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root@navio:/home/pi# dmesg
[ 0.000000] Booting Linux on physical CPU 0x0
[ 0.000000] Linux version 4.9.45-94f47ec-emlid-v7+ (root@kernelcruncher) (gcc version 5.4.0 20160609
(Ubuntu/Linaro 5.4.0-6ubuntu1~16.04.4) ) #4 SMP PREEMPT Wed Aug 30 18:17:43 MSK 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 80c80ec0, 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 13 pages/cpu @b5ff7000 s23564 r8192 d21492 u53248
[ 0.000000] pcpu-alloc: s23564 r8192 d21492 u53248 alloc=13*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 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=/dev/mmcblk0p2 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: 871228K/901120K available (7168K kernel code, 607K rwddata, 2180K rodata, 1024K init,
778K bss, 21700K 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 : 0x7f000000 - 0x80000000 ( 16 MB)
    .text : 0x80008000 - 0x80800000 (8160 kB)
    .init : 0x80b00000 - 0x80c00000 (1024 kB)
    .data : 0x80c00000 - 0x80c97e18 ( 608 kB)
    .bss : 0x80c99000 - 0x80d5bad4 ( 779 kB)
[ 0.000000] SLUB: HWalign=64, Order=0-3, MinObjects=0, CPUs=4, Nodes=1
[ 0.000000] Preemptible 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
[ 0.000009] sched_clock: 56 bits at 19MHz, resolution 52ns, wraps every 4398046511078ns
[ 0.000028] Switching to timer-based delay loop, resolution 52ns
[ 0.000348] Console: colour dummy device 80x30
[ 0.001702] console [tty1] enabled
[ 0.001764] Calibrating delay loop (skipped), value calculated using timer frequency.. 38.40 BogoMIPS (lpj=192000)
[ 0.001857] pid_max: default: 32768 minimum: 301
[ 0.002244] Mount-cache hash table entries: 2048 (order: 1, 8192 bytes)
[ 0.002302] Mountpoint-cache hash table entries: 2048 (order: 1, 8192 bytes)
[ 0.003375] Disabling cpuset control group subsystem

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[0.003588] CPU: Testing write buffer coherency: ok
[0.003675] ftrace: allocating 22241 entries in 66 pages
[0.055049] CPU0: update cpu_capacity 1024
[0.055120] CPU0: thread -1, cpu 0, socket 0, mpidr 80000000
[0.055232] Setting up static identity map for 0x100000 - 0x100034
[0.224913] CPU1: update cpu_capacity 1024
[0.224922] CPU1: thread -1, cpu 1, socket 0, mpidr 80000001
[0.294953] CPU2: update cpu_capacity 1024
[0.294961] CPU2: thread -1, cpu 2, socket 0, mpidr 80000002
[0.365059] CPU3: update cpu_capacity 1024
[0.365066] CPU3: thread -1, cpu 3, socket 0, mpidr 80000003
[0.365168] Brought up 4 CPUs
[0.365385] SMP: Total of 4 processors activated (153.60 BogoMIPS).
[0.365424] CPU: All CPU(s) started in HYP mode.
[0.365458] CPU: Virtualization extensions available.
[0.366322] devtmpfs: initialized
[0.379593] VFP support v0.3: implementor 41 architecture 3 part 40 variant 3 rev 4
[0.379963] clocksource: jiffies: mask: 0xffffffff max_cycles: 0xffffffff, max_idle_ns: 19112604462750000 ns
[0.380039] futex hash table entries: 1024 (order: 4, 65536 bytes)
[0.380645] pinctrl core: initialized pinctrl subsystem
[0.381684] NET: Registered protocol family 16
[0.384078] DMA: preallocated 1024 KiB pool for atomic coherent allocations
[0.393663] hw-breakpoint: found 5 (+1 reserved) breakpoint and 4 watchpoint registers.
[0.393724] hw-breakpoint: maximum watchpoint size is 8 bytes.
[0.393918] Serial: AMBA PL011 UART driver
[0.396209] bcm2835-mbox 3f00b880.mailbox: mailbox enabled
[0.396885] uart-pl011 3f201000.serial: could not find pctldev for node /soc/gpio@7e200000/uart0_pins, deferring probe
[0.397595] irq: no irq domain found for /soc/aux@0x7e215000 !
[0.486351] bcm2835-dma 3f007000.dma: DMA legacy API manager at b780f000, dmachans=0x1
[0.488442] SCSI subsystem initialized
[0.488649] usbcore: registered new interface driver usbfs
[0.488767] usbcore: registered new interface driver hub
[0.488903] usbcore: registered new device driver usb
[0.495193] raspberrypi-firmware soc:firmware: Attached to firmware from 2017-05-30 15:27
[0.496690] clocksource: Switched to clocksource arch_sys_counter
[0.585351] VFS: Disk quotas dquot_6.6.0
[0.585473] VFS: Dquot-cache hash table entries: 1024 (order 0, 4096 bytes)
[0.585751] FS-Cache: Loaded
[0.586037] CacheFiles: Loaded
[0.599033] NET: Registered protocol family 2
[0.600036] TCP established hash table entries: 8192 (order: 3, 32768 bytes)
[0.600186] TCP bind hash table entries: 8192 (order: 4, 65536 bytes)
[0.600406] TCP: Hash tables configured (established 8192 bind 8192)
[0.600530] UDP hash table entries: 512 (order: 2, 16384 bytes)
[0.600608] UDP-Lite hash table entries: 512 (order: 2, 16384 bytes)
[0.600878] NET: Registered protocol family 1
[0.601323] RPC: Registered named UNIX socket transport module.
[0.601364] RPC: Registered udp transport module.
[0.601399] RPC: Registered tcp transport module.
[0.601434] RPC: Registered tcp NFSv4.1 backchannel transport module.
[0.602436] hw perfevents: enabled with armv7_cortex_a7 PMU driver, 7 counters available
[0.605103] workingset: timestamp_bits=14 max_order=18 bucket_order=4
[0.622728] FS-Cache: Netfs 'nfs' registered for caching

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[ 0.623832] NFS: Registering the id_resolver key type
[ 0.623892] Key type id_resolver registered
[ 0.623928] Key type id_legacy registered
[ 0.626495] Block layer SCSI generic (bsg) driver version 0.4 loaded (major 251)
[ 0.626669] io scheduler noop registered
[ 0.626785] io scheduler deadline registered (default)
[ 0.627100] io scheduler cfq registered
[ 0.633365] BCM2708FB: allocated DMA memory f6910000
[ 0.633425] BCM2708FB: allocated DMA channel 0 @ b780f000
[ 0.642251] Console: switching to colour frame buffer device 82x26
[ 0.649934] Serial: 8250/16550 driver, 1 ports, IRQ sharing enabled
[ 0.653904] bcm2835-rng 3f104000.rng: hwrng registered
[ 0.656316] vc-cma: Videocore CMA driver
[ 0.658659] vc-cma: vc_cma_base    = 0x00000000
[ 0.661010] vc-cma: vc_cma_size     = 0x00000000 (0 MiB)
[ 0.663324] vc-cma: vc_cma_initial = 0x00000000 (0 MiB)
[ 0.665743] vc-mem: phys_addr:0x00000000 mem_base=0x3dc00000 mem_size:0x3f000000(1008 MiB)
[ 0.686909] brd: module loaded
[ 0.698733] loop: module loaded
[ 0.700811] Loading iSCSI transport class v2.0-870.
