

??  
 ??OS ??

- 3.5" SATA (FW)
- soft raid (mdadm) RAID 0/1/5 JBOD (linear)
- 1000M LAN?
- USB 2.0 + USB + 1 eSATA?
- iTunes UPnP AV?
- BT Downloader P2P? (BUG)
- Samba FTP Web?
- 50?
- 32?
- MySQL web Server
- EXT3
- Unicode



???

- [Amahi Cloud OS in Orion Nas](#)
- [Custom Kernel](#)
- [JTAG](#)
- [mvBoardEnvSpec.h](#)
- [Raid Mdadm ?](#)
- [U-boot](#)
- [Optware](#)
- [Hardware spec](#)
- [ROOT](#)
- [??](#)

?????  
<http://www.eusso.com/Models/NAS/USS4...SS4500-RS4.htm>  
 vistor

?? Kurobox PRO ?? Kuro ?????  
<http://buffalo.nas-central.org/wiki/KuroBoxPro>

???

- CPU : **Marvell 88F5182** 16 500Mhz
- DRAM : DDR2 128 DRAM
- FLASH: 8 MB Nand

????

- SAMBA 20 MB /sec
- FTP 20 MB /sec
- ??????,??CPU resources?????

### [CPU SPEC PDF](#)

??IP :

IP:192.168.1.2

WEB ID:admin

pass:admin

SSH:admin

pass:admin

### **\$ cat /proc/cpuinfo**

Processor : ARM926EJ-Sid(wb) rev 0 (v5l)

BogoMIPS : 332.59

Features : swp half thumb fastmult

CPU implementer : 0x41

CPU architecture: 5TEJ

CPU variant : 0x0

CPU part : 0x926

CPU revision : 0

Cache type : write-back

Cache clean : cp15 c7 ops

Cache lockdown : format C

Cache format : Harvard

I size : 32768

I assoc : 1

I line length : 32

I sets : 1024

D size : 32768

D assoc : 1

D line length : 32

D sets : 1024

Hardware : MV-88fxx81

Revision : 0000

Serial : 0000000000000000

/lib/libc.so.6 -> info about C library

lsmod -> info about loaded kernel modules

dmesg -> print out the kernel messages since bootup

**\$ uname -a**

Linux 4Bay-NAS 2.6.12.6-arm1 #1 Tue Dec 18 15:18:13 CST 2007 armv5tejl unknown

**\$ cat /proc/mtd**

```
mtd0: 00200000 00010000 "Kernel"
mtd1: 00570000 00010000 "File-System"
mtd2: 00010000 00010000 "System-config"
mtd3: 00010000 00010000 "bootloader-config"
mtd4: 00070000 00010000 "Boot-loader"
```

**???Flash? share ?????**

~~**\$cat /dev/mtd0> /home/share/mtd0.backup**~~

~~**\$cat /dev/mtd1> /home/share/mtd1.backup**~~

~~**\$cat /dev/mtd2> /home/share/mtd2.backup**~~

~~**\$cat /dev/mtd3> /home/share/mtd3.backup**~~

~~**\$cat /dev/mtd4> /home/share/mtd4.backup**~~

? dev ????

**\$dd if=/dev/mtd0 of=/home/share/mtd0.backup bs=1k**

**\$dd if=/dev/mtd\_boot\_cfg of=/home/share/mtd\_boot\_cfg.backup bs=1k**

**\$dd if=/dev/mtd\_bootloader of=/home/share/mtd\_bootloader.backup bs=1k**

**\$dd if=/dev/mtd\_config of=/home/share/mtd\_config.backup bs=1k**

**\$dd if=/dev/mtd\_kernel of=/home/share/mtd\_kernel.backup bs=1k**

**\$dd if=/dev/mtd\_ramdisk of=/home/share/mtdramdisk.backup bs=1k**

?????????

??????

Firmware ???

- [???????????](#)
- [NAS????????FW 1.2](#)
- [?? 1.3](#)

Firmware ??

????????????(?????)

1. ?FW ??? /home/share/fwupdate

2. ? Firmware upgrade ???...

??????????

1. ???? USB dongle????? FAT?
2. ?? Windows ???? firmware ???? USB dongle?
3. ? USB dongle ?? NAS > USB I?
4. ?? SSH ?? NAS??? root ?? ??:nxtadmin?
5. ????  
#cp /home/usbdisk1-1/NH234\_VR\_V1.30\_04-07-2008\_.web /home/share/fwupdate
6. ? NAS ???? > System > Firmware Upgrade > ?????? Upgrade?

TIPs?

? ???

? ??????????????

????

??

???

<http://dev.emcelettronica.com/hacking-network-attached-storage-nas>

Bootloader

[http://www.nas-central.org/wiki/General\\_NAS\\_customisation\\_guide](http://www.nas-central.org/wiki/General_NAS_customisation_guide)

<http://www.denx.de/wiki/bin/view/DULG/Manual>

Custom Kenrel

[http://computingplugs.com/index.php/...\\_custom\\_kernel](http://computingplugs.com/index.php/..._custom_kernel)

<http://tweaky.aribaud.net/?q=book/export/html/35>

?????link

<http://ipkg.nslu2-linux.org/feeds/optware/dns323/cross/stable/>

??orion ???

[http://www.nas-central.org/wiki/Orion\\_NAS\\_customisation\\_guide](http://www.nas-central.org/wiki/Orion_NAS_customisation_guide)

???OS

<https://forum.openwrt.org/viewtopic.php?id=12358>

debian

<http://www.cyrius.com/debian/orion/buffalo/kuroboxpro/install.html>

<http://hezmatt.org/~mpalmer/blog/2008/10/23/porting-d-i-to-the-dns-323.html>

Freebsd

<http://wiki.freebsd.org/FreeBSDMarvell>

NAS ??timemachine ????

[http://buffalo.nas-central.org/wiki/Time\\_Machine\\_%26\\_Time\\_Capsule\\_support\\_on\\_your\\_LinkStation](http://buffalo.nas-central.org/wiki/Time_Machine_%26_Time_Capsule_support_on_your_LinkStation)

CPU ??

[http://storage.it168.com/a2009/0603/...582556\\_1.shtml](http://storage.it168.com/a2009/0603/...582556_1.shtml)

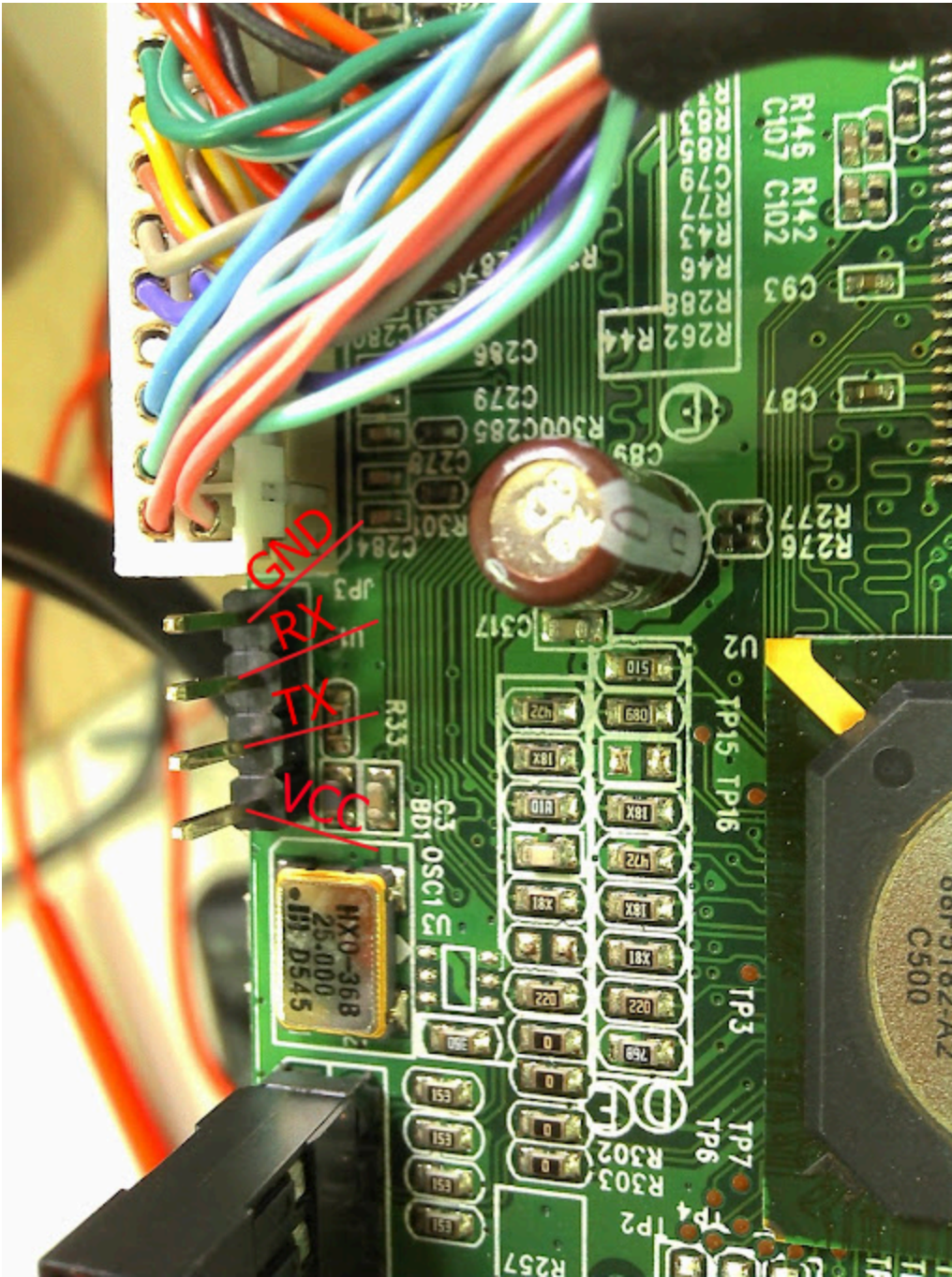
<http://www.nslu2-linux.org/wiki/Optware/Platforms>

note

[http://forum.buffalo.nas-central.org/](http://forum.buffalo.nas-central.org/viewtopic.php?f=18&t=4242&sid=e8f052bd627a79bcc6777423dc680d9b)

[viewtopic.php?f=18&t=4242&sid=e8f052bd627a79bcc6777423dc680d9b](http://forum.buffalo.nas-central.org/viewtopic.php?f=18&t=4242&sid=e8f052bd627a79bcc6777423dc680d9b)

**??MOD**



?????



