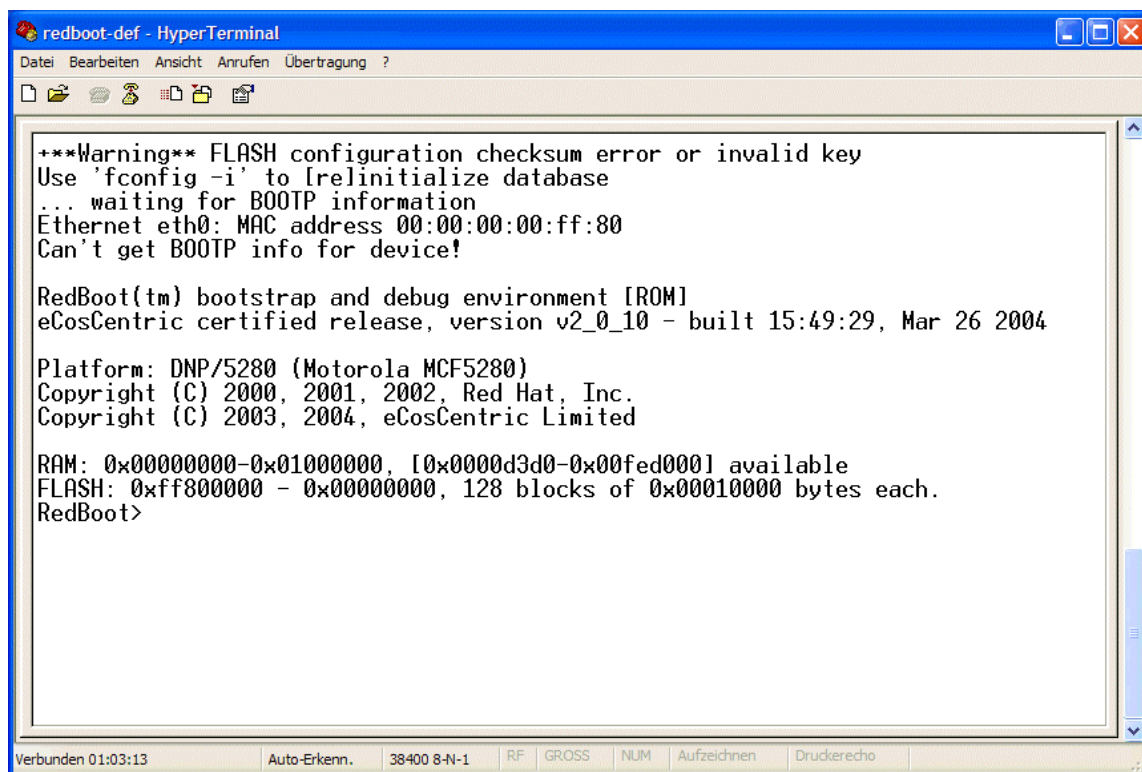


First Time RedBoot Usage

Direct after flashing RedBoot with the BDM interface adapter (see also mHT5280-34.pdf: “**How to change the dBUG ROM Monitor to the RedBoot Boot Loader**” for more details) it is necessary to change some RedBoot parameters.

- **1. Step:** Setup a serial link (**RS232 Serial Link**) between the DNP/5280 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 DNP/5280 and the PC COM port. Setup the line parameters to **38.400 bps, 8 data bits, 1 stop bit, no handshake**.
- **2. Step:** Run your terminal emulation program. Microsoft Windows-based PC systems offer *HyperTerminal* for this task. Linux-based systems comes with *Minicom*. Then provide the DNP/5280 with power. Wait for the RedBoot prompt “RedBoot>” (**This wait needs some time. RedBoot try’s first a network boot procedure**).



```
redboot-def - HyperTerminal
Datei Bearbeiten Ansicht Anrufen Übertragung ?
***Warning** FLASH configuration checksum error or invalid key
Use 'fconfig -i' to [re]initialize database
... waiting for BOOTP information
Ethernet eth0: MAC address 00:00:00:00:ff:80
Can't get BOOTP info for device!

RedBoot(tm) bootstrap and debug environment [ROM]
eCosCentric certified release, version v2_0_10 - built 15:49:29, Mar 26 2004

Platform: DNP/5280 (Motorola MCF5280)
Copyright (C) 2000, 2001, 2002, Red Hat, Inc.
Copyright (C) 2003, 2004, eCosCentric Limited

RAM: 0x00000000-0x01000000, [0x0000d3d0-0x00fed000] available
FLASH: 0xff800000 - 0x00000000, 128 blocks of 0x00010000 bytes each.
RedBoot>
```

- **3. Step:** The user interface to RedBoot consists of a command line interpreter (CLI), much like a Linux shell prompt.

When connected via a serial line you can interactively enter commands and see the results. Please type in the command

```
fconfig -i
```

and hit Enter. RedBoot executes the `fconfig` command and ask you some questions. Please answer this questions.

```

Initialize non-volatile configuration - continue (y/n)? y
Run script at boot: false
Use BOOTP for network configuration: false
Gateway IP address: 0.0.0.0
Local IP address: 192.168.0.126
Local IP address mask: 255.255.255.0
Default server IP address: 192.168.0.1
Console baud rate: 115200
DNS server IP address: 192.168.0.4
GDB connection port: 9000
Force console for special debug messages: false
Network hardware address [MAC]: 0x00:0x00:0x00:0x00:0xFF:0x80
Network debug at boot time: false
Update RedBoot non-volatile configuration - continue (y/n)? y
... Erase from 0xffff0000-0xffffffff: .
... Program from 0x00ff0000-0x01000000 at 0xffff0000:
RedBoot>

```

```

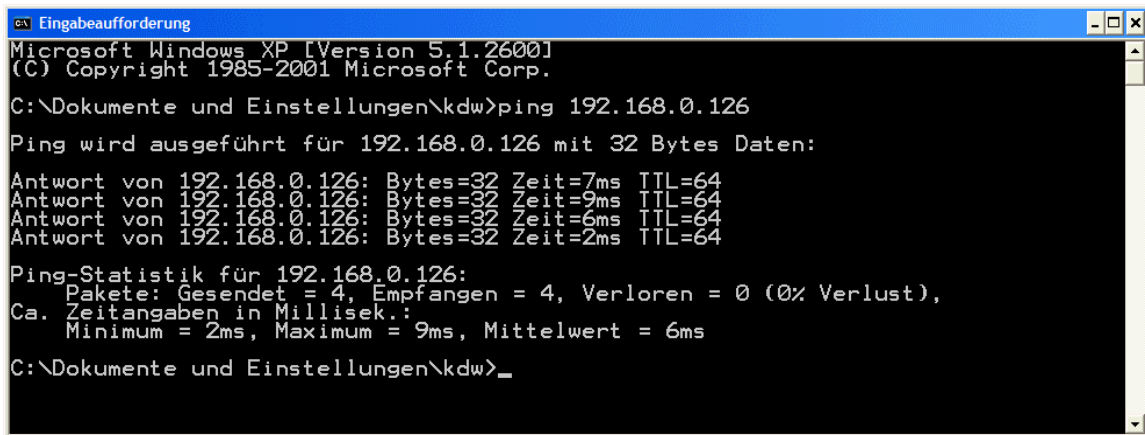
redboot-def - HyperTerminal
Datei Bearbeiten Ansicht Anrufen Übertragung ?
Platform: DNP/5280 (Motorola MCF5280)
Copyright (C) 2000, 2001, 2002, Red Hat, Inc.
Copyright (C) 2003, 2004, eCosCentric Limited
RAM: 0x00000000-0x01000000, [0x0000d3d0-0x00fed000] available
FLASH: 0xff800000 - 0x00000000, 128 blocks of 0x00010000 bytes each.
RedBoot> fconfig -i
Initialize non-volatile configuration - continue (y/n)? y
Run script at boot: false
Use BOOTP for network configuration: false
Gateway IP address: 0.0.0.0
Local IP address: 192.168.0.126
Local IP address mask: 255.255.255.0
Default server IP address: 192.168.0.1
Console baud rate: 115200
DNS server IP address: 192.168.0.4
GDB connection port: 9000
Force console for special debug messages: false
Network hardware address [MAC]: 0x00:0x00:0x00:0x00:0xFF:0x80
Network debug at boot time: false
Update RedBoot non-volatile configuration - continue (y/n)? y
... Erase from 0xffff0000-0xffffffff: .
... Program from 0x00ff0000-0x01000000 at 0xffff0000: .
RedBoot> _

```

- **4. Step:** Run your terminal emulation program again with a new setup. Setup the line parameters to **115.200 bps, 8 data bits, 1 stop bit, no handshake**. Then reset the DNP/5280. Wait again for the RedBoot prompt “RedBoot>”

After the reset the DNP/5280 comes up with a new setup for the serial line speed (Serial line speed before reset: 38.400 bps. Serial line speed after reset 115.200 bps).

- **5. Step:** Setup an Ethernet link between your PC and the DIL/NetPC DNP/5280. Check the Ethernet link with a ping command. The default IP address of the DNP/5280 is **192.168.0.126**.



```
Eingabeaufforderung
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Dokumente und Einstellungen\kdw>ping 192.168.0.126
Ping wird ausgeführt für 192.168.0.126 mit 32 Bytes Daten:
Antwort von 192.168.0.126: Bytes=32 Zeit=7ms TTL=64
Antwort von 192.168.0.126: Bytes=32 Zeit=9ms TTL=64
Antwort von 192.168.0.126: Bytes=32 Zeit=6ms TTL=64
Antwort von 192.168.0.126: Bytes=32 Zeit=2ms TTL=64
Ping-Statistik für 192.168.0.126:
    Pakete: Gesendet = 4, Empfangen = 4, Verloren = 0 (0% Verlust),
    Ca. Zeitangaben in Millisek.:
        Minimum = 2ms, Maximum = 9ms, Mittelwert = 6ms
C:\Dokumente und Einstellungen\kdw>
```

Please note: The steps in this document are executed within the factory setup of your DIL/NetPC DNP/5280 eCos Starter Kit before the shipment.

That is all.