

How to use the DNP/2110 with 32 MByte SDRAM

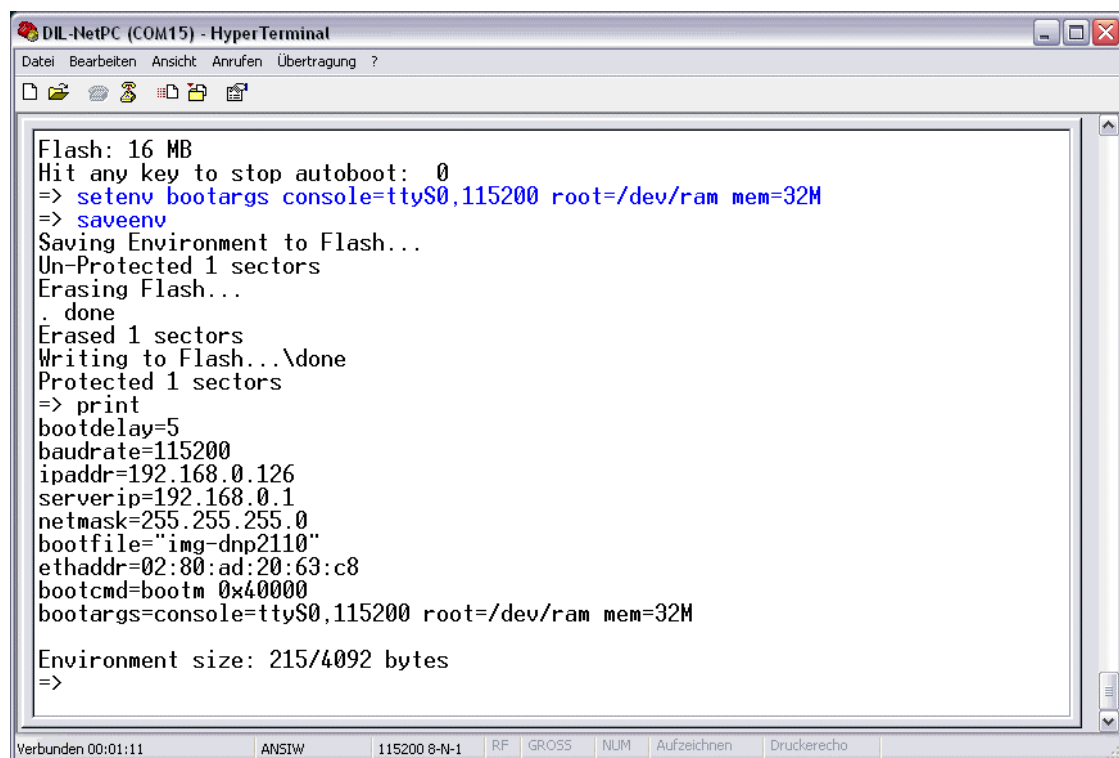
The DIL/NetPC DNP/2110 is available in two different memory configurations. The following table shows the order codes and the corresponding memory size.

| Ordercode | SRAM Size | Flash Memory Size |
|--------------|-----------|-------------------|
| DNP/2110-D16 | 16 MByte | 16 MByte |
| DNP/2110-D32 | 32 MByte | 16 MByte |

The default setup for the U-Boot boot loader is always the 16 MByte SDRAM configuration. Please change the U-Boot environment parameter for your DNP/2110-D32.

- **1. Step:** Set the DNP/2110 RCM jumper for RCM enable. Then power-up your DNP/2110 and interrupt the U-Boot autoboot process.
- **2. Step:** Change the U-Boot environment parameters with the following command sequence. Please note: This step needs a DNP/2110-D32 with an U-Boot version from May 2005 or newer.

```
setenv bootargs console=ttyS0,115200 root=/dev/ram mem=32M
saveenv
print
```



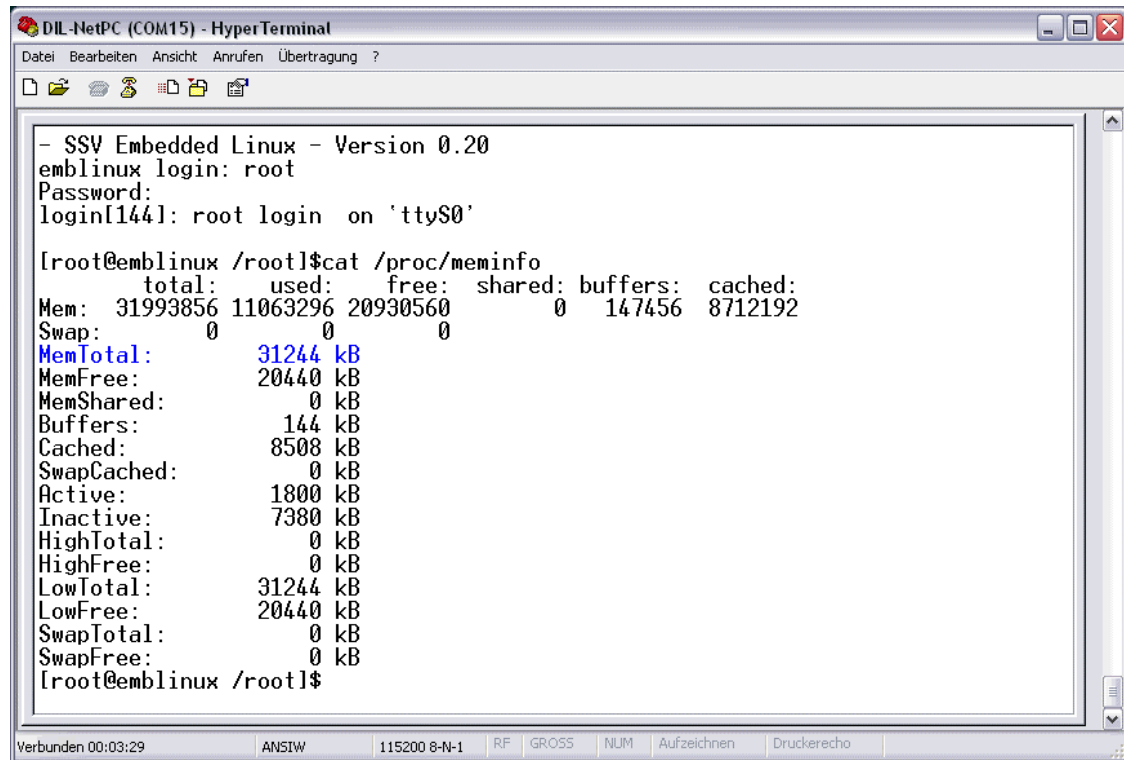
```
DIL-NetPC (COM15) - HyperTerminal
Datei Bearbeiten Ansicht Anrufen Übertragung ?
Flash: 16 MB
Hit any key to stop autoboot: 0
=> setenv bootargs console=ttyS0,115200 root=/dev/ram mem=32M
=> saveenv
Saving Environment to Flash...
Un-Protected 1 sectors
Erasing Flash...
. done
Erased 1 sectors
Writing to Flash...done
Protected 1 sectors
=> print
bootdelay=5
baudrate=115200
ipaddr=192.168.0.126
serverip=192.168.0.1
netmask=255.255.255.0
bootfile="img-dnp2110"
ethaddr=02:80:ad:20:63:c8
bootcmd=bootm 0x40000
bootargs=console=ttyS0,115200 root=/dev/ram mem=32M

Environment size: 215/4092 bytes
=>
```

- **3. Step:** Reboot the DNP/2110 and run the embedded Linux operating system. Use the Linux line

```
cat /proc/meminfo
```

and check how much memory is available. The memory total of your DNP/2110 is now approximately 32 MByte.



```
DIL-NetPC (COM15) - HyperTerminal
Datei Bearbeiten Ansicht Anrufen Übertragung ?
- SSV Embedded Linux - Version 0.20
emblinux login: root
Password:
login[144]: root login on 'ttyS0'

[root@emblinux /root]$cat /proc/meminfo
          total:        used:        free:    shared: buffers:   cached:
Mem:  31993856 11063296 20930560         0   147456  8712192
Swap:         0         0         0
MemTotal:        31244 kB
MemFree:         20440 kB
MemShared:         0 kB
Buffers:         144 kB
Cached:          8508 kB
SwapCached:         0 kB
Active:          1800 kB
Inactive:        7380 kB
HighTotal:         0 kB
HighFree:         0 kB
LowTotal:         31244 kB
LowFree:         20440 kB
SwapTotal:         0 kB
SwapFree:         0 kB
[root@emblinux /root]$
```

Verbunden 00:03:29 ANSIW 115200 8-N-1 RF GROSS NUM Aufzeichnen Druckerecho

That's all.