

U-Boot SPL 2020.07-08693-g68bef09-dirty (Dec 17 2020 - 11:24:04 +0000)

Trying to boot from MMC1

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CPU: Altera SoCFPGA Platform

FPGA: Altera Cyclone V, SE/A6 or SX/C6 or ST/D6, version 0x0

BOOT: SD/MMC Internal Transceiver (3.0V)

Watchdog enabled

DRAM: 1 GiB

MMC: dwmmc0@ff704000: 0

Loading Environment from MMC... \*\*\* Warning - bad CRC, using default environment

In: serial

Out: serial

Err: serial

Model: My Custom SoC Board

Net:

Error: ethernet@ff702000 address not set.

No ethernet found.

Hit any key to stop autoboot: 0

2312740 bytes read in 116 ms (19 MiB/s)

switch to partitions #0, OK

mmc0 is current device

Scanning mmc 0:1...

Found /extlinux/extlinux.conf

Retrieving file: /extlinux/extlinux.conf

235 bytes read in 3 ms (76.2 KiB/s)

1: my custom soc board

Retrieving file: /extlinux/./zImage

4696112 bytes read in 233 ms (19.2 MiB/s)

append: root=/dev/mmcblk0p3 rootwait rw earlycon console=,115200

Retrieving file: /extlinux/./socfpga\_cyclone5\_my\_custom\_soc\_board.dtb

26541 bytes read in 4 ms (6.3 MiB/s)

## Flattened Device Tree blob at 02000000

Booting using the fdt blob at 0x2000000

Loading Device Tree to 09ff6000, end 09fff7ac ... OK

Starting kernel ...

Deasserting all peripheral resets

[ 0.000000] Booting Linux on physical CPU 0x0

[ 0.000000] Linux version 4.14.130-ltsi-altera (oe-user@oe-host) (gcc version 8.3.0 (GCC)) #1 SMP Thu Dec 17 11:35:37 UTC 2020

[ 0.000000] CPU: ARMv7 Processor [413fc090] revision 0 (ARMv7), cr=10c5387d

[ 0.000000] CPU: PIPT / VIPT nonaliasing data cache, VIPT aliasing instruction cache

[ 0.000000] OF: fdt: Machine model: My Custom SoC Board

[ 0.000000] earlycon: uart0 at MMIO32 0xffc02000 (options '115200n8')

