

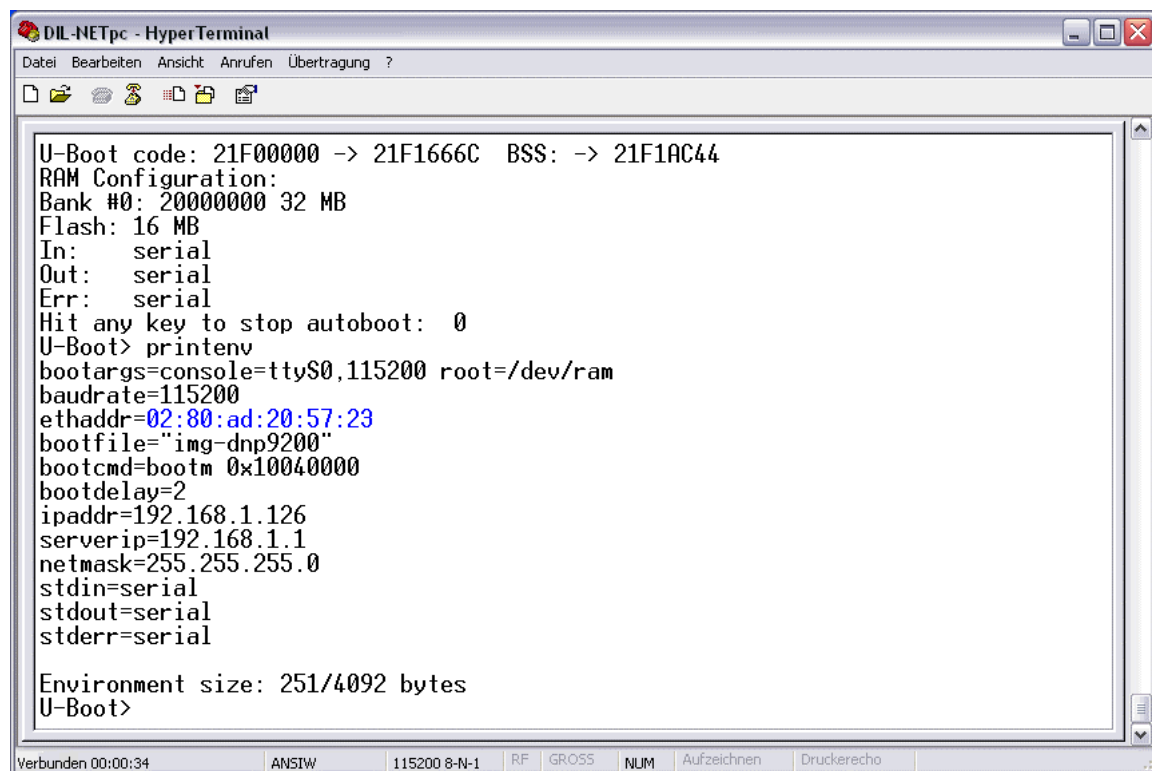
How to find the DNP/9200 Ethernet MAC Address

For some network configuration tasks (i.e. Firewall setup procedures) it can be necessary to know the Ethernet MAC address of a specific network member. The DIL/NetPC DNP/9200 offers two different ways to find out the current MAC address: 1. use the U-Boot boot loader **printenv** command or 2. use Linux **ifconfig** command.

- **1. Step:** Setup a serial link (**RS232 Serial Link**) between the DIL/NetPC DNP/9200 COM1 serial port and a serial port of your PC system. Use a null-modem cable for the physical connection between the COM1 port of the DIL/NetPC DNP/9200 and the PC COM port. For more details about this connection please use the DIL/NetPC DNP/9200 Starter Kit documentation.
- **2. Step:** Run your terminal emulation program. Microsoft Windows-based PC systems offer *HyperTerminal* for this task. Linux-based systems come with *Minicom*. Then power-up your DNP/9200.
- **3. Step with U-Boot:** Wait for the first message of U-Boot within your terminal emulation program window. Please hit any key for interrupt the U-Boot autoboot process. Then enter the command:

```
printenv
```

The U-Boot boot loader displays some environment variable. The value for **ethaddr** is the DNP/9200 MAC address.



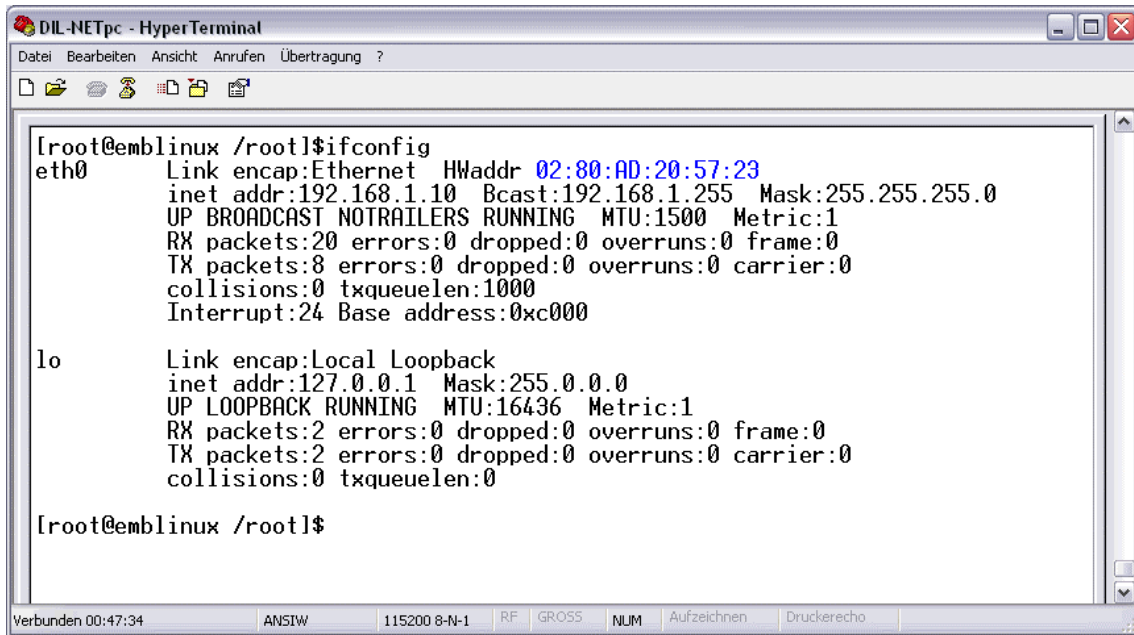
```
DIL-NETpc - HyperTerminal
Datei Bearbeiten Ansicht Anrufen Übertragung ?
U-Boot code: 21F00000 -> 21F1666C BSS: -> 21F1AC44
RAM Configuration:
Bank #0: 20000000 32 MB
Flash: 16 MB
In: serial
Out: serial
Err: serial
Hit any key to stop autoboot: 0
U-Boot> printenv
bootargs=console=ttyS0,115200 root=/dev/ram
baudrate=115200
ethaddr=02:80:ad:20:57:23
bootfile="img-dnp9200"
bootcmd=bootm 0x10040000
bootdelay=2
ipaddr=192.168.1.126
serverip=192.168.1.1
netmask=255.255.255.0
stdin=serial
stdout=serial
stderr=serial

Environment size: 251/4092 bytes
U-Boot>
```

- **3. Step with Linux:** Wait until the DNP/9200 Linux ask you for a user name. Please enter the user name **root**. This user name needs no password. Just hit the Enter key if the DNP/9200 Linux ask for a password. Then enter the command:

```
ifconfig
```

The DNP/9200 Linux operating system displays some information's about the Ethernet LAN interface **eth0**. The value for **HWaddr** is the DNP/9200 MAC address.



```
DIL-NETpc - HyperTerminal
Datei Bearbeiten Ansicht Anrufen Übertragung ?
[root@emlinux /root]$ifconfig
eth0      Link encap:Ethernet HWaddr 02:80:AD:20:57:23
          inet addr:192.168.1.10 Bcast:192.168.1.255 Mask:255.255.255.0
          UP BROADCAST NOTRAILERS RUNNING MTU:1500 Metric:1
          RX packets:20 errors:0 dropped:0 overruns:0 frame:0
          TX packets:8 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          Interrupt:24 Base address:0xc000

lo        Link encap:Local Loopback
          inet addr:127.0.0.1 Mask:255.0.0.0
          UP LOOPBACK RUNNING MTU:16436 Metric:1
          RX packets:2 errors:0 dropped:0 overruns:0 frame:0
          TX packets:2 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0

[root@emlinux /root]$
```

Verbunden 00:47:34 ANSIW 115200 8-N-1 RF GROSS NUM Aufzeichnen Druckerecho

That is all.