[ 0.703453] usbcore: registered new interface driver smsc95xx
[ 0.705644] dwc_otg: version 3.00a 10-AUG-2012 (platform bus)
[ 0.933883] Core Release: 2.80a
[ 0.935924] Setting default values for core params
[ 0.938045] Finished setting default values for core params
[ 1.140587] Using Buffer DMA mode
[ 1.142711] Periodic Transfer Interrupt Enhancement - disabled
[ 1.144912] Multiprocessor Interrupt Enhancement - disabled
[ 1.147193] OTG VER PARAM: 0, OTG VER FLAG: 0
[ 1.149408] Dedicated Tx FIFOs mode
[ 1.151927] WARN::dwc_otg_hcd_init:1032: FIQ DMA bounce buffers: virt = 0xb6904000 dma = 0xf6904000
len=9024
[ 1.156410] FIQ FSM acceleration enabled for :
    Non-periodic Split Transactions
    Periodic Split Transactions
    High-Speed Isochronous Endpoints
    Interrupt/Control Split Transaction hack enabled
[ 1.167857] dwc_otg: Microframe scheduler enabled
[ 1.167910] WARN::hcd_init_fiq:459: FIQ on core 1 at 0x805af978
[ 1.170235] WARN::hcd_init_fiq:460: FIQ ASM at 0x805afcdc length 36
[ 1.172578] WARN::hcd_init_fiq:486: MPHI regs_base at 0xb787a000
[ 1.174952] dwc_otg 3f980000.usb: DWC OTG Controller
[ 1.177304] dwc_otg 3f980000.usb: new USB bus registered, assigned bus number 1
[ 1.179699] dwc_otg 3f980000.usb: irq 62, io mem 0x00000000
[ 1.182035] Init: Port Power? op_state=1
[ 1.184301] Init: Power Port (0)
[ 1.186757] usb usb1: New USB device found, idVendor=1d6b, idProduct=0002
[ 1.189077] usb usb1: New USB device strings: Mfr=3, Product=2, SerialNumber=1
[ 1.191385] usb usb1: Product: DWC OTG Controller
[ 1.193640] usb usb1: Manufacturer: Linux 4.9.45-94f47ec-emlid-v7+ dwc_otg_hcd
[ 1.195980] usb usb1: SerialNumber: 3f980000.usb
[ 1.199173] hub 1-0:1.0: USB hub found
[ 1.201446] hub 1-0:1.0: 1 port detected
[ 1.204199] dwc_otg: FIQ enabled

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[1.204205] dwc_otg: NAK holdoff enabled
[1.204210] dwc_otg: FIQ split-transaction FSM enabled
[1.204225] Module dwc_common_port init
[1.204492] usbcore: registered new interface driver usb-storage
[1.206967] mousedev: PS/2 mouse device common for all mice
[1.210217] bcm2835-wdt 3f100000.watchdog: Broadcom BCM2835 watchdog timer
[1.212833] bcm2835-cpufreq: min=600000 max=1200000
[1.220194] sdhci: Secure Digital Host Controller Interface driver
[1.221388] sdhci: Copyright(c) Pierre Ossman
[1.222728] sdhost-bcm2835 3f202000.sdhost: could not get clk, deferring probe
[1.225982] mmc-bcm2835 3f300000.mmc: could not get clk, deferring probe
[1.227329] sdhci-pltfm: SDHCI platform and OF driver helper
[1.235460] ledtrig-cpu: registered to indicate activity on CPUs
[1.236855] hidraw: raw HID events driver (C) Jiri Kosina
[1.238218] usbcore: registered new interface driver usbhid
[1.239489] usbhid: USB HID core driver
[1.241236] vchiq: vchiq_init_state: slot_zero = 0xb6980000, is_master = 0
[1.243812] Initializing XFRM netlink socket
[1.245131] NET: Registered protocol family 17
[1.246473] Key type dns_resolver registered
[1.247962] Registering SWP/SWPB emulation handler
[1.249672] registered taskstats version 1
[1.251147] vc-sm: Videocore shared memory driver
[1.252415] [vc_sm_connected_init]: start
[1.253919] [vc_sm_connected_init]: end - returning 0
[1.258479] 3f201000.serial: ttyAMA0 at MMIO 0x3f201000 (irq = 87, base_baud = 0) is a PL011 rev2
[1.261955] sdhost: log_buf @ b6907000 (f6907000)
[1.336693] mmc0: sdhost-bcm2835 loaded - DMA enabled (>1)
[1.339967] mmc-bcm2835 3f300000.mmc: mmc_debug:0 mmc_debug2:0
[1.341197] mmc-bcm2835 3f300000.mmc: DMA channel allocated
[1.413574] mmc0: host does not support reading read-only switch, assuming write-enable
[1.417707] of_cfs_init
[1.418900] of_cfs_init: OK
[1.420304] Waiting for root device /dev/mmcblk0p2...