[ 0.000000] bootconsole [uart0] enabled

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[ 0.000000] Memory policy: Data cache writealloc
[ 0.000000] cma: Reserved 16 MiB at 0x3f000000
[ 0.000000] percpu: Embedded 16 pages/cpu s35980 r8192 d21364 u65536
[ 0.000000] Built 1 zonelists, mobility grouping on. Total pages: 260608
[ 0.000000] Kernel command line: root=/dev/mmcblk0p3 rootwait rw earlycon console=,115200
[ 0.000000] PID hash table entries: 4096 (order: 2, 16384 bytes)
[ 0.000000] Dentry cache hash table entries: 131072 (order: 7, 524288 bytes)
[ 0.000000] Inode-cache hash table entries: 65536 (order: 6, 262144 bytes)
[ 0.000000] Memory: 1010988K/1048576K available (7168K kernel code, 526K rwdata, 1640K rodata, 1024K
init, 136K bss, 21204K reserved, 16384K cma-reserved, 245760K highmem)
[ 0.000000] Virtual kernel memory layout:
[ 0.000000]   vector : 0xffff0000 - 0xffff1000   ( 4 kB)
[ 0.000000]   fixmap : 0xffc00000 - 0xffff0000   (3072 kB)
[ 0.000000]   vmalloc : 0xf0800000 - 0xff800000   ( 240 MB)
[ 0.000000]   lowmem  : 0xc0000000 - 0xf0000000   ( 768 MB)
[ 0.000000]   pkmap   : 0xbfe00000 - 0xc0000000   ( 2 MB)
[ 0.000000]   modules : 0xbf000000 - 0xbfe00000   ( 14 MB)
[ 0.000000]   .text : 0xc0008000 - 0xc0800000   (8160 kB)
[ 0.000000]   .init : 0xc0b00000 - 0xc0c00000   (1024 kB)
[ 0.000000]   .data : 0xc0c00000 - 0xc0c839a8   ( 527 kB)
[ 0.000000]   .bss : 0xc0c8a074 - 0xc0cac458   ( 137 kB)
[ 0.000000] SLUB: HWalign=64, Order=0-3, MinObjects=0, CPUs=2, Nodes=1
[ 0.000000] ftrace: allocating 25872 entries in 76 pages
[ 0.000000] Hierarchical RCU implementation.
[ 0.000000] RCU event tracing is enabled.
[ 0.000000] NR_IRQS: 16, nr_irqs: 16, preallocated irqs: 16
[ 0.000000] L2C-310 erratum 769419 enabled
[ 0.000000] L2C-310 enabling early BRESP for Cortex-A9
[ 0.000000] L2C-310 full line of zeros enabled for Cortex-A9
[ 0.000000] L2C-310 ID prefetch enabled, offset 8 lines
[ 0.000000] L2C-310 dynamic clock gating enabled, standby mode enabled
[ 0.000000] L2C-310 cache controller enabled, 8 ways, 512 kB
[ 0.000000] L2C-310: CACHE_ID 0x410030c9, AUX_CTRL 0x76460001
[ 0.000000] clocksource: timer1: mask: 0xffffffff max_cycles: 0xffffffff, max_idle_ns: 19112604467 ns
[ 0.000005] sched_clock: 32 bits at 100MHz, resolution 10ns, wraps every 21474836475ns
[ 0.007887] Switching to timer-based delay loop, resolution 10ns
[ 0.014031] Console: colour dummy device 80x30
[ 0.018481] Calibrating delay loop (skipped), value calculated using timer frequency.. 200.00 BogoMIPS
(lpj=1000000)
[ 0.028968] pid_max: default: 32768 minimum: 301
[ 0.033658] Mount-cache hash table entries: 2048 (order: 1, 8192 bytes)
[ 0.040246] Mountpoint-cache hash table entries: 2048 (order: 1, 8192 bytes)
[ 0.047718] CPU: Testing write buffer coherency: ok
[ 0.052615] CPU0: Spectre v2: using BPIALL workaround
[ 0.057811] CPU0: thread -1, cpu 0, socket 0, mpidr 80000000
[ 0.063846] Setting up static identity map for 0x100000 - 0x100060
[ 0.070099] Hierarchical SRCU implementation.
[ 0.074894] smp: Bringing up secondary CPUs ...
[ 0.079990] CPU1: thread -1, cpu 1, socket 0, mpidr 80000001
[ 0.079995] CPU1: Spectre v2: using BPIALL workaround
[ 0.090757] smp: Brought up 1 node, 2 CPUs
[ 0.094838] SMP: Total of 2 processors activated (400.00 BogoMIPS).
```

[ 0.101097] CPU: All CPU(s) started in SVC mode.  
[ 0.106553] devtmpfs: initialized  
[ 0.113754] random: get\_random\_u32 called from bucket\_table\_alloc+0x108/0x238 with crng\_init=0  
[ 0.122602] VFP support v0.3: implementor 41 architecture 3 part 30 variant 9 rev 4  
[ 0.130396] clocksource: jiffies: mask: 0xffffffff max\_cycles: 0xffffffff, max\_idle\_ns: 19112604462750000 ns  
[ 0.140227] futex hash table entries: 512 (order: 3, 32768 bytes)  
[ 0.147735] NET: Registered protocol family 16  
[ 0.153800] DMA: preallocated 256 KiB pool for atomic coherent allocations  
[ 0.161849] hw-breakpoint: found 5 (+1 reserved) breakpoint and 1 watchpoint registers.  
[ 0.169820] hw-breakpoint: maximum watchpoint size is 4 bytes.  
[ 0.191740] vgaarb: loaded  
[ 0.194714] SCSI subsystem initialized  
[ 0.198678] usbcore: registered new interface driver usbfs  
[ 0.204303] usbcore: registered new interface driver hub  
