

```
==> ext2load mmc 1:1 11000000 ${fdtfile}
49272 bytes read in 101 ms (475.6 KiB/s)
==> ext2load mmc 1:1 10800000 ${uimage}
4565488 bytes read in 261 ms (16.7 MiB/s)
==> bootm 10800000 - 11000000
## Booting kernel from Legacy Image at 10800000 ...
  Image Name:   Linux-3.10.17-rel1.0+g232293e
  Image Type:   ARM Linux Kernel Image (uncompressed)
  Data Size:    4565424 Bytes = 4.4 MiB
  Load Address: 10008000
  Entry Point: 10008000
  Verifying Checksum ... OK
## Flattened Device Tree blob at 11000000
  Booting using the fdt blob at 0x11000000
  Loading Kernel Image ... OK
  Using Device Tree in place at 11000000, end 1100f077
Using machid 0x10e9 from environment
```

Starting kernel ...

Booting Linux on physical CPU 0x0

Linux version 3.10.17-rel1.0+g232293e (safedrive@wippen) (gcc version 4.8.2 (GCC)) #1 SMP PREEMPT Tue Mar 22 12:25:40 IST 2016

CPU: ARMv7 Processor [412fc09a] revision 10 (ARMv7), cr=10c53c7d

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

Machine: Freescale i.MX6 Quad/DualLite (Device Tree), model: Kontron SMARC-sAMX6 i module

cma: CMA: reserved 320 MiB at 3c000000

Memory policy: ECC disabled, Data cache writealloc

PERCPU: Embedded 8 pages/cpu @81825000 s8832 r8192 d15744 u32768

Built 1 zonelists in Zone order, mobility grouping on. Total pages: 260096

Kernel command line: console=ttymx0,115200 root=/dev/mmcbk0p1 rw video=mxcfb0:dev=ldb,LDB-XGA,if=RGB666 video=mxcfb1:dev=hdmi,1920x1080M@60,if=RGB24

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: 1024MB = 1024MB total

Memory: 702540k/702540k available, 346036k reserved, 0K highmem

Virtual kernel memory layout:

```
vector : 0xffff0000 - 0xffff1000 ( 4 kB)
fixmap : 0xffff0000 - 0xfffe0000 ( 896 kB)
vmalloc : 0xc0800000 - 0xff000000 (1000 MB)
lowmem  : 0x80000000 - 0xc0000000 (1024 MB)
pkmap   : 0x7fe00000 - 0x80000000 ( 2 MB)
modules : 0x7f000000 - 0x7fe00000 ( 14 MB)
 .text  : 0x80008000 - 0x80763594 (7534 kB)
 .init  : 0x80764000 - 0x8079c280 ( 225 kB)
 .data  : 0x8079e000 - 0x807d63e0 ( 225 kB)
 .bss   : 0x807d63e0 - 0x8083dcdc ( 415 kB)
```

SLUB: HWalign=64, Order=0-3, MinObjects=0, CPUs=4, Nodes=1

Preemptible hierarchical RCU implementation.

