

boot

enabling mmu

FLASH_BASE=00000000

PXA: Evacuating 1MB of Flash to DRAM at: A3E00000

done

Map Flash virtual section to DRAM at: A3E00000

setting flashword=50000000

Flash style = 2x16

verify flash size...

btflash_init: mfrid=00890089

devid=00180018

mfrid=00890089

deviceid=00180018

walking flash descriptors (2x16)

btflash_init: found flash 28F128J3A

flashDescriptor=0002DEC8

flashSectors=0002C6A4

nsectors=00000080

flash_size=02000000

flash_address_mask=01FFFFFF

mach_type ->0000012F

reset_partitions: partition_table = 0x00000000

reset_partitions: flashDescriptor = 0x0002DEC8

define_partition: base 0x00000000

define_partition: partition_table 0x00000000

```
boot
allocated partition_table
defining partition: bootldr
define_partition: base 0x00040000
define_partition: partition_table 0xA3A00014
defining partition: root
initialize_by_mach_type done
probing ram
Probing bank0 memory size...
  bank0 memory size=04000000
MDCNFG=00001ACB
Probing memory size bank=00000000
maybe mem_size=04000000
found=
04000000
Probing memory size bank=00000001
seems to be no dram in bank=00000001
n_banks=00000001
dram_sizes[0]=04000000
dram_sizes[1]=FFFFFFF
SDRAM size: 0x04000000
  in megs: 64M
>> Compaq OHH BootLoader ported to Stargate 7.1, Rev 2-21-13 [BIG_KERNEL] [MONO]
>> 04-06-04_15:58
>> Last link date: Fri Jun  4 15:58:22 PDT 2004
```

boot

>> Contact: bootldr@handhelds.org

Cpu company: INTEL

Cpu Architecture: XScale

Cpu Part: PXA255

>> ARM Processor Rev=00050000

>> (c) 2000-2001 Compaq Computer Corporation, provided with NO WARRANTY under the terms of the GNU General Public License.

>> See <http://www.handhelds.org/bootldr/> for full license and sources
Press Return to start the OS now, any other key for monitor menu

found partition table in params sector

pt->npartitions=00000004

partition_table_size=000000B8

define_partition: base 0x00000000

define_partition: partition_table 0xA3A00014

defining partition: bootldr

define_partition: base 0x00040000

define_partition: partition_table 0xA3A00014

defining partition: params

define_partition: base 0x00080000

define_partition: partition_table 0xA3A00014

defining partition: kernel

define_partition: base 0x00140000

define_partition: partition_table 0xA3A00014

defining partition: root

```
boot
+ set macaddr "00:50:C2:2F:39:BA"
  setting param <macaddr> to value <00:50:C2:2F:39:BA>
+ set ipaddr "10.1.1.172"
  setting param <ipaddr> to value <10.1.1.172>
+ set gateway "10.1.1.221"
  setting param <gateway> to value <10.1.1.221>
+ set netmask "255.255.255.0"
  setting param <netmask> to value <255.255.255.0>
+ set serverip "10.1.1.205"
  setting param <serverip> to value <10.1.1.205>
+ set loadmethod "tftp"
  setting param <loadmethod> to value <tftp>
+ set netcfg "manual"
  setting param <netcfg> to value <manual>
+ set boot_flags 0x00000004
  setting param <boot_flags> to value <0x00000004>
+ set enable_mmu 1
  setting param <enable_mmu> to value <1>
```

MAC address: 00:50:C2:2F:39:BA

RXSTAT error: 000000FF

booting flash...

booting kernel from partition >kernel<

kernel partition base 50080000

kernel_magic=E1A00000

boot

kernel_region_words[9]=016F2818

Linux ELF flash_imgstart=50080000 size=000C0000 dest=A0000000 offset=00008000

MMU Control=00000079

MMU PIDVAM=00000000

copying Linux kernel ... done

root_filesystem_name=initrd

Grabbed linuxargs, argc = 00000002

Using mach_type 0000012F

haystack = < root=/dev/mtdblock3 console=ttyS0,115200 >

needle = <ip=>

command line is:

mtdparts=platx:0x00040000@0x00000000(bootldr)ro,0x00040000@0x00040000(params),0x000C0000@0x00080000(kernel),0x01EC0000@0x00140000(root) root=/dev/mtdblock3
console=ttyS0,115200 ip=10.1.1.172::10.1.1.221:255.255.255.0::eth0
rootfstype=jffs2

linuxEntryPoint=A0008000

Booting Linux image

Uncompressing Linux..... done, booting the kernel.

Linux version 2.4.19-rmk7-pxa2-star (epp@clyde) (gcc version 3.3.2) #1 Fri Aug 13 12:58:00 PDT 2004

STARGATE Version 7.2

CPU: XScale-PXA255 revision 6

Machine: Intel STARGATE Development Platform

Ignoring unrecognised tag 0x00000000

Memory clock: 99.53MHz (*27)

Run Mode clock: 199.07MHz (*2)

boot

Turbo Mode clock: 398.13MHz (*2.0, active)

On node 0 totalpages: 30720

zone(0): 2048 pages.

zone(1): 14336 pages.

zone(2): 0 pages.

Parsing command line:

```
mtdparts=platx:0x00040000@0x00000000(bootldr)ro,0x00040000@0x00040000(params),0x000C0000@0x00080000(kernel),0x01EC0000@0x00140000(root) root=/dev/mtdblock3
console=ttyS0,115200 ip=10.1.1.172::10.1.1.221:255.255.255.0::eth0
rootfstype=jffs2
```

Kernel command line:

```
mtdparts=platx:0x00040000@0x00000000(bootldr)ro,0x00040000@0x00040000(params),0x000C0000@0x00080000(kernel),0x01EC0000@0x00140000(root) root=/dev/mtdblock3
console=ttyS0,115200 ip=10.1.1.172::10.1.1.221:255.255.255.0::eth0
rootfstype=jffs2
```

Calibrating delay loop... 397.31 BogoMIPS

Memory: 64MB = 64MB total

Memory: 63104KB available (1364K code, 266K data, 64K init)

Dentry cache hash table entries: 8192 (order: 4, 65536 bytes)

Inode cache hash table entries: 4096 (order: 3, 32768 bytes)

Mount-cache hash table entries: 1024 (order: 1, 8192 bytes)

Buffer-cache hash table entries: 4096 (order: 2, 16384 bytes)

Page-cache hash table entries: 16384 (order: 4, 65536 bytes)

POSIX conformance testing by UNIFIX

Linux NET4.0 for Linux 2.4

Based upon Swansea University Computer Society NET3.039

Initializing RT netlink socket

Detected Stargate version 1.1Configuring LEDs OFF when suspended

```
boot
Registered config CONFIG_WAKEUPTIME in slot 0

Starting kswapd

Journalled Block Device driver loaded

devfs: v1.12a (20020514) Richard Gooch (rgooch@atnf.csiro.au)
devfs: boot_options: 0x1

JFFS2 version 2.1. (C) 2001 Red Hat, Inc., designed by Axis Communications AB.
pty: 256 Unix98 ptys configured

Serial driver version 5.05c (2001-07-08) with no serial options enabled
ttyS00 at 0x0000 (irq = 16) is a PXA UART
ttyS01 at 0x0000 (irq = 1) is a PXA UART
ttyS02 at 0x0000 (irq = 14) is a PXA UART

Uniform Multi-Platform E-IDE driver Revision: 6.31
ide: Assuming 50MHz system bus speed for PIO modes; override with idebus=xx
eth0: cs8900 rev K found at 0xf1000000 TAP cs89x0 reset...

cs89x0: Extended EEPROM checksum bad and no Cirrus EEPROM, relying on command line
cs89x0 media RJ-45, IRQ 26, programmed I/O
cs89x0 MAC address: 00:50:c2:2f:39:ba

loop: loaded (max 8 devices)

Probing Stargate flash at physical address 0x00000000 (32-bit buswidth)

Using buffer write method

Using command line partition definition

Creating 4 MTD partitions on "Stargate flash":
0x00000000-0x00040000 : "bootldr"
```

boot

0x00040000-0x00080000 : "params"

0x00080000-0x00140000 : "kernel"

0x00140000-0x02000000 : "root"

Linux Kernel Card Services 3.1.22

options: [pm]

Intel PXA250/210 PCMCIA (CS release 3.1.22)

Registered config CONFIG_PCMCIAPC in slot 1

pcmcia_pc_control -1 0

pcmcia_pc_control 0 0

pcmcia_pc_control 1 0

Platx LED driver installed

NET4: Linux TCP/IP 1.0 for NET4.0

IP Protocols: ICMP, UDP, TCP, IGMP

IP: routing cache hash table of 512 buckets, 4Kbytes

TCP: Hash tables configured (established 4096 bind 8192)

Linux IP multicast router 0.06 plus PIM-SM

cs89x0 net_open (initialized=0)

TAP cs89x0 reset...

TAP cs89x0 checking/waiting for valid link indicator...

TAP cs89x0 not ready, waiting... (20)

TAP cs89x0 not ready, waiting... (19)

TAP cs89x0 not ready, waiting... (18)

TAP cs89x0 not ready, waiting... (17)

TAP cs89x0 not ready, waiting... (16)

boot

TAP cs89x0 not ready, waiting... (15)

TAP cs89x0 not ready, waiting... (14)

TAP cs89x0 not ready, waiting... (13)

TAP cs89x0 not ready, waiting... (12)

TAP cs89x0 not ready, waiting... (11)

TAP cs89x0 not ready, waiting... (10)

TAP cs89x0 not ready, waiting... (9)

TAP cs89x0 not ready, waiting... (8)

TAP cs89x0 not ready, waiting... (7)

TAP cs89x0 not ready, waiting... (6)

TAP cs89x0 not ready, waiting... (5)

TAP cs89x0 not ready, waiting... (4)

TAP cs89x0 not ready, waiting... (3)

TAP cs89x0 not ready, waiting... (2)

TAP cs89x0 not ready, waiting... (1)

cs89x0: Could not initialize the driver. Check the cable.

IP-Config: Failed to open eth0

IP-Config: Device `eth0' not found.

ip_contrack (512 buckets, 4096 max)

ip_tables: (C) 2000-2002 Netfilter core team

arp_tables: (C) 2002 David S. Miller

NET4: Unix domain sockets 1.0/SMP for Linux NET4.0.

NET4: Ethernet Bridge 008 for NET4.0

NetWinder Floating Point Emulator V0.95 (c) 1998-1999 Rebel.com

boot

TAP PCMCIA conf 1 flags 000 at 33

TAP PCMCIA done at 33

TAP PCMCIA conf 1 flags 240 at 33

TAP PCMCIA done at 33

TAP PCMCIA conf 1 flags 200 at 33

TAP PCMCIA done at 33

VFS: Mounted root (jffs2 filesystem).

Mounted devfs on /dev

Freeing init memory: 64K

INIT: version 2.78 booting

Mounting local filesystems...

warning: can't open /etc/mtab: No such file or directory

ramfs on /mnt/ramfs type ramfs (rw)

devpts on /dev/pts type devpts (rw,mode=0622)

Done with default mountall.

Mounting local filesystems...

mount: ramfs already mounted on /mnt/ramfs

mount: devpts already mounted on /dev/pts

nothing was mounted

mount: proc already mounted

Done with default mountall.

mkdir: cannot create directory `/mnt/ramfs/var': File exists

mkdir: cannot create directory `/mnt/ramfs/tmp': File exists

Cleaning: /etc/network/ifstate.

```
boot
Calculating module dependencies... done.
Loading modules: onewire Platx onewire driver installed.
sa1100-rtc SA1100 Real Time Clock driver v1.00
Onewire error: crc mismatch
regmon gpiomon confmon
Creating link to /dev/misc/rtc
Setting the System Clock using the Hardware Clock as reference...
INIT: Entering runlevel: 2
Cleaning: /tmp find: invalid argument '-' to '-ctime'
/var/lock /var/run.
Configuring network interfaces: /etc/network/if-up.d/eth0: appcontrol: command not
found
run-parts: /etc/network/if-up.d/eth0 exited with return code 127
done.
modprobe: modprobe: Can't locate module binfmt-0000
modprobe: modprobe: Can't locate module binfmt-0000
Starting PCMCIA services: cardmgr.
cardmgr[103]: starting, version is 3.1.22
cardmgr[103]: watching 2 sockets
cardmgr[103]: socket 1: Fulbond Airbond XI-300B
cardmgr[103]: executing: 'modprobe hostap_crypt'
cardmgr[103]: + modprobe: Can't locate module hostap_crypt
cardmgr[103]: modprobe exited with status 255
cardmgr[103]: module /lib/modules/2.4.19-rmk7-pxa2-star/pcmcia/hostap_crypt.o not
available
```

```
boot
cardmgr[103]: executing: 'modprobe hostap'
cardmgr[103]: executing: 'modprobe hostap_cs'
hostap_cs: 0.1.3 - 2004-02-08 (Jouni Malinen <jkmaline@cc.hut.fi>)
TAP PCMCIA conf 1 flags 200 at 45
TAP PCMCIA done at 45
TAP PCMCIA conf 1 flags 220 at 45
Enable PCMCIA irq 155
enable_irq(155) unbalanced from c00e8af4
TAP PCMCIA done at 45
hostap_cs: index 0x01: Vcc 3.3, irq 155, io 0xf7000000-0xf700003f
hostap_cs: Registered netdevice wlan0
wlan0: NIC: id=0x801b v1.0.0
wlan0: PRI: id=0x15 v1.1.1
wlan0: STA: id=0x1f v1.8.0
cardmgr[103]: executing: './network start wlan0'
cardmgr[103]: exiting
modprobe: modprobe: Can't locate module binfmt-0000
modprobe: modprobe: Can't locate module binfmt-0000
Starting BlueZ HCI server: hcid.
Starting OpenBSD Secure Shell server: sshd.
modprobe: modprobe: Can't locate module binfmt-0000
modprobe: modprobe: Can't locate module binfmt-0000
usb.c: registered new driver usbdevfs
usb.c: registered new driver hub
```

boot
Pre-allocating 32 buffers for pool 0xc3ef5160
Pre-allocating 32 buffers for pool 0xc3ef55a0
usb-ohci.c: USB OHCI at membase 0xf4000400, IRQ 149
usb.c: new USB bus registered, assigned bus number 1
hub.c: USB hub found
hub.c: 1 port detected
Enabling remote wakeup...
SCSI subsystem driver Revision: 1.00
Initializing USB Mass Storage driver...
usb.c: registered new driver usb-storage
USB Mass Storage support registered.

stargate login: