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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
[ 0.000008] sched_clock: 56 bits at 19MHz, resolution 52ns, wraps every 4398046511078ns
[ 0.000028] Switching to timer-based delay loop, resolution 52ns
[ 0.000349] Console: colour dummy device 80x30
[ 0.001701] console [tty1] enabled
[ 0.001765] Calibrating delay loop (skipped), value calculated using timer frequency.. 38.40 BogoMIPS (lpj=192000)
[ 0.001859] pid_max: default: 32768 minimum: 301
[ 0.002247] Mount-cache hash table entries: 2048 (order: 1, 8192 bytes)
[ 0.002305] Mountpoint-cache hash table entries: 2048 (order: 1, 8192 bytes)
[ 0.003377] Disabling cpuset control group subsystem

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[ 0.003585] CPU: Testing write buffer coherency: ok
[ 0.003671] ftrace: allocating 22241 entries in 66 pages
[ 0.054941] CPU0: update cpu_capacity 1024
[ 0.055011] CPU0: thread -1, cpu 0, socket 0, mpidr 80000000
[ 0.055122] Setting up static identity map for 0x100000 - 0x100034
[ 0.224812] CPU1: update cpu_capacity 1024
[ 0.224822] CPU1: thread -1, cpu 1, socket 0, mpidr 80000001
[ 0.294832] CPU2: update cpu_capacity 1024
[ 0.294840] CPU2: thread -1, cpu 2, socket 0, mpidr 80000002
[ 0.364937] CPU3: update cpu_capacity 1024
[ 0.364945] CPU3: thread -1, cpu 3, socket 0, mpidr 80000003
[ 0.365046] Brought up 4 CPUs
[ 0.365263] SMP: Total of 4 processors activated (153.60 BogoMIPS).
[ 0.365302] CPU: All CPU(s) started in HYP mode.
[ 0.365335] CPU: Virtualization extensions available.
[ 0.366207] devtmpfs: initialized
[ 0.379480] VFP support v0.3: implementor 41 architecture 3 part 40 variant 3 rev 4
[ 0.379852] clocksource: jiffies: mask: 0xffffffff max_cycles: 0xffffffff, max_idle_ns: 19112604462750000 ns
[ 0.379928] futex hash table entries: 1024 (order: 4, 65536 bytes)
[ 0.380533] pinctrl core: initialized pinctrl subsystem
[ 0.381570] NET: Registered protocol family 16
[ 0.383958] DMA: preallocated 1024 KiB pool for atomic coherent allocations
[ 0.393575] hw-breakpoint: found 5 (+1 reserved) breakpoint and 4 watchpoint registers.
[ 0.393635] hw-breakpoint: maximum watchpoint size is 8 bytes.
[ 0.393834] Serial: AMBA PL011 UART driver
[ 0.396126] bcm2835-mbox 3f00b880.mailbox: mailbox enabled
[ 0.396799] uart-pl011 3f201000.serial: could not find pctldev for node /soc/gpio@7e200000/uart0_pins, deferring
probe
[ 0.397510] irq: no irq domain found for /soc/aux@0x7e215000 !
[ 0.486263] bcm2835-dma 3f007000.dma: DMA legacy API manager at b780f000, dmachans=0x1
[ 0.488356] SCSI subsystem initialized
[ 0.488563] usbcore: registered new interface driver usbfs
[ 0.488682] usbcore: registered new interface driver hub
[ 0.488818] usbcore: registered new device driver usb
[ 0.495083] raspberrypi-firmware soc:firmware: Attached to firmware from 2017-05-30 15:27
[ 0.496580] clocksource: Switched to clocksource arch_sys_counter
[ 0.585205] VFS: Disk quotas dquot_6.6.0
[ 0.585328] VFS: Dquot-cache hash table entries: 1024 (order 0, 4096 bytes)
[ 0.585605] FS-Cache: Loaded
[ 0.585892] CacheFiles: Loaded
[ 0.598887] NET: Registered protocol family 2
[ 0.599886] TCP established hash table entries: 8192 (order: 3, 32768 bytes)
[ 0.600035] TCP bind hash table entries: 8192 (order: 4, 65536 bytes)
[ 0.600256] TCP: Hash tables configured (established 8192 bind 8192)
[ 0.600381] UDP hash table entries: 512 (order: 2, 16384 bytes)
[ 0.600459] UDP-Lite hash table entries: 512 (order: 2, 16384 bytes)
[ 0.600729] NET: Registered protocol family 1
[ 0.601172] RPC: Registered named UNIX socket transport module.
[ 0.601213] RPC: Registered udp transport module.
[ 0.601248] RPC: Registered tcp transport module.
[ 0.601282] RPC: Registered tcp NFSv4.1 backchannel transport module.
[ 0.602285] hw perfevents: enabled with armv7_cortex_a7 PMU driver, 7 counters available
[ 0.604954] workingset: timestamp_bits=14 max_order=18 bucket_order=4
[ 0.622578] FS-Cache: Netfs 'nfs' registered for caching
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[ 0.623681] NFS: Registering the id_resolver key type
[ 0.623754] Key type id_resolver registered
[ 0.623790] Key type id_legacy registered
[ 0.626355] Block layer SCSI generic (bsg) driver version 0.4 loaded (major 251)
[ 0.626527] io scheduler noop registered
[ 0.626643] io scheduler deadline registered (default)
[ 0.626960] io scheduler cfq registered
[ 0.633211] BCM2708FB: allocated DMA memory f6910000
[ 0.633272] BCM2708FB: allocated DMA channel 0 @ b780f000
[ 0.642098] Console: switching to colour frame buffer device 82x26
[ 0.649763] Serial: 8250/16550 driver, 1 ports, IRQ sharing enabled
[ 0.653732] bcm2835-rng 3f104000.rng: hwrng registered
[ 0.656146] vc-cma: Videocore CMA driver
[ 0.658507] vc-cma: vc_cma_base = 0x00000000
[ 0.660857] vc-cma: vc_cma_size = 0x00000000 (0 MiB)
[ 0.663172] vc-cma: vc_cma_initial = 0x00000000 (0 MiB)
[ 0.665589] vc-mem: phys_addr:0x00000000 mem_base=0x3dc00000 mem_size:0x3f000000(1008 MiB)
[ 0.686768] brd: module loaded
[ 0.698629] loop: module loaded
[ 0.700704] Loading iSCSI transport class v2.0-870.
[ 0.703350] usbcore: registered new interface driver smsc95xx
[ 0.705540] dwc_otg: version 3.00a 10-AUG-2012 (platform bus)
[ 0.933766] Core Release: 2.80a
[ 0.935801] Setting default values for core params
[ 0.937919] Finished setting default values for core params
[ 1.140460] Using Buffer DMA mode
[ 1.142580] Periodic Transfer Interrupt Enhancement - disabled
[ 1.144777] Multiprocessor Interrupt Enhancement - disabled
[ 1.147051] OTG VER PARAM: 0, OTG VER FLAG: 0
[ 1.149263] Dedicated Tx FIFOs mode
[ 1.151780] WARN::dwc_otg_hcd_init:1032: FIQ DMA bounce buffers: virt = 0xb6904000 dma = 0xf6904000
len=9024
[ 1.156252] FIQ FSM acceleration enabled for :
    Non-periodic Split Transactions
    Periodic Split Transactions
    High-Speed Isochronous Endpoints
    Interrupt/Control Split Transaction hack enabled
[ 1.167679] dwc_otg: Microframe scheduler enabled
[ 1.167733] WARN::hcd_init_fiq:459: FIQ on core 1 at 0x805af978
[ 1.170057] WARN::hcd_init_fiq:460: FIQ ASM at 0x805afcdc length 36
[ 1.172398] WARN::hcd_init_fiq:486: MPHI regs_base at 0xb787a000
[ 1.174776] dwc_otg 3f980000.usb: DWC OTG Controller
[ 1.177129] dwc_otg 3f980000.usb: new USB bus registered, assigned bus number 1
[ 1.179527] dwc_otg 3f980000.usb: irq 62, io mem 0x00000000
[ 1.181862] Init: Port Power? op_state=1
[ 1.184130] Init: Power Port (0)
[ 1.186587] usb usb1: New USB device found, idVendor=1d6b, idProduct=0002
[ 1.188910] usb usb1: New USB device strings: Mfr=3, Product=2, SerialNumber=1
[ 1.191224] usb usb1: Product: DWC OTG Controller
[ 1.193485] usb usb1: Manufacturer: Linux 4.9.45-94f47ec-emlid-v7+ dwc_otg_hcd
[ 1.195828] usb usb1: SerialNumber: 3f980000.usb
[ 1.199028] hub 1-0:1.0: USB hub found
[ 1.201305] hub 1-0:1.0: 1 port detected
[ 1.204058] dwc_otg: FIQ enabled

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[1.204065] dwc_otg: NAK holdoff enabled
[1.204070] dwc_otg: FIQ split-transaction FSM enabled
[1.204085] Module dwc_common_port init
[1.204373] usbcore: registered new interface driver usb-storage
[1.206869] mousedev: PS/2 mouse device common for all mice
[1.210121] bcm2835-wdt 3f100000.watchdog: Broadcom BCM2835 watchdog timer
[1.212745] bcm2835-cpufreq: min=600000 max=1200000
[1.220110] sdhci: Secure Digital Host Controller Interface driver
[1.221307] sdhci: Copyright(c) Pierre Ossman
[1.222650] sdhost-bcm2835 3f202000.sdhost: could not get clk, deferring probe
[1.225903] mmc-bcm2835 3f300000.mmc: could not get clk, deferring probe
[1.227254] sdhci-pltfm: SDHCI platform and OF driver helper
[1.235393] ledtrig-cpu: registered to indicate activity on CPUs
[1.236791] hidraw: raw HID events driver (C) Jiri Kosina
[1.238153] usbcore: registered new interface driver usbhid
[1.239427] usbhid: USB HID core driver
[1.241175] vchiq: vchiq_init_state: slot_zero = 0xb6980000, is_master = 0
[1.243752] Initializing XFRM netlink socket
[1.245071] NET: Registered protocol family 17
[1.246412] Key type dns_resolver registered
[1.247906] Registering SWP/SWPB emulation handler
[1.249622] registered taskstats version 1
[1.251097] vc-sm: Videocore shared memory driver
[1.252362] [vc_sm_connected_init]: start
[1.253868] [vc_sm_connected_init]: end - returning 0
[1.258422] 3f201000.serial: ttyAMA0 at MMIO 0x3f201000 (irq = 87, base_baud = 0) is a PL011 rev2
[1.261901] sdhost: log_buf @ b6907000 (f6907000)
[1.336582] mmc0: sdhost-bcm2835 loaded - DMA enabled (>1)
[1.339859] mmc-bcm2835 3f300000.mmc: mmc_debug:0 mmc_debug2:0
[1.341091] mmc-bcm2835 3f300000.mmc: DMA channel allocated
[1.396650] of_cfs_init
[1.399910] of_cfs_init: OK
[1.406487] Waiting for root device /dev/mmcblk0p2...
[1.415698] mmc0: host does not support reading read-only switch, assuming write-enable
[1.418149] Indeed it is in host mode hprt0 = 00021501
[1.427547] mmc0: new high speed SDHC card at address 0007
[1.430635] mmcblk0: mmc0:0007 6YDLP 29.9 GiB
[1.431795] mmc1: queuing unknown CIS tuple 0x80 (2 bytes)
[1.434189] mmc1: queuing unknown CIS tuple 0x80 (3 bytes)
[1.436541] mmc1: queuing unknown CIS tuple 0x80 (3 bytes)
[1.440067] mmc1: queuing unknown CIS tuple 0x80 (7 bytes)
[1.484110] mmcblk0: p1 p2
[1.485904] random: fast init done
[1.528932] EXT4-fs (mmcblk0p2): INFO: recovery required on readonly filesystem
[1.530042] EXT4-fs (mmcblk0p2): write access will be enabled during recovery
[1.533333] mmc1: new high speed SDIO card at address 0001
[1.616596] usb 1-1: new high-speed USB device number 2 using dwc_otg
[1.617807] Indeed it is in host mode hprt0 = 00001101
[1.846742] usb 1-1: New USB device found, idVendor=0424, idProduct=9514
[1.847884] usb 1-1: New USB device strings: Mfr=0, Product=0, SerialNumber=0
[1.849494] hub 1-1:1.0: USB hub found
[1.850688] hub 1-1:1.0: 5 ports detected
[2.166579] usb 1-1.1: new high-speed USB device number 3 using dwc_otg
[2.216848] EXT4-fs (mmcblk0p2): recovery complete

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[ 2.296726] usb 1-1.1: New USB device found, idVendor=0424, idProduct=ec00
[ 2.297870] usb 1-1.1: New USB device strings: Mfr=0, Product=0, SerialNumber=0
[ 2.301487] smsc95xx v1.0.5
[ 2.388642] smsc95xx 1-1.1:1.0 eth0: register 'smsc95xx' at usb-3f980000.usb-1.1, smsc95xx USB 2.0 Ethernet,
b8:27:eb:9c:e3:22
[ 2.766655] EXT4-fs (mmcblk0p2): mounted filesystem with ordered data mode. Opts: (null)
[ 2.769335] VFS: Mounted root (ext4 filesystem) readonly on device 179:2.
[ 2.771560] devtmpfs: mounted
[ 2.773872] Freeing unused kernel memory: 1024K
[ 3.140618] systemd[1]: System time before build time, advancing clock.
[ 3.235335] NET: Registered protocol family 10
[ 3.251151] ip_tables: (C) 2000-2006 Netfilter Core Team
[ 3.270689] 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)
[ 3.275412] systemd[1]: Detected architecture arm.
[ 3.282963] systemd[1]: Set hostname to <navio>.
[ 3.586236] systemd[1]: ardupilot.service: Service lacks both ExecStart= and ExecStop= setting. Refusing.
[ 3.605511] systemd[1]: Listening on fsck to fsckd communication Socket.
[ 3.609119] systemd[1]: Listening on Syslog Socket.
[ 3.612241] systemd[1]: Listening on Journal Socket.
[ 3.615307] systemd[1]: Listening on udev Control Socket.
[ 3.634294] systemd[1]: Listening on udev Kernel Socket.
[ 3.637416] systemd[1]: Reached target Swap.
[ 3.675547] i2c /dev entries driver
[ 4.010665] EXT4-fs (mmcblk0p2): re-mounted. Opts: (null)
[ 4.061382] systemd-journald[116]: Received request to flush runtime journal from PID 1
[ 4.342112] gpiomem-bcm2835 3f200000.gpiomem: Initialised: Registers at 0x3f200000
[ 4.688995] rcio_core: loading out-of-tree module taints kernel.
[ 4.713671] rcio spi1.0: rcio_pwm: Advanced frequency configuration is not supported on this firmware
[ 4.716134] brcmfmac: F1 signature read @0x18000000=0x1541a9a6
[ 4.720098] RC config 0 set successfully
[ 4.722755] RC config 1 set successfully
[ 4.724697] RC config 2 set successfully
[ 4.725779] RC config 3 set successfully
[ 4.725844] usbcore: registered new interface driver brcmfmac
[ 4.728721] RC config 4 set successfully
[ 4.729183] smsc95xx 1-1.1:1.0 enxb827eb9ce322: renamed from eth0
[ 4.729684] RC config 5 set successfully
[ 4.730624] RC config 6 set successfully
[ 4.731551] RC config 7 set successfully
[ 4.732452] RC config 8 set successfully
[ 4.733352] RC config 9 set successfully
[ 4.734250] RC config 10 set successfully
[ 4.735149] RC config 11 set successfully
[ 4.736046] RC config 12 set successfully
[ 4.740972] RC config 13 set successfully
[ 4.741881] RC config 14 set successfully
[ 4.742783] RC config 15 set successfully
[ 4.743918] rcio spi1.0: rcio_status: Firmware CRC: 0x793d141e
[ 4.744822] rcio spi1.0: rcio_status: Could not read board type
[ 4.925611] brcmfmac: Firmware version = wl0: Aug 7 2017 00:46:29 version 7.45.41.46 (r666254 CY) FWID 01-
f8a78378
[ 5.025737] random: crng init done
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[ 6.082064] IPv6: ADDRCONF(NETDEV_UP): intwifi0: link is not ready
[ 6.082081] brcmfmac: power management disabled
[ 6.291069] uart-pl011 3f201000.serial: no DMA platform data
[ 6.819095] Adding 102396k swap on /var/swap. Priority:-1 extents:1 across:102396k SSFS
[ 85.306606] usb 1-1.2: new high-speed USB device number 4 using dwc_otg
[ 85.437067] usb 1-1.2: New USB device found, idVendor=0bda, idProduct=0811
[ 85.437077] usb 1-1.2: New USB device strings: Mfr=1, Product=2, SerialNumber=3
[ 85.437082] usb 1-1.2: Product: 802.11ac WLAN Adapter
[ 85.437087] usb 1-1.2: Manufacturer: Realtek
[ 85.437097] usb 1-1.2: SerialNumber: 00e04c000001
[ 85.578447] usbcore: registered new interface driver rtl8812au
[ 86.023793] IPv6: ADDRCONF(NETDEV_UP): wlan0: link is not ready
[ 86.023920] RTL871X: set bssid:00:00:00:00:00:00
[ 86.025130] RTL871X: set ssid [g\xff\xff\xffc6isQ\xff\xff\xffJ\xff\xff\xffec)?
\xff\xff\xfffab\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=0x00000008
[ 90.360166] RTL871X: set ssid [23doug2g4] fw_state=0x00000008
[ 90.360210] RTL871X: set bssid:60:38:e0:db:b2:da
[ 90.637300] RTL871X: start auth
[ 90.662312] RTL871X: auth success, start assoc
[ 90.701183] RTL871X: assoc success
[ 90.701400] IPv6: ADDRCONF(NETDEV_CHANGE): wlan0: link becomes ready
[ 90.704070] RTL871X: send eapol packet
[ 90.710371] RTL871X: send eapol packet
[ 90.714474] UpdateHalRAMask8812A => mac_id:0, networkType:0x0b, mask:0x003fffff
==> rssi_level:0, rate_bitmap:0x000fffff
[ 90.723820] RTL871X: set pairwise key to hw: alg:4(WEP40-1 WEP104-5 TKIP-2 AES-4) camid:4
[ 90.723841] RTL871X: set group key to hw: alg:4(WEP40-1 WEP104-5 TKIP-2 AES-4) keyid:2
[ 92.249236] UpdateHalRAMask8812A => mac_id:0, networkType:0x0b, mask:0x003fffff
==> rssi_level:1, rate_bitmap:0x000fffff
[ 384.726620] i2c-bcm2835 3f804000.i2c: i2c transfer timed out
[ 526.610528] RTL871X: set group key to hw: alg:4(WEP40-1 WEP104-5 TKIP-2 AES-4) keyid:1
[ 526.610554] RTL871X: send eapol packet
root@navio:/home/pi#
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