[ 5.760965] vdd_0v75_s0: supplied by vcc_1v1_nldo_s3
[ 5.761412] avcc_1v8_s0: supplied by vdd_2v0_pldo_s3
[ 5.761930] vcc_1v8_s0: supplied by vdd_2v0_pldo_s3
[ 5.762393] avdd_1v2_s0: supplied by vdd_2v0_pldo_s3
[ 5.762851] vcc_3v3_s0: supplied by vcc5v0_sys
[ 5.763248] vccio_sd_s0: supplied by vcc5v0_sys
[ 5.763678] pldo6_s3: supplied by vcc5v0_sys
[ 5.763847] rk806 spi2.0: no sleep-setting state
[ 5.763850] rk806 spi2.0: no reset-setting pinctrl state
[ 5.763854] rk806 spi2.0: no dvs-setting pinctrl state
[ 5.765021] rockchip-spi feb20000.spi: probed, poll=0, rsd=0, cs-inactive=0,
ready=0
[ 5.765337] rockchip-spi fecb0000.spi: no high_speed pinctrl state
[ 5.765546] rockchip-spi fecb0000.spi: probed, poll=0, rsd=0, cs-inactive=0,
ready=0
[ 5.766033] CAN device driver interface
[ 5.766725] rk_gmac-dwmac fe1b0000.ethernet: IRQ eth_lpi not found
[ 5.766943] rk_gmac-dwmac fe1b0000.ethernet: supply phy not found, using dumm
y regulator
[ 5.766982] rk_gmac-dwmac fe1b0000.ethernet: clock input or output? (output).
[ 5.766986] rk_gmac-dwmac fe1b0000.ethernet: TX delay(0x44).
[ 5.766989] rk_gmac-dwmac fe1b0000.ethernet: Can not read property: rx_delay.
[ 5.766993] rk_gmac-dwmac fe1b0000.ethernet: set rx_delay to 0xffffffff
[ 5.767006] rk_gmac-dwmac fe1b0000.ethernet: integrated PHY? (no).

[ 5.767011] rk_gmac-dwmac fe1b0000.ethernet: cannot get clock mac_clk_rx
Welcome to Ubuntu 22.04.5 LTS!
[ 5.767015] rk_gmac-dwmac fe1b0000.ethernet: cannot get clock mac_clk_tx

[ 5.767023] rk_gmac-dwmac fe1b0000.ethernet: cannot get clock clk_mac_speed
[ 5.767237] rk_gmac-dwmac fe1b0000.ethernet: init for RGMII_RXID
[ 5.767293] rk_gmac-dwmac fe1b0000.ethernet: User ID: 0x30, Synopsys ID: 0x51
[ 5.767297] rk_gmac-dwmac fe1b0000.ethernet:          DWMAC4/5
[ 5.767302] rk_gmac-dwmac fe1b0000.ethernet: DMA HW capability register suppo
rted
[ 5.767305] rk_gmac-dwmac fe1b0000.ethernet: RX Checksum Offload Engine suppo
rted
[ 5.767308] rk_gmac-dwmac fe1b0000.ethernet: TX Checksum insertion supported
[ 5.767311] rk_gmac-dwmac fe1b0000.ethernet: Wake-Up On Lan supported
[ 5.767331] rk_gmac-dwmac fe1b0000.ethernet: TSO supported
[ 5.767335] rk_gmac-dwmac fe1b0000.ethernet: Enable RX Mitigation via HW Watc
hdog Timer
[ 5.767338] rk_gmac-dwmac fe1b0000.ethernet: Enabled Flow TC (entries=2)
[ 5.767342] rk_gmac-dwmac fe1b0000.ethernet: TSO feature enabled
[ 5.767345] rk_gmac-dwmac fe1b0000.ethernet: Using 32 bits DMA width
[ 5.901366] usbcore: registered new interface driver rtl8150
[ 5.901380] usbcore: registered new interface driver r8152
```

```

[ 5.901390] usbcore: registered new interface driver asix
[ 5.901399] usbcore: registered new interface driver ax88179_178a
[ 5.901408] usbcore: registered new interface driver cdc_ether
[ 5.901416] usbcore: registered new interface driver cdc_eem
[ 5.901426] usbcore: registered new interface driver net1080
[ 5.901435] usbcore: registered new interface driver cdc_subset
[ 5.901444] usbcore: registered new interface driver zaaurus
[ 5.901454] usbcore: registered new interface driver ipheth
[ 5.901465] usbcore: registered new interface driver cdc_ncm
[ 5.901475] usbcore: registered new interface driver cdc_mbim
[ 5.901482] GobiNet: Quectel_Linux&Android_GobiNet_Driver_V1.6.2.14
[ 5.901492] usbcore: registered new interface driver GobiNet
[ 5.908840] ehci_hcd: USB 2.0 'Enhanced' Host Controller (EHCI) Driver
[ 5.908846] ehci-pci: EHCI PCI platform driver
[ 5.908866] ehci-platform: EHCI generic platform driver
[ 5.911025] ehci-platform fc880000.usb: EHCI Host Controller
[ 5.911068] ehci-platform fc880000.usb: new USB bus registered, assigned bus
number 1
[ 5.911110] ehci-platform fc880000.usb: irq 20, io mem 0xfc880000
[ 5.921226] rk-pcie fe170000.pcie: PCIe Linking... LTSSM is 0x3
[ 5.923447] ehci-platform fc880000.usb: USB 2.0 started, EHCI 1.00
[ 5.923500] usb usb1: New USB device found, idVendor=1d6b, idProduct=0002, bc
dDevice= 5.10
[ 5.923504] usb usb1: New USB device strings: Mfr=3, Product=2, SerialNumber=
1
[ 5.923507] usb usb1: Product: EHCI Host Controller
[ 5.923511] usb usb1: Manufacturer: Linux 5.10.209 ehci_hcd
[ 5.923513] usb usb1: SerialNumber: fc880000.usb
[ 5.923637] hub 1-0:1.0: USB hub found
[ 5.923646] hub 1-0:1.0: 1 port detected
[ 5.923870] ohci_hcd: USB 1.1 'Open' Host Controller (OHCI) Driver
[ 5.923876] ohci-platform: OHCI generic platform driver
[ 5.923964] ohci-platform fc8c0000.usb: Generic Platform OHCI controller
[ 5.924006] ohci-platform fc8c0000.usb: new USB bus registered, assigned bus
number 2
[ 5.924037] ohci-platform fc8c0000.usb: irq 21, io mem 0xfc8c0000
[ 5.946784] rk-pcie fe170000.pcie: PCIe Linking... LTSSM is 0x3
[ 5.973447] rk-pcie fe170000.pcie: PCIe Linking... LTSSM is 0x3
[ 5.976806] rk-pcie fe190000.pcie: PCIe Link up, LTSSM is 0x130011
[ 5.976937] rk-pcie fe190000.pcie: PCI host bridge to bus 0004:40
[ 5.976951] pci_bus 0004:40: root bus resource [bus 40-4f]
[ 5.976962] pci_bus 0004:40: root bus resource [??? 0xf4000000-0xf40fffff fla
gs 0x0]
[ 5.976973] pci_bus 0004:40: root bus resource [io 0x0000-0xfffff] (bus addr
ess [0xf4100000-0xf41fffff])
[ 5.976985] pci_bus 0004:40: root bus resource [mem 0xf4200000-0xf4ffffff]
[ 5.976995] pci_bus 0004:40: root bus resource [mem 0xa00000000-0xa3ffffff p
ref]
[ 5.977028] pci 0004:40:00.0: [1d87:3588] type 01 class 0x060400
[ 5.977053] pci 0004:40:00.0: reg 0x38: [mem 0x00000000-0x0000ffff pref]
[ 5.977107] pci 0004:40:00.0: supports D1 D2
[ 5.977115] pci 0004:40:00.0: PME# supported from D0 D1 D3hot
[ 5.984164] usb usb2: New USB device found, idVendor=1d6b, idProduct=0001, bc
dDevice= 5.10
[ 5.984168] usb usb2: New USB device strings: Mfr=3, Product=2, SerialNumber=
1
[ 5.984171] usb usb2: Product: Generic Platform OHCI controller
[ 5.984174] usb usb2: Manufacturer: Linux 5.10.209 ohci_hcd
[ 5.984177] usb usb2: SerialNumber: fc8c0000.usb
[ 5.985443] hub 2-0:1.0: USB hub found

```

```
[ 5.985453] hub 2-0:1.0: 1 port detected
[ 5.987699] pci 0004:40:00.0: Primary bus is hard wired to 0
[ 5.987712] pci 0004:40:00.0: bridge configuration invalid ([bus 01-ff]), reconfiguring
[ 5.987892] pci 0004:41:00.0: [8086:2723] type 00 class 0x028000
[ 5.987933] xhci-hcd xhci-hcd.4.auto: xHCI Host Controller
[ 5.987976] pci 0004:41:00.0: reg 0x10: [mem 0x00000000-0x00003fff 64bit]
[ 5.987980] xhci-hcd xhci-hcd.4.auto: new USB bus registered, assigned bus number 3
[ 5.988039] xhci-hcd xhci-hcd.4.auto: hcc params 0x0220fe64 hci version 0x110 quirks 0x0000800002010010
[ 5.988054] xhci-hcd xhci-hcd.4.auto: irq 139, io mem 0xfcd00000
[ 5.988098] xhci-hcd xhci-hcd.4.auto: xHCI Host Controller
[ 5.988135] xhci-hcd xhci-hcd.4.auto: new USB bus registered, assigned bus number 4
[ 5.988141] xhci-hcd xhci-hcd.4.auto: Host supports USB 3.0 SuperSpeed
[ 5.988172] usb usb3: New USB device found, idVendor=1d6b, idProduct=0002, bcdDevice= 5.10
[ 5.988176] usb usb3: New USB device strings: Mfr=3, Product=2, SerialNumber=1
[ OK ] Created slice Slice /system/modprobe.
[ 5.988179] usb usb3: Product: xHCI Host Controller
[ OK ] Created slice Slice /system/serial-getty.
[ 5.988182] usb usb3: Manufacturer: Linux 5.10.209 xhci-hcd
[ OK ] Created slice User and Session Slice.
[ 5.988185] usb usb3: SerialNumber: xhci-hcd.4.auto
[ OK ] Started Forward Password Requests to Wall Directory Watch.
[ 5.988288] hub 3-0:1.0: USB hub found
[ OK ] Reached target User and Group Name Lookups.
[ 5.988296] hub 3-0:1.0: 1 port detected
[ OK ] Reached target Slice Units.
[ 5.988372] pci 0004:41:00.0: PME# supported from D0 D3hot D3cold
[ OK ] Reached target Mounting snaps.
[ 5.988377] usb usb4: We don't know the algorithms for LPM for this host, disabling LPM.
[ OK ] Reached target Swaps.
[ 5.988401] usb usb4: New USB device found, idVendor=1d6b, idProduct=0003, bcdDevice= 5.10
[ OK ] Reached target Local Verity Protected Volumes.
[ 5.988405] usb usb4: New USB device strings: Mfr=3, Product=2, SerialNumber=1
[ OK ] Listening on Device-mapper event daemon FIFOs.
[ 5.988408] usb usb4: Product: xHCI Host Controller
[ OK ] Listening on LVM2 poll daemon socket.
[ 5.988411] usb usb4: Manufacturer: Linux 5.10.209 xhci-hcd
[ OK ] Listening on multipathd control socket.
[ 5.988414] usb usb4: SerialNumber: xhci-hcd.4.auto
[ OK ] Listening on Syslog Socket.
[ 5.988524] hub 4-0:1.0: USB hub found
[ OK ] Listening on fsck to fsckd communication Socket.
[ 5.988531] hub 4-0:1.0: 1 port detected
[ OK ] Listening on initctl Compatibility Named Pipe.
[ 5.988647] usbcore: registered new interface driver cdc_acm
[ OK ] Listening on Journal Socket (/dev/log).
[ 5.988650] cdc_acm: USB Abstract Control Model driver for USB modems and ISDN adapters
[ OK ] Listening on Journal Socket.
[ 5.988661] usbcore: registered new interface driver cdc_wdm
[ OK ] Listening on udev Control Socket.
[ 5.988725] usbcore: registered new interface driver uas
```

```

[ OK ] Listening on udev Kernel Socket.
[ 5.988749] usbcore: registered new interface driver usb-storage
Mounting POSIX Message Queue File System...
[ 5.988772] usbcore: registered new interface driver usbserial_generic
Mounting /sys/kernel/debug...
[ 5.988779] usbserial: USB Serial support registered for generic
Mounting Kernel Trace File System...
[ 5.988789] usbcore: registered new interface driver cp210x
Starting Journal Service...
[ 5.988795] usbserial: USB Serial support registered for cp210x
Starting Restore / save the current clock...
[ 5.988810] usbcore: registered new interface driver ftdi_sio
Starting Set the console keyboard layout...
[ 5.988816] usbserial: USB Serial support registered for FTDI USB Serial Device
Starting Monitoring of LVM 鈹 eventd or progress polling...
[ 5.988850] usbcore: registered new interface driver keyspan
Starting Load Kernel Module configs...
[ 5.988856] usbserial: USB Serial support registered for Keyspan - (without firmware)
Starting Load Kernel Module drm...
[ 5.988862] usbserial: USB Serial support registered for Keyspan 1 port adapter
Starting Load Kernel Module efi_pstore...
[ 5.988868] usbserial: USB Serial support registered for Keyspan 2 port adapter
Starting Load Kernel Module fuse...
[ 5.988874] usbserial: USB Serial support registered for Keyspan 4 port adapter
Starting Enable Rockchip camera engine rkaiq...
[ 5.988885] usbcore: registered new interface driver option
Starting Load Kernel Modules...
[ 5.988891] usbserial: USB Serial support registered for GSM modem (1-port)
Starting Remount Root and Kernel File Systems...
[ 5.988939] usbcore: registered new interface driver oti6858
Starting Coldplug All udev Devices...
[ 5.988945] usbserial: USB Serial support registered for oti6858
[ OK ] Mounted POSIX Message Queue File System.
[ 5.988955] usbcore: registered new interface driver pl2303
[ OK ] Mounted /sys/kernel/debug.
[ 5.988961] usbserial: USB Serial support registered for pl2303
[ OK ] Mounted Kernel Trace File System.
[ 5.988972] usbcore: registered new interface driver qcserial
[ OK ] Finished Restore / save the current clock.
[ 5.988978] usbserial: USB Serial support registered for Qualcomm USB modem
[ OK ] Finished Load Kernel Module configs.
[ 5.988993] usbcore: registered new interface driver sierra
[ OK ] Finished Load Kernel Module drm.
[ 5.988999] usbserial: USB Serial support registered for Sierra USB modem
[ OK ] Finished Load Kernel Module efi_pstore.
[ 5.989308] usbcore: registered new interface driver usbtouchscreen
[ OK ] Finished Load Kernel Module fuse.
[ 5.990105] input: rk805 pwrkey as /devices/platform/feb20000.spi/spi_master/spi2/spi2.0/rk805-pwrkey.2.auto/input/input0
[ OK ] Started Enable Rockchip camera engine rkaiq.
[ 5.990256] i2c /dev entries driver
Mounting FUSE Control File System...
[ 5.992912] vdd_cpu_big0_s0: supplied by vcc4v0_sys
Mounting Kernel Configuration File System...
[ 6.000403] rk-pcie fe170000.pcie: PCIe Linking... LTSSM is 0x3

```

