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pi@raspberrypi:~$ dmesg -w
[ 0.000000] Booting Linux on physical CPU 0x0
[ 0.000000] Linux version 4.9.24-v7+ (dc40dc4-XP513-9333) (gcc version 4.9.3 (crosstool-NG crosstool-ng-1.22.0-88-g8460611) ) #993 SMP Wed Apr 26 18:01:23 BST 2017
[ 0.000000] CPU: ARMv7 Processor [410fd034] revision 4 (ARMv7), cr-10c5383d
[ 0.000000] CPU: div instructions available: patching division code
[ 0.000000] CPU: PIPT / VIPT nonaliasing data cache, VIPT aliasing instruction cache
[ 0.000000] OF: fdt:Machine model: Raspberry Pi 3 Model B Rev 1.2
[ 0.000000] cma: Reserved 8 MiB at 0x36800000
[ 0.000000] Memory policy: Data cache writealloc
[ 0.000000] On node 0 totalpages: 225280
[ 0.000000] free_area_init_node: node 0, pgdat 80c6edc0, node_mem_map b603a000
[ 0.000000]   Normal zone: 1980 pages used for memmap
[ 0.000000]   Normal zone: 0 pages reserved
[ 0.000000]   Normal zone: 225280 pages, LIFO batch:31
[ 0.000000] percpu: Embedded 14 pages/cpu @b5ff3000 s25600 r8192 d23552 u57344
[ 0.000000] pcpu-alloc: s25600 r8192 d23552 u57344 alloc=14*4096
[ 0.000000] pcpu-alloc: [0] 0 [0] 1 [0] 2 [0] 3
[ 0.000000] Built 1 zonelists in Zone order, mobility grouping on. Total pages: 223300
[ 0.000000] Kernel command line: 8250.nr_uarts=1 8250.nr_uarts=1 bcm2708_fb.fbwidth=656 bcm2708_fb.fbheight=416 bcm2708_fb.fbswap=1 vc_mem.mem_base=0x3dc00000 vc_mem.mem_size=0x3f000000 dwc_otg.lpm_enable=0 console=tty1 root=PARTUUID=1b401d2-02 rootfstype=ext4 elevator=deadline fsck.repair=yes rootwait
[ 0.000000] PID hash table entries: 4096 (order: 2, 16384 bytes)
[ 0.000000] Dentry cache hash table entries: 131072 (order: 7, 524288 bytes)
[ 0.000000] Inode-cache hash table entries: 65536 (order: 6, 262144 bytes)
[ 0.000000] Memory: 871340K/901120K available (7168K kernel code, 483K rwdata, 2012K rodata, 1024K init, 778K bss, 21588K reserved, 8192K cma-reserved)
[ 0.000000] Virtual kernel memory layout:
vector : 0xffff0000 - 0xffff1000   (   4 kB)
fixmap  : 0xffc00000 - 0xffff0000 (3072 kB)
vmalloc : 0xb7800000 - 0xff800000 (1152 MB)
lowmem  : 0x80000000 - 0xb7000000 ( 880 MB)
modules : 0xf0000000 - 0x80000000 ( 16 MB)
.text   : 0x80008000 - 0x80800000 (8160 kB)
.init   : 0x80b00000 - 0x80c00000 (1024 kB)
.data   : 0x80c00000 - 0x80c78f94 ( 484 kB)
.bss    : 0x80c7a000 - 0x80d3ca64 ( 779 kB)
[ 0.000000] SLUB: Hwalign=64, Order=0-3, MinObjects=0, CPUs=4, Nodes=1
[ 0.000000] Hierarchical RCU implementation.
[ 0.000000] Build-time adjustment of leaf fanout to 32.
[ 0.000000] NR_IRQS:16 nr_irqs:16 16
[ 0.000000] arm_arch_timer: Architected cp15 timer(s) running at 19.20MHz (phys).
[ 0.000000] clocksource: arch_sys_counter: mask: 0xffffffffffffff max_cycles: 0x46d987e47, max_idle_ns: 440795202767 ns
[ 0.000007] sched_clock: 56 bits at 19MHz, resolution 52ns, wraps every 4398046511078ns
[ 0.000024] Switching to timer-based delay loop, resolution 52ns
[ 0.000330] Console: colour dummy device 80x30
[ 0.001224] console [tty1] enabled
[ 0.001283] Calibrating delay loop (skipped), value calculated using timer frequency.. 38.40 BogoMIPS (lpj=192000)
[ 0.001353] pid_max: default: 32768 minimum: 301
[ 0.001719] Mount-cache hash table entries: 2048 (order: 1, 8192 bytes)
[ 0.001761] Mountpoint-cache hash table entries: 2048 (order: 1, 8192 bytes)
[ 0.002789] Disabling cpuset control group subsystem
[ 0.002981] CPU: Testing write buffer coherency: ok
[ 0.003048] ftrace: allocating 22386 entries in 66 pages
[ 0.054602] CPU0: update cpu_capacity 1024
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0.003048] ftrace: allocating 22386 entries in 66 pages
0.054602] CPU0: update cpu_capacity 1024
0.054671] CPU0: thread -1, cpu 0, socket 0, mpidr 80000000
0.054769] Setting up static identity map for 0x100000 - 0x100034
0.057024] CPU1: update cpu_capacity 1024
0.057032] CPU1: thread -1, cpu 1, socket 0, mpidr 80000001
0.057752] CPU2: update cpu_capacity 1024
0.057758] CPU2: thread -1, cpu 2, socket 0, mpidr 80000002
0.058421] CPU3: update cpu_capacity 1024
0.058428] CPU3: thread -1, cpu 3, socket 0, mpidr 80000003
0.058510] Brought up 4 CPUs
0.058683] SMP: Total of 4 processors activated (153.60 BogoMIPS).
0.058713] CPU: All CPU(s) started in HYP mode.
0.058740] CPU: Virtualization extensions available.
0.059558] devtmpfs: initialized
0.070893] VFP support v0.3: implementor 41 architecture 3 part 40 variant 3 rev 4
0.071214] clocksource: jiffies: mask: 0xffffffff max_cycles: 0xffffffff, max_idle_ns: 19112604462750000 ns
0.071276] futex hash table entries: 1024 (order: 4, 65536 bytes)
0.071840] pinctrl core: initialized pinctrl subsystem
0.072771] NET: Registered protocol family 16
0.075036] DMA: preallocated 1024 KiB pool for atomic coherent allocations
0.083827] hw-breakpoint: found 5 (+1 reserved) breakpoint and 4 watchpoint registers.
0.083875] hw-breakpoint: maximum watchpoint size is 8 bytes.
0.084074] Serial: AMBA PL011 UART driver
0.085942] bcm2835-mbox 3f00b880.mailbox: mailbox enabled
0.086488] uart-pl011 3f201000.serial: could not find pctldev for node /soc/gpio@7e200000/uart0_pins, deferring probe
0.087061] irq: no irq domain found for /soc/aux@0x7e215000 !
0.087303] irq: no irq domain found for /soc/aux@0x7e215000 !
0.155222] bcm2835-dma 3f007000.dma: DMA legacy API manager at b780f000, dmachans=0x1
0.157108] SCSI subsystem initialized
0.157285] usbcore: registered new interface driver usbfs
0.157394] usbcore: registered new interface driver hub
0.157510] usbcore: registered new device driver usb
0.164180] raspberrypi-firmware soc:firmware: Attached to firmware from 2017-04-27 17:27
0.165582] clocksource: Switched to clocksource arch_sys_counter
0.212528] VFS: Disk quotas dquot_6.6.0
0.212639] VFS: Dquot-cache hash table entries: 1024 (order 0, 4096 bytes)
0.212869] FS-Cache: Loaded
0.213136] CacheFiles: Loaded
0.225305] NET: Registered protocol family 2
0.226239] TCP established hash table entries: 8192 (order: 3, 32768 bytes)
0.226377] TCP bind hash table entries: 8192 (order: 4, 65536 bytes)
0.226587] TCP: Hash tables configured (established 8192 bind 8192)
0.226700] UDP hash table entries: 512 (order: 2, 16384 bytes)
0.226768] UDP-Lite hash table entries: 512 (order: 2, 16384 bytes)
0.227003] NET: Registered protocol family 1
0.227441] RPC: Registered named UNIX socket transport module.
