

A Bug Report: Intel NUC mini PC kit NUC7i7BNH (Intel Core i7) + Ettus B210

27 Oct 2017

This document describes, what seems to be a bug, when a powered Ettus B210 is plugged on a fresh new Intel NUC7i7BNH running Ubuntu 16.04 or higher.

To reproduce this error:

- Plug the B210 in the wall. The USB 3 wire is connected to the blue USB ports on the NUC.
- The Intel NUC7i7BNH is not plugged in the wall. Now plug it in.
- Make sure you have the latest BIOS Update: [BNKBL357.86A]
Version: 0052 which is dated: 9/18/2017
- Make sure it has Ubuntu 16.04.3 LTS. (We have also tried 16.04.2, 17.10 and Linux Kernel 4.13.10 with similar behavior)
- Switch on the Intel NUC7i7BNH

Here is the end of the dmesg output we get, when this is done:

```
[ 2.561904] IPv6: ADDRCONF(NETDEV_UP): wlp58s0: link is not ready
[ 2.564297] IPv6: ADDRCONF(NETDEV_UP): eno1: link is not ready
[ 2.749393] IPv6: ADDRCONF(NETDEV_UP): eno1: link is not ready
[ 2.808202] IPv6: ADDRCONF(NETDEV_UP): wlp58s0: link is not ready
[ 2.845635] [drm] RC6 on
[ 3.239667] Bluetooth: BNEP (Ethernet Emulation) ver 1.3
[ 3.239669] Bluetooth: BNEP filters: protocol multicast
[ 3.239672] Bluetooth: BNEP socket layer initialized
[ 6.485547] usb 1-2: device descriptor read/64, error -110
[ 8.935955] wlp58s0: authenticate with dc:ef:09:96:ad:2c
[ 8.938324] wlp58s0: send auth to dc:ef:09:96:ad:2c (try 1/3)
[ 8.947266] wlp58s0: authenticated
[ 8.949138] wlp58s0: associate with dc:ef:09:96:ad:2c (try 1/3)
[ 8.953000] wlp58s0: RX AssocResp from dc:ef:09:96:ad:2c (capab=0x1411 status=0 aid=8)
[ 8.957048] wlp58s0: associated
[ 8.957073] IPv6: ADDRCONF(NETDEV_CHANGE): wlp58s0: link becomes ready
[ 22.101462] usb 1-2: device descriptor read/64, error -110
[ 22.329396] usb 1-2: new high-speed USB device number 4 using xhci_hcd
[ 27.477465] usb 1-2: device descriptor read/64, error -110
[ 43.137491] usb 1-2: device descriptor read/64, error -110
[ 43.365977] usb 1-2: new high-speed USB device number 5 using xhci_hcd
[ 48.401678] xhci_hcd 0000:00:14.0: Timeout while waiting for setup device command
```

```
[ 53.781811] xhci_hcd 0000:00:14.0: Timeout while waiting for setup device command
[ 53.989862] usb 1-2: device not accepting address 5, error -62
[ 54.109968] usb 1-2: new high-speed USB device number 6 using xhci_hcd
[ 59.159957] xhci_hcd 0000:00:14.0: Timeout while waiting for setup device command
[ 64.537054] xhci_hcd 0000:00:14.0: Timeout while waiting for setup device command
[ 64.744844] usb 1-2: device not accepting address 6, error -62
[ 64.744921] usb usb1-port2: unable to enumerate USB device
[ 64.864906] usb 1-3: new low-speed USB device number 7 using xhci_hcd
[ 65.007755] usb 1-3: New USB device found, idVendor=17ef, idProduct=602e
[ 65.007760] usb 1-3: New USB device strings: Mfr=0, Product=2, SerialNumber=0
[ 65.007763] usb 1-3: Product: USB Optical Mouse
[ 65.010785] input: USB Optical Mouse as /devices/pci0000:00/0000:00:14.0/usb1/1-3/1-3:1.0/0003:17EF:602E:0000:0000:0000:0000/input/input12: USB HID v1.11 Mouse [USB Optical Mouse] on
[ 65.011265] hid-generic 0003:17EF:602E:0003: input,hidraw2: USB HID v1.11 Mouse [USB Optical Mouse] on
[ 65.188625] usb 1-8: new full-speed USB device number 8 using xhci_hcd
[ 65.329799] usb 1-8: New USB device found, idVendor=8087, idProduct=0a2b
[ 65.329801] usb 1-8: New USB device strings: Mfr=0, Product=0, SerialNumber=0
[ 65.345527] usbcore: registered new interface driver btusb
[ 65.351684] Bluetooth: hci0: Firmware revision 0.1 build 103 week 50 2016
[ 65.403476] Bluetooth: RFCOMM TTY layer initialized
[ 65.403480] Bluetooth: RFCOMM socket layer initialized
[ 65.403483] Bluetooth: RFCOMM ver 1.11
```

If we now run `uhd_find_devices`, no devices are found. Now physically pull the USB cord out of the nuc, and push it back in. Wait for a few seconds and type `dmesg`. Here is what gets added to the `dmesg`.

```
[ 65.403480] Bluetooth: RFCOMM socket layer initialized
[ 65.403483] Bluetooth: RFCOMM ver 1.11
[ 406.938506] usb 1-2: new high-speed USB device number 9 using xhci_hcd
[ 407.078509] usb 1-2: New USB device found, idVendor=2500, idProduct=0020
[ 407.078516] usb 1-2: New USB device strings: Mfr=1, Product=2, SerialNumber=3
[ 407.078521] usb 1-2: Product: WestBridge
[ 407.078525] usb 1-2: Manufacturer: Cypress
[ 407.078528] usb 1-2: SerialNumber: 0000000004BE
[ 484.515656] usb 1-2: USB disconnect, device number 9
[ 484.812009] usb 2-2: new SuperSpeed USB device number 2 using xhci_hcd
[ 484.832979] usb 2-2: LPM exit latency is zeroed, disabling LPM.
[ 484.833954] usb 2-2: New USB device found, idVendor=2500, idProduct=0020
[ 484.833960] usb 2-2: New USB device strings: Mfr=1, Product=2, SerialNumber=3
[ 484.833964] usb 2-2: Product: USRP B200
[ 484.833967] usb 2-2: Manufacturer: Ettus Research LLC
[ 484.833970] usb 2-2: SerialNumber: 310FCBA
```

If we now run `uhd_find_devices`, B210 will be found. Here is the complete `dmesg` output of this machine since boot.

```

[ 0.000000] Linux version 4.10.0-37-generic (buildd@lgw01-amd64-037) (gcc version 5.4.0 20160609 (Ubuntu
[ 0.000000] Command line: BOOT_IMAGE=/boot/vmlinuz-4.10.0-37-generic.efi.signed root=UUID=e548bd32-f122
[ 0.000000] KERNEL supported cpus:
[ 0.000000]   Intel GenuineIntel
[ 0.000000]   AMD AuthenticAMD
[ 0.000000]   Centaur CentaurHauls
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x001: 'x87 floating point registers'
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x002: 'SSE registers'
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x004: 'AVX registers'
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x008: 'MPX bounds registers'
[ 0.000000] x86/fpu: Supporting XSAVE feature 0x010: 'MPX CSR'
[ 0.000000] x86/fpu: xstate_offset[2]: 576, xstate_sizes[2]: 256
[ 0.000000] x86/fpu: xstate_offset[3]: 832, xstate_sizes[3]: 64
[ 0.000000] x86/fpu: xstate_offset[4]: 896, xstate_sizes[4]: 64
[ 0.000000] x86/fpu: Enabled xstate features 0x1f, context size is 960 bytes, using 'compacted' format.
[ 0.000000] e820: BIOS-provided physical RAM map:
[ 0.000000] BIOS-e820: [mem 0x0000000000000000-0x00000000000057fff] usable
[ 0.000000] BIOS-e820: [mem 0x00000000000058000-0x00000000000058fff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000000059000-0x0000000000009efff] usable
[ 0.000000] BIOS-e820: [mem 0x0000000000009f000-0x000000000000fffff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000000100000-0x0000000000006e263fff] usable
[ 0.000000] BIOS-e820: [mem 0x0000000000006e264000-0x0000000000006e264fff] ACPI NVS
[ 0.000000] BIOS-e820: [mem 0x0000000000006e265000-0x0000000000006e265fff] reserved
[ 0.000000] BIOS-e820: [mem 0x0000000000006e266000-0x0000000000007a447fff] usable
[ 0.000000] BIOS-e820: [mem 0x0000000000007a448000-0x0000000000007a787fff] reserved
[ 0.000000] BIOS-e820: [mem 0x0000000000007a788000-0x0000000000007a7c6fff] ACPI data
[ 0.000000] BIOS-e820: [mem 0x0000000000007a7c7000-0x0000000000007afa2fff] ACPI NVS
[ 0.000000] BIOS-e820: [mem 0x0000000000007afa3000-0x0000000000007b399fff] reserved
[ 0.000000] BIOS-e820: [mem 0x0000000000007b39a000-0x0000000000007b3fdfff] type 20
[ 0.000000] BIOS-e820: [mem 0x0000000000007b3fe000-0x0000000000007b3fefff] usable
[ 0.000000] BIOS-e820: [mem 0x0000000000007b3ff000-0x0000000000007fffffff] reserved
[ 0.000000] BIOS-e820: [mem 0x000000000000e000000-0x000000000000efffffff] reserved
[ 0.000000] BIOS-e820: [mem 0x000000000000fe00000-0x000000000000fe010fff] reserved
[ 0.000000] BIOS-e820: [mem 0x000000000000fec0000-0x000000000000fec00fff] reserved
[ 0.000000] BIOS-e820: [mem 0x000000000000fed0000-0x000000000000fed00fff] reserved
[ 0.000000] BIOS-e820: [mem 0x000000000000fee0000-0x000000000000fee00fff] reserved
[ 0.000000] BIOS-e820: [mem 0x000000000000ff00000-0x000000000000ffffffffff] reserved
[ 0.000000] BIOS-e820: [mem 0x00000000100000000-0x00000000000047effffff] usable
[ 0.000000] NX (Execute Disable) protection: active
[ 0.000000] efi: EFI v2.50 by American Megatrends
[ 0.000000] efi: ACPI 2.0=0x7a794000 ACPI=0x7a794000 SMBIOS=0x7b30a000 SMBIOS 3.0=0x7b309000 ESRT=
[ 0.000000] SMBIOS 3.0.0 present.
[ 0.000000] DMI: /NUC7i7BNB, BIOS BNKBL357.86A.0053.2017.1019.1457 10/19/2017
[ 0.000000] e820: update [mem 0x00000000-0x000000fff] usable ==> reserved

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[ 0.000000] e820: remove [mem 0x000a0000-0x000fffff] usable
[ 0.000000] e820: last_pfn = 0x47f000 max_arch_pfn = 0x400000000
[ 0.000000] MTRR default type: write-back
[ 0.000000] MTRR fixed ranges enabled:
[ 0.000000] 00000-9FFFF write-back
[ 0.000000] A0000-BFFFF uncachable
[ 0.000000] C0000-FFFFFF write-protect
[ 0.000000] MTRR variable ranges enabled:
[ 0.000000] 0 base 0080000000 mask 7F80000000 uncachable
[ 0.000000] 1 base 007C000000 mask 7FFC000000 uncachable
[ 0.000000] 2 base 007B800000 mask 7FFF800000 uncachable
[ 0.000000] 3 disabled
[ 0.000000] 4 disabled
[ 0.000000] 5 disabled
[ 0.000000] 6 disabled
[ 0.000000] 7 disabled
[ 0.000000] 8 disabled
[ 0.000000] 9 disabled
[ 0.000000] x86/PAT: Configuration [0-7]: WB WC UC- UC WB WC UC- WT
[ 0.000000] e820: last_pfn = 0x7b3ff max_arch_pfn = 0x400000000
[ 0.000000] found SMP MP-table at [mem 0x000fcc50-0x000fcc5f] mapped at [ffff9c5b000fcc50]
[ 0.000000] esrt: Reserving ESRT space from 0x000000007b0bae58 to 0x000000007b0bae90.