```

[ OK ] Mounted FUSE Control File System.
[ 6.007209] pci_bus 0004:41: busn_res: [bus 41-4f] end is updated to 41
[ OK ] Mounted Kernel Configuration File System.
[ 6.007242] pci 0004:40:00.0: BAR 8: assigned [mem 0xf4200000-0xf42fffff]
[ OK ] Finished Load Kernel Modules.
[ 6.007254] pci 0004:40:00.0: BAR 6: assigned [mem 0xf4300000-0xf430ffff
pref
]
    Starting Apply Kernel Variables...
[ 6.007268] pci 0004:41:00.0: BAR 0: assigned [mem 0xf4200000-0xf4203fff 64bit]
[ OK ] Finished Remount Root and Kernel File Systems.
[ 6.007311] pci 0004:40:00.0: PCI bridge to [bus 41]
    Starting Device-Mapper Multipath Device Controller...
[ 6.007323] pci 0004:40:00.0: bridge window [mem 0xf4200000-0xf42fffff]
    Starting Platform Persistent Storage Archival...
[ 6.009463] vdd_cpu_big1_s0: supplied by vcc4v0_sys
    Starting Load/Save Random Seed...
[ 6.009566] pcieport 0004:40:00.0: PME: Signaling with IRQ 149
    Starting Create System Users...
[ 6.017473] vdd_npu_s0: supplied by vcc4v0_sys
[ OK ] Finished Platform Persistent Storage Archival.
[ 6.024891] Goodix-TS 2-0014: supply AVDD28 not found, using dummy regulator
[ OK ] Finished Load/Save Random Seed.
[ 6.024999] Goodix-TS 2-0014: supply VDDIO not found, using dummy regulator
[ OK ] Finished Apply Kernel Variables.
[ 6.026785] rk-pcie fe170000.pcie: PCIe Linking... LTSSM is 0x3
[ OK ] Finished Set the console keyboard layout.
[ 6.053445] rk-pcie fe170000.pcie: PCIe Linking... LTSSM is 0x3
[ OK ] Finished Create System Users.
[ 6.080114] rk-pcie fe170000.pcie: PCIe Linking... LTSSM is 0x3
    Starting Create Static Device Nodes in /dev...
[ 6.106780] rk-pcie fe170000.pcie: PCIe Linking... LTSSM is 0x3
[ OK ] Started Journal Service.
[ 6.116951] Goodix-TS 2-0014: i2c test failed attempt 1: -6
[ OK ] Finished Create Static Device Nodes in /dev.
[ 6.133447] rk-pcie fe170000.pcie: PCIe Linking... LTSSM is 0x3
    Starting Flush Journal to Persistent Storage...
[ 6.143612] Goodix-TS 2-0014: i2c test failed attempt 2: -6
    Starting Rule-based Manage 鈎 or Device Events and Files...
[ 6.160113] rk-pcie fe170000.pcie: PCIe Linking... LTSSM is 0x3
[FAILED] Failed to start Device-Map 鈎 Multipath Device Controller.
[ 6.170133] Goodix-TS 2-0014: I2C communication failure: -6
See 'systemctl status multipathd.service' for details.
[ 6.173450] usb 1-1: new high-speed USB device number 2 using ehci-platform
[ OK ] Finished Flush Journal to Persistent Storage.
[ 6.186591] rtc-rx8010 5-0032: registered as rtc0
[ OK ] Finished Coldplug All udev Devices.
[ 6.188068] rtc-rx8010 5-0032: setting system clock to 2025-06-03T07:50:12 UTC (1748937012)
    Starting Helper to synchronize boot up for ifupdown...
[ 6.188790] dw9763 3-000c: probing...
[ OK ] Finished Helper to synchronize boot up for ifupdown.
[ 6.188822] dw9763 3-000c: Failed to get power-gpios, maybe no use
[ OK ] Started Rule-based Manager for Device Events and Files.
[ 6.188848] dw9763 3-000c: supply avdd not found, using dummy regulator
[ OK ] Started Dispatch Password 鈎 s to Console Directory Watch.
[ 6.188944] dw9763 3-000c: __dw9763_set_power(730) on(1)
[ OK ] Reached target Local Encrypted Volumes.

```

```
[ 6.189012] dw9763 3-000c: Unexpected sensor id(000000), ret(-5)
[ OK ] Created slice Slice /system/systemd-backlight.
[ 6.189022] dw9763 3-000c: __dw9763_set_power(730) on(0)
Starting Load/Save Screen 鈹 f backlight:backlight-dsi0...
[ 6.189035] dw9763 3-000c: Probe failed: -19
[ OK ] Finished Load/Save Screen 鈹 of backlight:backlight-dsi0.
[ 6.190434] rkcihw fdce0000.rkcif: Adding to iommu group 15
[ OK ] Found device /dev/ttyFIQ0.
[ 6.191512] rkcihw fdce0000.rkcif: No reserved memory region assign to CIF
[ OK ] Found device /dev/mmcblk0p8.
[ 6.191661] rkcihw rkcihw-mipi-lvds: Adding to iommu group 15
Starting Device-Mapper Multipath Device Controller...
[ 6.191688] rkcihw rkcihw-mipi-lvds: rkcihw driver version: v00.02.00
Starting Enable Rockchip camera engine rkaiq...
[ 6.191796] rkcihw rkcihw-mipi-lvds: attach to cif hw node
[ OK ] Found device /dev/mmcblk0p7.
[ 6.191807] rkcihw rkcihw-mipi-lvds: rkcihw wait line 0
[ OK ] Started Enable Rockchip camera engine rkaiq.
[ 6.191816] rkcihw rkcihw-mipi-lvds: rkcihw fastboot reserve bufs num 3
[FAILED] Failed to start Device-Map 鈹 Multipath Device Controller.
[ 6.191826] : terminal subdev does not exist
See 'systemctl status multipathd.service' for details.
[ 6.191834] : terminal subdev does not exist
[ OK ] Listening on Load/Save RF 鈹 tch Status /dev/rfkill Watch.
[ 6.191841] : terminal subdev does not exist
Starting Load/Save RF Kill Switch Status...
[ 6.191847] : terminal subdev does not exist
[ OK ] Started Load/Save RF Kill Switch Status.
[ 6.191856] : get_remote_sensor: video pad[0] is null
Starting Device-Mapper Multipath Device Controller...
[ 6.191863] : rkcihw_update_sensor_info: stream[0] get remote sensor_sd
failed

!
Starting Enable Rockchip camera engine rkaiq...
[ 6.191872] : rkcihw_scale_set_fmt: req(40, 30) src out(0, 0)
[ OK ] Started Enable Rockchip camera engine rkaiq.
[ 6.191879] : get_remote_sensor: video pad[0] is null
[ OK ] Finished Monitoring of LVM 鈹 dmeventd or progress polling.
[ 6.191886] : rkcihw_update_sensor_info: stream[0] get remote sensor_sd
failed

!
[FAILED] Failed to start Device-Map 鈹 Multipath Device Controller.
[ 6.191893] : rkcihw_scale_set_fmt: req(40, 30) src out(0, 0)
See 'systemctl status multipathd.service' for details.
[ 6.191900] : get_remote_sensor: video pad[0] is null
[ OK ] Reached target Preparation for Local File Systems.
[ 6.191906] : rkcihw_update_sensor_info: stream[0] get remote sensor_sd
failed

!
Mounting /oem...
[ 6.191914] : rkcihw_scale_set_fmt: req(40, 30) src out(0, 0)
Mounting Mount unit for cmake, revision 1464...
[ 6.191921] : get_remote_sensor: video pad[0] is null
Mounting Mount unit for core20, revision 2585...
[ 6.191927] : rkcihw_update_sensor_info: stream[0] get remote sensor_sd
failed
```