0.227474] RPC: Registered udp transport module.
0.227502] RPC: Registered tcp transport module.
0.227529] RPC: Registered tcp NFSv4.1 backchannel transport module.
0.228516] hw perfevents: enabled with armv7_cortex_a7 PMU driver, 7 counters available
0.230834] workingset: timestamp_bits=14 max_order=18 bucket_order=4
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[ 0.228516] hw perfevents: enabled with armv7_cortex_a7 PMU driver, 7 counters available
[ 0.230834] workingset: timestamp_bits=14 max_order=18 bucket_order=4
[ 0.246927] FS-Cache: Netfs 'nfs' registered for caching
[ 0.247939] NFS: Registering the id_resolver key type
[ 0.247993] Key type id_resolver registered
[ 0.248021] Key type id_legacy registered
[ 0.250408] Block layer SCSI generic (bsg) driver version 0.4 loaded (major 251)
[ 0.250555] io scheduler noop registered
[ 0.250585] io scheduler deadline registered (default)
[ 0.250870] io scheduler cfq registered
[ 0.256618] BCM2708FB: allocated DMA memory f6910000
[ 0.256673] BCM2708FB: allocated DMA channel 0 @ b780f000
[ 0.265324] Console: switching to colour frame buffer device 82x26
[ 0.272810] Serial: 8250/16550 driver, 1 ports, IRQ sharing enabled
[ 0.276375] bcm2835-aux-uart 3f215040.serial: could not get clk: -517
[ 0.279754] bcm2835-rng 3f104000.rng: hwrng registered
[ 0.282189] vc-cma: Videocore CMA driver
[ 0.284551] vc-cma: vc_cma_base = 0x00000000
[ 0.286951] vc-cma: vc_cma_size = 0x00000000 (0 MiB)
[ 0.289225] vc-cma: vc_cma_initial = 0x00000000 (0 MiB)
[ 0.291584] vc-mem: phys_addr:0x00000000 mem_base=0x3dc00000 mem_size:0x3f000000(1008 MiB)
[ 0.311050] brd: module loaded
[ 0.321957] loop: module loaded
[ 0.324051] Loading iSCSI transport class v2.0-870.
[ 0.326734] usbcore: registered new interface driver smc95xx
[ 0.328874] dwc_otg: version 3.00a 10-AUG-2012 (platform bus)
[ 0.556980] Core Release: 2.80a
[ 0.559033] Setting default values for core params
[ 0.561156] Finished setting default values for core params
[ 0.763698] Using Buffer DMA mode
[ 0.765839] Periodic Transfer Interrupt Enhancement - disabled
[ 0.768085] Multiprocessor Interrupt Enhancement - disabled
[ 0.770315] OTG VER PARAM: 0, OTG VER FLAG: 0
[ 0.772501] Dedicated Tx FIFOs mode
[ 0.774947] WARN:dwc_otg_hcd_init:1053: FIQ DMA bounce buffers: virt = 0xb6904000 dma = 0xf6904000 len=9024
[ 0.779402] FIQ FSM acceleration enabled for :
Non-periodic Split Transactions
Periodic Split Transactions
High-Speed Isochronous Endpoints
Interrupt/Control Split Transaction hack enabled
[ 0.790742] dwc_otg: Microframe scheduler enabled
[ 0.790786] WARN:hc_init_fiq:459: FIQ on core 1 at 0x8058e4c4
[ 0.793080] WARN:hc_init_fiq:460: FIQ ASM at 0x8058e834 length 36
[ 0.795399] WARN:hc_init_fiq:486: MPHI regs_base at 0xb787a000
[ 0.797766] dwc_otg 3f980000.usb: DWC OTG Controller
[ 0.800078] dwc_otg 3f980000.usb: new USB bus registered, assigned bus number 1
[ 0.802441] dwc_otg 3f980000.usb: irq 62, io mem 0x00000000
[ 0.804764] Init: Port Power? op_state=1
[ 0.807039] Init: Power Port (0)
[ 0.809419] usb usb1: New USB device found, idVendor=1d6b, idProduct=0002
[ 0.811725] usb usb1: New USB device strings: Mfr=3, Product=2, SerialNumber=1
[ 0.814024] usb usb1: Product: DWC OTG Controller
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0.790742] dwc_otg: Microframe scheduler enabled
0.790786] WARN::hcd_init_fiq:459: FIQ on core 1 at 0x8058e4c4
0.793080] WARN::hcd_init_fiq:460: FIQ ASM at 0x8058e834 length 36
0.795399] WARN::hcd_init_fiq:486: MPHI regs_base at 0xb787a000
0.797766] dwc_otg 3f980000.usb: DMC OTG Controller
0.800078] dwc_otg 3f980000.usb: new USB bus registered, assigned bus number 1
0.802441] dwc_otg 3f980000.usb: irq 62, io mem 0x00000000
0.804764] Init: Port Power? op_state=1
0.807039] Init: Power Port (0)
0.809419] usb usb1: New USB device found, idVendor=1d6b, idProduct=0002
0.811725] usb usb1: New USB device strings: Mfr=3, Product=2, SerialNumber=1
0.814024] usb usb1: Product: DMC OTG Controller
0.816287] usb usb1: Manufacturer: Linux 4.9.24-v7+ dwc_otg_hcd
0.818557] usb usb1: SerialNumber: 3f980000.usb
0.821603] hub 1-0:1.0: USB hub found
0.823810] hub 1-0:1.0: 1 port detected
0.826494] dwc_otg: FIQ enabled
0.826498] dwc_otg: NAK holdoff enabled
0.826502] dwc_otg: FIQ split-transaction FSM enabled
0.826515] Module dwc_common_port init
0.826738] usbcore: registered new interface driver usb-storage
0.829062] mousedev: PS/2 mouse device common for all mice
0.832148] bcm2835-wdt 3f100000.watchdog: Broadcom BCM2835 watchdog timer
0.834686] bcm2835-cpufreq: min=600000 max=1200000
0.837372] sdhci: Secure Digital Host Controller Interface driver
0.839686] sdhci: Copyright(c) Pierre Ossman
0.842210] sdhost-bcm2835 3f202000.sdhost: could not get clk, deferring probe
0.846786] mmc-bcm2835 3f300000.mmc: could not get clk, deferring probe
0.849328] sdhci-pltfm: SDHCI platform and OF driver helper
0.859048] ledtrig-cpu: registered to indicate activity on CPUs
0.861688] hidraw: raw HID events driver (C) Jiri Kosina
0.864322] usbcore: registered new interface driver usbhid
0.866802] usbhid: USB HID core driver
0.870048] vchiq: vchiq_init_state: slot_zero = 0xb6980000, is_master = 0
0.874278] Initializing XFRM netlink socket
0.876845] NET: Registered protocol family 17
0.879428] Key type dns_resolver registered
0.882245] Registering SWP/SWPB emulation handler
0.885409] registered taskstats version 1
0.888197] vc-sm: Videocore shared memory driver
0.890699] [vc_sm_connected_init]: start
0.893602] [vc_sm_connected_init]: end - returning 0
0.902014] 3f201000.serial: ttyAMA0 at MMIO 0x3f201000 (irq = 87, base_baud = 0) is a PL011 rev2
0.909036] 3f215040.serial: ttyS0 at MMIO 0x0 (irq = 220, base_baud = 31250000) is a 16550
0.914678] sdhost: log_buf @ b6907000 (f6907000)
0.995609] mmc0: sdhost-bcm2835 loaded - DMA enabled (>1)
1.000293] mmc-bcm2835 3f300000.mmc: mmc_debug:0 mmc_debug2:0
1.002779] mmc-bcm2835 3f300000.mmc: DMA channel allocated
1.045667] Indeed it is in host mode hprt0 = 00021501
1.115536] mmc0: host does not support reading read-only switch, assuming write-enable
1.122446] mmc0: new high speed SDHC card at address 0007
1.125598] mmcblk0: mmc0:0007 SD8GB 7.42 GiB
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1.122446] mmc0: new high speed SDHC card at address 0007
1.125598] mmcblk0: mmc0:0007 SD8GB 7.42 GiB
1.129780]   mmcblk0: p1 p2
1.135748] of_cfs_init
1.137346] random: fast init done
1.140558] of_cfs_init: OK
1.156713] EXT4-fs (mmcblk0p2): mounted filesystem with ordered data mode. Opts: (null)
1.159102] mmc1: queuing unknown CIS tuple 0x80 (2 bytes)
1.160657] mmc1: queuing unknown CIS tuple 0x80 (3 bytes)
1.162216] mmc1: queuing unknown CIS tuple 0x80 (3 bytes)
1.164998] mmc1: queuing unknown CIS tuple 0x80 (7 bytes)
1.171116] VFS: Mounted root (ext4 filesystem) readonly on device 179:2.
1.182560] devtmpfs: mounted
1.186493] Freeing unused kernel memory: 1024K (80b00000 - 80c00000)
1.245617] usb 1-1: new high-speed USB device number 2 using dwc_otg
1.248019]   Indeed it is in host mode hprt0 = 00001101
1.320531] mmc1: new high speed SDIO card at address 0001
1.475915] usb 1-1: New USB device found, idVendor=0424, idProduct=9514
1.478260] usb 1-1: New USB device strings: Mfr=0, Product=0, SerialNumber=0
1.481327] hub 1-1:1.0: USB hub found
1.483588] hub 1-1:1.0: 5 ports detected
1.541082] systemd[1]: systemd 215 running in system mode. (+PAM +AUDIT +SELINUX +IMA +SYSVINIT +LIBCRYPTSETUP +GCRYPT +ACL +XZ -SECCOMP -APPARMOR)
1.546103] systemd[1]: Detected architecture 'arm'.
1.670274] NET: Registered protocol family 10
1.673941] systemd[1]: Inserted module 'ipv6'
1.678246] systemd[1]: Set hostname to <raspberrypi>.
1.680828] systemd[1]: Initializing machine ID from random generator.
1.683581] systemd[1]: Installed transient /etc/machine-id file.
1.805638] usb 1-1.1: new high-speed USB device number 3 using dwc_otg
1.935962] usb 1-1.1: New USB device found, idVendor=0424, idProduct=ec00
1.938530] usb 1-1.1: New USB device strings: Mfr=0, Product=0, SerialNumber=0
1.943858] smsc95xx v1.0.5
2.040002] smsc95xx 1-1.1:1.0 eth0: register 'smc95xx' at usb-3f980000.usb-1.1, smc95xx USB 2.0 Ethernet, b8:27:eb:8b:85:b1
2.074575] systemd[1]: Cannot add dependency job for unit regenerate_ssh_host_keys.service, ignoring: Unit regenerate_ssh_host_keys.service failed to load: No such file or directory.
2.083105] systemd[1]: Cannot add dependency job for unit display-manager.service, ignoring: Unit display-manager.service failed to load: No such file or directory.
2.094364] systemd[1]: Starting Forward Password Requests to Wall Directory Watch.
2.100408] systemd[1]: Started Forward Password Requests to Wall Directory Watch.
2.135635] usb 1-1.2: new full-speed USB device number 4 using dwc_otg
2.277405] usb 1-1.2: New USB device found, idVendor=0483, idProduct=5740
2.277415] usb 1-1.2: New USB device strings: Mfr=1, Product=2, SerialNumber=3
2.277422] usb 1-1.2: Product: Pixhawk1
2.277428] usb 1-1.2: Manufacturer: ArduPilot
2.277434] usb 1-1.2: SerialNumber: 20002E001047333133313936
2.375679] usb 1-1.4: new full-speed USB device number 5 using dwc_otg
2.391169] i2c /dev entries driver
2.535042] usb 1-1.4: New USB device found, idVendor=0403, idProduct=6015
2.537360] usb 1-1.4: New USB device strings: Mfr=1, Product=2, SerialNumber=3
2.539609] usb 1-1.4: Product: FT231X USB UART
2.541855] usb 1-1.4: Manufacturer: FTDI
2.544072] usb 1-1.4: SerialNumber: DM01NH9Q
3.668759] systemd-udevd[144]: starting version 215
4.047693] cdc_acm 1-1.2:1.0: ttyACM0: USB ACM device
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2.535042] usb 1-1.4: New USB device found, idVendor=0403, idProduct=6015
2.537360] usb 1-1.4: New USB device strings: Mfr=1, Product=2, SerialNumber=3
2.539609] usb 1-1.4: Product: FT231X USB UART
2.541855] usb 1-1.4: Manufacturer: FTDI
2.544072] usb 1-1.4: SerialNumber: DM01NH9Q
3.668759] systemd-udevd[144]: starting version 215
4.047693] cdc_acm 1-1.2:1.0: ttyACM0: USB ACM device
4.051425] usbcore: registered new interface driver cdc_acm
4.051435] cdc_acm: USB Abstract Control Model driver for USB modems and ISDN adapters
4.112587] gpiomem-bcm2835 3f200000.gpiomem: Initialised: Registers at 0x3f200000
4.885422] EXT4-fs (mmcblk0p2): re-mounted. Opts: (null)
4.945922] usbcore: registered new interface driver brcmfmac
5.089943] brcmfmac: Firmware version = wl0: May 27 2016 00:13:38 version 7.45.41.26 (r640327) FWID 01-df77e47
5.451841] systemd-journald[138]: Received request to flush runtime journal from PID 1
5.953264] usbcore: registered new interface driver usbserial
5.953348] usbcore: registered new interface driver usbserial_generic
5.953423] usbserial: USB Serial support registered for generic
5.965641] usbcore: registered new interface driver ftdi_sio
5.966882] usbserial: USB Serial support registered for FTDI USB Serial Device
5.967972] ftdi_sio 1-1.4:1.0: FTDI USB Serial Device converter detected
5.968222] usb 1-1.4: Detected FT-X
5.969544] usb 1-1.4: FTDI USB Serial Device converter now attached to ttyUSB0
6.266849] smsc95xx 1-1.1:1.0 eth0: hardware isn't capable of remote wakeup
6.313927] IPv6: ADDRCONF(NETDEV_UP): wlan0: link is not ready
6.313943] brcmfmac: power management disabled
7.136399] uart-pl011 3f201000.serial: no DMA platform data
7.334359] Adding 102396k swap on /var/swap. Priority:-1 extents:5 across:200700k SSFS
7.759296] smsc95xx 1-1.1:1.0 eth0: link up, 100Mbps, full-duplex, lpa 0x5DE1
11.530725] Bluetooth: Core ver 2.22
11.530804] NET: Registered protocol family 31
11.530809] Bluetooth: HCI device and connection manager initialized
11.530829] Bluetooth: HCI socket layer initialized
11.530842] Bluetooth: L2CAP socket layer initialized
11.530873] Bluetooth: SCO socket layer initialized
11.538943] Bluetooth: HCI UART driver ver 2.3
11.538955] Bluetooth: HCI UART protocol H4 registered
11.538960] Bluetooth: HCI UART protocol Three-wire (H5) registered
11.539118] Bluetooth: HCI UART protocol Broadcom registered
11.697970] Bluetooth: BNEP (Ethernet Emulation) ver 1.3
11.697977] Bluetooth: BNEP filters: protocol multicast
11.697990] Bluetooth: BNEP socket layer initialized
20.843745] media: Linux media interface: v0.10
20.869806] Linux video capture interface: v2.00
21.016991] bcm2835-v4l2: scene mode selected 0, was 0
21.017322] bcm2835-v4l2: V4L2 device registered as video0 - stills mode > 1280x720
21.023660] bcm2835-v4l2: Broadcom 2835 MMAL video capture ver 0.0.2 loaded.
25.366776] random: crng init done
26.005766] bcm2835-v4l2: error 0 waiting for frame completion
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