[1.421556] mmc0: new high speed SDHC card at address 0007
[1.423041] mmcblk0: mmc0:0007 6YDLP 29.9 GiB
[1.424575] Indeed it is in host mode hprt0 = 00021501
[1.453926] mmc1: queuing unknown CIS tuple 0x80 (2 bytes)
[1.456549] mmc1: queuing unknown CIS tuple 0x80 (3 bytes)
[1.459154] mmc1: queuing unknown CIS tuple 0x80 (3 bytes)
[1.462910] mmc1: queuing unknown CIS tuple 0x80 (7 bytes)
[1.494849] mmcblk0: p1 p2
[1.500166] random: fast init done
[1.539578] EXT4-fs (mmcblk0p2): INFO: recovery required on readonly filesystem
[1.540653] EXT4-fs (mmcblk0p2): write access will be enabled during recovery
[1.556840] mmc1: new high speed SDIO card at address 0001
[1.626705] usb 1-1: new high-speed USB device number 2 using dwc_otg
[1.627877] Indeed it is in host mode hprt0 = 00001101
[1.856852] usb 1-1: New USB device found, idVendor=0424, idProduct=9514
[1.857963] usb 1-1: New USB device strings: Mfr=0, Product=0, SerialNumber=0
[1.859530] hub 1-1:1.0: USB hub found
[1.860604] hub 1-1:1.0: 5 ports detected
[2.176694] usb 1-1.1: new high-speed USB device number 3 using dwc_otg
[2.240685] EXT4-fs (mmcblk0p2): recovery complete

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[ 2.245632] EXT4-fs (mmcblk0p2): mounted filesystem with ordered data mode. Opts: (null)
[ 2.247872] VFS: Mounted root (ext4 filesystem) readonly on device 179:2.
[ 2.249797] devtmpfs: mounted
[ 2.251841] Freeing unused kernel memory: 1024K
[ 2.306902] usb 1-1.1: New USB device found, idVendor=0424, idProduct=ec00
[ 2.308244] usb 1-1.1: New USB device strings: Mfr=0, Product=0, SerialNumber=0
[ 2.312125] smsc95xx v1.0.5
[ 2.398896] smsc95xx 1-1.1:1.0 eth0: register 'smc95xx' at usb-3f980000.usb-1.1, smc95xx USB 2.0 Ethernet,
b8:27:eb:9c:e3:22
[ 2.625710] systemd[1]: System time before build time, advancing clock.
[ 2.717815] NET: Registered protocol family 10
[ 2.733656] ip_tables: (C) 2000-2006 Netfilter Core Team
[ 2.753206] systemd[1]: systemd 232 running in system mode. (+PAM +AUDIT +SELINUX +IMA +APPARMOR
+SMACK +SYSVINIT +UTMP +LIBCRYPTSETUP +GCRYPT +GNUTLS +ACL +XZ +LZ4 +SECCOMP
+BLKID +ELFUTILS +KMOD +IDN)
[ 2.757937] systemd[1]: Detected architecture arm.
[ 2.765355] systemd[1]: Set hostname to <navio>.
[ 3.074748] systemd[1]: ardupilot.service: Service lacks both ExecStart= and ExecStop= setting. Refusing.
[ 3.094018] systemd[1]: Listening on Journal Socket (/dev/log).
[ 3.097499] systemd[1]: Listening on Syslog Socket.
[ 3.100551] systemd[1]: Reached target Swap.
[ 3.103905] systemd[1]: Created slice System Slice.
[ 3.107496] systemd[1]: Created slice system-systemd\x2dfsck.slice.
[ 3.112229] systemd[1]: Mounting Debug File System...
[ 3.162343] i2c /dev entries driver
[ 3.511767] EXT4-fs (mmcblk0p2): re-mounted. Opts: (null)
[ 3.574024] systemd-journald[134]: Received request to flush runtime journal from PID 1
[ 3.743054] gpiomem-bcm2835 3f200000.gpiomem: Initialised: Registers at 0x3f200000
[ 4.005427] rcio_core: loading out-of-tree module taints kernel.