```

!
    Mounting Mount unit for snapd, revision 24509...
[ 6.191935] : rkCIF_scale_set_fmt: req(40, 30) src out(0, 0)
    Mounting /tmp...
[ 6.193084] rkCIF rkCIF-mipi-lvds: No memory-region-thunderboot specified
    Mounting /userdata...
[ 6.194521] rockchip-mipi-csi2-hw fdd10000.mipi0-csi2-hw: enter mipi csi2 hw
probe!
[ OK ] Mounted /oem.
[ 6.194634] rockchip-mipi-csi2-hw fdd10000.mipi0-csi2-hw: probe success, v4l2
_dev:mipi0-csi2-hw!
[ OK ] Mounted Mount unit for cmake, revision 1464.
[ 6.194698] rockchip-mipi-csi2-hw fdd20000.mipi1-csi2-hw: enter mipi csi2 hw
probe!
[ OK ] Mounted Mount unit for core20, revision 2585.
[ 6.194800] rockchip-mipi-csi2-hw fdd20000.mipi1-csi2-hw: probe success, v4l2
_dev:mipi1-csi2-hw!
[ OK ] Mounted Mount unit for snapd, revision 24509.
[ 6.194862] rockchip-mipi-csi2-hw fdd30000.mipi2-csi2-hw: enter mipi csi2 hw
probe!
[ OK ] Mounted /tmp.
[ 6.194957] rockchip-mipi-csi2-hw fdd30000.mipi2-csi2-hw: probe success, v4l2
_dev:mipi2-csi2-hw!
[ OK ] Mounted /userdata.
[ 6.195019] rockchip-mipi-csi2-hw fdd40000.mipi3-csi2-hw: enter mipi csi2 hw
probe!
[ OK ] Reached target Mounted snaps.
[ 6.195115] rockchip-mipi-csi2-hw fdd40000.mipi3-csi2-hw: probe success, v4l2
_dev:mipi3-csi2-hw!
[ OK ] Reached target Local File Systems.
[ 6.195180] rockchip-mipi-csi2-hw fdd50000.mipi4-csi2-hw: enter mipi csi2 hw
probe!
    Starting Enable support for executable binary formats...
[ 6.195274] rockchip-mipi-csi2-hw fdd50000.mipi4-csi2-hw: probe success, v4l2
_dev:mipi4-csi2-hw!
    Starting Set console font and keymap...
[ 6.195336] rockchip-mipi-csi2-hw fdd60000.mipi5-csi2-hw: enter mipi csi2 hw
probe!
    Starting Create final run dir for shutdown pivot root...
[ 6.195434] rockchip-mipi-csi2-hw fdd60000.mipi5-csi2-hw: probe success, v4l2
_dev:mipi5-csi2-hw!
    Starting Raise network interfaces...
[ 6.196243] rockchip-mipi-csi2 mipi0-csi2: attach to csi2 hw node
    Starting Tell Plymouth To Write Out Runtime Data...
[ 6.196281] rkCIF rkCIF-mipi-lvds: Entity type for entity rockchip-mipi-csi2
was not initialized!
    Starting Create Volatile Files and Directories...
[ 6.196292] rockchip-mipi-csi2: Async registered subdev
[ OK ] Finished Enable support for all executable binary formats.
[ 6.196301] rockchip-mipi-csi2: probe success, v4l2_dev:rkCIF-mipi-lvds!
[ OK ] Finished Set console font and keymap.
[ 6.197831] rkisp_hw fdcb0000.rkisp: Adding to iommu group 14
[ OK ] Finished Create final run dir for shutdown pivot root.
[ 6.198034] rkisp_hw fdcb0000.rkisp: is_thunderboot: 0
[ OK ] Finished Create Volatile Files and Directories.
[ 6.198046] rkisp_hw fdcb0000.rkisp: Missing rockchip,grf property
[ OK ] Finished Tell Plymouth To Write Out Runtime Data.
[ 6.198070] rkisp_hw fdcb0000.rkisp: max input:0x0@0fps
    Starting Network Name Resolution...

```

```

[ 6.198198] rkisp_hw fdcb0000.rkisp: no find phandle sram
Starting Network Time Synchronization...
[ 6.198620] rkisp rkisp0-vir0: rkisp driver version: v02.05.01
Starting Record System Boot/Shutdown in UTMP...
[ 6.198734] rkisp rkisp0-vir0: No memory-region-thunderboot specified
[ OK ] Finished Record System Boot/Shutdown in UTMP.
[ 6.198843] rkisp rkisp0-vir0: Entity type for entity rkisp-isp-subdev was not initialized!
[ OK ] Finished Raise network interfaces.
[ 6.201423] rk_hdmirx fdee0000.hdmirx-controller: No reserved memory for HDMI RX, use default CMA
[ OK ] Started Network Time Synchronization.
[ 6.201452] rk_hdmirx fdee0000.hdmirx-controller: hdmirx_get_phy_cpuid_func: mpidr: 0x0000000500, phy_cpuid:0x5
[ OK ] Reached target System Initialization.
[ 6.201467] rk_hdmirx fdee0000.hdmirx-controller: hdmirx_probe: cpu_aff:0x500

, Bound_cpu:5, wdt_cfg_bound_cpu:2, phy_cpuid:5
[ OK ] Started CUPS Scheduler.
[ 6.201993] rk_hdmirx fdee0000.hdmirx-controller: hdmirx_audio_interrupts_setup: 0
[ OK ] Started Start whoopsie on 鈱 of the /var/crash directory.
[ 6.202885] rk_hdmirx fdee0000.hdmirx-controller: rk_hdmirx_hdcp_register success
[ OK ] Started Daily Cleanup of Temporary Directories.
[ 6.202918] rk_hdmirx fdee0000.hdmirx-controller: fdee0000.hdmirx-controller driver probe ok!
[ OK ] Reached target Path Units.
[ 6.203082] usbcore: registered new interface driver uvcvideo
[ OK ] Reached target System Time Set.
[ 6.203091] USB Video Class driver (1.1.1)
[ OK ] Started Trigger anacron every hour.
[ 6.204928] Bluetooth: HCI UART driver ver 2.3
[ OK ] Started Daily apt download activities.
[ 6.204939] Bluetooth: HCI UART protocol H4 registered
[ OK ] Started Daily apt upgrade and clean activities.
[ 6.204947] Bluetooth: HCI UART protocol ATH3K registered
[ OK ] Started Daily dpkg database backup timer.
[ 6.204992] usbcore: registered new interface driver b4usb
[ OK ] Started Periodic ext4 Onli 鈱 ta Check for All Filesystems.
[ 6.206301] cpu cpu0: bin=0
[ OK ] Started Discard unused blocks once a week.
[ 6.206496] cpu cpu0: leakage=8
[ OK ] Started Refresh fwupd metadata regularly.
[ 6.208087] cpu cpu0: pvtm=1404
[ OK ] Started Daily rotation of log files.
[ 6.208356] cpu cpu0: pvtm-volt-sel=0
[ OK ] Started Daily man-db regeneration.
[ 6.210638] cpu cpu4: bin=0
[ OK ] Started Message of the Day.
[ 6.210828] cpu cpu4: leakage=7
[ OK ] Listening on Avahi mDNS/DNS-SD Stack Activation Socket.
[ 6.217531] cpu cpu4: pvtm=1743
[ OK ] Listening on CUPS Scheduler.
[ 6.221712] cpu cpu4: pvtm-volt-sel=5
[ OK ] Listening on D-Bus System Message Bus Socket.
[ 6.224748] cpu cpu6: bin=0
[ OK ] Listening on Open-iSCSI iscsid Socket.
[ 6.224938] cpu cpu6: leakage=7

```

```

        Starting Socket activation for snappy daemon...
[ 6.231650] cpu cpu6: pvtm=1847
[ OK ] Listening on UUID daemon activation socket.
[ 6.235776] cpu cpu6: pvtm-volt-sel=7
[ OK ] Started Network Name Resolution.
[ 6.238336] cpu cpu0: avs=0
[ OK ] Listening on Socket activation for snappy daemon.
[ 6.240160] cpu cpu4: avs=0
[ OK ] Reached target Host and Network Name Lookups.
[ 6.241806] cpu cpu6: avs=0
[ OK ] Reached target Socket Units.
[ 6.242318] cpu cpu0: EM: created perf domain
[ OK ] Reached target Basic System.
[ 6.242381] cpu cpu0: l=15000 h=85000 hyst=5000 l_limit=0 h_limit=1608000000
h_table=0
        Starting Accounts Service...
[ 6.243577] cpu cpu4: EM: created perf domain
        Starting adbd Compatibility...
[ 6.243647] cpu cpu4: l=15000 h=85000 hyst=5000 l_limit=0 h_limit=2208000000
h_table=0
[ OK ] Started Run anacron jobs.
[ 6.252221] cpu cpu6: EM: created perf domain
        Starting Avahi mDNS/DNS-SD Stack...
[ 6.252637] cpu cpu6: l=15000 h=85000 hyst=5000 l_limit=0 h_limit=2208000000
h_table=0
        Starting Bluetooth service...
[ 6.266173] sdhci: Secure Digital Host Controller Interface driver
        Starting Set CPU governor to performance...
[ 6.266178] sdhci: Copyright(c) Pierre Ossman
[ OK ] Started D-Bus System Message Bus.
[ 6.266182] Synopsys Designware Multimedia Card Interface Driver
        Starting Network Manager...
[ 6.266634] sdhci-pltfm: SDHCI platform and OF driver helper
[ OK ] Started Save initial kernel messages after boot.
[ 6.266910] dwmmc_rockchip fe2c0000.mmc: No normal pinctrl state
        Starting Remove Stale Onli 欵 4 Metadata Check Snapshots...
[ 6.266917] dwmmc_rockchip fe2c0000.mmc: No idle pinctrl state
        Starting Set GPU governor to performance...
[ 6.267027] dwmmc_rockchip fe2c0000.mmc: IDMAC supports 32-bit address mode.
        Starting Initialize hardware monitoring sensors...
[ 6.267055] dwmmc_rockchip fe2c0000.mmc: Using internal DMA controller.
        Starting Dispatcher daemon for systemd-networkd...
[ 6.267063] dwmmc_rockchip fe2c0000.mmc: Version ID is 270a
        Starting Authorization Manager...
[ 6.267085] dwmmc_rockchip fe2c0000.mmc: DW MMC controller at irq 89,32 bit h
ost data width,256 deep fifo
        Starting Power Profiles daemon...
[ 6.267438] dwmmc_rockchip fe2c0000.mmc: Got CD GPIO
        Starting System Logging Service...
[ 6.267772] arm-scmi firmware:scmi: Failed. SCMI protocol 17 not active.
        Starting Set mali firmware based on kernel version...
[ 6.267842] SMCCC: SOC_ID: ARCH_SOC_ID not implemented, skipping ....
[ OK ] Reached target Preparation for Logins.
[ 6.268403] cryptodev: driver 1.12 loaded.
        Starting Wait until snapd is fully seeded...
[ 6.268432] hid: raw HID events driver (C) Jiri Kosina
        Starting Snap Daemon...
[ 6.268607] usbcore: registered new interface driver usbhid
        Starting Switcheroo Control Proxy service...
[ 6.268612] usbhid: USB HID core driver

```

```

Starting User Login Management...
[ 6.279269] optee: probing for conduit method.
Starting Disk Manager...
[ 6.279291] optee: revision 3.13 (185dc3c9)
Starting WPA supplicant...
[ 6.279567] optee: dynamic shared memory is enabled
[ OK ] Finished Set GPU governor to performance.
[ 6.279708] optee: initialized driver
[ OK ] Finished Initialize hardware monitoring sensors.
[ 6.283828] rockchip-i2s-tdm fddf0000.i2s: CLK-ALWAYS-ON: mclk: 12288000, bcl
k: 3072000, fsync: 48000
[ OK ] Finished Set CPU governor to performance.
[ 6.285825] mmc_host mmc1: Bus speed (slot 0) = 400000Hz (slot req 400000Hz,
actual 400000HZ div = 0)
[ OK ] Finished Remove Stale Onli 欵 xt4 Metadata Check Snapshots.
[ 6.286130] rockchip-i2s-tdm fe470000.i2s: Register PCM for TRCM mode
[ OK ] Started System Logging Service.
[ 6.288760] debugfs: File 'Capture' in directory 'dapm' already present!
[ OK ] Finished Set mali firmware based on kernel version.
[ 6.289680] input: rockchip,dp0 rockchip,dp0 as /devices/platform/dp0-sound/s
ound/card0/input1
[ OK ] Started User Login Management.
[ 6.290495] input: headset-keys as /devices/platform/nau8822-sound/input/inpu
t2
[ OK ] Started Avahi mDNS/DNS-SD Stack.
[ 6.302747] mmc0: SDHCI controller on fe2e0000.mmc [fe2e0000.mmc] using ADMA
[ OK ] Started Bluetooth service.
[ 6.321530] usb 1-1: New USB device found, idVendor=1a40, idProduct=0101, bcd
Device= 1.11
[ OK ] Reached target Bluetooth Support.
[ 6.321547] usb 1-1: New USB device strings: Mfr=0, Product=1, SerialNumber=0
Starting /etc/init.d/bluez_init Compatibility...
[ 6.321557] usb 1-1: Product: USB 2.0 Hub
[ OK ] Started Switcheroo Control Proxy service.
[ 6.322290] hub 1-1:1.0: USB hub found
[ OK ] Started WPA supplicant.
[ 6.322527] hub 1-1:1.0: 4 ports detected
Starting Save/Restore Sound Card State...
[ 6.339930] mmc0: Host Software Queue enabled
[ OK ] Started Network Manager.
[ 6.339942] mmc0: new HS400 Enhanced strobe MMC card at address 0001
[ OK ] Reached target Network.
[ 6.340252] mmcblk0: mmc0:0001 A3A55B 28.9 GiB
[ OK ] Reached target Network is Online.
[ 6.340353] mmcblk0boot0: mmc0:0001 A3A55B partition 1 4.00 MiB
[ OK ] Started Download data for 欵 iled at package install time.
[ 6.340451] mmcblk0boot1: mmc0:0001 A3A55B partition 2 4.00 MiB
[ OK ] Started Check to see wheth 欵 version of Ubuntu available.
[ 6.340525] mmcblk0rpmc: mmc0:0001 A3A55B partition 3 16.0 MiB, chardev (236:
0)
[ OK ] Reached target Timer Units.
[ 6.342531] mmcblk0: p1 p2 p3 p4 p5 p6 p7 p8
Starting CUPS Scheduler...
[ 6.395880] input: rockchip-nau8822 Headset as /devices/platform/nau8822-soun
d/sound/card1/input3
[ OK ] Reached target Preparation for Remote File Systems.
[ 6.397751] IPVS: Registered protocols ()
[ OK ] Reached target Remote File Systems.
[ 6.397805] IPVS: Connection hash table configured (size=4096, memory=32Kbyte
s)

```

```

Starting LSB: automatic crash report generation...
[ 6.397988] IPVS: ipvs loaded.
[ OK ] Finished Availability of block devices.
[ 6.398262] Initializing XFRM netlink socket
[ OK ] Started Regular background program processing daemon.
[ 6.398897] NET: Registered protocol family 10
Starting Tool to automatic 鈹 it kernel crash signatures...
[ 6.400091] Segment Routing with IPv6
Starting OpenVPN service...
[ 6.400281] NET: Registered protocol family 17
Starting Pollinate to seed 鈹 do random number generator...
[ 6.400317] NET: Registered protocol family 15
Starting /etc/rc.local Compatibility...
[ 6.400393] Bridge firewalling registered
Starting Permit User Sessions...
[ 6.400407] can: controller area network core
Starting LSB: Start busybox udhcpd at boot time...
[ 6.400464] NET: Registered protocol family 29
[ OK ] Started Unattended Upgrades Shutdown.
[ 6.400476] can: raw protocol
[ OK ] Finished /etc/init.d/bluez_init Compatibility.
[ 6.400490] can: broadcast manager protocol
[ OK ] Finished Save/Restore Sound Card State.
[ 6.400510] can: netlink gateway - max_hops=1
[ OK ] Finished OpenVPN service.
[ 6.400956] Bluetooth: RFCOMM socket layer initialized
[ OK ] Started /etc/rc.local Compatibility.
[ 6.400986] Bluetooth: RFCOMM ver 1.11
[ OK ] Finished Permit User Sessions.
[ 6.401006] Bluetooth: HIDP (Human Interface Emulation) ver 1.2
[ OK ] Started Authorization Manager.
[ 6.401023] Bluetooth: HIDP socket layer initialized
[ OK ] Started Power Profiles daemon.
[ 6.401089] [BT_RFKILL]: Enter rfkill_rk_init
[ OK ] Reached target Sound Card.
[ 6.401102] [WLAN_RFKILL]: Enter rfkill_wlan_init
Starting Modem Manager...
[ 6.402078] Key type dns_resolver registered
Starting GNOME Display Manager...
[ 6.404060] ov13855 3-0036: driver version: 00.01.04
Starting Hold until boot process finishes up...
[ 6.404255] ov13855 3-0036: Failed to get power-gpios, maybe no use
Starting Hostname Service...
[ 6.404754] vendor storage:20190527 ret = 0
[ OK ] Started LSB: automatic crash report generation.
[ 6.405603] ov13855 3-0036: supply avdd not found, using dummy regulator
[ OK ] Started LSB: Start busybox udhcpd at boot time.
[ 6.415905] ov13855 3-0036: supply dovdd not found, using dummy regulator
[ OK ] Finished Hold until boot process finishes up.
[ 6.418927] ov13855 3-0036: supply dvdd not found, using dummy regulator
[ OK ] Started Serial Getty on ttyFIQ0.
[ 6.418956] ov13855 3-0036: could not get default pinstate
[ OK ] Reached target Login Prompts.
[ 6.418962] ov13855 3-0036: could not get sleep pinstate
Starting Set console scheme...
[ 6.434697] ov13855 3-0036: Unexpected sensor id(000000), ret(-5)
[ OK ] Started Tool to automatica 鈹 bmit kernel crash signatures.
[ 6.437232] Loading compiled-in X.509 certificates
[ OK ] Finished Set console scheme.
[ 6.437793] pstore: Using crash dump compression: deflate

```