[ 0.000000] Scanning 1 areas for low memory corruption
[ 0.000000] Base memory trampoline at [ffff9c5b00097000] 97000 size 24576
[ 0.000000] Using GB pages for direct mapping
[ 0.000000] BRK [0x3d7228000, 0x3d7228fff] PGTABLE
[ 0.000000] BRK [0x3d7229000, 0x3d7229fff] PGTABLE
[ 0.000000] BRK [0x3d722a000, 0x3d722afff] PGTABLE
[ 0.000000] BRK [0x3d722b000, 0x3d722bfff] PGTABLE
[ 0.000000] BRK [0x3d722c000, 0x3d722cfff] PGTABLE
[ 0.000000] BRK [0x3d722d000, 0x3d722dfff] PGTABLE
[ 0.000000] BRK [0x3d722e000, 0x3d722efff] PGTABLE
[ 0.000000] BRK [0x3d722f000, 0x3d722ffff] PGTABLE
[ 0.000000] BRK [0x3d7230000, 0x3d7230fff] PGTABLE
[ 0.000000] RAMDISK: [mem 0x33026000-0x3580afff]
[ 0.000000] ACPI: Early table checksum verification disabled
[ 0.000000] ACPI: RSDP 0x000000007A794000 000024 (v02 INTEL )
[ 0.000000] ACPI: XSDT 0x000000007A7940B0 0000E4 (v01 INTEL NUC7i7BN 00000035 AMI 00010013)
[ 0.000000] ACPI: FACP 0x000000007A7BD118 000114 (v06 INTEL NUC7i7BN 00000035 AMI 00010013)
[ 0.000000] ACPI: DSDT 0x000000007A794228 028EEC (v02 INTEL NUC7i7BN 00000035 INTL 20160422)
[ 0.000000] ACPI: FACS 0x000000007AF72C40 000040
[ 0.000000] ACPI: APIC 0x000000007A7BD230 000084 (v03 INTEL NUC7i7BN 00000035 AMI 00010013)
[ 0.000000] ACPI: FPDT 0x000000007A7BD2B8 000044 (v01 INTEL NUC7i7BN 00000035 AMI 00010013)
[ 0.000000] ACPI: MCFG 0x000000007A7BD300 00003C (v01 INTEL NUC7i7BN 00000035 MSFT 00000097)

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[ 0.000000] ACPI: SSDT 0x000000007A7BD340 000359 (v01 INTEL NUC7i7BN 00000035 INTL 20160422)
[ 0.000000] ACPI: FIDT 0x000000007A7BD6A0 00009C (v01 INTEL NUC7i7BN 00000035 AMI 00010013)
[ 0.000000] ACPI: SSDT 0x000000007A7BD740 003174 (v02 INTEL NUC7i7BN 00000035 INTL 20160422)
[ 0.000000] ACPI: HPET 0x000000007A7C08B8 000038 (v01 INTEL NUC7i7BN 00000035 MSFT 0000005F)
[ 0.000000] ACPI: SSDT 0x000000007A7C08F0 0009B2 (v02 INTEL NUC7i7BN 00000035 INTL 20160422)
[ 0.000000] ACPI: UEFI 0x000000007A7C12A8 000042 (v01 INTEL NUC7i7BN 00000035 01000013)
[ 0.000000] ACPI: SSDT 0x000000007A7C12F0 000758 (v02 INTEL NUC7i7BN 00000035 INTL 20160422)
[ 0.000000] ACPI: SSDT 0x000000007A7C1A48 000EDE (v02 INTEL NUC7i7BN 00000035 INTL 20160422)
[ 0.000000] ACPI: LPIT 0x000000007A7C2928 000094 (v01 INTEL NUC7i7BN 00000035 MSFT 0000005F)
[ 0.000000] ACPI: WSMT 0x000000007A7C29C0 000028 (v01 INTEL NUC7i7BN 00000035 MSFT 0000005F)
[ 0.000000] ACPI: SSDT 0x000000007A7C29E8 000141 (v02 INTEL NUC7i7BN 00000035 INTL 20160422)
[ 0.000000] ACPI: SSDT 0x000000007A7C2B30 00029F (v02 INTEL NUC7i7BN 00000035 INTL 20160422)
[ 0.000000] ACPI: SSDT 0x000000007A7C2DD0 003002 (v02 INTEL NUC7i7BN 00000035 INTL 20160422)
[ 0.000000] ACPI: DBGp 0x000000007A7C5DD8 000034 (v01 INTEL NUC7i7BN 00000035 MSFT 0000005F)
[ 0.000000] ACPI: DBG2 0x000000007A7C5E10 000054 (v00 INTEL NUC7i7BN 00000035 MSFT 0000005F)
[ 0.000000] ACPI: BGRT 0x000000007A7C5E68 000038 (v01 INTEL NUC7i7BN 00000035 AMI 00010013)
[ 0.000000] ACPI: DMAR 0x000000007A7C5EA0 0000A8 (v01 INTEL NUC7i7BN 00000035 INTL 00000001)
[ 0.000000] ACPI: NHLT 0x000000007A7C5F48 00002D (v00 INTEL NUC7i7BN 00000035 01000013)
[ 0.000000] ACPI: TPM2 0x000000007A7C5F78 000034 (v03 INTEL NUC7i7BN 00000035 AMI 00000000)
[ 0.000000] ACPI: SSDT 0x000000007A7C5FB0 0001C9 (v01 INTEL NUC7i7BN 00000035 INTL 20160422)
[ 0.000000] ACPI: Local APIC address 0xfee00000
[ 0.000000] No NUMA configuration found
[ 0.000000] Faking a node at [mem 0x0000000000000000-0x0000000047effffff]
[ 0.000000] NODE_DATA(0) allocated [mem 0x47efd5000-0x47effffff]
[ 0.000000] Zone ranges:
[ 0.000000]   DMA      [mem 0x0000000000001000-0x000000000000ffff]
[ 0.000000]   DMA32    [mem 0x0000000001000000-0x000000000000ffff]
[ 0.000000]   Normal   [mem 0x0000000100000000-0x0000000047effffff]
[ 0.000000]   Device   empty
[ 0.000000] Movable zone start for each node
[ 0.000000] Early memory node ranges
[ 0.000000]   node    0: [mem 0x0000000000001000-0x00000000000057fff]
[ 0.000000]   node    0: [mem 0x00000000000059000-0x00000000000009efff]
[ 0.000000]   node    0: [mem 0x0000000001000000-0x0000000000006e263fff]
[ 0.000000]   node    0: [mem 0x00000000006e266000-0x00000000007a447fff]
[ 0.000000]   node    0: [mem 0x0000000007b3fe000-0x00000000007b3fefff]
[ 0.000000]   node    0: [mem 0x0000000100000000-0x0000000047effffff]
[ 0.000000] Initmem setup node 0 [mem 0x0000000000001000-0x0000000047effffff]
[ 0.000000] On node 0 totalpages: 4166628
[ 0.000000]   DMA zone: 64 pages used for memmap
[ 0.000000]   DMA zone: 25 pages reserved
[ 0.000000]   DMA zone: 3997 pages, LIFO batch:0
[ 0.000000]   DMA32 zone: 7762 pages used for memmap
[ 0.000000]   DMA32 zone: 496711 pages, LIFO batch:31

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[ 0.000000] Normal zone: 57280 pages used for memmap
[ 0.000000] Normal zone: 3665920 pages, LIFO batch:31
[ 0.000000] Reserving Intel graphics memory at 0x000000007c000000-0x000000007fffffff
[ 0.000000] ACPI: PM-Timer IO Port: 0x1808
[ 0.000000] ACPI: Local APIC address 0xfee00000
[ 0.000000] ACPI: LAPIC_NMI (acpi_id[0x01] high edge lint[0x1])
[ 0.000000] ACPI: LAPIC_NMI (acpi_id[0x02] high edge lint[0x1])
[ 0.000000] ACPI: LAPIC_NMI (acpi_id[0x03] high edge lint[0x1])
[ 0.000000] ACPI: LAPIC_NMI (acpi_id[0x04] high edge lint[0x1])
[ 0.000000] IOAPIC[0]: apic_id 2, version 32, address 0xfec00000, GSI 0-119
[ 0.000000] ACPI: INT_SRC_OVR (bus 0 bus_irq 0 global_irq 2 dfl dfl)
[ 0.000000] ACPI: INT_SRC_OVR (bus 0 bus_irq 9 global_irq 9 high level)
[ 0.000000] ACPI: IRQ0 used by override.
[ 0.000000] ACPI: IRQ9 used by override.
[ 0.000000] Using ACPI (MADT) for SMP configuration information
[ 0.000000] ACPI: HPET id: 0x8086a201 base: 0xfed00000
[ 0.000000] smpboot: Allowing 4 CPUs, 0 hotplug CPUs
[ 0.000000] PM: Registered nosave memory: [mem 0x00000000-0x00000fff]
[ 0.000000] PM: Registered nosave memory: [mem 0x00058000-0x00058fff]
[ 0.000000] PM: Registered nosave memory: [mem 0x0009f000-0x000fffff]
[ 0.000000] PM: Registered nosave memory: [mem 0x6e264000-0x6e264fff]
[ 0.000000] PM: Registered nosave memory: [mem 0x6e265000-0x6e265fff]
[ 0.000000] PM: Registered nosave memory: [mem 0x7a448000-0x7a787fff]
[ 0.000000] PM: Registered nosave memory: [mem 0x7a788000-0x7a7c6fff]
[ 0.000000] PM: Registered nosave memory: [mem 0x7a7c7000-0x7afa2fff]
[ 0.000000] PM: Registered nosave memory: [mem 0x7afa3000-0x7b399fff]
[ 0.000000] PM: Registered nosave memory: [mem 0x7b39a000-0x7b3fdfff]
[ 0.000000] PM: Registered nosave memory: [mem 0x7b3ff000-0x7fffffff]
[ 0.000000] PM: Registered nosave memory: [mem 0x80000000-0xffffffff]
[ 0.000000] PM: Registered nosave memory: [mem 0xe0000000-0xefffffff]
[ 0.000000] PM: Registered nosave memory: [mem 0xf0000000-0xfdfdfdfdf]
[ 0.000000] PM: Registered nosave memory: [mem 0xfe000000-0xfe010fff]
[ 0.000000] PM: Registered nosave memory: [mem 0xfe011000-0xfebfffff]
[ 0.000000] PM: Registered nosave memory: [mem 0xfec00000-0xfec00fff]
[ 0.000000] PM: Registered nosave memory: [mem 0xfec01000-0xfecfffff]
[ 0.000000] PM: Registered nosave memory: [mem 0xfed00000-0xfed00fff]
[ 0.000000] PM: Registered nosave memory: [mem 0xfed01000-0xfedfffff]
[ 0.000000] PM: Registered nosave memory: [mem 0xfee00000-0xfee00fff]
[ 0.000000] PM: Registered nosave memory: [mem 0xfee01000-0xfeffffff]
[ 0.000000] PM: Registered nosave memory: [mem 0xff000000-0xffffffff]
[ 0.000000] e820: [mem 0x80000000-0xffffffff] available for PCI devices
[ 0.000000] Booting paravirtualized kernel on bare hardware
[ 0.000000] clocksource: refined-jiffies: mask: 0xffffffff max_cycles: 0xffffffff, max_idle_ns: 7645519
[ 0.000000] setup_percpu: NR_CPUS:8192 nr_cpumask_bits:4 nr_cpu_ids:4 nr_node_ids:1

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[ 0.000000] percpu: Embedded 36 pages/cpu @ffff9c5f7ec00000 s107992 r8192 d31272 u524288
[ 0.000000] pcpu-alloc: s107992 r8192 d31272 u524288 alloc=1*2097152
[ 0.000000] pcpu-alloc: [0] 0 1 2 3
[ 0.000000] Built 1 zonelists in Node order, mobility grouping on. Total pages: 4101497
[ 0.000000] Policy zone: Normal
[ 0.000000] Kernel command line: BOOT_IMAGE=/boot/vmlinuz-4.10.0-37-generic.efi.signed root=UUID=e548bd
[ 0.000000] PID hash table entries: 4096 (order: 3, 32768 bytes)
[ 0.000000] Calgary: detecting Calgary via BIOS EBDA area
[ 0.000000] Calgary: Unable to locate Rio Grande table in EBDA - bailing!