NR_IRQS:16 nr_irqs:16 16

L310 cache controller enabled
l2x0: 16 ways, CACHE_ID 0x410000c7, AUX_CTRL 0x32070000, Cache size: 1048576 B
sched_clock: 32 bits at 3000kHz, resolution 333ns, wraps every 1431655ms
CPU identified as i.MX6Q, silicon rev 1.2
Console: colour dummy device 80x30
Calibrating delay loop... 1581.05 BogoMIPS (lpj=7905280)
pid_max: default: 32768 minimum: 301
Mount-cache hash table entries: 512
CPU: Testing write buffer coherency: ok
CPU0: thread -1, cpu 0, socket 0, mpidr 80000000
Setting up static identity map for 0x8056ffe0 - 0x80570038
CPU1: Booted secondary processor
CPU1: thread -1, cpu 1, socket 0, mpidr 80000001
CPU2: Booted secondary processor
CPU2: thread -1, cpu 2, socket 0, mpidr 80000002
CPU3: Booted secondary processor
CPU3: thread -1, cpu 3, socket 0, mpidr 80000003
Brought up 4 CPUs
SMP: Total of 4 processors activated (6324.22 BogoMIPS).
CPU: All CPU(s) started in SVC mode.
devtmpfs: initialized
pinctrl core: initialized pinctrl subsystem
regulator-dummy: no parameters
NET: Registered protocol family 16
DMA: preallocated 256 KiB pool for atomic coherent allocations
Use WDOG1 as reset source
syscon 20c8000.anatop: regmap [mem 0x020c8000-0x020c8fff] registered
vdd1p1: 800 <--> 1375 mV at 1125 mV
vdd3p0: 2800 <--> 3150 mV at 3000 mV
vdd2p5: 2000 <--> 2750 mV at 2425 mV
cpu: 725 <--> 1450 mV at 1150 mV
vddpu: 725 <--> 1450 mV at 1150 mV
vddsoc: 725 <--> 1450 mV at 1175 mV
syscon 20e0000.iomuxc-gpr: regmap [mem 0x020e0000-0x020e0037] registered
syscon 21bc000.ocotp-ctrl: regmap [mem 0x021bc000-0x021bffff] registered
hw-breakpoint: found 5 (+1 reserved) breakpoint and 1 watchpoint registers.
hw-breakpoint: maximum watchpoint size is 4 bytes.
imx6q-pinctrl 20e0000.iomuxc: initialized IMX pinctrl driver
bio: create slab <bio-0> at 0
V_3V3_S5: 3300 mV
V_1V8_S5: 1800 mV
V_3V3_S0: 3300 mV
V_1V0_S0: 1000 mV
V_31V9_BKLT: 12000 mV
V_3V3_SDCARD: 3300 mV
platform 66.regulator: Driver reg-fixed-voltage requests probe deferral
platform 67.regulator: Driver reg-fixed-voltage requests probe deferral
SCSI subsystem initialized
usbcore: registered new interface driver usbfs
usbcore: registered new interface driver hub
usbcore: registered new device driver usb
i2c-gpio i2c-gpio-0.23: using pins 28 (SDA) and 30 (SCL)

i2c-gpio i2c-gpio-1.24: using pins 106 (SDA) and 6 (SCL)
i2c-gpio i2c-gpio-2.25: using pins 21 (SDA) and 19 (SCL)
i2c i2c-3: IMX I2C adapter registered
i2c i2c-4: IMX I2C adapter registered
i2c i2c-5: IMX I2C adapter registered
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
imx-ipuv3 2400000.ipu: IPU DMFC NORMAL mode: 1(0~1), 5B(4,5), 5F(6,7)
imx-ipuv3 2800000.ipu: IPU DMFC NORMAL mode: 1(0~1), 5B(4,5), 5F(6,7)
MIPI CSI2 driver module loaded
Advanced Linux Sound Architecture Driver Initialized.
cfg80211: Calling CRDA to update world regulatory domain
Switching to clocksource mxc_timer1
PCI host bridge to bus 0000:00
pci_bus 0000:00: root bus resource [io 0x1000-0x10000]
pci_bus 0000:00: root bus resource [mem 0x01000000-0x01efffff]
pci_bus 0000:00: No busn resource found for root bus, will use [bus 00-ff]
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 0x01000000-0x010fffff]
pci 0000:00:00.0: BAR 8: assigned [mem 0x01100000-0x011fffff]
pci 0000:00:00.0: BAR 9: assigned [mem 0x01200000-0x012fffff pref]
pci 0000:00:00.0: BAR 6: assigned [mem 0x01300000-0x0130ffff pref]
pci 0000:01:00.0: BAR 0: assigned [mem 0x01100000-0x0111ffff 64bit]
pci 0000:01:00.0: BAR 6: assigned [mem 0x01200000-0x0120ffff pref]
pci 0000:00:00.0: PCI bridge to [bus 01]
pci 0000:00:00.0: bridge window [mem 0x01100000-0x011fffff]
pci 0000:00:00.0: bridge window [mem 0x01200000-0x012fffff pref]
NET: Registered protocol family 2
TCP established hash table entries: 8192 (order: 4, 65536 bytes)
TCP bind hash table entries: 8192 (order: 4, 65536 bytes)
TCP: Hash tables configured (established 8192 bind 8192)
TCP: reno registered
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.
hw perfevents: enabled with ARMv7 Cortex-A9 PMU driver, 7 counters available
pureg-dummy: no parameters
imx6_busfreq busfreq.15: DDR medium rate not supported.
Bus freq driver module loaded
VFS: Disk quotas dquot_6.5.2
Dquot-cache hash table entries: 1024 (order 0, 4096 bytes)
NFS: Registering the id_resolver key type
Key type id_resolver registered
Key type id_legacy registered

