Start by removing one HDD

[Debian](#) [TS-WXL](#)

Since RAID1 has been constructed, pull out one and start it assuming a failure.

```
** Something is wrong, because of dev_desc->blksz is 0!!!
disk0 is not found!

Signature version    : 0.00
Signature MACAddress:

    This is not my HDD!!!
    Anyway load images...

2555068 bytes read
    Image Name:    Linux-2.6.22.18-mv78100
    Created:       2010-02-04   2:14:52 UTC
    Image Type:    ARM Linux Kernel Image (uncompressed)
    Data Size:     2555004 Bytes =  2.4 MB
    Load Address: 00008000
    Entry Point:  00008000

9237152 bytes read
    Image Name:    initrd
    Created:       2010-04-06  12:27:59 UTC
    Image Type:    ARM Linux RAMDisk Image (gzip compressed)
    Data Size:     9237088 Bytes =  8.8 MB
    Load Address: 00000000
    Entry Point:  00000000


** Something is wrong, because of dev_desc->blksz is 0!!!
disk2 is not found!


** Something is wrong, because of dev_desc->blksz is 0!!!
disk3 is not found!

 ***** Debug *****
diskinfo [0] .IsMyDisk = 0
diskinfo[0].uImage_date = 0
diskinfo[0].initrd_date = 0
diskinfo [1] .IsMyDisk = 0
diskinfo[1].uImage_date = 1265249692
diskinfo[1].initrd_date = 1270556879
diskinfo [2] .IsMyDisk = 0
diskinfo[2].uImage_date = 0
diskinfo[2].initrd_date = 0
diskinfo [3] .IsMyDisk = 0
diskinfo[3].uImage_date = 0
diskinfo[3].initrd_date = 0

All disks are don't have signature or not mine!
newest_fw_dev is updated to 1

Booting from Device 1
hit any key to switch tftp boot.
Hit any key to stop autoboot:  0
Hit any key to stop autoboot:  0

2555068 bytes read

9237152 bytes read
<<stop_sound>>
## Booting image at 02000000 ...
    Image Name:    Linux-2.6.22.18-mv78100
    Created:       2010-02-04   2:14:52 UTC
    Image Type:    ARM Linux Kernel Image (uncompressed)
    Data Size:     2555004 Bytes =  2.4 MB
    Load Address: 00008000
    Entry Point:  00008000
    Verifying Checksum ... OK
OK
call do_bootm_linux
## Loading Ramdisk Image at 00900000 ...
    Image Name:    initrd
    Created:       2010-04-06  12:27:59 UTC
    Image Type:    ARM Linux RAMDisk Image (gzip compressed)
    Data Size:     9237088 Bytes =  8.8 MB
    Load Address: 00000000
    Entry Point:  00000000
    Verifying Checksum ... OK

Starting kernel ...

--- CONFIG_BUFFALO_PLATFORM ---
---
Uncompressing Linux.............................................................................................................................
Linux version 2.6.22.18-mv78100 (root@build2.dd-hot24.nas.buffalo.local) (gcc version 4.2.0 20070413 (prerelease) #134 Thu Feb 4 11:14:40 JST 2010
CPU: ARM926EJ-S [41159260] revision 0 (ARMv5TE), cr=00053977
Machine: Feroceon-MV78XX0
```

```
using uBoot passing parameters structure
u.mv_uboot.env_addr is 0xfff80000. Using tag's value.
Memory policy: ECC disabled, Data cache writeback
CPU0: D VIVT write-back cache
CPU0: I cache: 32768 bytes, associativity 4, 32 byte lines, 256 sets
CPU0: D cache: 32768 bytes, associativity 4, 32 byte lines, 256 sets
Built 1 zonelists.  Total pages: 130048
Kernel command line: console=ttyS0,115200 root=/dev/sda2 rw initrd=0x00900040,15M panic=5 BOOTVER=2.08
PID hash table entries: 2048 (order: 11, 8192 bytes)
Console: colour dummy device 80x30
Dentry cache hash table entries: 65536 (order: 6, 262144 bytes)
Inode-cache hash table entries: 32768 (order: 5, 131072 bytes)
Memory: 512MB 0MB 0MB 0MB = 512MB total
Memory: 499072KB available (4644K code, 327K data, 136K init)
Mount-cache hash table entries: 512
CPU: Testing write buffer coherency: ok
NET: Registered protocol family 16

CPU 0, CPU Interface
-------------
SDRAM_CS0.... ....base 00000000, size 512MB
SDRAM_CS1.... ....disable
SDRAM_CS2.... ....disable
SDRAM_CS3.... ....disable
DEVICE_CS0... ....base f8000000, size   32MB
DEVICE_CS1... ....base fe000000, size    1MB
DEVICE_CS2... ....base fc000000, size    1MB
DEVICE_CS3... ....no such
DEV_BOOCS.... ....base fff00000, size 512KB
DEVICE_SPI... ....base fff00000, size 512KB
PEX0_IO...... ....base f2000000, size    8MB
PEX0_MEM0.... ....base c8000000, size   64MB
PEX1_IO...... ....base f3000000, size    8MB
PEX1_MEM0.... ....base cc000000, size   64MB
PEX2_IO...... ....no such
PEX2_MEM0.... ....no such
PEX3_IO...... ....base f5000000, size    8MB
PEX3_MEM0.... ....base d4000000, size   64MB
PEX4_IO...... ....base f6000000, size    8MB
PEX4_MEM0.... ....base d8000000, size   64MB
PEX5_IO...... ....no such
PEX5_MEM0.... ....no such
PEX6_IO...... ....no such
PEX6_MEM0.... ....no such
PEX7_IO...... ....no such
PEX7_MEM0.... ....no such
CRYPT_ENG..... ....base f7000000, size    2MB
INTER_REGS... ....base f1000000, size    1MB

  Marvell Development Board (LSP Version 2.0.2_Patch1_MV78XX0)-- DB-MV78100-A-BP-BUFFALO  Soc: MV78100 A0 LE


 Detected Tclk 166666667 and SysClk 400000000
Marvell USB EHCI Host controller #0: 8057d600
Marvell USB EHCI Host controller #1: 8057d400
Marvell USB EHCI Host controller #2: 8057d200
PEX0 interface detected no Link.
PEX4 interface detected no Link.
SCSI subsystem initialized
NET: Registered protocol family 2
Time: orion_clocksource clocksource has been installed.
IP route cache hash table entries: 16384 (order: 4, 65536 bytes)
TCP established hash table entries: 65536 (order: 7, 524288 bytes)
TCP bind hash table entries: 65536 (order: 6, 262144 bytes)
TCP: Hash tables configured (established 65536 bind 65536)
TCP reno registered
checking if image is initramfs...it isn't (no cpio magic); looks like an initrd
Freeing initrd memory: 15360K
RTC registered.
MICON ctrl (C) BUFFALO INC. V.1.00 installed.
Buffalo Gpio Control Driver (C) BUFFALO INC. Ver.0.02 installed.
>BuffaloCpuInterrupts_init
Buffalo CPU Inerupts Driver (C) BUFFALO INC. Ver.0.01 alpha1 installed.
MICON V2 (C) BUFFALO INC. V.1.00 installed.
UPSDRV (C) BUFFALO INC. V.1.00 installed.
  OMRON contact type ups shutdown support enabled!
Kernel event proc (C) BUFFALO INC. V.1.00 installed.
Buffalo RTC Driver (C) BUFFALO INC. Ver.1.00 (RS5C372) installed.
Buffalo GPIO SATA Hotplug Event Driver (C) BUFFALO INC. Ver.1.00 installed.
Use the XOR engines (acceleration) for enhancing the following functions:
  or RAID 5 Xor calculation
  o kernel memcpy
  o kenrel memzero
Number of XOR engines to use: 2
cesadev_init(800133d8)
mvCesaInit: sessions=640, queue=64, pSram=f7000000
VFS: Disk quotas dquot_6.5.1
Dquot-cache hash table entries: 1024 (order 0, 4096 bytes)
Installing knfsd (copyright (C) 1996 okir@monad.swb.de).
JFFS2 version 2.2. (NAND) 誕 ·001-2006 Red Hat, Inc.
fuse init (API version 7.8)
SGI XFS with ACLs, large block numbers, no debug enabled
SGI XFS Quota Management subsystem
io scheduler noop registered (default)
io scheduler anticipatory registered
io scheduler deadline registered
io scheduler cfq registered
Serial: 8250/16550 driver $Revision: 1.90 $ 4 ports, IRQ sharing disabled
serial8250.0: ttyS0 at MMIO 0xf1012000 (irq = 12) is a 16550A
```

```
serial8250.0: ttyS1 at MMIO 0xf1012100 (irq = 13) is a 16550A
serial8250.2: ttyS2 at MMIO 0xf1012200 (irq = 14) is a 16550A
```

```
RAMDISK driver initialized: 3 RAM disks of 32768K size 1024 blocksize
loop: module loaded
Load Marvell Ethernet Driver
  o Cached descriptors in DRAM
  o DRAM SW cache-coherency
  o Single RX Queue support - ETH_DEF_RXQ=0
  o Single TX Queue support - ETH_DEF_TXQ = 0
  o TCP segmentation offload enabled
  o Receive checksum offload enabled
  o Transmit checksum offload enabled
  o Network Fast Processing (Routing) supported
  o Proc tool API enabled
  o Rx descriptors: q0=128
  o Tx descriptors: q0 = 532
  o Loading network interface:
eth0 eth1
Network Fast Processing Disabled
mvFpRuleDb (81400000): 16384 entries, 65536 bytes
Integrated Sata device found
mvSataInitAdapter : regVal changed(0x00000010)
scsi0 : Marvell SCSI to SATA adapter
scsi1 : Marvell SCSI to SATA adapter
** BUFFALO Disable Command Queuing Function [0 1] **
scsi 1:0:0:0: Direct-Access     Hitachi  HDT722525DLA380  V44O PQ: 0 ANSI: 5
Linux IAL (ERROR) [0 1 0]: set device max sectors to 2048
Linux IAL (ERROR) : retry command host=1, bus=1 SCpnt = 9f516ba0
sd 1:0:0:0: [sda] 488397168 512-byte hardware sectors (250059 MB)
sd 1:0:0:0: [sda] Write Protect is off
sd 1:0:0:0: [sda] Write cache: enabled, read cache: enabled, doesn't support DPO or FUA
sd 1:0:0:0: [sda] 488397168 512-byte hardware sectors (250059 MB)
sd 1:0:0:0: [sda] Write Protect is off
sd 1:0:0:0: [sda] Write cache: enabled, read cache: enabled, doesn't support DPO or FUA
 sda: sda1 sda2 sda3 sda4 sda5 sda6
sd 1:0:0:0: [sda] Attached SCSI disk
sd 1:0:0:0: Attached scsi generic sg0 type 0
SPI Serial flash detected @ 0xfff00000, 512KB (8sec x 64KB)
cmdlinepart partition parsing not available
     Write size    : 0x00000800
     OOB size      : 0x00000040
     Erase size    : 0x00020000
NAND device: Manufacturer ID: 0x20, Chip ID: 0xdc (ST Micro NAND 512MiB 3,3V 8-bit)
Scanning device for bad blocks
Bad eraseblock 298 at 0x02540000
Bad eraseblock 369 at 0x02e20000
Bad eraseblock 371 at 0x02e60000
Bad eraseblock 480 at 0x03c00000
Bad eraseblock 1176 at 0x09300000
Bad eraseblock 3864 at 0x1e300000
Bad eraseblock 3866 at 0x1e340000
cmdlinepart partition parsing not available
Using static partition definition
Creating 2 MTD partitions on "nand_mtd":
0x00000000-0x02000000 : "nboot"
0x02000000-0x20000000 : "nroot"
mice: PS/2 mouse device common for all mice
md: raid0 personality registered for level 0
md: raid1 personality registered for level 1
raid6: int32x1     113 MB/s
raid6: int32x2     148 MB/s
raid6: int32x4     139 MB/s
raid6: int32x8     111 MB/s
raid6: using algorithm int32x2 (148 MB/s)
md: raid6 personality registered for level 6
md: raid5 personality registered for level 5
md: raid4 personality registered for level 4
raid5: measuring checksumming speed
   arm4regs  :    824.800 MB/sec
   8regs     :    742.400 MB/sec
   32regs    :    822.800 MB/sec
raid5: using function: arm4regs (824.800 MB/sec)
device-mapper: ioctl: 4.11.0-ioctl (2006-10-12) initialised: dm-devel@redhat.com
dm_crypt using the OCF package.
ip_tables: (C) 2000-2006 Netfilter Core Team
TCP cubic registered
NET: Registered protocol family 1
NET: Registered protocol family 17
VFP support v0.3: implementor 41 architecture 1 part 10 variant 9 rev 0
md: Autodetecting RAID arrays.
md: autorun ...
md: ... autorun DONE.
RAMDISK: Compressed image found at block 0
VFS: Mounted root (ext2 filesystem).
---- in hackkit linuxrc ---
-- rebuild mdadm.conf for BOOT, ROOTFS with Intelligent routine --
kjournald starting.  Commit interval 5 seconds
EXT3-fs: mounted filesystem with ordered data mode.
mount: mounting /dev/disk2_1 on /tmp/boot_test failed: No such device or address
/usr/local/lib/libmd: line 362: [: -gt: unary operator expected
GetMdBaseDisk : Selected 1
md: md10 stopped.
md: bind<sda5>
raid1: raid set md10 active with 1 out of 2 mirrors
mdadm: /dev/md10 has been started with 1 drive (out of 2).
md: md1 stopped.
md: bind<sda2>
```

```
raid1: raid set md1 active with 1 out of 2 mirrors
mdadm: /dev/md1 has been started with 1 drive (out of 2).
md: md0 stopped.
md: bind<sda1>
raid1: raid set md0 active with 1 out of 2 mirrors
mdadm: /dev/md0 has been started with 1 drive (out of 2).
-- setup max error counts --
/sys/block/md0/md/maxerr_cnt is setted to 20
/sys/block/md1/md/maxerr_cnt is setted to 20
/sys/block/md10/md/maxerr_cnt is setted to 20
kjournald starting.  Commit interval 5 seconds
EXT3-fs warning: maximal mount count reached, running e2fsck is recommended
EXT3 FS on md1, internal journal
EXT3-fs: mounted filesystem with ordered data mode.
VFS: Mounted root (ext3 filesystem).
Trying to move old root to /initrd ... okay
Freeing init memory: 136K
INIT: version 2.86 booting
Setting the system clock.
Cannot access the Hardware Clock via any known method.
Use the --debug option to see the details of our search for an access method.
Unable to set System Clock to: Sun May 9 06:43:24 JST 2010 (warning).
Activating swap...Adding 999864k swap on /dev/md10.  Priority:-1 extents:1 across:999864k
done.
Setting the system clock.
Cannot access the Hardware Clock via any known method.
Use the --debug option to see the details of our search for an access method.
Unable to set System Clock to: Sun May 9 06:43:25 JST 2010 (warning).
Cleaning up ifupdown....
Loading kernel modules...done.
Generating udev events for MD arrays...done.
Checking file systems...fsck 1.41.3 (12-Oct-2008)
done.
Setting kernel variables (/etc/sysctl.conf)...Unknown HZ value! (80) Assume 100.
done.
Mounting local filesystems...kjournald starting.  Commit interval 5 seconds
EXT3-fs warning: maximal mount count reached, running e2fsck is recommended
EXT3 FS on md0, internal journal
EXT3-fs: mounted filesystem with ordered data mode.
done.
Activating swapfile swap...done.
Setting up networking....
Configuring network interfaces...eth0: link down
eth0: started
done.
BuffaloGpio_ChangePowerStatus > Writing 0x71
INIT: Entering runlevel: 2
Starting enhanced syslogd: rsyslogdeth0: link up, full duplex, speed 1 Gbps
.
Starting MTA: exim4.
Starting internet superserver: inetd.
Starting MD monitoring service: mdadm --monitor.
Starting periodic command scheduler: crond.

Debian GNU/Linux 5.0 tswxl ttyS0

tswxl login:
```

Has started normally.

```
Debian GNU/Linux 5.0 tswxl ttyS0

tswxl login: root
Password:
Last login: Fri May  7 07:12:38 JST 2010 on ttyS0
Linux odxl 2.6.22.18-mv78100 # 134 Thu Feb 4 11:14:40 JST 2010 armv5tejl

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
tswxl:~# df
Filesystem           1K-blocks      Used Available Use% Mounted on
/dev/md1               4921404    804648   3866760  18% /
tmpfs                   257388         0    257388   0% /lib/init/rw
tmpfs                   257388         0    257388   0% /dev/shm
/dev/root.old            31729     23459      8270  74% /initrd
/dev/md0                991928    176928    815000  18% /boot
tswxl:~# cat /proc/mdstat
Personalities : [raid0] [raid1] [raid6] [raid5] [raid4]
md1 : active raid1 sda2[1]
      4999936 blocks [2/1] [_U]

md10 : active raid1 sda5[1]
      999872 blocks [2/1] [_U]

md0 : active raid1 sda1[1]
      999872 blocks [2/1] [_U]

unused devices:
odxl: ~ #
```

TS-WXL