```

[ OK ] Created slice Slice /system/getty.
[ 6.438049] rga3 fdb60000.rga: Adding to iommu group 2
[FAILED] Failed to start GNOME Display Manager.
[ 6.438632] rga3 fdb60000.rga: probe successfully, irq = 31, hw_version:3.0.7
6831
See 'systemctl status gdm.service' for details.
[ 6.438724] rga3 fdb70000.rga: Adding to iommu group 3
[ OK ] Started Disk Manager.
[ 6.439184] rga3 fdb70000.rga: probe successfully, irq = 32, hw_version:3.0.7
6831
[ OK ] Started Accounts Service.
[ 6.439720] rga2 fdb80000.rga: probe successfully, irq = 33, hw_version:3.2.6
3318
[ OK ] Started CUPS Scheduler.
[ 6.439891] rga_iommu: IOMMU binding successfully, default mapping core[0x1]
[ OK ] Started Make remote CUPS printers available locally.
[ 6.440006] rga: Module initialized. v1.3.3
[ OK ] Started Hostname Service.
[ 6.465122] pcie20_avdd0v85: supplied by vdd_0v85_s0
Starting Network Manager Script Dispatcher Service...
[ 6.465329] mali fb000000.gpu: Kernel DDK version g18p0-01eac0
[ OK ] Started Modem Manager.
[ 6.465858] pcie20_avdd1v8: supplied by avcc_1v8_s0
[ OK ] Finished Pollinate to seed 欵 eudo random number generator.
[ 6.465955] mali fb000000.gpu: bin=0
[ OK ] Started Network Manager Script Dispatcher Service.
[ 6.466144] mali fb000000.gpu: leakage=11
Starting OpenBSD Secure Shell server...
[ 6.466188] debugfs: Directory 'fb000000.gpu-mali' with parent 'vdd_gpu_s0' a
lready present!
[ OK ] Started Dispatcher daemon for systemd-networkd.
[ 6.466337] pcie30_avdd1v8: supplied by avcc_1v8_s0
[ OK ] Reached target Hardware activated USB gadget.
[ 6.466998] pcie30_avdd0v75: supplied by avdd_0v75_s0
[ OK ] Started OpenBSD Secure Shell server.
[ 6.468029] mali fb000000.gpu: pvtm=850
[ OK ] Started adbd Compatibility.
[ 6.468601] mali fb000000.gpu: pvtm-volt-sel=2
[ OK ] Stopped GNOME Display Manager.
[ 6.469847] mali fb000000.gpu: avs=0
Starting GNOME Display Manager...
[ 6.469881] W : [File] : drivers/gpu/arm/bifrost/platform/rk/mali_kbase_conf
g_rk.c; [Line] : 143; [Func] : kbase_platform_rk_init(); power-off-delay-ms not
available.
[FAILED] Failed to start GNOME Display Manager.
[ 6.470009] rockchip-dmc dmc: bin=0
See 'systemctl status gdm.service' for details.
[ 6.470192] rockchip-dmc dmc: leakage=26
[ 6.470205] rockchip-dmc dmc: leakage-volt-sel=0
[ 6.470220] rockchip-dmc dmc: soc version=0, speed=0
[ 6.470376] mali fb000000.gpu: r0p0 status 5 not found in HW issues table;
[ 6.470387] mali fb000000.gpu: falling back to closest match: r0p0 status 0
[ 6.470393] mali fb000000.gpu: Execution proceeding normally with fallback ma
tch
[ 6.470402] mali fb000000.gpu: GPU identified as 0x7 arch 10.8.6 r0p0 status
0
[ 6.470444] mali fb000000.gpu: No priority control manager is configured
[ 6.470627] mali fb000000.gpu: No memory group manager is configured
[ 6.470654] mali fb000000.gpu: Protected memory allocator not available
[ 6.471112] rockchip-dmc dmc: avs=0

```

```
[ 6.471128] rockchip-dmc dmc: current ATF version 0x100
[ 6.471329] rockchip-dmc dmc: normal_rate = 1560000000
[ 6.471338] rockchip-dmc dmc: reboot_rate = 2112000000
[ 6.471346] rockchip-dmc dmc: suspend_rate = 528000000
[ 6.471354] rockchip-dmc dmc: video_4k_rate = 1560000000
[ 6.471361] rockchip-dmc dmc: video_4k_10b_rate = 1560000000
[ 6.471368] rockchip-dmc dmc: video_svep_rate = 1560000000
[ 6.471375] rockchip-dmc dmc: boost_rate = 2112000000
[ 6.471382] rockchip-dmc dmc: fixed_rate(isplcif0|cif1|dualview) = 2112000000
[ 6.471389] rockchip-dmc dmc: performance_rate = 2112000000
[ 6.471397] rockchip-dmc dmc: hdmirx_rate = 2112000000
[ 6.471404] rockchip-dmc dmc: deep_suspend_rate = 2112000000
[ 6.471414] rockchip-dmc dmc: failed to get vop bandwidth to dmc rate
[ 6.471421] rockchip-dmc dmc: failed to get vop pn to msch rl
[ 6.471457] mali fb000000.gpu: Capping CSF_FIRMWARE_TIMEOUT to
CSF_FIRMWARE_P
ING_TIMEOUT
[ 6.471549] rockchip-dmc dmc: l=15000 h=2147483647 hyst=5000 l_limit=0 h_limi
t=0 h_table=0
[ 6.471913] mali fb000000.gpu: l=15000 h=85000 hyst=5000 l_limit=0 h_limit=80
0000000 h_table=0
[ 6.472457] rockchip-dmc dmc: could not find power_model node
[ 6.473221] mali fb000000.gpu: Probed as mali0
[ 6.560253] rockchip-dmc dmc: Get wrong frequency, Request 528000000, Current
2112000000
[ 6.562742] rockchip-csi2-dphy csi2-dcphy0: csi2 dphy0 probe successfully!
[ 6.578658] rockchip-vop2 fdd90000.vop: [drm:vop2_bind] vp0 assign plane
mask

: 0x5, primary plane phy id: 2
[ 6.578697] rockchip-vop2 fdd90000.vop: [drm:vop2_bind] vp1 assign plane
mask

: 0xa, primary plane phy id: 3
[ 6.578727] rockchip-vop2 fdd90000.vop: [drm:vop2_bind] vp2 assign plane
mask

: 0x140, primary plane phy id: 8
[ 6.578754] rockchip-vop2 fdd90000.vop: [drm:vop2_bind] vp3 assign plane
mask

: 0x280, primary plane phy id: 9
[ 6.603503] rockchip-drm display-subsystem: bound fdd90000.vop (ops 0xffffffc
0094213d0)
[ 6.604098] dwhdmi-rockchip fde80000.hdmi: registered ddc I2C bus driver
[ 6.604714] dw-hdmi-qp-hdcp dw-hdmi-qp-hdcp.8.auto: dw_hdcp_qp_hdcp_probe
suc
cess
[ 6.604778] rockchip-drm display-subsystem: bound fde80000.hdmi (ops 0xfffffc
c00942ff58)
[ OK ] Started Snap Daemon.
[ 6.604818] rockchip-drm display-subsystem: bound fde20000.dsi (ops 0xfffffc
0094327f0)
Starting Time & Date Service...
[ 6.604879] rockchip-drm display-subsystem: bound fde50000.dp (ops 0xfffffc0
09432bd0)
[ 6.656839] rockchip-dmc dmc: Get wrong frequency, Request 528000000, Current
2112000000
[ 6.657514] devfreq dmc: dvfs failed with (-22) error
[ 6.706981] dwhdmi-rockchip fde80000.hdmi: i2c read time out!
```

```
[ 6.726791] usb 1-1.1: new full-speed USB device number 3 using ehci-platform
[ 6.800277] rockchip-dmc dmc: Get wrong frequency, Request 528000000, Current
2112000000
[ 6.800862] devfreq dmc: dvfs failed with (-22) error
[ 6.828454] dwhdmi-rockchip fde80000.hdmi: use tmds mode
[ 6.829204] dwhdmi-rockchip fde80000.hdmi: use tmds mode
[ 6.863737] rockchip-drm display-subsystem: [drm] fb0: rockchipdrmfb frame bu
ffer device
[ 6.865691] [drm] Initialized rockchip 3.0.0 20140818 for display-subsystem o
n minor 0
[ OK ] Started Time & Date Service.
[ 6.866739] input: adc-keys as /devices/platform/adc-keys/input/input4
[ 6.871223] input: rockchip-hdmi0 rockchip-hdmi0 as /devices/platform/hdmi0-s
ound/sound/card2/input5
[ 6.874316] rkCIF-mipi-lvds: clear unready subdev num: 1
[ 6.875099] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[0] get remote t
erminal sensor failed!
[ OK ] Finished Wait until snapd is fully seeded.
[ 6.875150] rkCIF-mipi-lvds: Async subdev notifier completed
[ OK ] Stopped GNOME Display Manager.
[ 6.875181] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[0] get remote t
erminal sensor failed!
Starting GNOME Display Manager...
[ 6.875193] rkCIF-mipi-lvds: There is not terminal subdev, not synchronized w
ith ISP
[ OK ] Reached target Multi-User System.
[ 6.875342] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[0] get remote t
erminal sensor failed!
[FAILED] Failed to start GNOME Display Manager.
[ 6.875352] rkCIF-mipi-lvds: There is not terminal subdev, not synchronized w
ith ISP
See 'systemctl status gdm.service' for details.
[ 6.877438] RKNPU fdab0000.npu: Adding to iommu group 0
[ OK ] Reached target Graphical Interface.
[ 6.877656] RKNPU fdab0000.npu: RKNPU: rknpu iommu is enabled, using iommu mo
de
Starting Record Runlevel Change in UTMF...
[ 6.879219] RKNPU fdab0000.npu: can't request region for resource [mem 0xfda
b0000-0xfda bffff]
[ OK ] Finished Record Runlevel Change in UTMF.
[ 6.879252] RKNPU fdab0000.npu: can't request region for resource [mem 0xfda
c0000-0xfda cffff]
[ 6.879275] RKNPU fdab0000.npu: can't request region for resource [mem 0xfda
d0000-0xfda dffff]
[ 6.879843] [drm] Initialized rknpu 0.9.6 20240322 for fdab0000.npu on minor
1
[ 6.884023] RKNPU fdab0000.npu: RKNPU: bin=0
[ 6.884225] RKNPU fdab0000.npu: leakage=6
[ 6.884295] debugfs: Directory 'fdab0000.npu-rknpu' with parent 'vdd_npu_s0'
already present!
[ 6.892837] RKNPU fdab0000.npu: pvtm=855
[ 6.899148] RKNPU fdab0000.npu: pvtm-volt-sel=2
[ 6.901750] RKNPU fdab0000.npu: avs=0
[ 6.902137] RKNPU fdab0000.npu: l=15000 h=85000 hyst=5000 l_limit=0 h_limit=8
00000000 h_table=0
[ 6.912486] RKNPU fdab0000.npu: failed to find power_model node
[ 6.912516] RKNPU fdab0000.npu: RKNPU: failed to initialize power model
[ 6.912537] RKNPU fdab0000.npu: RKNPU: failed to get dynamic-coefficient
[ 6.914501] cfg80211: Loading compiled-in X.509 certificates for regulatory d
atabase
```



```
/1-1/1-1.2/1-1.2:1.0/0003:1C4F:0048.0001/input/input6
[ 7.550341] hid-generic 0003:1C4F:0048.0001: input,hidraw0: USB HID v1.10 Mouse [SIGMACHIP Usb Mouse] on usb-fc880000.usb-1.2/input0
[ 7.554440] systemd[1]: Configuration file /lib/systemd/system/adb.service is marked executable. Please remove executable permission bits. Proceeding anyway.
[ 7.605305] systemd[1]: Queued start job for default target Graphical Interface.
[ 7.606121] systemd[1]: Created slice Slice /system/modprobe.
[ 7.606452] systemd[1]: Created slice Slice /system/serial-getty.
[ 7.606590] systemd[1]: Created slice User and Session Slice.
[ 7.606694] systemd[1]: Started Forward Password Requests to Wall Directory Watch.
[ 7.606832] systemd[1]: Condition check resulted in Arbitrary Executable File Formats File System Automount Point being skipped.
[ 7.606937] systemd[1]: Reached target User and Group Name Lookups.
[ 7.606989] systemd[1]: Reached target Slice Units.
[ 7.607030] systemd[1]: Reached target Mounting snaps.
[ 7.607069] systemd[1]: Reached target Swaps.
[ 7.607116] systemd[1]: Reached target Local Verity Protected Volumes.
[ 7.607219] systemd[1]: Listening on Device-mapper event daemon FIFOs.
[ 7.607370] systemd[1]: Listening on LVM2 poll daemon socket.
[ 7.607521] systemd[1]: Listening on multipathd control socket.
[ 7.607645] systemd[1]: Listening on Syslog Socket.
[ 7.607758] systemd[1]: Listening on fsck to fsckd communication Socket.
[ 7.607837] systemd[1]: Listening on initctl Compatibility Named Pipe.
[ 7.612869] systemd[1]: Condition check resulted in Journal Audit Socket being skipped.
[ 7.612989] systemd[1]: Listening on Journal Socket (/dev/log).
[ 7.613145] systemd[1]: Listening on Journal Socket.
[ 7.613285] systemd[1]: Listening on udev Control Socket.
[ 7.613372] systemd[1]: Listening on udev Kernel Socket.
[ 7.613488] systemd[1]: Condition check resulted in Huge Pages File System being skipped.
[ 7.613943] systemd[1]: Mounting POSIX Message Queue File System...
[ 7.614437] systemd[1]: Mounting /sys/kernel/debug...
[ 7.614938] systemd[1]: Mounting Kernel Trace File System...
[ 7.615228] systemd[1]: systemd-journald.service: unit configures an IP firewall, but the local system does not support BPF/cgroup firewalling.
[ 7.615232] systemd[1]: (This warning is only shown for the first unit using IP firewalling.)
[ 7.615655] systemd[1]: Starting Journal Service...
[ 7.616697] systemd[1]: Starting Restore / save the current clock...
[ 7.617492] systemd[1]: Starting Set the console keyboard layout...
[ 7.617588] systemd[1]: Condition check resulted in Create List of Static Device Nodes being skipped.
[ 7.618260] systemd[1]: Starting Monitoring of LVM2 mirrors, snapshots etc. using dmeventd or progress polling...
[ 7.618347] systemd[1]: Condition check resulted in LXDM - agent being skipped.
.
[ 7.619080] systemd[1]: Starting Load Kernel Module configs...
[ 7.619981] systemd[1]: Starting Load Kernel Module drm...
[ 7.620936] systemd[1]: Starting Load Kernel Module efi_pstore...
[ 7.621726] systemd[1]: Starting Load Kernel Module fuse...
[ 7.622620] systemd[1]: Starting Enable Rockchip camera engine rkaiq...
[ 7.622843] systemd[1]: Condition check resulted in File System Check on Root Device being skipped.
[ 7.625997] systemd[1]: Starting Load Kernel Modules...
[ 7.628282] systemd[1]: Starting Remount Root and Kernel File Systems...
```

```
[ 7.629816] systemd[1]: Starting Coldplug All udev Devices...
[ 7.631210] systemd[1]: Mounted POSIX Message Queue File System.
[ 7.631342] systemd[1]: Mounted /sys/kernel/debug.
[ 7.631435] systemd[1]: Mounted Kernel Trace File System.
[ 7.631645] systemd[1]: Finished Restore / save the current clock.
[ 7.633404] systemd[1]: modprobe@configfs.service: Deactivated successfully.
[ 7.633552] systemd[1]: Finished Load Kernel Module configfs.
[ 7.633832] systemd[1]: modprobe@drm.service: Deactivated successfully.
[ 7.633948] systemd[1]: Finished Load Kernel Module drm.
[ 7.634169] systemd[1]: modprobe@efi_pstore.service: Deactivated
successfully
```

```
.
[ 7.634286] systemd[1]: Finished Load Kernel Module efi_pstore.
[ 7.634509] systemd[1]: modprobe@fuse.service: Deactivated successfully.
[ 7.634620] systemd[1]: Finished Load Kernel Module fuse.
[ 7.634859] systemd[1]: Started Enable Rockchip camera engine rkaiq.
[ 7.635587] systemd[1]: Mounting FUSE Control File System...
[ 7.636322] systemd[1]: Mounting Kernel Configuration File System...
[ 7.638340] systemd[1]: Mounted FUSE Control File System.
[ 7.639534] systemd[1]: Mounted Kernel Configuration File System.
[ 7.639781] systemd[1]: Finished Load Kernel Modules.
[ 7.640554] systemd[1]: Starting Apply Kernel Variables...
[ 7.641049] EXT4-fs (mmcblk0p6): re-mounted. Opts: (null)
[ 7.641869] systemd[1]: Finished Remount Root and Kernel File Systems.
[ 7.642570] systemd[1]: Starting Device-Mapper Multipath Device Controller...
[ 7.643329] systemd[1]: Starting Platform Persistent Storage Archival...
[ 7.644000] systemd[1]: Starting Load/Save Random Seed...
[ 7.644703] systemd[1]: Starting Create System Users...
[ 7.663779] systemd[1]: Finished Platform Persistent Storage Archival.
[ 7.680338] systemd[1]: Finished Load/Save Random Seed.
[ 7.680489] systemd[1]: Condition check resulted in First Boot Complete being
skipped.
```

```
[ 8.021325] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[3] get remote t
erminal sensor failed!
[ 8.021333] stream_cif_mipi_id3: update sensor info failed -19
[ 8.021895] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[0] get remote t
erminal sensor failed!
[ 8.021900] rkCIF_scale_ch0: update sensor info failed -19
[ 8.022487] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[2] get remote t
erminal sensor failed!
[ 8.022492] stream_cif_mipi_id2: update sensor info failed -19
[ 8.022655] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[2] get remote t
erminal sensor failed!
[ 8.022659] rkCIF_tools_id2: update sensor info failed -19
[ 8.026292] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[0] get remote t
erminal sensor failed!
[ 8.026299] stream_cif_mipi_id0: update sensor info failed -19
[ 8.028098] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[1] get remote t
erminal sensor failed!
```

```
[ 8.028112] stream_cif_mipi_id1: update sensor info failed -19
Ubuntu 22.04.5 LTS elf2-desktop ttyFIQ0
[ 8.030463] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[1] get remote t
erminal sensor failed!
```

```
[ 8.030469] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[2] get remote t
erminal sensor failed!
elf2-desktop login: [ 8.030471] rkCIF_scale_ch2: update sensor info failed -1
9
```

```
[ 8.030474] rkCIF_scale_ch1: update sensor info failed -19
[ 8.031599] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[3] get remote terminal sensor failed!
[ 8.031605] rkCIF_scale_ch3: update sensor info failed -19
[ 8.031699] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[1] get remote terminal sensor failed!
[ 8.031702] rkCIF_tools_id1: update sensor info failed -19
[ 8.040463] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[0] get remote terminal sensor failed!
[ 8.040477] rkCIF_tools_id0: update sensor info failed -19
[ 8.211806] squashfs: SQUASHFS error: Xattrs in filesystem, these will be ignored
[ 8.211816] unable to read xattr id index table
[ 8.213006] squashfs: SQUASHFS error: Xattrs in filesystem, these will be ignored
[ 8.213022] unable to read xattr id index table
[ 8.381209] rk_hdmirx fdee0000.hdmirx-controller: hdmirx_cancel_cpu_limit_freq freq qos nod add
[ 8.610139] rk-pcie fe170000.pcie: PCIe Link Fail, LTSSM is 0x3, hw_retries=0
[ 12.503509] rk-pcie fe170000.pcie: PCIe Link Fail, LTSSM is 0x3, hw_retries=1
[ 13.232575] iwlwifi 0004:41:00.0: Unhandled alg: 0x3f0707
[ 13.233418] iwlwifi 0004:41:00.0: Unhandled alg: 0x3f0707
[ 13.233690] iwlwifi 0004:41:00.0: Unhandled alg: 0x3f0707
[ 13.513556] rk-pcie fe170000.pcie: failed to initialize host
```

elf2-desktop login: elf

Password:

Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 5.10.209 aarch64)

\* Documentation: <https://help.ubuntu.com>  
\* Management: <https://landscape.canonical.com>  
\* Support: <https://ubuntu.com/pro>

Expanded Security Maintenance for Applications is not enabled.

93 updates can be applied immediately.

To see these additional updates run: `apt list --upgradable`

20 additional security updates can be applied with ESM Apps.

Learn more about enabling ESM Apps service at <https://ubuntu.com/esm>

Last login: Tue Jun 3 07:34:29 UTC 2025 on ttyFIQ0

```
[ 21.912483] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[0] get remote terminal sensor failed!
[ 21.912495] stream_cif_mipi_id0: update sensor info failed -19
[ 21.912633] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[1] get remote terminal sensor failed!
[ 21.912636] stream_cif_mipi_id1: update sensor info failed -19
[ 21.912748] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[2] get remote terminal sensor failed!
[ 21.912751] rkCIF_tools_id2: update sensor info failed -19
[ 21.912860] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[2] get remote terminal sensor failed!
[ 21.912862] stream_cif_mipi_id2: update sensor info failed -19
[ 21.912971] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[3] get remote terminal sensor failed!
[ 21.912973] stream_cif_mipi_id3: update sensor info failed -19
[ 21.913082] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[0] get remote terminal sensor failed!
```

```
[ 21.913085] rkCIF_scale_ch0: update sensor info failed -19
[ 21.913195] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[1] get remote terminal
sensor failed!
[ 21.913197] rkCIF_scale_ch1: update sensor info failed -19
[ 21.913306] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[2] get remote terminal
sensor failed!
[ 21.913308] rkCIF_scale_ch2: update sensor info failed -19
[ 21.913419] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[3] get remote terminal
sensor failed!
[ 21.913422] rkCIF_scale_ch3: update sensor info failed -19
[ 21.913560] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[0] get remote terminal
sensor failed!
[ 21.913563] rkCIF_tools_id0: update sensor info failed -19
[ 21.913681] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[1] get remote terminal
sensor failed!
[ 21.913683] rkCIF_tools_id1: update sensor info failed -19
[ 22.057132] dma-pl330 fea30000.dma-controller: fill_queue:2250 Bad Desc(2)
[ 22.342590] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[0] get remote terminal
sensor failed!
[ 22.342610] stream_cif_mipi_id0: update sensor info failed -19
[ 22.342765] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[1] get remote terminal
sensor failed!
[ 22.342772] stream_cif_mipi_id1: update sensor info failed -19
[ 22.342919] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[2] get remote terminal
sensor failed!
[ 22.342926] rkCIF_tools_id2: update sensor info failed -19
[ 22.343072] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[2] get remote terminal
sensor failed!
[ 22.343078] stream_cif_mipi_id2: update sensor info failed -19
[ 22.343225] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[3] get remote terminal
sensor failed!
[ 22.343231] stream_cif_mipi_id3: update sensor info failed -19
[ 22.343377] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[0] get remote terminal
sensor failed!
[ 22.343383] rkCIF_scale_ch0: update sensor info failed -19
[ 22.343554] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[1] get remote terminal
sensor failed!
[ 22.343560] rkCIF_scale_ch1: update sensor info failed -19
[ 22.343710] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[2] get remote terminal
sensor failed!
[ 22.343716] rkCIF_scale_ch2: update sensor info failed -19
[ 22.343864] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[3] get remote terminal
sensor failed!
[ 22.343870] rkCIF_scale_ch3: update sensor info failed -19
[ 22.344019] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[0] get remote terminal
sensor failed!
[ 22.344025] rkCIF_tools_id0: update sensor info failed -19
[ 22.344172] rkCIF-mipi-lvds: rkCIF_update_sensor_info: stream[1] get remote terminal
sensor failed!
[ 22.344178] rkCIF_tools_id1: update sensor info failed -19
(base) elf@elf2-desktop:~$
```