[ 0.000000] Memory: 16047032K/16666512K available (9070K kernel code, 1667K rwdata, 3828K rodata, 2228K
[ 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 64.
[ 0.000000] RCU restricting CPUs from NR_CPUS=8192 to nr_cpu_ids=4.
[ 0.000000] RCU: Adjusting geometry for rcu_fanout_leaf=64, nr_cpu_ids=4
[ 0.000000] NR_IRQS:524544 nr_irqs:1024 16
[ 0.000000] vt handoff: transparent VT on vt#7
[ 0.000000] Console: colour dummy device 80x25
[ 0.000000] console [tty0] enabled
[ 0.000000] clocksource: hpet: mask: 0xffffffff max_cycles: 0xffffffff, max_idle_ns: 79635855245 ns
[ 0.000000] hpet clockevent registered
[ 0.000000] tsc: Detected 3500.000 MHz processor
[ 0.000017] Calibrating delay loop (skipped), value calculated using timer frequency.. 7008.00 BogoMIPS
[ 0.000019] pid_max: default: 32768 minimum: 301
[ 0.000025] ACPI: Core revision 20160930
[ 0.026039] ACPI: 10 ACPI AML tables successfully acquired and loaded
[ 0.026612] Security Framework initialized
[ 0.026612] Yama: becoming mindful.
[ 0.026623] AppArmor: AppArmor initialized
[ 0.027182] Dentry cache hash table entries: 2097152 (order: 12, 16777216 bytes)
[ 0.029300] Inode-cache hash table entries: 1048576 (order: 11, 8388608 bytes)
[ 0.030236] Mount-cache hash table entries: 32768 (order: 6, 262144 bytes)
[ 0.030245] Mountpoint-cache hash table entries: 32768 (order: 6, 262144 bytes)
[ 0.030455] CPU: Physical Processor ID: 0
[ 0.030456] CPU: Processor Core ID: 0
[ 0.030459] ENERGY_PERF_BIAS: Set to 'normal', was 'performance'
[ 0.030459] ENERGY_PERF_BIAS: View and update with x86_energy_perf_policy(8)
[ 0.030464] mce: CPU supports 9 MCE banks
[ 0.030471] CPU0: Thermal monitoring enabled (TM1)
[ 0.030485] process: using mwait in idle threads
[ 0.030487] Last level iTLB entries: 4KB 64, 2MB 8, 4MB 8
[ 0.030487] Last level dTLB entries: 4KB 64, 2MB 0, 4MB 0, 1GB 4
[ 0.030812] Freeing SMP alternatives memory: 32K
[ 0.035906] ftrace: allocating 34228 entries in 134 pages
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[ 0.047482] smpboot: Max logical packages: 2
[ 0.047486] DMAR: Host address width 39
[ 0.047487] DMAR: DRHD base: 0x000000fed90000 flags: 0x0
[ 0.047492] DMAR: dmar0: reg_base_addr fed90000 ver 1:0 cap 1c0000c40660462 ecap 19e2ff0505e
[ 0.047493] DMAR: DRHD base: 0x000000fed91000 flags: 0x1
[ 0.047496] DMAR: dmar1: reg_base_addr fed91000 ver 1:0 cap d2008c40660462 ecap f050da
[ 0.047497] DMAR: RMRR base: 0x0000007a709000 end: 0x0000007a728fff
[ 0.047497] DMAR: RMRR base: 0x0000007b800000 end: 0x0000007fffffff
[ 0.047499] DMAR-IR: IOAPIC id 2 under DRHD base 0xfed91000 IOMMU 1
[ 0.047499] DMAR-IR: HPET id 0 under DRHD base 0xfed91000
[ 0.047500] DMAR-IR: Queued invalidation will be enabled to support x2apic and Intr-remapping.
[ 0.048896] DMAR-IR: Enabled IRQ remapping in x2apic mode
[ 0.048897] x2apic enabled
[ 0.048923] Switched APIC routing to cluster x2apic.
[ 0.052895] ..TIMER: vector=0x30 apic1=0 pin1=2 apic2=-1 pin2=-1
[ 0.092587] TSC deadline timer enabled
[ 0.092592] smpboot: CPU0: Intel(R) Core(TM) i7-7567U CPU @ 3.50GHz (family: 0x6, model: 0x8e, stepping
[ 0.092642] Performance Events: PEBS fmt3+, Skylake events, 32-deep LBR, full-width counters, Intel PMU
[ 0.092663] ... version: 4
[ 0.092663] ... bit width: 48
[ 0.092664] ... generic registers: 4
[ 0.092664] ... value mask: 0000ffffffffffff
[ 0.092664] ... max period: 00007ffffffffffff
[ 0.092665] ... fixed-purpose events: 3
[ 0.092665] ... event mask: 000000070000000f
[ 0.093275] NMI watchdog: enabled on all CPUs, permanently consumes one hw-PMU counter.
[ 0.093284] smp: Bringing up secondary CPUs ...
[ 0.093344] x86: Booting SMP configuration:
[ 0.093344] .... node #0, CPUs: #1 #2 #3
[ 0.094652] smp: Brought up 1 node, 4 CPUs
[ 0.094654] smpboot: Total of 4 processors activated (28032.00 BogomIPS)
[ 0.098467] devtmpfs: initialized
[ 0.098505] x86/mm: Memory block size: 128MB
[ 0.100746] evm: security.selinux
[ 0.100746] evm: security.SMACK64
[ 0.100747] evm: security.SMACK64EXEC
[ 0.100747] evm: security.SMACK64TRANSMUTE
[ 0.100747] evm: security.SMACK64MMAP
[ 0.100748] evm: security.ima
[ 0.100748] evm: security.capability
[ 0.100785] PM: Registering ACPI NVS region [mem 0x6e264000-0x6e264fff] (4096 bytes)
[ 0.100786] PM: Registering ACPI NVS region [mem 0x7a7c7000-0x7afa2fff] (8241152 bytes)
[ 0.100888] clocksource: jiffies: mask: 0xffffffff max_cycles: 0xffffffff, max_idle_ns: 764504178510000
[ 0.100894] futex hash table entries: 1024 (order: 4, 65536 bytes)

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[ 0.100941] pinctrl core: initialized pinctrl subsystem
[ 0.101083] RTC time: 16:30:55, date: 10/27/17
[ 0.101141] NET: Registered protocol family 16
[ 0.114129] cpuidle: using governor ladder
[ 0.130153] cpuidle: using governor menu
[ 0.130159] PCCT header not found.
[ 0.130230] ACPI FADT declares the system doesn't support PCIe ASPM, so disable it
[ 0.130231] ACPI: bus type PCI registered
[ 0.130232] acpiphp: ACPI Hot Plug PCI Controller Driver version: 0.5
[ 0.130272] PCI: MMCONFIG for domain 0000 [bus 00-ff] at [mem 0xe0000000-0xffffffff] (base 0xe0000000)
[ 0.130274] PCI: MMCONFIG at [mem 0xe0000000-0xffffffff] reserved in E820
[ 0.130282] PCI: Using configuration type 1 for base access
[ 0.146303] HugeTLB registered 1 GB page size, pre-allocated 0 pages
[ 0.146303] HugeTLB registered 2 MB page size, pre-allocated 0 pages
[ 0.146438] ACPI: Added _OSI(Module Device)
[ 0.146438] ACPI: Added _OSI(Processor Device)
[ 0.146439] ACPI: Added _OSI(3.0 _SCP Extensions)
[ 0.146439] ACPI: Added _OSI(Processor Aggregator Device)
[ 0.147547] ACPI: Executed 32 blocks of module-level executable AML code
[ 0.157133] ACPI: Dynamic OEM Table Load:
[ 0.157137] ACPI: SSDT 0xFFFF9C5F6C3EA000 0007BC (v02 PmRef Cpu0Ist 00003000 INTL 20160422)
[ 0.157240] ACPI: Executed 1 blocks of module-level executable AML code
[ 0.157297] ACPI: \_PR_.CPU0: _OSC native thermal LVT Acked
[ 0.158143] ACPI: Dynamic OEM Table Load:
[ 0.158146] ACPI: SSDT 0xFFFF9C5F6BD90800 0003FF (v02 PmRef Cpu0Cst 00003001 INTL 20160422)
[ 0.158238] ACPI: Executed 1 blocks of module-level executable AML code
[ 0.158345] ACPI: Dynamic OEM Table Load:
[ 0.158348] ACPI: SSDT 0xFFFF9C5F6BD87400 000115 (v02 PmRef Cpu0Hwp 00003000 INTL 20160422)
[ 0.158422] ACPI: Executed 1 blocks of module-level executable AML code
[ 0.158470] ACPI: Dynamic OEM Table Load:
[ 0.158473] ACPI: SSDT 0xFFFF9C5F6BD87600 0001A4 (v02 PmRef HwpLvt 00003000 INTL 20160422)
[ 0.158541] ACPI: Executed 1 blocks of module-level executable AML code
[ 0.158784] ACPI: Dynamic OEM Table Load:
[ 0.158788] ACPI: SSDT 0xFFFF9C5F6C37B800 00065C (v02 PmRef ApIst 00003000 INTL 20160422)
[ 0.159014] ACPI: Executed 1 blocks of module-level executable AML code
[ 0.159116] ACPI: Dynamic OEM Table Load:
[ 0.159119] ACPI: SSDT 0xFFFF9C5F6BE1AA00 000197 (v02 PmRef ApHwp 00003000 INTL 20160422)
[ 0.159208] ACPI: Executed 1 blocks of module-level executable AML code
[ 0.159316] ACPI: Dynamic OEM Table Load:
[ 0.159319] ACPI: SSDT 0xFFFF9C5F6BD87E00 00018A (v02 PmRef ApCst 00003000 INTL 20160422)
[ 0.159405] ACPI: Executed 1 blocks of module-level executable AML code
[ 0.160496] ACPI : EC: EC started
[ 0.160497] ACPI : EC: interrupt blocked
[ 0.160512] ACPI: \_SB_.PCI0.LPCB.H_EC: Used as first EC
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[ 0.160513] ACPI: \_SB_.PCI0.LPCB.H_EC: GPE=0x14, EC_CMD/EC_SC=0x66, EC_DATA=0x62
[ 0.160514] ACPI: \_SB_.PCI0.LPCB.H_EC: Used as boot DSDT EC to handle transactions
[ 0.160514] ACPI: Interpreter enabled
[ 0.160545] ACPI: (supports S0 S3 S4 S5)
[ 0.160545] ACPI: Using IOAPIC for interrupt routing
[ 0.160574] PCI: Using host bridge windows from ACPI; if necessary, use "pci=nocrs" and report a bug
[ 0.163356] ACPI: Power Resource [WRST] (on)
[ 0.163594] ACPI: Power Resource [WRST] (on)
[ 0.163831] ACPI: Power Resource [WRST] (on)
[ 0.164069] ACPI: Power Resource [WRST] (on)
[ 0.164304] ACPI: Power Resource [WRST] (on)
[ 0.164536] ACPI: Power Resource [WRST] (on)
[ 0.164771] ACPI: Power Resource [WRST] (on)
[ 0.165003] ACPI: Power Resource [WRST] (on)
[ 0.165237] ACPI: Power Resource [WRST] (on)
[ 0.165474] ACPI: Power Resource [WRST] (on)
[ 0.165706] ACPI: Power Resource [WRST] (on)
[ 0.165948] ACPI: Power Resource [WRST] (on)
[ 0.166184] ACPI: Power Resource [WRST] (on)
[ 0.166416] ACPI: Power Resource [WRST] (on)
[ 0.166652] ACPI: Power Resource [WRST] (on)
[ 0.166885] ACPI: Power Resource [WRST] (on)
[ 0.167787] ACPI: Power Resource [WRST] (on)
[ 0.168025] ACPI: Power Resource [WRST] (on)
[ 0.168260] ACPI: Power Resource [WRST] (on)
[ 0.168654] ACPI: Power Resource [WRST] (on)
[ 0.174838] ACPI: PCI Root Bridge [PCI0] (domain 0000 [bus 00-fe])
[ 0.174841] acpi PNP0A08:00: _OSC: OS supports [ExtendedConfig ASPM ClockPM Segments MSI]
[ 0.174958] acpi PNP0A08:00: _OSC: platform does not support [PCIeHotplug PME]
[ 0.175064] acpi PNP0A08:00: _OSC: OS now controls [AER PCIeCapability]
[ 0.175064] acpi PNP0A08:00: FADT indicates ASPM is unsupported, using BIOS configuration
[ 0.175571] PCI host bridge to bus 0000:00
[ 0.175572] pci_bus 0000:00: root bus resource [io 0x0000-0x0cf7 window]
[ 0.175573] pci_bus 0000:00: root bus resource [io 0x0d00-0xffff window]
[ 0.175574] pci_bus 0000:00: root bus resource [mem 0x000a0000-0x000bffff window]
[ 0.175574] pci_bus 0000:00: root bus resource [mem 0x80000000-0xdfffffff window]
[ 0.175575] pci_bus 0000:00: root bus resource [mem 0xfd000000-0xfe7fffff window]
[ 0.175576] pci_bus 0000:00: root bus resource [bus 00-fe]
[ 0.175581] pci 0000:00:00.0: [8086:5904] type 00 class 0x060000
[ 0.175832] pci 0000:00:02.0: [8086:5927] type 00 class 0x030000
[ 0.175840] pci 0000:00:02.0: reg 0x10: [mem 0xdb000000-0xdbffffff 64bit]
[ 0.175844] pci 0000:00:02.0: reg 0x18: [mem 0x90000000-0x9fffffff 64bit pref]
[ 0.175848] pci 0000:00:02.0: reg 0x20: [io 0xf000-0xf03f]
[ 0.175964] pci 0000:00:08.0: [8086:1911] type 00 class 0x088000

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[ 0.175973] pci 0000:00:08.0: reg 0x10: [mem 0xdc34f000-0xdc34ffff 64bit]
[ 0.176097] pci 0000:00:14.0: [8086:9d2f] type 00 class 0x0c0330
[ 0.176113] pci 0000:00:14.0: reg 0x10: [mem 0xdc330000-0xdc33ffff 64bit]
[ 0.176173] pci 0000:00:14.0: PME# supported from D3hot D3cold
[ 0.176296] pci 0000:00:14.0: System wakeup disabled by ACPI
[ 0.176325] pci 0000:00:14.2: [8086:9d31] type 00 class 0x118000
[ 0.176341] pci 0000:00:14.2: reg 0x10: [mem 0xdc34e000-0xdc34efff 64bit]
[ 0.176483] pci 0000:00:16.0: [8086:9d3a] type 00 class 0x078000
[ 0.176502] pci 0000:00:16.0: reg 0x10: [mem 0xdc34d000-0xdc34dfff 64bit]
[ 0.176571] pci 0000:00:16.0: PME# supported from D3hot
[ 0.176689] pci 0000:00:17.0: [8086:9d03] type 00 class 0x010601
[ 0.176704] pci 0000:00:17.0: reg 0x10: [mem 0xdc348000-0xdc349fff]
[ 0.176712] pci 0000:00:17.0: reg 0x14: [mem 0xdc34c000-0xdc34c0ff]
[ 0.176719] pci 0000:00:17.0: reg 0x18: [io 0xf090-0xf097]
[ 0.176727] pci 0000:00:17.0: reg 0x1c: [io 0xf080-0xf083]
[ 0.176734] pci 0000:00:17.0: reg 0x20: [io 0xf060-0xf07f]
[ 0.176740] pci 0000:00:17.0: reg 0x24: [mem 0xdc34b000-0xdc34b7ff]
[ 0.176778] pci 0000:00:17.0: PME# supported from D3hot
[ 0.176887] pci 0000:00:1c.0: [8086:9d10] type 01 class 0x060400
[ 0.176945] pci 0000:00:1c.0: PME# supported from D0 D3hot D3cold
[ 0.177041] pci 0000:00:1c.0: System wakeup disabled by ACPI
[ 0.177077] pci 0000:00:1c.5: [8086:9d15] type 01 class 0x060400
[ 0.177130] pci 0000:00:1c.5: PME# supported from D0 D3hot D3cold
[ 0.177224] pci 0000:00:1c.5: System wakeup disabled by ACPI
[ 0.177248] pci 0000:00:1c.7: [8086:9d17] type 01 class 0x060400
[ 0.177301] pci 0000:00:1c.7: PME# supported from D0 D3hot D3cold
[ 0.177394] pci 0000:00:1c.7: System wakeup disabled by ACPI
[ 0.177415] pci 0000:00:1d.0: [8086:9d18] type 01 class 0x060400
[ 0.177468] pci 0000:00:1d.0: PME# supported from D0 D3hot D3cold
[ 0.177561] pci 0000:00:1d.0: System wakeup disabled by ACPI
[ 0.177611] pci 0000:00:1f.0: [8086:9d4e] type 00 class 0x060100
[ 0.177800] pci 0000:00:1f.2: [8086:9d21] type 00 class 0x058000
[ 0.177810] pci 0000:00:1f.2: reg 0x10: [mem 0xdc344000-0xdc347fff]
[ 0.177951] pci 0000:00:1f.3: [8086:9d71] type 00 class 0x040380
[ 0.177973] pci 0000:00:1f.3: reg 0x10: [mem 0xdc340000-0xdc343fff 64bit]
[ 0.178003] pci 0000:00:1f.3: reg 0x20: [mem 0xdc320000-0xdc32ffff 64bit]
[ 0.178048] pci 0000:00:1f.3: PME# supported from D3hot D3cold
[ 0.178173] pci 0000:00:1f.3: System wakeup disabled by ACPI
[ 0.178202] pci 0000:00:1f.4: [8086:9d23] type 00 class 0x0c0500
[ 0.178248] pci 0000:00:1f.4: reg 0x10: [mem 0xdc34a000-0xdc34a0ff 64bit]
[ 0.178317] pci 0000:00:1f.4: reg 0x20: [io 0xf040-0xf05f]
[ 0.178483] pci 0000:00:1f.6: [8086:15d8] type 00 class 0x020000
[ 0.178501] pci 0000:00:1f.6: reg 0x10: [mem 0xdc300000-0xdc31ffff]
[ 0.178587] pci 0000:00:1f.6: PME# supported from D0 D3hot D3cold

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[ 0.178668] pci 0000:00:1f.6: System wakeup disabled by ACPI
[ 0.178727] pci 0000:00:1c.0: PCI bridge to [bus 01-39]
[ 0.178731] pci 0000:00:1c.0: bridge window [mem 0xc4000000-0xda0fffff]
[ 0.178734] pci 0000:00:1c.0: bridge window [mem 0xa0000000-0xc1ffffff 64bit pref]
[ 0.178819] pci 0000:3a:00.0: [8086:24fd] type 00 class 0x028000
[ 0.178850] pci 0000:3a:00.0: reg 0x10: [mem 0xdc200000-0xdc201fff 64bit]
[ 0.179003] pci 0000:3a:00.0: PME# supported from D0 D3hot D3cold
[ 0.179093] pci 0000:3a:00.0: System wakeup disabled by ACPI
[ 0.179121] pci 0000:00:1c.5: PCI bridge to [bus 3a]
[ 0.179124] pci 0000:00:1c.5: bridge window [mem 0xdc200000-0xdc2ffffff]
[ 0.179214] pci 0000:3b:00.0: [10ec:5229] type 00 class 0xff0000
[ 0.179233] pci 0000:3b:00.0: reg 0x10: [mem 0xdc100000-0xdc100fff]
[ 0.179338] pci 0000:3b:00.0: supports D1 D2
[ 0.179339] pci 0000:3b:00.0: PME# supported from D1 D2 D3hot
[ 0.179405] pci 0000:3b:00.0: System wakeup disabled by ACPI
[ 0.194268] pci 0000:00:1c.7: PCI bridge to [bus 3b]
[ 0.194271] pci 0000:00:1c.7: bridge window [mem 0xdc100000-0xdc1ffffff]
[ 0.194347] pci 0000:3c:00.0: [144d:a804] type 00 class 0x010802
[ 0.194364] pci 0000:3c:00.0: reg 0x10: [mem 0xdc000000-0xdc003fff 64bit]
[ 0.194519] pci 0000:3c:00.0: System wakeup disabled by ACPI
[ 0.194541] pci 0000:00:1d.0: PCI bridge to [bus 3c]
[ 0.194544] pci 0000:00:1d.0: bridge window [mem 0xdc000000-0xdc0ffffff]
[ 0.195941] ACPI: PCI Interrupt Link [LNKA] (IRQs 3 4 5 6 10 *11 12 14 15)
[ 0.195975] ACPI: PCI Interrupt Link [LNKB] (IRQs 3 4 5 6 *10 11 12 14 15)
[ 0.196009] ACPI: PCI Interrupt Link [LNKC] (IRQs 3 4 5 6 10 *11 12 14 15)
[ 0.196043] ACPI: PCI Interrupt Link [LNKD] (IRQs 3 4 5 6 10 *11 12 14 15)
[ 0.196076] ACPI: PCI Interrupt Link [LNKE] (IRQs 3 4 5 6 10 *11 12 14 15)
[ 0.196110] ACPI: PCI Interrupt Link [LNKF] (IRQs 3 4 5 6 10 *11 12 14 15)
[ 0.196143] ACPI: PCI Interrupt Link [LNKG] (IRQs 3 4 5 6 10 *11 12 14 15)
[ 0.196176] ACPI: PCI Interrupt Link [LNKH] (IRQs 3 4 5 6 10 *11 12 14 15)
[ 0.196448] ACPI: Enabled 5 GPEs in block 00 to 7F
[ 0.196486] ACPI : EC: interrupt unblocked
[ 0.196497] ACPI : EC: event unblocked
[ 0.196507] ACPI: \_SB_.PCI0.LPCB.H_EC: GPE=0x14, EC_CMD/EC_SC=0x66, EC_DATA=0x62
[ 0.196508] ACPI: \_SB_.PCI0.LPCB.H_EC: Used as boot DSDT EC to handle transactions and events
[ 0.196688] SCSI subsystem initialized
[ 0.196712] libata version 3.00 loaded.