jffs2: version 2.2. (NAND) © 2001-2006 Red Hat, Inc.
fuse init (API version 7.22)
msgmni has been set to 2012
io scheduler noop registered (default)
imx-weim 21b8000.weim: WEIM driver registered.
mxc_sdc_fb fb.19: register mxc display driver ldb
imx-ipuv3 2400000.ipu: IPU DMFC DP HIGH RESOLUTION: 1(0,1), 5B(2~5), 5F(6,7)
Console: switching to colour frame buffer device 128x48
mxc_sdc_fb fb.19: timeout when waiting for flip irq
mxc_sdc_fb fb.20: register mxc display driver hdmi
mxc_hdmi 20e0000.hdmi_video: Detected HDMI controller 0x13:0xa:0xa0:0xc1
fbcv: 1920x1080@60: CVT Name - 2.073M9
imx-sdma 20ec000.sdma: no iram assigned, using external mem
imx-sdma 20ec000.sdma: loaded firmware 1.1
imx-sdma 20ec000.sdma: initialized
pfuze100-regulator 0-0008: Full lay: 1, Metal lay: 1
pfuze100-regulator 0-0008: FAB: 0, FIN: 1
V_CORE_S0: 300 <--> 1875 mV at 1375 mV
V_VDDSOC_S0: 300 <--> 1875 mV at 1375 mV
V_3V15_S0: 800 <--> 3300 mV at 3150 mV
SW3A: 400 <--> 1975 mV at 1500 mV
SW3B: 400 <--> 1975 mV at 1500 mV
V_1V8_S0: 800 <--> 1975 mV at 1800 mV
V_5V0_S0: 5000 <--> 5150 mV at 5000 mV
VSNVS: 1000 <--> 3000 mV at 3000 mV
VREFDDR: 750 mV
VGEN1: 800 <--> 1550 mV at 1200 mV
VGEN2: 800 <--> 1550 mV at 1500 mV
VGEN3: 1800 <--> 3300 mV at 1800 mV
VGEN4: 1800 <--> 3300 mV at 1800 mV
V_2V5_S0: 1800 <--> 3300 mV at 2500 mV
VGEN6: 1800 <--> 3300 mV at 2800 mV
Serial: IMX driver
2020000.serial: ttyimxc0 at MMIO 0x2020000 (irq = 58) is a IMX
console [ttyimxc0] enabled
21e8000.serial: ttyimxc1 at MMIO 0x21e8000 (irq = 59) is a IMX
21f0000.serial: ttyimxc3 at MMIO 0x21f0000 (irq = 61) is a IMX
21f4000.serial: ttyimxc4 at MMIO 0x21f4000 (irq = 62) is a IMX
[drm] Initialized drm 1.1.0 20060810
[drm] Initialized vivante 1.0.0 20120216 on minor 0
loop: module loaded
at24 5-0050: 4096 byte 24c32 EEPROM, writable, 8 bytes/write
Wait for CR ACK error!
sata phy RX_PLL is stable!
ahci: SSS flag set, parallel bus scan disabled
ahci ahci: AHCI 0001.0300 32 slots 1 ports 3 Gbps 0x1 impl platform mode
ahci ahci: flags: ncq sntf stag pm led clo only pmp pio slum part ccc apst
scsi0 : ahci_platform
ata1: SATA max UDMA/133 mmio [mem 0x02200000-0x02203fff] port 0x100 irq 71
spi_imx 200c000.ecspi: probed
m25p80 spi0.0: found w25q16, expected w25q64dw
m25p80 spi0.0: w25q16 (1024 Kbytes)

3 ofpart partitions found on MTD device spi0.0
Creating 3 MTD partitions on "spi0.0":
0x000000000000-0x0000000c0000 : "bootloader"
0x0000000c0000-0x0000000d0000 : "environment"
0x0000000d0000-0x000000080000 : "user"
mtd: partition "user" extends beyond the end of device "spi0.0" -- size truncated to 0x30000
spi_imx 2014000.ecspi: probed
CAN device driver interface
platform 2090000.can: Driver flexcan requests probe deferral
platform 2094000.can: Driver flexcan requests probe deferral
libphy: fec_enet_mii_bus: probed
fec 2188000.ethernet eth0: registered PHC device 0
ehci_hcd: USB 2.0 'Enhanced' Host Controller (EHCI) Driver
ehci-pci: EHCI PCI platform driver
usbcore: registered new interface driver usb-storage
ci_hdrc ci_hdrc.1: doesn't support gadget
ci_hdrc ci_hdrc.1: EHCI Host Controller
ci_hdrc ci_hdrc.1: new USB bus registered, assigned bus number 1
ci_hdrc ci_hdrc.1: USB 2.0 started, EHCI 1.00
hub 1-0:1.0: USB hub found
hub 1-0:1.0: 1 port detected
mousedev: PS/2 mouse device common for all mice
snvs_rtc 20cc034.snvs-rtc-lp: rtc core: registered 20cc034.snvs-rtc-lp as rtc0
i2c /dev entries driver
mxc_v4l2_output v4l2_out.28: V4L2 device registered as video16
mxc_v4l2_output v4l2_out.28: V4L2 device registered as video17
mxc_v4l2_output v4l2_out.28: V4L2 device registered as video18
mxc_v4l2_output v4l2_out.28: V4L2 device registered as video19
imx2-wdt 20bc000.wdog: IMX2+ Watchdog Timer enabled. timeout=60s (nowayout=0)
cpuidle: using governor ladder
cpuidle: using governor menu
sdhci: Secure Digital Host Controller Interface driver
sdhci: Copyright(c) Pierre Ossman
sdhci-pltfm: SDHCI platform and OF driver helper
mmc0: no vqmmc regulator found
mmc0: SDHCI controller on 2198000.usdhc [2198000.usdhc] using ADMA
mmc1: no vqmmc regulator found
mmc1: no vmmc regulator found
mmc1: SDHCI controller on 219c000.usdhc [219c000.usdhc] using ADMA

U-Boot 2015.04-00025-gaa1cf09 (Jul 21 2015 - 15:28:22)

CPU: Freescale i.MX6Q rev1.2 at 792 MHz
Board: Kontron SMARC-sAMX6
I2C: ready
DRAM: 1 GiB
MMC: FSL_SDHC: 0, FSL_SDHC: 1, FSL_SDHC: 2
SF: Detected W25Q16DW with page size 4 KiB, total 2 MiB
SF: Detected W25Q16DW with page size 4 KiB, total 2 MiB
Display: LCD_1024x768@LVDS (Resolution: 1024x768 [px], LVDS clk 72 [MHz])

In: serial
Out: serial
Err: serial
Selected Boot source: Carrier SD Card
Net: FEC [PRIME]
Hit any key to stop autoboot: 0
49272 bytes read in 104 ms (461.9 KiB/s)
4565488 bytes read in 264 ms (16.5 MiB/s)
Booting kernel from Legacy Image at 10800000 ...
Image Name: Linux-3.10.17-rel1.0+g232293e
Image Type: ARM Linux Kernel Image (uncompressed)
Data Size: 4565424 Bytes = 4.4 MiB
Load Address: 10008000
Entry Point: 10008000
Verifying Checksum ... OK
Wrong Ramdisk Image Format
Ramdisk image is corrupt or invalid