[ 0.209655] usbcore: registered new device driver usb  
[ 0.214837] usb\_phy\_generic soc:usbphy: soc:usbphy supply vcc not found, using dummy regulator  
[ 0.223791] pps\_core: LinuxPPS API ver. 1 registered  
[ 0.228748] pps\_core: Software ver. 5.3.6 - Copyright 2005-2007 Rodolfo Giometti <giometti@linux.it>  
[ 0.237883] PTP clock support registered  
[ 0.242011] FPGA manager framework  
[ 0.246417] clocksource: Switched to clocksource timer1  
[ 0.297284] NET: Registered protocol family 2  
[ 0.302117] TCP established hash table entries: 8192 (order: 3, 32768 bytes)  
[ 0.309235] TCP bind hash table entries: 8192 (order: 4, 65536 bytes)  
[ 0.315757] TCP: Hash tables configured (established 8192 bind 8192)  
[ 0.322208] UDP hash table entries: 512 (order: 2, 16384 bytes)  
[ 0.328143] UDP-Lite hash table entries: 512 (order: 2, 16384 bytes)  
[ 0.334605] NET: Registered protocol family 1  
[ 0.339246] RPC: Registered named UNIX socket transport module.  
[ 0.345140] RPC: Registered udp transport module.  
[ 0.349847] RPC: Registered tcp transport module.  
[ 0.354528] RPC: Registered tcp NFSv4.1 backchannel transport module.  
[ 0.361571] hw perfevents: enabled with armv7\_cortex\_a9 PMU driver, 7 counters available  
[ 0.371065] workingset: timestamp\_bits=30 max\_order=18 bucket\_order=0  
[ 0.385126] NFS: Registering the id\_resolver key type  
[ 0.390227] Key type id\_resolver registered  
[ 0.394392] Key type id\_legacy registered  
[ 0.398420] Installing knfsd (copyright (C) 1996 okir@monad.swb.de).  
[ 0.405354] ntfs: driver 2.1.32 [Flags: R/W].  
[ 0.409933] jffs2: version 2.2. (NAND) © 2001-2006 Red Hat, Inc.  
[ 0.417090] bounce: pool size: 64 pages  
[ 0.420923] io scheduler noop registered (default)  
[ 0.425692] io scheduler mq-deadline registered  
[ 0.430383] io scheduler kyber registered  
[ 0.437614] dma-pl330 ffe01000.pdma: Loaded driver for PL330 DMAC-341330  
[ 0.444318] dma-pl330 ffe01000.pdma: DBUFF-512x8bytes Num\_Chans-8 Num\_Peri-32 Num\_Events-8  
[ 0.456199] Serial: 8250/16550 driver, 2 ports, IRQ sharing disabled  
[ 0.463692] ffc02000.serial0: ttyS0 at MMIO 0xffc02000 (irq = 36, base\_baud = 6250000) is a 16550A  
[ 0.473357] ffc03000.serial1: ttyS1 at MMIO 0xffc03000 (irq = 37, base\_baud = 6250000) is a 16550A  
[ 0.483751] brd: module loaded  
[ 0.493322] loop: module loaded  
[ 0.497403] libphy: Fixed MDIO Bus: probed

[ 0.502160] CAN device driver interface  
[ 0.506537] socfpga-dwmac ff702000.ethernet: PTP uses main clock  
[ 0.512725] socfpga-dwmac ff702000.ethernet: Ring mode enabled  
[ 0.518559] socfpga-dwmac ff702000.ethernet: DMA HW capability register supported  
[ 0.526009] socfpga-dwmac ff702000.ethernet: Enhanced/Alternate descriptors  
[ 0.532969] socfpga-dwmac ff702000.ethernet: Extended descriptors not supported  
[ 0.540257] socfpga-dwmac ff702000.ethernet: RX Checksum Offload Engine supported  
[ 0.547714] socfpga-dwmac ff702000.ethernet: COE Type 2  
[ 0.552915] socfpga-dwmac ff702000.ethernet: TX Checksum insertion supported  
[ 0.559950] socfpga-dwmac ff702000.ethernet (unnamed net\_device) (uninitialized): device MAC address 9e:7c:df:96:8b:96  
[ 0.578060] libphy: stmmac: probed  
[ 0.581457] Micrel KSZ9021 Gigabit PHY stmmac-0:01: attached PHY driver [Micrel KSZ9021 Gigabit PHY] (mii\_bus:phy\_addr=stmmac-0:01, irq=POLL)  
[ 0.595110] dwc2 ffb40000.usb: ffb40000.usb supply vusb\_d not found, using dummy regulator  
[ 0.603420] dwc2 ffb40000.usb: ffb40000.usb supply vusb\_a not found, using dummy regulator  
[ 0.611808] dwc2 ffb40000.usb: EPs: 16, dedicated fifos, 8064 entries in SPRAM  
[ 0.619682] dwc2 ffb40000.usb: DWC OTG Controller  
[ 0.624385] dwc2 ffb40000.usb: new USB bus registered, assigned bus number 1  
[ 0.631467] dwc2 ffb40000.usb: irq 38, io mem 0xffb40000  
[ 0.637396] hub 1-0:1.0: USB hub found  
[ 0.641164] hub 1-0:1.0: 1 port detected  
[ 0.645707] usbcore: registered new interface driver usb-storage  
[ 0.652075] i2c /dev entries driver  
[ 0.655623] IR NEC protocol handler initialized  
[ 0.660165] IR RC5(x/sz) protocol handler initialized  
[ 0.665192] IR RC6 protocol handler initialized  
[ 0.669710] IR JVC protocol handler initialized  
