

U-Boot SPL 2016.07-at23 (Mar 25 2022 - 16:42:41)  
Trying to boot from MMC2

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CPU: Freescale i.MX7D rev1.3 at 996MHz  
CPU: Extended Commercial temperature grade (-20C to 105C) at 59C  
Reset cause: POR  
      Watchdog enabled  
I2C: ready  
DRAM: 1 GiB  
Boot Source: eMMC  
Board Type: Armadillo-IoT G3 M1(0a000003)  
Revision: 0002  
S/N: xxxxxxxxxxxx  
DRAM: 00001e05  
XTAL: 00  
MMC: FSL\_SDHC: 0, FSL\_SDHC: 1  
Loading Environment from MMC... \*\*\* Warning - bad CRC, using default environment

Failed (-5)  
Loading Environment from MMC... \*\*\* Warning - bad CRC, using default environment

Failed (-5)  
In: serial  
Out: serial  
Err: serial  
Found PFUZE300! deviceid 0x30, revid 0x11  
Net: FEC0  
switch to partitions #0, OK  
mmc1(part 0) is current device  
switch to partitions #0, OK  
mmc1(part 0) is current device  
reading boot.scr  
\*\* Unable to read file boot.scr \*\*  
reading boot.scr  
\*\* Unable to read file boot.scr \*\*  
reading uImage  
12138592 bytes read in 296 ms (39.1 MiB/s)  
Booting from mmc ...  
reading armadillo\_iotg\_g3\_m1.dtb  
54740 bytes read in 22 ms (2.4 MiB/s)  
## Booting kernel from Legacy Image at 82000000 ...  
Image Name: Linux-4.9.133-at23  
Image Type: ARM Linux Kernel Image (uncompressed)  
Data Size: 12138528 Bytes = 11.6 MiB  
Load Address: 80008000  
Entry Point: 80008000  
Verifying Checksum ... OK  
## Flattened Device Tree blob at 84800000  
Booting using the fdt blob at 0x84800000  
Loading Kernel Image ... OK  
Using Device Tree in place at 84800000, end 848105d3

Starting kernel ...

Booting Linux on physical CPU 0x0

Linux version 4.9.133-at23 (atmark@atde8) (gcc version 8.3.0 (Debian 8.3.0-2) ) #2 SMP PREEMPT Fri Jun 17 15:35:34 JST 2022

CPU: ARMv7 Processor [410fc075] revision 5 (ARMv7), cr=10c53c7d

CPU: div instructions available: patching division code

CPU: PIPT / VIPT nonaliasing data cache, VIPT aliasing instruction cache

OF: fdt:Machine model: Atmark-Techno Armadillo-IoT Gateway G3 M1 Board

Reserved memory: created CMA memory pool at 0xac000000, size 320 MiB

OF: reserved mem: initialized node linux,cma, compatible id shared-dma-pool

Memory policy: Data cache writealloc

percpu: Embedded 14 pages/cpu @ab61a000 s26636 r8192 d22516 u57344

Built 1 zonelists in Zone order, mobility grouping on. Total pages: 259840

Kernel command line: console=ttyMXC4,115200 root=/dev/mmcblk2p2 rootwait rw

PID hash table entries: 4096 (order: 2, 16384 bytes)

Dentry cache hash table entries: 131072 (order: 7, 524288 bytes)

Inode-cache hash table entries: 65536 (order: 6, 262144 bytes)

Memory: 687252K/1048576K available (11264K kernel code, 654K rwdma, 5020K rodata, 4096K init, 493K bss, 33644K reserved, 327680K cma-reserved, 0K highmem)

Virtual kernel memory layout:

```
vector : 0xffff0000 - 0xffff1000 ( 4 kB)
fixmap : 0xffc00000 - 0xffff0000 (3072 kB)
vmalloc : 0xc0800000 - 0xff800000 (1008 MB)
lowmem : 0x80000000 - 0xc0000000 (1024 MB)
pkmap : 0x7fe00000 - 0x80000000 ( 2 MB)
modules : 0x7f000000 - 0x7fe00000 ( 14 MB)
.text : 0x80008000 - 0x80c00000 (12256 kB)
.init : 0x81200000 - 0x81600000 (4096 kB)
.data : 0x81600000 - 0x816a3820 ( 655 kB)
.bss : 0x816a5000 - 0x817204ec ( 494 kB)
```

SLUB: HWalign=64, Order=0-3, MinObjects=0, CPUs=2, Nodes=1

Preemptible hierarchical RCU implementation.

Build-time adjustment of leaf fanout to 32.

RCU restricting CPUs from NR\_CPUS=4 to nr\_cpu\_ids=2.

RCU: Adjusting geometry for rcu\_fanout\_leaf=32, nr\_cpu\_ids=2

NR\_IRQS:16 nr\_irqs:16 16

arm\_arch\_timer: Architected cp15 timer(s) running at 8.00MHz (phys).

clocksource: arch\_sys\_counter: mask: 0xffffffffffffff max\_cycles: 0x1d854df40, max\_idle\_ns: 440795202120 ns

sched\_clock: 56 bits at 8MHz, resolution 125ns, wraps every 2199023255500ns

Switching to timer-based delay loop, resolution 125ns

Ignoring duplicate/late registration of read\_current\_timer delay

clocksource: mxc\_timer1: mask: 0xffffffff max\_cycles: 0xffffffff, max\_idle\_ns: 637086815595 ns

Console: colour dummy device 80x30

Calibrating delay loop (skipped), value calculated using timer frequency.. 16.00 BogoMIPS (lpj=80000)

pid\_max: default: 32768 minimum: 301

Mount-cache hash table entries: 2048 (order: 1, 8192 bytes)

Mountpoint-cache hash table entries: 2048 (order: 1, 8192 bytes)

CPU: Testing write buffer coherency: ok

CPU0: update cpu\_capacity 1024

CPU0: thread -1, cpu 0, socket 0, mpidr 80000000

Setting up static identity map for 0x80100000 - 0x80100058  
CPU1: update cpu\_capacity 1024  
CPU1: thread -1, cpu 1, socket 0, mpidr 80000001  
Brought up 2 CPUs  
SMP: Total of 2 processors activated (32.00 BogoMIPS).  
CPU: All CPU(s) started in SVC mode.  
devtmpfs: initialized  
VFP support v0.3: implementor 41 architecture 2 part 30 variant 7 rev 5  
clocksource: jiffies: mask: 0xffffffff max\_cycles: 0xffffffff, max\_idle\_ns: 19112604462750000 ns  
futex hash table entries: 512 (order: 3, 32768 bytes)  
pinctrl core: initialized pinctrl subsystem  
NET: Registered protocol family 16  
DMA: preallocated 256 KiB pool for atomic coherent allocations  
cpuidle: using governor ladder  
cpuidle: using governor menu  
DDR type is DDR3!  
hw-breakpoint: found 5 (+1 reserved) breakpoint and 4 watchpoint registers.  
hw-breakpoint: maximum watchpoint size is 8 bytes.  
imx7d-pinctrl 302c0000.iomuxc-lpsr: initialized IMX pinctrl driver  
imx7d-pinctrl 30330000.iomuxc: initialized IMX pinctrl driver  
MU is ready for cross core communication!  
GPIO line 13 (MCU\_INTB) hogged as input  
GPIO line 43 (SVEN) hogged as output/high  
GPIO line 60 (LAN1\_INT\_N) hogged as input  
GPIO line 62 (LAN1\_COMA\_MODE) hogged as output/low  
GPIO line 85 (EC25\_USB\_VBUS) hogged as output/low  
mxs-dma 33000000.dma-apbh: initialized  
vgaarb: loaded  
SCSI subsystem initialized  
usbcore: registered new interface driver usbfs  
usbcore: registered new interface driver hub  
usbcore: registered new device driver usb  
30800000.aips-bus:usbphynop1 supply vcc not found, using dummy regulator  
30800000.aips-bus:usbphynop2 supply vcc not found, using dummy regulator  
i2c i2c-0: IMX I2C adapter registered  
i2c i2c-0: can't use DMA, using PIO instead.  
gpio\_bmic 3-0014: version: 2.0  
bmic\_regulator 3-0016: version: 1.0  
i2c i2c-3: IMX I2C adapter registered  
i2c i2c-3: can't use DMA, using PIO instead.  
Linux video capture interface: v2.00  
pps\_core: LinuxPPS API ver. 1 registered  
pps\_core: Software ver. 5.3.6 - Copyright 2005-2007 Rodolfo Giometti <giometti@linux.it>  
PTP clock support registered  
MIPI CSI2 driver module loaded  
imx rpmsg driver is registered.  
Advanced Linux Sound Architecture Driver Initialized.  
Bluetooth: Core ver 2.22  
NET: Registered protocol family 31  
Bluetooth: HCI device and connection manager initialized  
Bluetooth: HCI socket layer initialized  
Bluetooth: L2CAP socket layer initialized  
Bluetooth: SCO socket layer initialized  
random: fast init done

armadillo\_iotg\_addon addon: Atmark Techno RS232C board detected at Add-On Module I/F 1(Rev 2, SerialNumber=7872).  
armadillo\_iotg\_addon addon: No add-on expansion board detected at Add-On Module I/F 2.  
clocksource: Switched to clocksource arch\_sys\_counter  
VFS: Disk quotas dquot\_6.6.0  
VFS: Dquot-cache hash table entries: 1024 (order 0, 4096 bytes)  
NET: Registered protocol family 2  
TCP established hash table entries: 8192 (order: 3, 32768 bytes)  
TCP bind hash table entries: 8192 (order: 4, 65536 bytes)  
TCP: Hash tables configured (established 8192 bind 8192)  
UDP hash table entries: 512 (order: 2, 16384 bytes)  
UDP-Lite hash table entries: 512 (order: 2, 16384 bytes)  
NET: Registered protocol family 1  
RPC: Registered named UNIX socket transport module.  
RPC: Registered udp transport module.  
RPC: Registered tcp transport module.  
RPC: Registered tcp NFSv4.1 backchannel transport module.  
Bus freq driver module loaded  
workingset: timestamp\_bits=14 max\_order=18 bucket\_order=4  
squashfs: version 4.0 (2009/01/31) Phillip Lougher  
NFS: Registering the id\_resolver key type  
Key type id\_resolver registered  
Key type id\_legacy registered  
jffs2: version 2.2. (NAND) c 2001-2006 Red Hat, Inc.  
fuse init (API version 7.26)  
NET: Registered protocol family 38  
Block layer SCSI generic (bsg) driver version 0.4 loaded (major 248)  
io scheduler noop registered  
io scheduler deadline registered  
io scheduler cfq registered (default)  
OF: PCI: host bridge /soc/pcie@0x33800000 ranges:  
OF: PCI: No bus range found for /soc/pcie@0x33800000, using [bus 00-ff]  
OF: PCI: IO 0x4ff80000..0x4ff8ffff -> 0x00000000  
OF: PCI: MEM 0x40000000..0x4feffff -> 0x40000000  
imx6q-pcie 33800000.pcie: Speed change timeout  
imx6q-pcie 33800000.pcie: Roll back to GEN1 link!  
imx6q-pcie 33800000.pcie: Link up, Gen1  
imx6q-pcie 33800000.pcie: PCI host bridge to bus 0000:00  
pci\_bus 0000:00: root bus resource [bus 00-ff]  
pci\_bus 0000:00: root bus resource [io 0x0000-0xffff]  
pci\_bus 0000:00: root bus resource [mem 0x40000000-0x4feffff]  
PCI: bus0: Fast back to back transfers disabled  
PCI: bus1: Fast back to back transfers disabled  
pci 0000:00:00.0: BAR 0: assigned [mem 0x40000000-0x400ffff]  
pci 0000:00:00.0: BAR 14: assigned [mem 0x40100000-0x401ffff]  
pci 0000:00:00.0: BAR 15: assigned [mem 0x40200000-0x402ffff pref]  
pci 0000:00:00.0: BAR 6: assigned [mem 0x40300000-0x403ffff pref]  
pci 0000:01:00.0: BAR 0: assigned [mem 0x40100000-0x4017fff 64bit]  
pci 0000:01:00.0: BAR 6: assigned [mem 0x40200000-0x402ffff pref]  
pci 0000:00:00.0: PCI bridge to [bus 01-ff]  
pci 0000:00:00.0: bridge window [mem 0x40100000-0x401ffff]  
pci 0000:00:00.0: bridge window [mem 0x40200000-0x402ffff pref]  
pcieport 0000:00:00.0: Signaling PME through PCIe PME interrupt  
pci 0000:01:00.0: Signaling PME through PCIe PME interrupt

imx-sdma 30bd0000.sdma: loaded firmware 4.2  
pfuze100-regulator 3-0009: Full layer: 1, Metal layer: 1  
pfuze100-regulator 3-0009: FAB: 0, FIN: 0  
pfuze100-regulator 3-0009: pfuze3000 found.  
30a70000.serial: ttymxc4 at MMIO 0x30a70000 (irq = 45, base\_baud = 5000000) is a IMX console [ttymxc4] enabled  
30a90000.serial: ttymxc6 at MMIO 0x30a90000 (irq = 46, base\_baud = 500000) is a IMX  
30860000.serial: ttymxc0 at MMIO 0x30860000 (irq = 285, base\_baud = 5000000) is a IMX  
imx sema4 driver is registered.  
[drm] Initialized  
[drm] Initialized vivante 1.0.0 20120216 on minor 0  
brd: module loaded  
loop: module loaded  
(hci\_tty): inside hci\_tty\_init  
(hci\_tty): allocated 246, 0  
libphy: Fixed MDIO Bus: probed  
tun: Universal TUN/TAP device driver, 1.6  
tun: (C) 1999-2004 Max Krasnyansky <maxk@qualcomm.com>  
CAN device driver interface  
30bf0000.ethernet supply phy not found, using dummy regulator  
pps pps0: new PPS source ptp0  
libphy: fec\_enet\_mii\_bus: probed  
fec 30bf0000.ethernet eth0: registered PHC device 0  
PPP generic driver version 2.4.2  
ath9k 0000:01:00.0: enabling device (0140 -> 0142)  
ieee80211 phy0: Atheros AR9462 Rev:3 mem=0xc0a00000, irq=286  
usbcore: registered new interface driver kaweth  
pegasus: v0.9.3 (2013/04/25), Pegasus/Pegasus II USB Ethernet driver  
usbcore: registered new interface driver pegasus  
usbcore: registered new interface driver rtl8150  
usbcore: registered new interface driver r8152  
usbcore: registered new interface driver asix  
usbcore: registered new interface driver ax88179\_178a  
usbcore: registered new interface driver cdc\_ether  
usbcore: registered new interface driver cdc\_eem  
usbcore: registered new interface driver smsc95xx  
usbcore: registered new interface driver net1080  
usbcore: registered new interface driver cdc\_subset  
usbcore: registered new interface driver zaurus  
usbcore: registered new interface driver sierra\_net  
usbcore: registered new interface driver cdc\_ncm  
usbcore: registered new interface driver qmi\_wwan  
ehci\_hcd: USB 2.0 'Enhanced' Host Controller (EHCI) Driver  
ehci-pci: EHCI PCI platform driver  
ehci-mxc: Freescale On-Chip EHCI Host driver  
usbcore: registered new interface driver cdc\_acm  
cdc\_acm: USB Abstract Control Model driver for USB modems and ISDN adapters  
usbcore: registered new interface driver cdc\_wdm  
usbcore: registered new interface driver usb-storage  
usbcore: registered new interface driver usbserial  
usbcore: registered new interface driver usbserial\_generic  
usbserial: USB Serial support registered for generic  
usbcore: registered new interface driver ftdi\_sio  
usbserial: USB Serial support registered for FTDI USB Serial Device

usbcore: registered new interface driver option  
usbserial: USB Serial support registered for GSM modem (1-port)  
usbcore: registered new interface driver sierra  
usbserial: USB Serial support registered for Sierra USB modem  
usbcore: registered new interface driver usb\_serial\_simple  
usbserial: USB Serial support registered for carelink  
usbserial: USB Serial support registered for zio  
usbserial: USB Serial support registered for funsoft  
usbserial: USB Serial support registered for flashloader  
usbserial: USB Serial support registered for google  
usbserial: USB Serial support registered for libtransistor  
usbserial: USB Serial support registered for vivopay  
usbserial: USB Serial support registered for moto\_modem  
usbserial: USB Serial support registered for motorola\_tetra  
usbserial: USB Serial support registered for novatel\_gps  
usbserial: USB Serial support registered for hp4x  
usbserial: USB Serial support registered for suunto  
usbserial: USB Serial support registered for siemens\_mpi  
usbcore: registered new interface driver usb\_ehset\_test  
usb3503 3-0008: switched to HUB mode  
usb3503 3-0008: usb3503\_probe: probed in hub mode  
30b10200.usbmisc supply vbus-wakeup not found, using dummy regulator  
30b30200.usbmisc supply vbus-wakeup not found, using dummy regulator  
30b20200.usbmisc supply vbus-wakeup not found, using dummy regulator  
ci\_hdrc ci\_hdrc.0: EHCI Host Controller  
ci\_hdrc ci\_hdrc.0: new USB bus registered, assigned bus number 1  
ci\_hdrc ci\_hdrc.0: USB 2.0 started, EHCI 1.00  
hub 1-0:1.0: USB hub found  
hub 1-0:1.0: 1 port detected  
30b30000.usb supply vbus not found, using dummy regulator  
ci\_hdrc ci\_hdrc.1: EHCI Host Controller  
ci\_hdrc ci\_hdrc.1: new USB bus registered, assigned bus number 2  
ci\_hdrc ci\_hdrc.1: USB 2.0 started, EHCI 1.00  
hub 2-0:1.0: USB hub found  
hub 2-0:1.0: 1 port detected  
udc-core: couldn't find an available UDC - added [g\_cdc] to list of pending drivers  
mousedev: PS/2 mouse device common for all mice  
input: 30370000.snvs:snvs-powerkey as /devices/soc0/soc/30000000.aips-bus/30370000.snvs/30370000.snvs:snvs-powerkey/input/input0  
bmic\_rtc 3-0011: version: 1.1  
bmic\_rtc 3-0011: rtc core: registered bmic\_rtc as rtc0  
snvs\_rtc 30370000.snvs:snvs-rtc-lp: rtc core: registered 30370000.snvs:snvs- as rtc1  
i2c /dev entries driver  
IR NEC protocol handler initialized  
IR RC5(x/sz) protocol handler initialized  
IR RC6 protocol handler initialized  
IR JVC protocol handler initialized  
IR Sony protocol handler initialized  
IR SANYO protocol handler initialized  
IR Sharp protocol handler initialized  
IR MCE Keyboard/mouse protocol handler initialized  
IR XMP protocol handler initialized  
usbcore: registered new interface driver uvcvideo  
USB Video Class driver (1.1.1)

bmic\_thermal 3-0013: version: 1.0  
imx2-wdt 30280000.wdog: timeout 10 sec (nowayout=0)  
Bluetooth: HCI UART driver ver 2.3  
Bluetooth: HCI UART protocol H4 registered  
Bluetooth: HCI UART protocol BCSP registered  
Bluetooth: HCI UART protocol LL registered  
Bluetooth: HCI UART protocol ATH3K registered  
usbcore: registered new interface driver bcm203x  
usbcore: registered new interface driver btusb  
usbcore: registered new interface driver ath3k  
sdhci: Secure Digital Host Controller Interface driver  
sdhci: Copyright(c) Pierre Ossman  
sdhci-pltfm: SDHCI platform and OF driver helper  
sdhci-esdhc-imx 30b40000.usdhc: Got CD GPIO  
sdhci-esdhc-imx 30b40000.usdhc: Got WP GPIO  
mmc0: SDHCI controller on 30b40000.usdhc [30b40000.usdhc] using ADMA  
sdhci-esdhc-imx 30b60000.usdhc: could not get ultra high speed state, work on normal mode  
sdhci-esdhc-imx 30b60000.usdhc: allocated mmc-pwrseq  
usb 1-1: new full-speed USB device number 2 using ci\_hdrc  
usb 2-1: new high-speed USB device number 2 using ci\_hdrc  
mmc2: SDHCI controller on 30b60000.usdhc [30b60000.usdhc] using ADMA  
caam 30900000.caam: ERA source: CCBVID.  
caam 30900000.caam: Entropy delay = 3200  
caam 30900000.caam: Instantiated RNG4 SH0  
mmc2: new DDR MMC card at address 0001  
mmcbk2: mmc2:0001 S0J35A 3.54 GiB  
caam 30900000.caam: Instantiated RNG4 SH1  
caam 30900000.caam: device ID = 0x0a16030000000000 (Era 8)  
mmcbk2boot0: mmc2:0001 S0J35A partition 1 31.5 MiB  
caam 30900000.caam: job rings = 3, qi = 0  
mmcbk2boot1: mmc2:0001 S0J35A partition 2 31.5 MiB  
mmcbk2gp0: mmc2:0001 S0J35A partition 4 8.00 MiB  
mmcbk2gp1: mmc2:0001 S0J35A partition 5 8.00 MiB  
mmcbk2gp2: mmc2:0001 S0J35A partition 6 8.00 MiB  
mmcbk2gp3: mmc2:0001 S0J35A partition 7 8.00 MiB  
mmcbk2rpmb: mmc2:0001 S0J35A partition 3 4.00 MiB  
caam algorithms registered in /proc/crypto  
caam\_jr 30901000.jr0: registering rng-caam  
mmcbk2: p1 p2 p3  
caam 30900000.caam: caam pkc algorithms registered in /proc/crypto  
snvs-secvio 30370000.caam-snvs: can't get snvs clock  
snvs-secvio 30370000.caam-snvs: violation handlers armed - non-secure state  
usbcore: registered new interface driver usbhid  
usbhid: USB HID core driver  
hub 2-1:1.0: USB hub found  
hub 2-1:1.0: 3 ports detected  
usbcore: registered new interface driver r8712u  
bmic\_adc 3-0012: version: 1.0  
coresight-etm3x 3007c000.etm: ETM 3.5 initialized  
coresight-etm3x 3007d000.etm: ETM 3.5 initialized  
Bluetooth: hci0: rtl: examining hci\_ver=06 hci\_rev=000a lmp\_ver=06 lmp\_subver=8761  
Bluetooth: hci0: rtl: loading rtl\_bt/rtl8761a\_config.bin  
bluetooth hci0: **Direct firmware load for rtl\_bt/rtl8761a\_config.bin failed with error -2**  
Bluetooth: hci0: **Failed to load rtl\_bt/rtl8761a\_config.bin**

```
Bluetooth: hci0: rtl: loading rtl_bt/rtl8761a_fw.bin
bluetooth hci0: Direct firmware load for rtl_bt/rtl8761a_fw.bin failed with error -2
Bluetooth: hci0: Failed to load rtl_bt/rtl8761a_fw.bin
usbcore: registered new interface driver snd-usb-audio
NET: Registered protocol family 26
Netfilter messages via NETLINK v0.30.
nfnl_acct: registering with nfnetlink.
nf_contrack version 0.5.0 (16384 buckets, 65536 max)
cnetlink v0.93: registering with nfnetlink.
nf_tables: (c) 2007-2009 Patrick McHardy <kaber@trash.net>
nf_tables_compat: (c) 2012 Pablo Neira Ayuso <pablo@netfilter.org>
xt_time: kernel timezone is -0000
IPVS: Registered protocols ()
IPVS: Connection hash table configured (size=4096, memory=32Kbytes)
IPVS: Creating netns size=912 id=0
IPVS: ipvs loaded.
ipip: IPv4 and MPLS over IPv4 tunneling driver
gre: GRE over IPv4 demultiplexor driver
ip_gre: GRE over IPv4 tunneling driver
ip_tables: (C) 2000-2006 Netfilter Core Team
ipt_CLUSTERIP: ClusterIP Version 0.8 loaded successfully
arp_tables: arp_tables: (C) 2002 David S. Miller
Initializing XFRM netlink socket
NET: Registered protocol family 10
mip6: Mobile IPv6
ip6_tables: (C) 2000-2006 Netfilter Core Team
sit: IPv6, IPv4 and MPLS over IPv4 tunneling driver
ip6_gre: GRE over IPv6 tunneling driver
NET: Registered protocol family 17
NET: Registered protocol family 15
Bridge firewalling registered
can: controller area network core (rev 20120528 abi 9)
NET: Registered protocol family 29
can: raw protocol (rev 20120528)
can: broadcast manager protocol (rev 20161123 t)
can: netlink gateway (rev 20130117) max_hops=1
Bluetooth: RFCOMM TTY layer initialized
Bluetooth: RFCOMM socket layer initialized
Bluetooth: RFCOMM ver 1.11
Bluetooth: BNEP (Ethernet Emulation) ver 1.3
Bluetooth: BNEP filters: protocol multicast
Bluetooth: BNEP socket layer initialized
Bluetooth: HIDP (Human Interface Emulation) ver 1.2
Bluetooth: HIDP socket layer initialized
8021q: 802.1Q VLAN Support v1.8
Key type dns_resolver registered
ThumbEE CPU extension supported.
mmc0: new ultra high speed SDR104 SDHC card at address 59b4
mmcbk0: mmc0:59b4 FFFF 14.9 GiB
  mmcbk0: p1 p2
usb 2-1.3: new full-speed USB device number 3 using ci_hdrc
imx_thermal 30000000.aips-bus:tempmon: Extended Commercial CPU temperature grade - max:
105C critical:100C passive:95C
usb 2-1.3: USB disconnect, device number 3
```

コメントの追加 [A1]: 「/usr/lib/firmware」内の  
rtl\_bt/rtl8761a\_config.bin  
rtl\_bt/rtl8761a\_fw.bin  
を読み込もうとするが、エラーで失敗している。



```
dhd_module_init in
input: gpio-keys as /devices/soc0/gpio-keys/input/input1
bmic_rtc 3-0011: setting system clock to 1970-01-01 03:21:57 UTC (12117)
VLDO2: disabling
ALSA device list:
  No soundcards found.
Warning: unable to open an initial console.
Freeing unused kernel memory: 4096K
systemd-udevd[221]: starting version 215
random: systemd-udevd: uninitialized urandom read (16 bytes read)
usb 2-1.3: new full-speed USB device number 4 using ci_hdrc
EXT4-fs (mmcblk2p2): mounted filesystem with ordered data mode. Opts: (null)
systemd[1]: System time before build time, advancing clock.
cgroup: cgroup2: unknown option "nsdelegate"
systemd[1]: systemd 241 running in system mode. (+PAM +AUDIT +SELINUX +IMA +APPARMOR
+SMACK +SYSVINIT +UTMP +LIBCRYPTSETUP +GCRYPT +GNUTLS +ACL +XZ +LZ4 +SECCOMP
+BLKID +ELFUTILS +KMOD -IDN2 +IDN -PCRE2 default-hierarchy=hybrid)
systemd[1]: Detected architecture arm.
```

Welcome to Debian GNU/Linux 10 (buster)!

```
systemd[1]: Set hostname to <armadillo>.
systemd[1]: /lib/systemd/system/thermal_trip_point-set.service:1: Assignment outside of section.
Ignoring.
systemd[1]: /lib/systemd/system/thermal_trip_point-set.service:2: Assignment outside of section.
Ignoring.
systemd[1]: Configuration file /lib/systemd/system/ec25-reset-config.service is marked executable.
Please remove executable permission bits. Proceeding anyway.
systemd[1]: Configuration file /etc/systemd/system/cp_SwUpdExec.service is marked world-inacces-
sible. This has no effect as configuration data is accessible via APIs without restrictions. Proceed-
ing anyway.
systemd[1]: Configuration file /etc/systemd/system/chg_gpio73.service is marked world-inaccessi-
ble. This has no effect as configuration data is accessible via APIs without restrictions. Proceedin-
g anyway.
systemd[1]: Configuration file /etc/systemd/system/xxxxxxx.service is marked world-inaccessible.
This has no effect as configuration data is accessible via APIs without restrictions. Proceeding a-
nyway.
systemd[1]: Configuration file /etc/systemd/system/xxxxxxx.service is marked world-inaccessible.
This has no effect as configuration data is accessible via APIs without restrictions. Proceeding a-
nyway.
random: systemd: uninitialized urandom read (16 bytes read)
random: systemd: uninitialized urandom read (16 bytes read)
[ OK ] Listening on udev Control Socket.
random: systemd: uninitialized urandom read (16 bytes read)
[ OK ] Created slice system-serial%$2dgetty.slice.
[ OK ] Reached target Remote File Systems.
[ OK ] Created slice system-getty.slice.
[ OK ] Listening on Journal Socket (/dev/log).
[ OK ] Reached target Swap.
[ OK ] Listening on Syslog Socket.
[ OK ] Set up automount Arbitrary...s File System Automount Point.
[ OK ] Listening on Journal Socket.
Mounting Kernel Debug File System...
Starting Load Kernel Modules...
```

```
Mounting POSIX Message Queue File System...
Starting Journal Service...
Starting Remount Root and Kernel File Systems...
[ OK ] Listening on initctl Compatibility Named Pipe.
[ OK ] Listening on udev Kernel Socket.
Starting udev Coldplug all Devices...
[ OK ] Started Dispatch Password Requests to Console Directory Watch.
[ OK ] Created slice User and Session Slice.
[ OK ] Reached target Slices.
[ OK ] Started Forward Password Requests to Wall Directory Watch.
[ OK ] Reached target Local Encrypted Volumes.
[ OK ] Reached target Paths.
[ OK ] Started Journal Service.
[ OK ] Mounted Kernel Debug File System.
[ OK ] Started Load Kernel Modules.
[ OK ] Mounted POSIX Message Queue File System.
[ OK ] Started Remount Root and Kernel File Systems.
Starting Create System Users...
Starting Load/Save Random Seed...
Mounting FUSE Control File System...
Starting Apply Kernel Variables...
Mounting Kernel Configuration File System...
Starting Flush Journal to Persistent Storage...
[ OK ] Started Create System Users.
[ OK ] Started Load/Save Random Seed.
[ OK ] Mounted FUSE Control File System.
[ OK ] Started Apply Kernel Variables.
[ OK ] Mounted Kernel Configuration File System.
[ OK ] Started udev Coldplug all Devices.
systemd-journald[292]: Received request to flush runtime journal from PID 1
Starting Create Static Device Nodes in /dev...
[ OK ] Started Flush Journal to Persistent Storage.
[ OK ] Started Create Static Device Nodes in /dev.
[ OK ] Reached target Local File Systems (Pre).
[ OK ] Reached target Local File Systems.
Starting udev Kernel Device Manager...
Starting Create Volatile Files and Directories...
[ OK ] Started Create Volatile Files and Directories.
[ OK ] Started udev Kernel Device Manager.
Starting Network Time Synchronization...
Starting Update UTMP about System Boot/Shutdown...
[ OK ] Started Update UTMP about System Boot/Shutdown.
[ OK ] Started Network Time Synchronization.
[ OK ] Reached target System Time Synchronized.
[ OK ] Reached target System Initialization.
[ OK ] Started Daily rotation of log files.
[ OK ] Listening on Avahi mDNS/DNS-SD Stack Activation Socket.
[ OK ] Started Daily Cleanup of Temporary Directories.
[ OK ] Started Daily apt download activities.
[ OK ] Started Daily man-db regeneration.
[ OK ] Listening on D-Bus System Message Bus Socket.
[ OK ] Reached target Sockets.
[ OK ] Reached target Basic System.
[ OK ] Started xxxxxxxx Service.
```

```
Starting Restore /etc/reso... the ppp link was shut down...
[ OK ] Started Regular background program processing daemon.
Starting xxxxxxxx...
[ OK ] Started D-Bus System Message Bus.
Starting Network Manager...
Starting WPA supplicant...
Starting System Logging Service...
Starting thermal_trip_point-set.service...
Starting LSB: Load kernel ...d to enable cpufreq scaling...
Starting EC25 resetting configuration...
[ OK ] Started Power off EC25 safely.
Starting set GPIO 73 to high...
Starting Avahi mDNS/DNS-SD Stack...
Starting Login Service...
[ OK ] Started Daily apt upgrade and clean activities.
[ OK ] Reached target Timers.
[ OK ] Started xxxxxxxx Service.
[ OK ] Started xxxxxxxx Service.
[ OK ] Started System Logging Service.
[ OK ] Started Restore /etc/resol...re the ppp link was shut down.
[ OK ] Started xxxxxxxx.
[ OK ] Started thermal_trip_point-set.service.
[ OK ] Started WPA supplicant.
[ OK ] Started set GPIO 73 to high.
[ OK ] Started Avahi mDNS/DNS-SD Stack.
[ OK ] Started xxxxxxxx Service.
[ OK ] Started xxxxxxxx Service.
[ OK ] Started Login Service.
[ OK ] Started Network Manager.
Starting Hostname Service...
IPVS: Creating netns size=912 id=1
Starting Network Manager Wait Online...
[ OK ] Reached target Network.
Starting vsftpd FTP server...
Starting xxxxxxxx Service...
Starting Connection Recover...
Starting Permit User Sessions...
[ OK ] Started Create AP Service.
[ OK ] Started LSB: Load kernel m...ded to enable cpufreq scaling.
[ OK ] Started vsftpd FTP server.
Starting LSB: set CPUFreq kernel parameters...
[ OK ] Started Permit User Sessions.
[ OK ] Started xxxxxxxx Service.
[ OK ] Started Connection Recover.
[ OK ] Started LSB: set CPUFreq kernel parameters.
[ OK ] Started Hostname Service.
Starting Network Manager Script Dispatcher Service...
[ OK ] Started Network Manager Script Dispatcher Service.
IPv6: ADDRCONF(NETDEV_UP): eth0: link is not ready
Vitesse VSC8501 30bf0000.ethernet-1:00: attached PHY driver [Vitesse VSC8501] (mii_bus:phy_a
ddr=30bf0000.ethernet-1:00, irq=-1)
IPv6: ADDRCONF(NETDEV_UP): eth0: link is not ready
Starting Authorization Manager...
[ OK ] Started EC25 resetting configuration.
```

```
Starting Modem Manager...
usb 2-1.2: new high-speed USB device number 5 using ci_hdrc
option 2-1.2:1.0: GSM modem (1-port) converter detected
usb 2-1.2: GSM modem (1-port) converter now attached to ttyUSB0
[ OK option 2-1.2:1.1: GSM modem (1-port) converter detected
] Started Authorization Manager.
usb 2-1.2: GSM modem (1-port) converter now attached to ttyUSB1
option 2-1.2:1.2: GSM modem (1-port) converter detected
usb 2-1.2: GSM modem (1-port) converter now attached to ttyUSB2
option 2-1.2:1.3: GSM modem (1-port) converter detected
[ OK usb 2-1.2: GSM modem (1-port) converter now attached to ttyUSB3
] Found device /dev/ttymx4.
[ OK ] Started Modem Manager.
[ OK ] Found device /dev/license.
[ OK ] Started Network Manager Wait Online.
[ OK ] Listening on Load/Save RF Kill Switch Status /dev/rfkill Watch.
[ OK ] Reached target Network is Online.
Starting /etc/rc.local Compatibility...
Starting LSB: exim Mail Transport Agent...
Starting Lighttpd Daemon...
Mounting /opt/license...
Starting Bluetooth service...
Starting Load/Save RF Kill Switch Status...
[ OK ] Mounted /opt/license.
IPv6: ADDRCONF(NETDEV_UP): ap0: link is not ready
[ OK ] Started Load/Save RF Kill Switch Status.
[ OK ] Started Bluetooth service.
[ OK ] Reached target Bluetooth.
[ OK ] Started /etc/rc.local Compatibility.
IPv6: ADDRCONF(NETDEV_CHANGE): ap0: link becomes ready
[ OK ] Started Serial Getty on ttymx4.
Starting change status LED...
[ OK ] Started reset usb3503.
[ OK ] Started Getty on tty1.
[ OK ] Reached target Login Prompts.
Starting xxxxxxxx service...
Starting input event poweroff daemon...
[ OK ] Started change status LED.
[ OK ] Started xxxxxxxx service..
[ OK ] Started input event poweroff daemon.
[ OK ] Started Lighttpd Daemon.
[ OK ] Started LSB: exim Mail Transport Agent.
[ OK ] Reached target Multi-User System.
[ OK ] Reached target Graphical Interface.
Starting Update UTMP about System Runlevel Changes...
[ OK ] Started Update UTMP about System Runlevel Changes.
```

Debian GNU/Linux 10 armadillo ttymx4

```
armadillo login: random: crng init done
random: 6 urandom warning(s) missed due to ratelimiting
```

```
armadillo login: usb 1-1: USB disconnect, device number 2
usb 1-1: new full-speed USB device number 3 using ci_hdrc
```

コメントの追加 [A2]: カーネル起動後、USB ドングルを抜挿した。

```
Bluetooth: hci0: rtl: examining hci_ver=06 hci_rev=000a Imp_ver=06 Imp_subver=8761
Bluetooth: hci0: rtl: loading rtl_bt/rtl8761a_config.bin
Bluetooth: hci0: rtl: loading rtl_bt/rtl8761a_fw.bin
Bluetooth: hci0: rom_version status=0 version=3
Bluetooth: cfg_sz 14, total size 20290
```

armadillo login:

**コメントの追加 [A3]:** このタイミング(カーネル起動後&USB  
ドングル抜挿)では、ファームウェアファイルの読み込みに失敗しな  
い。