[ 0.196734] pci 0000:00:02.0: vgaarb: setting as boot VGA device
[ 0.196735] pci 0000:00:02.0: vgaarb: VGA device added: decodes=io+mem,owns=io+mem,locks=None
[ 0.196737] pci 0000:00:02.0: vgaarb: bridge control possible
[ 0.196737] vgaarb: loaded
[ 0.196748] ACPI: bus type USB registered
[ 0.196758] usbcore: registered new interface driver usbfs
[ 0.196762] usbcore: registered new interface driver hub

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[ 0.196770] usbcore: registered new device driver usb
[ 0.196814] Registered efivars operations
[ 0.215556] PCI: Using ACPI for IRQ routing
[ 0.238840] PCI: pci_cache_line_size set to 64 bytes
[ 0.238898] e820: reserve RAM buffer [mem 0x00058000-0x0005ffff]
[ 0.238899] e820: reserve RAM buffer [mem 0x0009f000-0x0009ffff]
[ 0.238899] e820: reserve RAM buffer [mem 0x6e264000-0x6fffffff]
[ 0.238900] e820: reserve RAM buffer [mem 0x7a448000-0x7bfffffff]
[ 0.238901] e820: reserve RAM buffer [mem 0x7b3ff000-0x7bfffffff]
[ 0.238901] e820: reserve RAM buffer [mem 0x47f000000-0x47fffffff]
[ 0.238958] NetLabel: Initializing
[ 0.238958] NetLabel: domain hash size = 128
[ 0.238958] NetLabel: protocols = UNLABELED CIPSOv4 CALIPSO
[ 0.238967] NetLabel: unlabeled traffic allowed by default
[ 0.239070] hpet0: at MMIO 0xfed00000, IRQs 2, 8, 0, 0, 0, 0, 0, 0
[ 0.239072] hpet0: 8 comparators, 64-bit 24.000000 MHz counter
[ 0.241110] clocksource: Switched to clocksource hpet
[ 0.246330] VFS: Disk quotas dquot_6.6.0
[ 0.246340] VFS: Dquot-cache hash table entries: 512 (order 0, 4096 bytes)
[ 0.246400] AppArmor: AppArmor Filesystem Enabled
[ 0.246422] pnp: PnP ACPI init
[ 0.246668] system 00:00: [io 0x0a00-0x0a1f] has been reserved
[ 0.246670] system 00:00: [io 0x0a20-0x0a2f] has been reserved
[ 0.246670] system 00:00: [io 0x0a30-0x0a3f] has been reserved
[ 0.246671] system 00:00: [io 0x0a40-0x0a4f] has been reserved
[ 0.246672] system 00:00: [io 0x0a50-0x0a5f] has been reserved
[ 0.246672] system 00:00: [io 0x0a60-0x0a6f] has been reserved
[ 0.246675] system 00:00: Plug and Play ACPI device, IDs PNP0c02 (active)
[ 0.246843] pnp 00:01: [dma 0 disabled]
[ 0.246861] pnp 00:01: Plug and Play ACPI device, IDs ITE8708 (active)
[ 0.246957] system 00:02: [io 0x0680-0x069f] has been reserved
[ 0.246958] system 00:02: [io 0xffff] has been reserved
[ 0.246959] system 00:02: [io 0xffff] has been reserved
[ 0.246959] system 00:02: [io 0xffff] has been reserved
[ 0.246960] system 00:02: [io 0x1800-0x18fe] has been reserved
[ 0.246961] system 00:02: [io 0x164e-0x164f] has been reserved
[ 0.246962] system 00:02: Plug and Play ACPI device, IDs PNP0c02 (active)
[ 0.247028] pnp 00:03: Plug and Play ACPI device, IDs PNP0b00 (active)
[ 0.247052] system 00:04: [io 0x1854-0x1857] has been reserved
[ 0.247053] system 00:04: Plug and Play ACPI device, IDs INT3f0d PNP0c02 (active)
[ 0.247220] system 00:05: [mem 0xfed10000-0xfed17fff] has been reserved
[ 0.247221] system 00:05: [mem 0xfed18000-0xfed18fff] has been reserved
[ 0.247222] system 00:05: [mem 0xfed19000-0xfed19fff] has been reserved
[ 0.247223] system 00:05: [mem 0xe0000000-0xffffffff] has been reserved

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[ 0.247223] system 00:05: [mem 0xfed20000-0xfed3ffff] has been reserved
[ 0.247224] system 00:05: [mem 0xfed90000-0xfed93fff] could not be reserved
[ 0.247225] system 00:05: [mem 0xfed45000-0xfed8ffff] has been reserved
[ 0.247225] system 00:05: [mem 0xff000000-0xffffffff] has been reserved
[ 0.247226] system 00:05: [mem 0xfe000000-0xfeffffff] could not be reserved
[ 0.247227] system 00:05: [mem 0xdffe0000-0xdfffffff] has been reserved
[ 0.247228] system 00:05: Plug and Play ACPI device, IDs PNP0c02 (active)
[ 0.247254] system 00:06: [mem 0xfd000000-0xfdabffff] has been reserved
[ 0.247255] system 00:06: [mem 0xfdad0000-0xfdadffff] has been reserved
[ 0.247255] system 00:06: [mem 0xfdb00000-0xfdbffffff] has been reserved
[ 0.247256] system 00:06: [mem 0xfe000000-0xfe01ffff] could not be reserved
[ 0.247257] system 00:06: [mem 0xfe036000-0xfe03bfff] has been reserved
[ 0.247257] system 00:06: [mem 0xfe03d000-0xfe3ffffff] has been reserved
[ 0.247258] system 00:06: [mem 0xfe410000-0xfe7ffffff] has been reserved
[ 0.247259] system 00:06: Plug and Play ACPI device, IDs PNP0c02 (active)
[ 0.247468] system 00:07: [io 0xff00-0xfffe] has been reserved
[ 0.247469] system 00:07: Plug and Play ACPI device, IDs PNP0c02 (active)
[ 0.248231] system 00:08: [mem 0xfe029000-0xfe029fff] has been reserved
[ 0.248231] system 00:08: [mem 0xfe028000-0xfe028fff] has been reserved
[ 0.248232] system 00:08: [mem 0xfdaf0000-0xfdaffffff] has been reserved
[ 0.248233] system 00:08: [mem 0xfdae0000-0xfdaeffff] has been reserved
[ 0.248233] system 00:08: [mem 0xfdac0000-0xfdacffff] has been reserved
[ 0.248235] system 00:08: Plug and Play ACPI device, IDs PNP0c02 (active)
[ 0.248820] pnp: PnP ACPI: found 9 devices
[ 0.255373] clocksource: acpi_pm: mask: 0xffffffff max_cycles: 0xffffffff, max_idle_ns: 2085701024 ns
[ 0.255381] pci 0000:00:1c.0: bridge window [io 0x1000-0x0fff] to [bus 01-39] add_size 1000
[ 0.255396] pci 0000:00:1c.0: res[13]=[io 0x1000-0x0fff] res_to_dev_res add_size 1000 min_align 1000
[ 0.255397] pci 0000:00:1c.0: res[13]=[io 0x1000-0x1fff] res_to_dev_res add_size 1000 min_align 1000
[ 0.255399] pci 0000:00:1c.0: BAR 13: assigned [io 0x2000-0x2fff]
[ 0.255400] pci 0000:00:1c.0: PCI bridge to [bus 01-39]
[ 0.255402] pci 0000:00:1c.0: bridge window [io 0x2000-0x2fff]
[ 0.255405] pci 0000:00:1c.0: bridge window [mem 0xc4000000-0xda0ffffff]
[ 0.255407] pci 0000:00:1c.0: bridge window [mem 0xa0000000-0xc1ffffff 64bit pref]
[ 0.255410] pci 0000:00:1c.5: PCI bridge to [bus 3a]
[ 0.255413] pci 0000:00:1c.5: bridge window [mem 0xdc200000-0xdc2ffffff]
[ 0.255417] pci 0000:00:1c.7: PCI bridge to [bus 3b]
[ 0.255420] pci 0000:00:1c.7: bridge window [mem 0xdc100000-0xdc1ffffff]
[ 0.255424] pci 0000:00:1d.0: PCI bridge to [bus 3c]
[ 0.255426] pci 0000:00:1d.0: bridge window [mem 0xdc000000-0xdc0ffffff]
[ 0.255431] pci_bus 0000:00: resource 4 [io 0x0000-0x0cf7 window]
[ 0.255432] pci_bus 0000:00: resource 5 [io 0x0d00-0xffff window]
[ 0.255433] pci_bus 0000:00: resource 6 [mem 0x000a0000-0x000bffff window]
[ 0.255433] pci_bus 0000:00: resource 7 [mem 0x80000000-0xdfffffff window]
[ 0.255434] pci_bus 0000:00: resource 8 [mem 0xfd000000-0xfe7ffffff window]

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[ 0.255435] pci_bus 0000:01: resource 0 [io 0x2000-0x2fff]
[ 0.255435] pci_bus 0000:01: resource 1 [mem 0xc4000000-0xda0fffff]
[ 0.255436] pci_bus 0000:01: resource 2 [mem 0xa0000000-0xc1ffffff 64bit pref]
[ 0.255436] pci_bus 0000:3a: resource 1 [mem 0xdc200000-0xdc2fffff]
[ 0.255437] pci_bus 0000:3b: resource 1 [mem 0xdc100000-0xdc1fffff]
[ 0.255438] pci_bus 0000:3c: resource 1 [mem 0xdc000000-0xdc0fffff]
[ 0.255536] NET: Registered protocol family 2
[ 0.255641] TCP established hash table entries: 131072 (order: 8, 1048576 bytes)
[ 0.255783] TCP bind hash table entries: 65536 (order: 8, 1048576 bytes)
[ 0.255890] TCP: Hash tables configured (established 131072 bind 65536)
[ 0.255910] UDP hash table entries: 8192 (order: 6, 262144 bytes)
[ 0.255943] UDP-Lite hash table entries: 8192 (order: 6, 262144 bytes)
[ 0.256004] NET: Registered protocol family 1
[ 0.256011] pci 0000:00:02.0: Video device with shadowed ROM at [mem 0x000c0000-0x000dffff]
[ 0.256213] PCI: CLS 64 bytes, default 64
[ 0.256253] Unpacking initramfs...
[ 0.680536] Freeing initrd memory: 40852K
[ 0.680579] PCI-DMA: Using software bounce buffering for IO (SWIOTLB)
[ 0.680581] software IO TLB [mem 0x6818d000-0x6c18d000] (64MB) mapped at [ffff9c5b6818d000-ffff9c5b6c18d000]
[ 0.680605] clocksource: tsc: mask: 0xffffffffffffffff max_cycles: 0x3282142a9b0, max_idle_ns: 440795380
[ 0.680705] Scanning for low memory corruption every 60 seconds
[ 0.680970] audit: initializing netlink subsys (disabled)
[ 0.681032] audit: type=2000 audit(1509121855.676:1): initialized
[ 0.681276] Initialise system trusted keyrings
[ 0.681371] workingset: timestamp_bits=36 max_order=22 bucket_order=0
[ 0.682266] zbud: loaded
[ 0.682550] squashfs: version 4.0 (2009/01/31) Phillip Lougher
[ 0.682691] fuse init (API version 7.26)
[ 0.684245] Key type asymmetric registered
[ 0.684245] Asymmetric key parser 'x509' registered
[ 0.684265] Block layer SCSI generic (bsg) driver version 0.4 loaded (major 248)
[ 0.684302] io scheduler noop registered
[ 0.684302] io scheduler deadline registered
[ 0.684306] io scheduler cfq registered (default)
[ 0.684985] pcieport 0000:00:1c.0: AER enabled with IRQ 122
[ 0.685004] pcieport 0000:00:1c.5: AER enabled with IRQ 123
[ 0.685023] pcieport 0000:00:1c.7: AER enabled with IRQ 124
[ 0.685041] pcieport 0000:00:1d.0: AER enabled with IRQ 125
[ 0.685076] efifb: probing for efifb
[ 0.685087] efifb: framebuffer at 0x90000000, using 32448k, total 32448k
[ 0.685088] efifb: mode is 3840x2160x32, linelength=15360, pages=1
[ 0.685088] efifb: scrolling: redraw
[ 0.685089] efifb: Truecolor: size=8:8:8:8, shift=24:16:8:0
[ 0.685231] Console: switching to colour frame buffer device 480x135

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[ 0.685276] fb0: EFI VGA frame buffer device
[ 0.685281] intel_idle: MWAIT substates: 0x11142120
[ 0.685281] intel_idle: v0.4.1 model 0x8E
[ 0.685431] intel_idle: lapic_timer_reliable_states 0xffffffff
[ 0.685501] input: Sleep Button as /devices/LNXSYSTM:00/LNXXSYBUS:00/PNP0C0E:00/input/input0
[ 0.685503] ACPI: Sleep Button [SLPB]
[ 0.685523] input: Power Button as /devices/LNXSYSTM:00/LNXXSYBUS:00/PNP0C0C:00/input/input1
[ 0.685524] ACPI: Power Button [PWRB]
[ 0.685542] input: Power Button as /devices/LNXSYSTM:00/LNXPWRBN:00/input/input2
[ 0.685543] ACPI: Power Button [PWRF]
[ 0.685954] GHES: HEST is not enabled!
[ 0.686001] Serial: 8250/16550 driver, 32 ports, IRQ sharing enabled
[ 0.687041] Linux agpgart interface v0.103
[ 0.688426] loop: module loaded
[ 0.688522] libphy: Fixed MDIO Bus: probed
[ 0.688522] tun: Universal TUN/TAP device driver, 1.6
[ 0.688522] tun: (C) 1999-2004 Max Krasnyansky <maxk@qualcomm.com>
[ 0.688559] PPP generic driver version 2.4.2
[ 0.688587] ehci_hcd: USB 2.0 'Enhanced' Host Controller (EHCI) Driver
[ 0.688588] ehci-pci: EHCI PCI platform driver
[ 0.688594] ehci-platform: EHCI generic platform driver
[ 0.688598] ohci_hcd: USB 1.1 'Open' Host Controller (OHCI) Driver
[ 0.688599] ohci-pci: OHCI PCI platform driver
[ 0.688604] ohci-platform: OHCI generic platform driver
[ 0.688607] uhci_hcd: USB Universal Host Controller Interface driver
[ 0.688708] xhci_hcd 0000:00:14.0: xHCI Host Controller
[ 0.688712] xhci_hcd 0000:00:14.0: new USB bus registered, assigned bus number 1
[ 0.689805] xhci_hcd 0000:00:14.0: hcc params 0x200077c1 hci version 0x100 quirks 0x00109810
[ 0.689809] xhci_hcd 0000:00:14.0: cache line size of 64 is not supported
[ 0.689875] usb usb1: New USB device found, idVendor=1d6b, idProduct=0002
[ 0.689875] usb usb1: New USB device strings: Mfr=3, Product=2, SerialNumber=1
[ 0.689876] usb usb1: Product: xHCI Host Controller
[ 0.689877] usb usb1: Manufacturer: Linux 4.10.0-37-generic xhci-hcd
[ 0.689877] usb usb1: SerialNumber: 0000:00:14.0
[ 0.689979] hub 1-0:1.0: USB hub found
[ 0.689994] hub 1-0:1.0: 12 ports detected
[ 0.695705] xhci_hcd 0000:00:14.0: xHCI Host Controller
[ 0.695707] xhci_hcd 0000:00:14.0: new USB bus registered, assigned bus number 2
[ 0.695725] usb usb2: New USB device found, idVendor=1d6b, idProduct=0003
[ 0.695725] usb usb2: New USB device strings: Mfr=3, Product=2, SerialNumber=1
[ 0.695726] usb usb2: Product: xHCI Host Controller
[ 0.695727] usb usb2: Manufacturer: Linux 4.10.0-37-generic xhci-hcd
[ 0.695727] usb usb2: SerialNumber: 0000:00:14.0
[ 0.695823] hub 2-0:1.0: USB hub found
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[ 0.695831] hub 2-0:1.0: 6 ports detected
[ 0.698644] usb: port power management may be unreliable
[ 0.698805] i8042: PNP: No PS/2 controller found.
[ 0.698928] mousedev: PS/2 mouse device common for all mice
[ 0.699179] rtc_cmos 00:03: RTC can wake from S4
[ 0.699549] rtc_cmos 00:03: rtc core: registered rtc_cmos as rtc0
[ 0.699630] rtc_cmos 00:03: alarms up to one month, y3k, 242 bytes nvram, hpet irqs
[ 0.699633] i2c /dev entries driver
[ 0.699683] device-mapper: uevent: version 1.0.3
[ 0.699723] device-mapper: ioctl: 4.35.0-ioclt (2016-06-23) initialised: dm-devel@redhat.com
[ 0.699725] intel_pstate: Intel P-state driver initializing
[ 0.700087] intel_pstate: HWP enabled
[ 0.700118] ledtrig-cpu: registered to indicate activity on CPUs
[ 0.700119] EFI Variables Facility v0.08 2004-May-17
[ 0.722965] NET: Registered protocol family 10
[ 0.725078] Segment Routing with IPv6
[ 0.725088] NET: Registered protocol family 17
[ 0.725093] Key type dns_resolver registered
[ 0.725307] microcode: sig=0x806e9, pf=0x40, revision=0x62
[ 0.725344] microcode: Microcode Update Driver: v2.2.
[ 0.725428] registered taskstats version 1
[ 0.725438] Loading compiled-in X.509 certificates
[ 0.726680] Loaded X.509 cert 'Build time autogenerated kernel key: ebb0dc598d000e9bec363d7c6e3d1e7183d'
[ 0.726692] zswap: loaded using pool lzo/zbud
[ 0.733354] Key type big_key registered
[ 0.733355] Key type trusted registered
[ 0.734243] Key type encrypted registered
[ 0.734245] AppArmor: AppArmor sha1 policy hashing enabled
[ 0.734246] ima: No TPM chip found, activating TPM-bypass! (rc=-19)
[ 0.734255] evm: HMAC attrs: 0x1
[ 0.734911] Magic number: 5:230:541
[ 0.735099] rtc_cmos 00:03: setting system clock to 2017-10-27 16:30:56 UTC (1509121856)
[ 0.735141] BIOS EDD facility v0.16 2004-Jun-25, 0 devices found
[ 0.735141] EDD information not available.
[ 0.735170] PM: Hibernation image not present or could not be loaded.
[ 0.736078] Freeing unused kernel memory: 2228K
[ 0.736079] Write protecting the kernel read-only data: 14336k
[ 0.736262] Freeing unused kernel memory: 1156K
[ 0.736568] Freeing unused kernel memory: 268K
[ 0.740434] x86/mm: Checked W+X mappings: passed, no W+X pages found.
[ 0.747036] random: systemd-udevd: uninitialized urandom read (16 bytes read)
[ 0.747078] random: systemd-udevd: uninitialized urandom read (16 bytes read)
[ 0.747083] random: systemd-udevd: uninitialized urandom read (16 bytes read)
[ 0.747434] random: udevadm: uninitialized urandom read (16 bytes read)
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[ 0.747446] random: udevadm: uninitialized urandom read (16 bytes read)
[ 0.750219] random: systemd-udev: uninitialized urandom read (16 bytes read)
[ 0.750228] random: systemd-udev: uninitialized urandom read (16 bytes read)
[ 0.750231] random: systemd-udev: uninitialized urandom read (16 bytes read)
[ 0.750414] random: systemd-udev: uninitialized urandom read (16 bytes read)
[ 0.750424] random: systemd-udev: uninitialized urandom read (16 bytes read)
[ 0.771296] FUJITSU Extended Socket Network Device Driver - version 1.2 - Copyright (c) 2015 FUJITSU LI
[ 0.774458] hidraw: raw HID events driver (C) Jiri Kosina
[ 0.789051] wmi: Mapper loaded
[ 0.792200] [drm] Initialized
[ 0.792287] ahci 0000:00:17.0: version 3.0
[ 0.792456] rtsx_pci 0000:3b:00.0: enabling device (0000 -> 0002)
[ 0.792557] ahci 0000:00:17.0: AHCI 0001.0301 32 slots 1 ports 6 Gbps 0x1 impl SATA mode
[ 0.792558] ahci 0000:00:17.0: flags: 64bit ncq pm led clo only pio slum part deso sadm sds apst
[ 0.792618] rtsx_pci 0000:3b:00.0: rtsx_pci_acquire_irq: pcr->msi_en = 1, pci->irq = 128
[ 0.792801] scsi host0: ahci
[ 0.792869] ata1: SATA max UDMA/133 abar m2048@0xdc34b000 port 0xdc34b100 irq 127
[ 0.795257] pps_core: LinuxPPS API ver. 1 registered
[ 0.795258] pps_core: Software ver. 5.3.6 - Copyright 2005-2007 Rodolfo Giometti <giometti@linux.it>
[ 0.796183] PTP clock support registered
[ 0.799712] e1000e: Intel(R) PRO/1000 Network Driver - 3.2.6-k
[ 0.799712] e1000e: Copyright(c) 1999 - 2015 Intel Corporation.
[ 0.799915] e1000e 0000:00:1f.6: Interrupt Throttling Rate (ints/sec) set to dynamic conservative mode
[ 0.805159] nvme nvme0: pci function 0000:3c:00.0
[ 1.021165] usb 1-1: new low-speed USB device number 2 using xhci_hcd
[ 1.040568] nvme0n1: p1 p2 p3
[ 1.044805] e1000e 0000:00:1f.6 0000:00:1f.6 (uninitialized): registered PHC clock
[ 1.105912] ata1: SATA link down (SStatus 4 SControl 300)
[ 1.112546] e1000e 0000:00:1f.6 eth0: (PCI Express:2.5GT/s:Width x1) f4:4d:30:6f:4c:20
[ 1.112547] e1000e 0000:00:1f.6 eth0: Intel(R) PRO/1000 Network Connection
[ 1.112613] e1000e 0000:00:1f.6 eth0: MAC: 12, PHY: 12, PBA No: FFFFFFF-0FF
[ 1.113031] [drm] Found 64MB of eDRAM
[ 1.113309] e1000e 0000:00:1f.6 eno1: renamed from eth0
[ 1.113424] [drm] Memory usable by graphics device = 4096M
[ 1.113425] checking generic (90000000 1fb0000) vs hw (90000000 10000000)
[ 1.113426] fb: switching to inteldrmfb from EFI VGA
[ 1.113442] Console: switching to colour dummy device 80x25
[ 1.113643] [drm] Replacing VGA console driver
[ 1.119541] [drm] Supports vblank timestamp caching Rev 2 (21.10.2013).
[ 1.119542] [drm] Driver supports precise vblank timestamp query.
[ 1.128506] [drm] Finished loading i915/kbl_dmc_ver1_01.bin (v1.1)
[ 1.129305] i915 0000:00:02.0: vgaarb: changed VGA decodes: olddecodes=io+mem,decodes=io+mem:owns=io+me
[ 1.168319] usb 1-1: New USB device found, idVendor=413c, idProduct=2113
[ 1.168320] usb 1-1: New USB device strings: Mfr=0, Product=2, SerialNumber=0

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[ 1.168321] usb 1-1: Product: Dell KB216 Wired Keyboard
[ 1.176082] usbcore: registered new interface driver usbhid
[ 1.176082] usbhid: USB HID core driver
[ 1.177008] input: Dell KB216 Wired Keyboard as /devices/pci0000:00/0000:00:14.0/usb1/1-1/1-1:1.0/0003:
[ 1.233232] hid-generic 0003:413C:2113.0001: input,hidraw0: USB HID v1.11 Keyboard [Dell KB216 Wired Ke
[ 1.234319] input: Dell KB216 Wired Keyboard as /devices/pci0000:00/0000:00:14.0/usb1/1-1/1-1:1.1/0003:
[ 1.293210] hid-generic 0003:413C:2113.0002: input,hidraw1: USB HID v1.11 Device [Dell KB216 Wired Keyb
[ 1.345129] usb 1-2: new high-speed USB device number 3 using xhci_hcd
[ 1.394397] random: fast init done
[ 1.401174] [drm] failed to retrieve link info, disabling eDP
[ 1.423547] [drm] GuC firmware load skipped
[ 1.425143] ACPI: Video Device [GFX0] (multi-head: yes rom: no post: no)
[ 1.425571] acpi device:0f: registered as cooling_device4
[ 1.425625] input: Video Bus as /devices/LNXSYSTM:00/LNXSYBUS:00/PNP0A08:00/LNXVIDEO:00/input/input5
[ 1.425693] [drm] Initialized i915 1.6.0 20161121 for 0000:00:02.0 on minor 0
[ 1.693455] clocksource: Switched to clocksource tsc
[ 1.720172] fbcon: inteldrmfb (fb0) is primary device
[ 1.720261] Console: switching to colour frame buffer device 480x135
[ 1.720337] i915 0000:00:02.0: fb0: inteldrmfb frame buffer device
[ 1.762734] EXT4-fs (nvme0n1p2): mounted filesystem with ordered data mode. Opts: (null)
[ 1.846812] systemd[1]: systemd 229 running in system mode. (+PAM +AUDIT +SELINUX +IMA +APPARMOR +SMACK
[ 1.846883] systemd[1]: Detected architecture x86-64.
[ 1.846973] systemd[1]: Set hostname to <saturn>.
[ 1.874563] systemd[1]: Listening on udev Kernel Socket.
[ 1.874591] systemd[1]: Reached target Remote File Systems (Pre).
[ 1.874607] systemd[1]: Started Forward Password Requests to Wall Directory Watch.
[ 1.874622] systemd[1]: Listening on udev Control Socket.
[ 1.874651] systemd[1]: Listening on Journal Audit Socket.
[ 1.874661] systemd[1]: Listening on fsck to fsckd communication Socket.
[ 1.874664] systemd[1]: Reached target Encrypted Volumes.
[ 1.887726] lp: driver loaded but no devices found
[ 1.893734] ppdev: user-space parallel port driver
[ 1.918482] EXT4-fs (nvme0n1p2): re-mounted. Opts: errors=remount-ro
[ 1.922502] systemd-journald[246]: Received request to flush runtime journal from PID 1
[ 1.966749] tpm_crb MSFT0101:00: can't request region for resource [mem 0xfed40080-0xfed40fff]
[ 1.966757] tpm_crb: probe of MSFT0101:00 failed with error -16
[ 1.982265] ite_cir: Auto-detected model: ITE8708 CIR transceiver
[ 1.982266] ite_cir: Using model: ITE8708 CIR transceiver
[ 1.982267] ite_cir: TX-capable: 1
[ 1.982267] ite_cir: Sample period (ns): 8680
[ 1.982267] ite_cir: TX carrier frequency (Hz): 38000
[ 1.982268] ite_cir: TX duty cycle (%): 33
[ 1.982268] ite_cir: RX low carrier frequency (Hz): 0
[ 1.982269] ite_cir: RX high carrier frequency (Hz): 0
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[ 1.983211] Bluetooth: Core ver 2.22
[ 1.983218] NET: Registered protocol family 31
[ 1.983218] Bluetooth: HCI device and connection manager initialized
[ 1.983220] Bluetooth: HCI socket layer initialized
[ 1.983221] Bluetooth: L2CAP socket layer initialized
[ 1.983224] Bluetooth: SCO socket layer initialized
[ 1.987988] Bluetooth: HCI UART driver ver 2.3
[ 1.987989] Bluetooth: HCI UART protocol H4 registered
[ 1.987989] Bluetooth: HCI UART protocol BCSP registered
[ 1.987990] Bluetooth: HCI UART protocol LL registered
[ 1.987990] Bluetooth: HCI UART protocol ATH3K registered
[ 1.987990] Bluetooth: HCI UART protocol Three-wire (H5) registered
[ 1.988006] Bluetooth: HCI UART protocol Intel registered
[ 1.988012] Bluetooth: HCI UART protocol Broadcom registered
[ 1.988012] Bluetooth: HCI UART protocol QCA registered
[ 1.988012] Bluetooth: HCI UART protocol AG6XX registered
[ 1.988013] Bluetooth: HCI UART protocol Marvell registered
[ 1.999462] (NULL device *): hwmon_device_register() is deprecated. Please convert the driver to use hwmon_device_register()
[ 2.003597] shpchp: Standard Hot Plug PCI Controller Driver version: 0.4
[ 2.004059] mei_me 0000:00:16.0: enabling device (0000 -> 0002)
[ 2.009282] Registered IR keymap rc-rc6-mce
[ 2.009357] input: ITE8708 CIR transceiver as /devices/virtual/rc/rc0/input6
[ 2.009548] rc rc0: ITE8708 CIR transceiver as /devices/virtual/rc/rc0
[ 2.016558] lirc_dev: IR Remote Control driver registered, major 240
[ 2.017420] IR LIRC bridge handler initialized
[ 2.022445] Intel(R) Wireless WiFi driver for Linux
[ 2.022445] Copyright(c) 2003- 2015 Intel Corporation
[ 2.022485] iwlwifi 0000:3a:00.0: enabling device (0000 -> 0002)
[ 2.023307] rc rc0: lirc_dev: driver ir-lirc-codec (ite-cir) registered at minor = 0
[ 2.025472] IR RC6 protocol handler initialized
[ 2.025911] iwlwifi 0000:3a:00.0: Direct firmware load for iwlwifi-8265-26.ucode failed with error -2
[ 2.025925] iwlwifi 0000:3a:00.0: Direct firmware load for iwlwifi-8265-25.ucode failed with error -2
[ 2.025992] iwlwifi 0000:3a:00.0: Direct firmware load for iwlwifi-8265-24.ucode failed with error -2
[ 2.026001] iwlwifi 0000:3a:00.0: Direct firmware load for iwlwifi-8265-23.ucode failed with error -2
[ 2.032536] iwlwifi 0000:3a:00.0: loaded firmware version 22.391740.0 op_mode iwlmvm
[ 2.039164] AVX2 version of gcm_enc/dec engaged.
[ 2.039165] AES CTR mode by8 optimization enabled
[ 2.050686] iwlwifi 0000:3a:00.0: Detected Intel(R) Dual Band Wireless AC 8265, REV=0x230
[ 2.052726] iwlwifi 0000:3a:00.0: L1 Disabled - LTR Enabled
[ 2.053339] iwlwifi 0000:3a:00.0: L1 Disabled - LTR Enabled
[ 2.054442] ite_cir: driver has been successfully loaded
[ 2.073078] random: crng init done
[ 2.132267] intel_rapl: Found RAPL domain package
[ 2.132269] intel_rapl: Found RAPL domain core

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[ 2.132269] intel_rapl: Found RAPL domain uncore
[ 2.132270] intel_rapl: Found RAPL domain dram
[ 2.135843] snd_hda_intel 0000:00:1f.3: bound 0000:00:02.0 (ops i915_audio_component_bind_ops [i915])
[ 2.150315] Adding 16665596k swap on /dev/nvme0n1p3. Priority:-1 extents:1 across:16665596k SSFS
[ 2.165446] snd_hda_codec_realtek hdaudioC0D0: autoconfig for ALC283: line_outs=1 (0x21/0x0/0x0/0x0/0x0)
[ 2.165448] snd_hda_codec_realtek hdaudioC0D0: speaker_outs=0 (0x0/0x0/0x0/0x0/0x0)
[ 2.165449] snd_hda_codec_realtek hdaudioC0D0: hp_outs=0 (0x0/0x0/0x0/0x0/0x0)
[ 2.165450] snd_hda_codec_realtek hdaudioC0D0: mono: mono_out=0x0
[ 2.165450] snd_hda_codec_realtek hdaudioC0D0: inputs:
[ 2.165451] snd_hda_codec_realtek hdaudioC0D0: Mic=0x12
[ 2.173219] ieee80211 phy0: Selected rate control algorithm 'iwl-mvm-rs'
[ 2.173429] (NULL device *): hwmon_device_register() is deprecated. Please convert the driver to use hwmon
[ 2.173445] thermal thermal_zone2: failed to read out thermal zone (-5)
[ 2.202191] iwlwifi 0000:3a:00.0 wlp58s0: renamed from wlan0
[ 2.218021] input: HDA Intel PCH Front Headphone as /devices/pci0000:00/0000:00:1f.3/sound/card0/input7
[ 2.218066] input: HDA Intel PCH HDMI/DP,pcm=3 as /devices/pci0000:00/0000:00:1f.3/sound/card0/input8
[ 2.218245] input: HDA Intel PCH HDMI/DP,pcm=7 as /devices/pci0000:00/0000:00:1f.3/sound/card0/input9
[ 2.218275] input: HDA Intel PCH HDMI/DP,pcm=8 as /devices/pci0000:00/0000:00:1f.3/sound/card0/input10
[ 2.235895] audit: type=1400 audit(1509121857.994:2): apparmor="STATUS" operation="profile_load" profile="unconfined"
[ 2.235897] audit: type=1400 audit(1509121857.994:3): apparmor="STATUS" operation="profile_load" profile="unconfined"
[ 2.235898] audit: type=1400 audit(1509121857.994:4): apparmor="STATUS" operation="profile_load" profile="unconfined"
[ 2.235898] audit: type=1400 audit(1509121857.994:5): apparmor="STATUS" operation="profile_load" profile="unconfined"
[ 2.236315] audit: type=1400 audit(1509121857.994:6): apparmor="STATUS" operation="profile_load" profile="unconfined"
[ 2.236316] audit: type=1400 audit(1509121857.994:7): apparmor="STATUS" operation="profile_load" profile="unconfined"
[ 2.237296] audit: type=1400 audit(1509121857.998:8): apparmor="STATUS" operation="profile_load" profile="unconfined"
[ 2.237297] audit: type=1400 audit(1509121857.998:9): apparmor="STATUS" operation="profile_load" profile="unconfined"
[ 2.238505] audit: type=1400 audit(1509121857.998:10): apparmor="STATUS" operation="profile_load" profile="unconfined"
[ 2.390670] IPv6: ADDRCONF(NETDEV_UP): wlp58s0: link is not ready
[ 2.392721] iwlwifi 0000:3a:00.0: L1 Disabled - LTR Enabled
[ 2.392972] iwlwifi 0000:3a:00.0: L1 Disabled - LTR Enabled
[ 2.508724] iwlwifi 0000:3a:00.0: L1 Disabled - LTR Enabled
[ 2.508975] iwlwifi 0000:3a:00.0: L1 Disabled - LTR Enabled
[ 2.561904] IPv6: ADDRCONF(NETDEV_UP): wlp58s0: link is not ready
[ 2.564297] IPv6: ADDRCONF(NETDEV_UP): eno1: link is not ready
[ 2.749393] IPv6: ADDRCONF(NETDEV_UP): eno1: link is not ready
[ 2.808202] IPv6: ADDRCONF(NETDEV_UP): wlp58s0: link is not ready
[ 2.845635] [drm] RC6 on
[ 3.239667] Bluetooth: BNEP (Ethernet Emulation) ver 1.3
[ 3.239669] Bluetooth: BNEP filters: protocol multicast
[ 3.239672] Bluetooth: BNEP socket layer initialized
[ 6.485547] usb 1-2: device descriptor read/64, error -110
[ 8.935955] wlp58s0: authenticate with dc:ef:09:96:ad:2c
[ 8.938324] wlp58s0: send auth to dc:ef:09:96:ad:2c (try 1/3)
[ 8.947266] wlp58s0: authenticated

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[ 8.949138] wlp58s0: associate with dc:ef:09:96:ad:2c (try 1/3)
[ 8.953000] wlp58s0: RX AssocResp from dc:ef:09:96:ad:2c (capab=0x1411 status=0 aid=8)
[ 8.957048] wlp58s0: associated
[ 8.957073] IPv6: ADDRCONF(NETDEV_CHANGE): wlp58s0: link becomes ready
[ 22.101462] usb 1-2: device descriptor read/64, error -110
[ 22.329396] usb 1-2: new high-speed USB device number 4 using xhci_hcd
[ 27.477465] usb 1-2: device descriptor read/64, error -110
[ 43.137491] usb 1-2: device descriptor read/64, error -110
[ 43.365977] usb 1-2: new high-speed USB device number 5 using xhci_hcd
[ 48.401678] xhci_hcd 0000:00:14.0: Timeout while waiting for setup device command
[ 53.781811] xhci_hcd 0000:00:14.0: Timeout while waiting for setup device command
[ 53.989862] usb 1-2: device not accepting address 5, error -62
[ 54.109968] usb 1-2: new high-speed USB device number 6 using xhci_hcd
[ 59.159957] xhci_hcd 0000:00:14.0: Timeout while waiting for setup device command
[ 64.537054] xhci_hcd 0000:00:14.0: Timeout while waiting for setup device command
[ 64.744844] usb 1-2: device not accepting address 6, error -62
[ 64.744921] usb usb1-port2: unable to enumerate USB device
[ 64.864906] usb 1-3: new low-speed USB device number 7 using xhci_hcd
[ 65.007755] usb 1-3: New USB device found, idVendor=17ef, idProduct=602e
[ 65.007760] usb 1-3: New USB device strings: Mfr=0, Product=2, SerialNumber=0
[ 65.007763] usb 1-3: Product: USB Optical Mouse
[ 65.010785] input: USB Optical Mouse as /devices/pci0000:00/0000:00:14.0/usb1/1-3/1-3:1.0/0003:17EF:602E:0000:0000:0000:0000/input/input12
[ 65.011265] hid-generic 0003:17EF:602E:0003: input,hidraw2: USB HID v1.11 Mouse [USB Optical Mouse] on usb1-lp0-port2
[ 65.188625] usb 1-8: new full-speed USB device number 8 using xhci_hcd
[ 65.329799] usb 1-8: New USB device found, idVendor=8087, idProduct=0a2b
[ 65.329801] usb 1-8: New USB device strings: Mfr=0, Product=0, SerialNumber=0
[ 65.345527] usbcore: registered new interface driver btusb
[ 65.351684] Bluetooth: hci0: Firmware revision 0.1 build 103 week 50 2016
[ 65.403476] Bluetooth: RFCOMM TTY layer initialized
[ 65.403480] Bluetooth: RFCOMM socket layer initialized
[ 65.403483] Bluetooth: RFCOMM ver 1.11
[ 406.938506] usb 1-2: new high-speed USB device number 9 using xhci_hcd
[ 407.078509] usb 1-2: New USB device found, idVendor=2500, idProduct=0020
[ 407.078516] usb 1-2: New USB device strings: Mfr=1, Product=2, SerialNumber=3
[ 407.078521] usb 1-2: Product: WestBridge
[ 407.078525] usb 1-2: Manufacturer: Cypress
[ 407.078528] usb 1-2: SerialNumber: 00000000004BE
[ 484.515656] usb 1-2: USB disconnect, device number 9
[ 484.812009] usb 2-2: new SuperSpeed USB device number 2 using xhci_hcd
[ 484.832979] usb 2-2: LPM exit latency is zeroed, disabling LPM.
[ 484.833954] usb 2-2: New USB device found, idVendor=2500, idProduct=0020
[ 484.833960] usb 2-2: New USB device strings: Mfr=1, Product=2, SerialNumber=3
[ 484.833964] usb 2-2: Product: USRP B200
[ 484.833967] usb 2-2: Manufacturer: Ettus Research LLC

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[484.833970] usb 2-2: SerialNumber: 310FCBA

Here is the output of the Intel's SSU script:

SSU Scan Information

Scan Info:

Version:"1.0.0.0"

Scan Date:"2017/10/27"

Scan Time:"13:57:53"

Scanned Hardware

Computer:

BaseBoard Manufacturer:"Intel Corporation"

Bios Mode:"UEFI"

Bios Version/Date:"BNKBL357.86A.0053.2017.1019.1457,10/19/2017"

CD or DVD:"Not Available"

Platform Role:"Linux saturn 4.10.0-37-generic #41~16.04.1-Ubuntu SMP Fri Oct 6 22:42:59 UTC 2017"

Processor:"Intel(R) Core(TM) i7-7567U CPU @ 3.50GHz"

Serial Number:""

SMBIOS Version:"3.0.0"

Sound Cards:"HDA-Intel - HDA Intel PCH"

Sound Cards:"HDA Intel PCH at 0xdc340000 irq 137"

System Manufacturer:""

System Model:""

System Type:"x64-based PC"

- Display

- "Intel Corporation Device 5927 (rev 06) (prog-if 00 [VGA controller])"

Adapter RAM:"size=256M"

Capabilities:"[40] Vendor Specific Information: Len=0c <?>"

Capabilities:"[70] Express Root Complex Integrated Endpoint, MSI 00"

Capabilities:"[ac] MSI: Enable+ Count=1/1 Maskable- 64bit-"

Capabilities:"[d0] Power Management version 2"

Capabilities:"[100] #1b"

Capabilities:"[200] Address Translation Service (ATS)"

Capabilities:"[300] #13"

Caption:"Intel Corporation Device 5927 (rev 06) (prog-if 00 [VGA controller])"

Device ID:"8086:2068"

Driver:"i915"

Driver Path:"/lib/modules/4.10.0-37-generic/kernel/drivers/gpu/drm/i915/i915.ko"

Driver Provider:"Intel Corporation"

Driver Provider:"Tungsten Graphics, Inc."

Driver Version:""

Flags:"bus master, fast devsel, latency 0, IRQ 134"

I/O Ports:"I/O ports at f000 [size=64]"

Location:"pci@0000:00:02.0"
Manufacturer:"Intel Corporation [8086]"
Power Management Capabilities:"Power Management version 2"
Refresh Rate - Current:"Not Available"
Resolution:"Not Available"

- Memory

Physical Memory (Available):"15270 MB"
Physical Memory (Installed):"15937 MB"
Physical Memory (Total):"32212 MB"

- "ChannelA-DIMM0"

Capacity:"8192 MB"
Configured Clock Speed:"2133 MHz"
Configured Voltage:"1.2 V"
Data Width:"64 bits"
Form Factor:"SODIMM"
Interleave Position:"First Position"
Locator:"ChannelA-DIMM0"
Manufacturer:"859B"
Maximum Voltage:"1.2 V"
Minimum Voltage:"1.2 V"
Part Number:"T8G4SFD824A.C16FHP"
Serial Number:"A02781CE"
Speed:"Not Available"
Type:"Synchronous Unbuffered (Unregistered)"

- "ChannelB-DIMM0"

Capacity:"8192 MB"
Configured Clock Speed:"2133 MHz"
Configured Voltage:"1.2 V"
Data Width:"64 bits"
Form Factor:"SODIMM"
Interleave Position:"First Position"
Locator:"ChannelB-DIMM0"
Manufacturer:"859B"
Maximum Voltage:"1.2 V"
Minimum Voltage:"1.2 V"
Part Number:"T8G4SFD824A.C16FHP"
Serial Number:"A421A673"
Speed:"Not Available"
Type:"Synchronous Unbuffered (Unregistered)"

- Motherboard

Manufacturer:"Intel Corporation"
Product:"NUC7i7BNB"
Serial Number:"GEBN71900LS7"
Version:"J31145-304"

- Networking

- "Intel Corporation Ethernet Connection (4) I219-V (rev 21)"

Supports auto-negotiation:"Yes"

Advertised auto-negotiation:"Yes"

Auto-negotiation:"on"

Availability:"UP BROADCAST MULTICAST MTU:1500 Metric:1"

Capabilities:"[c8] Power Management version 3"

Capabilities:"[d0] MSI: Enable+ Count=1/1 Maskable- 64bit+"

Capabilities:"[e0] PCI Advanced Features"

Caption:"Not Available"

Default IP Gateway:"Not Available"

DHCP Enabled:"Yes"

DHCP Lease Expires:"Not Available"

DHCP Lease Obtained:"Not Available"

DHCP Server:"Not Available"

Driver:"e1000e"

Driver Path:"/lib/modules/4.10.0-37-generic/kernel/drivers/net/ethernet/intel/e1000e/e"

Driver Provider:"Intel Corporation, <linux.nics@intel.com>"

Driver Version:""

Duplex:"Unknown! (255)"

Firmware Version:"0.1-4"

Interface:"enol"

I/O Ports:"Not Available"

IP Address:"Not Available"

IP Subnet:"Not Available"

MAC Address:"f4:4d:30:6f:4c:20"

Location:"00:1f.6"

Manufacturer:"Intel Corporation"

Net Connection ID:"Ethernet"

Port:"Twisted Pair"

Power Management:"Supports Wake-on: pumbg"

Power Management:"Wake-on: g"

Speed:"Unknown!"

Supported link modes:"10baseT/Half 10baseT/Full, 100baseT/Half 100baseT/Full, 1000baseT/Half 1000baseT/Full"

Advertised link modes:"10baseT/Half 10baseT/Full, 100baseT/Half 100baseT/Full, 1000baseT/Half 1000baseT/Full, 1000baseT/Full"

Partner advertised link modes:"Not Available"

- "Intel Corporation Device 24fd (rev 78)"

Auto-Negotiation:"Not Available"

Availability:"UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1"

Capabilities:"[c8] Power Management version 3"

Capabilities:"[d0] MSI: Enable+ Count=1/1 Maskable- 64bit+"

Capabilities:"[40] Express Endpoint, MSI 00"

Capabilities:"[100] Advanced Error Reporting"

Capabilities:"[140] Device Serial Number f8-63-3f-ff-ff-3c-08-25"

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Capabilities:"[14c] Latency Tolerance Reporting"
Capabilities:"[154] L1 PM Substates"
Caption:"Not Available"
Default IP Gateway:"192.168.1.1"
DHCP Enabled:"Yes"
DHCP Lease Expires:"16:18:20"
16:31:04"
DHCP Lease Obtained:"Oct 27 12:31"
DHCP Server:"192.168.1.1"
192.168.1.1"
Driver:"iwlwifi"
Driver Path:":"/lib/modules/4.10.0-37-generic/kernel/drivers/net/wireless/intel/iwlwifi/
Driver Provider:"Copyright(c) 2003- 2015 Intel Corporation <linuxwifi@intel.com>"
Driver Version:""
Duplex:"Not Available"
Firmware Version:"22.391740.0"
Interface:"wlp58s0"
I/O Ports:"Not Available"
IP Address:"192.168.1.2"
IP Subnet:"255.255.255.0"
MAC Address:"f8:63:3f:3c:08:25"
Location:"3a:00.0"
Manufacturer:"Intel Corporation"
Net Connection ID:"Ethernet"
Port:"Not Available"
Power Management:"Not Available"
Speed:"Not Available"
Supported Link Modes:"Not Available"
Advertised link modes:"Not Available"
Partner advertised link modes:"Not Available"
- Operating System
  Boot Device:":"/dev/nvme0n1p2"
  Last Reset:"up 1:27, 1 user, load average: 0.10, 0.03, 0.01"
  Locale:"en_US"
  OS Manufacturer:"Ubuntu 16.04.3 LTS \n \l"
  OS Name:"Ubuntu 16.04.3 LTS \n \l"
  Page File:":"/dev/nvme0n1p3"
  Page File Space (Available):"16665596"
  Page File Space (Used):"0"
  Physical Memory (Available):"15270 MB"
  Physical Memory (Installed):"15937 MB"
  Physical Memory (Total):"32212 MB"
  Version:"4.10.0-37-generic GNU/Linux"
  Virtual Memory (Available):"16665596"

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Virtual Memory (Total):"16320112"

- Processor

- "Intel(R) Core(TM) i7-7567U CPU @ 3.50GHz"

Architecture:"x86_64"

Available:"Offline"

Byte Order:"Little Endian"

Cache Size:"4096 KB"

Caption:"Intel(R) Core(TM) i7-7567U CPU @ 3.50GHz"

- Characteristics

64-bit capable

Enhanced Virtualization

Execute Protection

Hardware Thread

Multi-Core

Power/Performance Control

CPU Speed (Minimum):"3907.379"

CPU Speed (Maximum):"2400 MHz"

Current Voltage:"1.0 V"

External Clock:"100 MHz"

Family:"Core i7"

- Flags

"ACPI (ACPI supported)"

"APIC (On-chip APIC hardware supported)"

"CLFSH (CLFLUSH instruction supported)"

"CMOV (Conditional move instruction supported)"

"CX8 (CMPXCHG8 instruction supported)"

"DE (Debugging extension)"

"DS (Debug store)"

"FPU (Floating-point unit on-chip)"

"FXSR (FXSAVE and FXSTOR instructions supported)"

"HTT (Multi-threading)"

"MCA (Machine check architecture)"

"MCE (Machine check exception)"

"MMX (MMX technology supported)"

"MSR (Model specific registers)"

"MTRR (Memory type range registers)"

"PAE (Physical address extension)"

"PAT (Page attribute table)"

"PBE (Pending break enabled)"

"PGE (Page global enable)"

"PSE-36 (36-bit page size extension)"

"PSE (Page size extension)"

"SEP (Fast system call)"

"SSE2 (Streaming SIMD extensions 2)"

"SSE (Streaming SIMD extensions)"
"SS (Self-snoop)"
"TM (Thermal monitor supported)"
"TSC (Time stamp counter)"
"VME (Virtual mode extension)"
ID:"E9 06 08 00 FF FB EB BF"
Level 1 Cache:"32K"
Level 2 Cache:"256K"
Level 3 Cache:"4096K"
Load:"load average: 0.10, 0.03, 0.01"
Manufacturer:"Intel(R) Corporation"
Model:"142"
Name:"Intel(R) Core(TM) i7-7567U CPU @ 3.50GHz"
Number of Cores:"2"
Number of Cores - Enabled:"2"
Part Number:"To Be Filled By O.E.M."
Socket Designation:"U3E1"
Status:"Populated, Enabled"
Version:"Intel(R) Core(TM) i7-7567U CPU @ 3.50GHz"
Voltage:"1.0 V"
Virtualization:"Not Available"

- Storage