[ 4.038036] rcio spi1.0: rcio_pwm: Advanced frequency configuration is not supported on this firmware
[ 4.046272] RC config 0 set successfully
[ 4.046272] RC config 1 set successfully
[ 4.056181] RC config 2 set successfully
[ 4.060759] RC config 3 set successfully
[ 4.060761] RC config 4 set successfully
[ 4.061790] RC config 5 set successfully
[ 4.064013] RC config 6 set successfully
[ 4.064857] brcmfmac: F1 signature read @0x18000000=0x1541a9a6
[ 4.069336] RC config 7 set successfully
[ 4.070444] RC config 8 set successfully
[ 4.071529] RC config 9 set successfully
[ 4.072126] usbcore: registered new interface driver brcmfmac
[ 4.073687] RC config 10 set successfully
[ 4.074674] RC config 11 set successfully
[ 4.076376] RC config 12 set successfully
[ 4.077420] RC config 13 set successfully
[ 4.078446] RC config 14 set successfully
[ 4.079420] RC config 15 set successfully
[ 4.080636] rcio spi1.0: rcio_status: Firmware CRC: 0x793d141e
[ 4.081584] rcio spi1.0: rcio_status: Could not read board type
[ 4.116049] smsc95xx 1-1.1:1.0 enxb827eb9ce322: renamed from eth0
[ 4.281327] brcmfmac: Firmware version = wl0: Aug 7 2017 00:46:29 version 7.45.41.46 (r666254 CY) FWID 01-
f8a78378
[ 4.524054] random: crng init done

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[ 5.476182] IPv6: ADDRCONF(NETDEV_UP): intwifi0: link is not ready
[ 5.476198] brcmfmac: power management disabled
[ 5.708417] uart-pl011 3f201000.serial: no DMA platform data
[ 7.177569] Adding 102396k swap on /var/swap. Priority:-1 extents:1 across:102396k SSFS
[ 366.146710] usb 1-1.2: new high-speed USB device number 4 using dwc_otg
[ 366.277161] usb 1-1.2: New USB device found, idVendor=0bda, idProduct=0811
[ 366.277172] usb 1-1.2: New USB device strings: Mfr=1, Product=2, SerialNumber=3
[ 366.277177] usb 1-1.2: Product: 802.11ac WLAN Adapter
[ 366.277182] usb 1-1.2: Manufacturer: Realtek
[ 366.277187] usb 1-1.2: SerialNumber: 00e04c000001
[ 366.420727] usbcore: registered new interface driver rtl8812au
[ 366.853278] IPv6: ADDRCONF(NETDEV_UP): wlan0: link is not ready
[ 366.853412] RTL871X: set bssid:00:00:00:00:00:00
[ 366.853503] RTL871X: set ssid [g\xff\xff\xffc6isQ\xff\xff\xffJ\xff\xff\xffec)?
\xff\xff\xffab\xff\xff\xff2\xff\xff\xffb\xff\xff\xff3F\xff\xff\xffc2T\xff\xff\xff8\xff\xff\xff8\xff\xff\xff7\xff\xff\xff8dvZ.c3\xff\xff\xff9f?]
fw_state=0x000000008
[ 371.225391] RTL871X: set ssid [23doug2g4] fw_state=0x000000008
[ 371.225702] RTL871X: set bssid:60:38:e0:db:b2:da
[ 371.471622] RTL871X: start auth
[ 371.510846] RTL871X: auth success, start assoc
[ 371.540149] RTL871X: assoc success
[ 371.540366] IPv6: ADDRCONF(NETDEV_CHANGE): wlan0: link becomes ready
[ 371.544090] RTL871X: send eapol packet
[ 371.545878] UpdateHalRAMask8812A => mac_id:0, networkType:0x0b, mask:0x003fffff
==> rssi_level:0, rate_bitmap:0x000fffff
[ 371.553864] RTL871X: send eapol packet
[ 371.562310] RTL871X: set pairwise key to hw: alg:4(WEP40-1 WEP104-5 TKIP-2 AES-4) camid:4
[ 371.562334] RTL871X: set group key to hw: alg:4(WEP40-1 WEP104-5 TKIP-2 AES-4) keyid:2
[ 373.049306] UpdateHalRAMask8812A => mac_id:0, networkType:0x0b, mask:0x003fffff
==> rssi_level:1, rate_bitmap:0x000fffff
root@navio:/home/pi#
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