

How to switch boot firmware

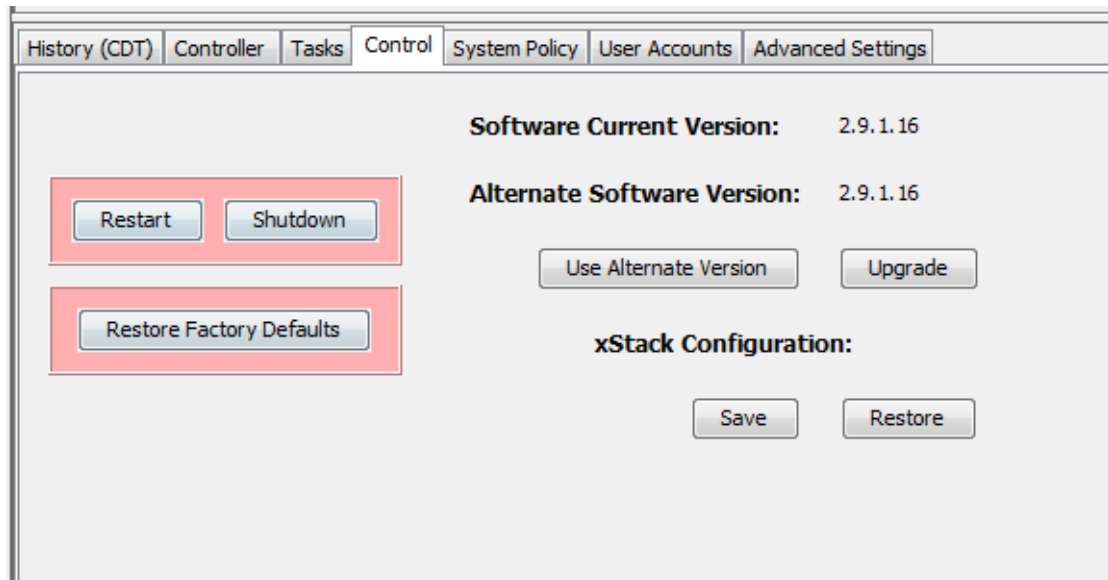
Scenario:

When your original DSN device boot firmware was broken, you can reference this document to change your boot firmware.

This procedure just for DSN-1100, 2100, 3200 and 4000 series.

Tip:

DSN device have 2 boot firmware, “current software” and “alternate software”, please see below screenshot.



Now, please follow below procedure to switch your boot firmware. **Blue word** is key point! When you finished this procedure, you should use “alternate software” to boot up this device.

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Promise Version: 2.9.2.5

U-Boot 1.1.6 (Jan 5 2012 - 02:03:33),
Build: Automated:Beta

CPU: Unknown, Version: 1.1, (0x80720011)

Core: E500, Version: 2.0, (0x80200020)

Clock Configuration:

CPU: 533 MHz, CCB: 266 MHz,

DDR: 133 MHz, LBC: 33 MHz

L1: D-cache 32 kB enabled

I-cache 32 kB enabled

PCI: 64 bit, 66 MHz (compiled)

initializing local bus

gl2C: Resetting the i2c bus 81 a6 81

ready

DRAM: Initializing

DDR: 128 MB

boardID = XC080009

bladeType = 4, mgmtPortType = 2

Now running in RAM - U-Boot at: 07fa0000 board_init_r@07fac470

FLASH: CFI conformant FLASH (16 x 16) Size: 2 MB in 39 Sectors

Erase timeout 8192 ms, write timeout 500 ms, buffer write timeout 500 ms, buffer size 1

Sector Start Addresses:

FFE00000 RO FFE10000 RO FFE20000 RO FFE30000 RO FFE40000
RO

FFE50000 RO FFE60000 RO FFE70000 RO FFE80000 RO FFE90000
RO

FFEA0000 RO FFEB0000 RO FFEC0000 RO FFED0000 RO FFEE0000
RO

FFEF0000 RO FFF00000 RO FFF10000 RO FFF20000 RO FFF30000
RO

FFF40000 RO FFF50000 RO FFF60000 RO FFF70000 RO FFF80000
RO
FFF90000 RO FFFA0000 RO FFFB0000 RO FFFC0000 RO FFFD0000
RO
FFFE0000 RO FFFF0000 RO FFFF2000 RO FFFF4000 RO FFFF6000
RO
FFFF8000 RO FFFFA000 RO FFFFC000 RO FFFFE000 RO
2 2 MB

L2 cache 256KB: enabled

BR1(5008):ff008881 OR1(500c):ffff84f0 MAMR(5070):00000000

MAMR changed to 10000000 for RAM write

[fff32c30] [0ff00c30] [0ff00c30] [0ff00c30]
[0ff02c34] [fff30c31] [fffffc30] [fffffc30]
[ffff3c30] [0fff3c30] [0faf3c30] [0faf3c30]
[0faf3c30] [0fff3c34] [ffff3c31] [fffffc30]
[fff3fc30] [0ff3fc30] [0fa3fc30] [0fa3fd30]
[0fa3fc30] [0ff3fc34] [ffffc31] [fffffc30]
[fff33c30] [0ff33c30] [0fa33c30] [0fa33e30]
[0fa33c30] [0ff33c34] [fff33c31] [fff3fc30]
[fff3fc30] [fff3fc30] [fff6fc30] [fffcfc30]
[fffcfc30] [fffcfc30] [fffcfc30] [fffcfc30]
[fffcfc30] [fffcfc30] [fffcfc30] [fffcfc30]
[fffd3c30] [ffffc30] [ffffc30] [fefffc31]
[ffffc30] [ffffc00] [ffffc00] [ffffc00]
[ffffc00] [ffffc00] [ffffc00] [ffffc00]
[ffffc00] [ffffc00] [ffffc00] [ffffc01]
[ffffc00] [ffffc00] [ffffc00] [ffffc01]

MAMR changed back to 0000003f

NAND: NAND device EC:DA 'NAND 256MiB 3,3V 8-bit' found
256 MiB

diag start address e200000, arc start addr e500000

log start addr fb00000, max size 500000

last entry fb00000

env_relocate[252] offset = 0x8190000

env_relocate[266] malloced ENV at 07f11a60

CFK env_relocate_spec gd->sector_addr:ffee0008 flash_addr->data:ffee0008

crc returned=0xd5766ef1

```
Partition=A gd->selector.active_boot_loader=0xffe10000
found pci vendor=172a
Resetting the i2c bus 81 a6 81
& get_version=07fcb934
In:   serial
Out:  serial
Err:  serial
PCI:  initializing iSNP8000 on bus(0), devieid(14) ...
      bus dev fn venID devID class  rev MBAR0    MBAR1    IPIN ILINE
      00 0e 00 172a 8000 000000 01 00000004 00000001 00 00
Net:   TSECO
PM8380#1 a3 a3 a3 a3  a3 a3 a3 a3
PM8380#2 3 3 3 3  3 3 3 3
TGIF is not present.
i2c_read of 0x68 return code (0), val 8e
```

Hit any key to stop autoboot: 0 (Hit Enter)

sff=> envinfo(enter this CLI)

```
selector->magic      :85204995
selector->version    :131072
```

```
selector->active_boot_loader (A):0xffe10000
fw: 2.9.2.5, time=1325761919, flags=0x02
active_env (2)      :0xffe00000
active_env len      :65536
inactive_env (1)    :0xffed0000
inactive_env len    :65536
```

```
selector->inactive_boot_loader (B):0xffff10000
fw: 2.9.2.2, time=1323914200, flags=0x02
active_env (1)      :0xffffd0000
active_env len      :65536
```

```
inactive_env (2) :0xffe0000
inactive_env len :65536
env_ptr          :0x07f11a60
env_ptr->crc     :0xb8cbe960
env_ptr->data:   :0x07f11a68

flash_addr      :0xffe0000
flash_addr->crc :0xd5766ef1
flash_addr->data:0xffe0008

gd              :0x07f0fee8
gd->env_addr    :0x07f11a68
gd->env_old     :0x00000
gd->reloc_off   :0x08190000
07f11a60 Crc (default) :0x340021ea
ffe0000 Crc    :0xd5766ef1
ffed0000 Crc  :0xd5766ef1
Environment is valid
```

[sff=> set_boot b\(enter this CLI\)](#)

. done

Un-Protected 1 sectors

. done

Erased 1 sectors

. done

Protected 1 sectors

. done

Un-Protected 1 sectors

. done

Erased 1 sectors

. done

Protected 1 sectors

Wrote Selectors to flash...

sff=> reset(enter this CLI then DSN will reboot)

Promise Version: 2.9.2.2

U-Boot 1.1.6 (Dec 14 2011 - 16:53:42),
Build: Automated:Beta

CPU: Unknown, Version: 1.1, (0x80720011)

Core: E500, Version: 2.0, (0x80200020)

Clock Configuration:

CPU: 533 MHz, CCB: 266 MHz,

DDR: 133 MHz, LBC: 33 MHz

L1: D-cache 32 kB enabled

I-cache 32 kB enabled

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ready

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Sector Start Addresses:

FFE00000 RO FFE10000 RO FFE20000 RO FFE30000 RO FFE40000
RO

FFE50000 RO FFE60000 RO FFE70000 RO FFE80000 RO FFE90000
RO

FFEA0000 RO FFEB0000 RO FFEC0000 RO FFED0000 RO FFEE0000
RO

FFEF0000 RO FFF00000 RO FFF10000 RO FFF20000 RO FFF30000
RO

FFF40000 RO FFF50000 RO FFF60000 RO FFF70000 RO FFF80000

RO

FFF90000 RO FFFA0000 RO FFFB0000 RO FFFC0000 RO FFFD0000

RO

FFFE0000 RO FFFF0000 RO FFFF2000 RO FFFF4000 RO FFFF6000

RO

FFFF8000 RO FFFFA000 RO FFFFC000 RO FFFFE000 RO

2.2 MB

L2 cache 256KB: enabled

BR1(5008):ff008881 OR1(500c):ffff84f0 MAMR(5070):00000000

MAMR changed to 10000000 for RAM write

[fff32c30] [0ff00c30] [0ff00c30] [0ff00c30]

[0ff02c34] [fff30c31] [ffffc30] [ffffc30]

[ffff3c30] [0fff3c30] [0faf3c30] [0faf3c30]

[0faf3c30] [0fff3c34] [ffff3c31] [ffffc30]

[fff3fc30] [0ff3fc30] [0fa3fc30] [0fa3fd30]

[0fa3fc30] [0ff3fc34] [ffffc31] [ffffc30]

[fff33c30] [0ff33c30] [0fa33c30] [0fa33e30]

[0fa33c30] [0ff33c34] [fff33c31] [fff3fc30]

[fff3fc30] [fff3fc30] [fff6fc30] [fffcfc30]

[fffcfc30] [fffcfc30] [fffcfc30] [fffcfc30]

[fffcfc30] [fffcfc30] [fffcfc30] [fffcfc30]

[fffdfc30] [ffffc30] [ffffc30] [fefffc31]

[ffffc30] [ffffc00] [ffffc00] [ffffc00]

[ffffc00] [ffffc00] [ffffc00] [ffffc00]

[ffffc00] [ffffc00] [ffffc00] [ffffc01]

[ffffc00] [ffffc00] [ffffc00] [ffffc01]

MAMR changed back to 0000003f

NAND: NAND device EC:DA 'NAND 256MiB 3,3V 8-bit' found

256 MiB

diag start address e200000, arc start addr e500000

log start addr fb00000, max size 500000

last entry fb00000

env_relocate[252] offset = 0x8090000

env_relocate[266] malloced ENV at 07f11a60

CFK env_relocate_spec gd->sector_addr:fffd0008 flash_addr->data:fffd0008

crc returned=0x945a1c98

Partition=B gd->selector.active_boot_loader=0xffff10000

```
found pci vendor=172a
Resetting the i2c bus 81 a6 81
& get_version=07fcb934
In:    serial
Out:   serial
Err:   serial
PCI:   initializing iSNP8000 on bus(0), devieid(14) ...
      bus dev fn venID devID class  rev MBAR0    MBAR1    IPIN ILINE
      00 0e 00 172a 8000 000000 01 00000004 00000001 00 00
Net:   TSECO
PM8380#1 a3 a3 a3 a3  a3 a3 a3 a3
PM8380#2 3 3 3 3  3 3 3 3
TGIF is not present.
i2c_read of 0x68 return code (0), val 8e
Hit any key to stop autoboot:  0
sff=> envinfo
selector->magic      :85204995
selector->version    :131072
selector->active_boot_loader (B):0xffff10000
  fw: 2.9.2.2, time=1323914200, flags=0x02
  active_env  (1)    :0xfffd0000
  active_env len    :65536
  inactive_env (2)   :0xfffe0000
  inactive_env len  :65536
selector->inactive_boot_loader (A):0xffe10000
  fw: 2.9.2.5, time=1325761919, flags=0x02
  active_env  (2)    :0xffee0000
  active_env len    :65536
  inactive_env (1)   :0xffed0000
  inactive_env len  :65536
env_ptr          :0x07f11a60
env_ptr->crc      :0x9a8a16b1
env_ptr->data:    :0x07f11a68

flash_addr       :0xfffd0000
flash_addr->crc   :0x945a1c98
flash_addr->data: :0xfffd0008
```


gd :0x07f0fee8
gd->env_addr :0x07f11a68
gd->env_old :0x0000
gd->reloc_off :0x08090000
07f11a60 Crc (default) :0x1384b8f5
ffd0000 Crc :0x945a1c98
ffe0000 Crc :0x945a1c98

Environment is valid

sff=>

+++++

END