[ 0.674218] IR Sony protocol handler initialized  
[ 0.678821] IR SANYO protocol handler initialized  
[ 0.683501] IR Sharp protocol handler initialized  
[ 0.688194] IR MCE Keyboard/mouse protocol handler initialized  
[ 0.693997] IR XMP protocol handler initialized  
[ 0.699503] Synopsys Designware Multimedia Card Interface Driver  
[ 0.705839] dw\_mmc ff704000.dwmmc0: IDMAC supports 32-bit address mode.  
[ 0.712541] dw\_mmc ff704000.dwmmc0: Using internal DMA controller.  
[ 0.718714] dw\_mmc ff704000.dwmmc0: Version ID is 240a  
[ 0.723870] dw\_mmc ff704000.dwmmc0: DW MMC controller at irq 31,32 bit host data width,1024 deep fifo  
[ 0.733243] mmc\_host mmc0: card is polling.  
[ 0.776422] mmc\_host mmc0: Bus speed (slot 0) = 50000000Hz (slot req 400000Hz, actual 396825HZ div = 63)  
[ 0.806773] ledtrig-cpu: registered to indicate activity on CPUs  
[ 0.812915] usbcore: registered new interface driver usbhid  
[ 0.818482] usbhid: USB HID core driver  
[ 0.822617] fpga\_manager fpga0: Altera SOCFPGA FPGA Manager registered  
[ 0.829626] altera\_hps2fpga\_bridge ff400000.fpga\_bridge: fpga bridge [lwhps2fpga] registered  
[ 0.838296] altera\_hps2fpga\_bridge ff500000.fpga\_bridge: fpga bridge [hps2fpga] registered  
[ 0.847003] oprofile: using arm/armv7-ca9  
[ 0.851612] NET: Registered protocol family 10  
[ 0.856803] Segment Routing with IPv6  
[ 0.860512] sit: IPv6, IPv4 and MPLS over IPv4 tunneling driver  
[ 0.866946] NET: Registered protocol family 17

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[ 0.871389] NET: Registered protocol family 15
[ 0.875811] can: controller area network core (rev 20170425 abi 9)
[ 0.882043] NET: Registered protocol family 29
[ 0.886483] can: raw protocol (rev 20170425)
[ 0.890733] can: broadcast manager protocol (rev 20170425 t)
[ 0.896374] can: netlink gateway (rev 20170425) max_hops=1
[ 0.902013] 8021q: 802.1Q VLAN Support v1.8
[ 0.906211] Key type dns_resolver registered
[ 0.910563] ThumbEE CPU extension supported.
[ 0.914819] Registering SWP/SWPB emulation handler
[ 0.922008] of-fpga-region soc:base-fpga-region: FPGA Region probed
[ 0.928718] hctosys: unable to open rtc device (rtc0)
[ 0.933778] of_cfs_init
[ 0.936299] of_cfs_init: OK
[ 0.939377] Warning: unable to open an initial console.
[ 0.944720] Waiting for root device /dev/mmcblk0p3...
[ 0.985231] mmc_host mmc0: Bus speed (slot 0) = 500000000Hz (slot req 500000000Hz, actual 500000000HZ
div = 0)
[ 0.994995] mmc0: new high speed SDHC card at address 0007
[ 1.000818] mmcblk0: mmc0:0007 SS08G 7.21 GiB
[ 1.006422] mmcblk0: p1 p2 p3
[ 1.102520] EXT4-fs (mmcblk0p3): mounted filesystem with ordered data mode. Opts: (null)
[ 1.110642] VFS: Mounted root (ext4 filesystem) on device 179:3.
[ 1.116780] random: fast init done
[ 1.121023] devtmpfs: mounted
[ 1.126495] Freeing unused kernel memory: 1024K
[ 1.474048] udevd[753]: starting version 3.2.7
[ 1.480253] random: udevd: uninitialized urandom read (16 bytes read)
[ 1.488165] random: udevd: uninitialized urandom read (16 bytes read)
[ 1.494653] random: udevd: uninitialized urandom read (16 bytes read)
[ 1.509525] udevd[753]: specified group 'kvm' unknown
[ 1.532283] udevd[754]: starting eudev-3.2.7
[ 1.823926] EXT4-fs (mmcblk0p3): re-mounted. Opts: data=ordered
[ 2.607112] Micrel KSZ9021 Gigabit PHY stmmac-0:01: attached PHY driver [Micrel KSZ9021 Gigabit
PHY] (mii_bus:phy_addr=stmmac-0:01, irq=POLL)
[ 2.622174] socfpga-dwmac ff702000.ethernet eth0: registered PTP clock
[ 2.628818] IPv6: ADDRCONF(NETDEV_UP): eth0: link is not ready
[ 5.767212] socfpga-dwmac ff702000.ethernet eth0: Link is Up - 100Mbps/Full - flow control rx/tx
[ 5.775990] IPv6: ADDRCONF(NETDEV_CHANGE): eth0: link becomes ready
[ 9.908925] urandom_read: 3 callbacks suppressed
[ 9.908930] random: dbus-uuidgen: uninitialized urandom read (12 bytes read)
[ 9.920687] random: dbus-uuidgen: uninitialized urandom read (8 bytes read)
[ 9.972266] random: dbus-daemon: uninitialized urandom read (12 bytes read)
[ 10.115036] ttyS0 - failed to request DMA
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Poky (Yocto Project Reference Distro) 2.7.4 my-custom-soc-board /dev/ttyS0

my-custom-soc-board login: