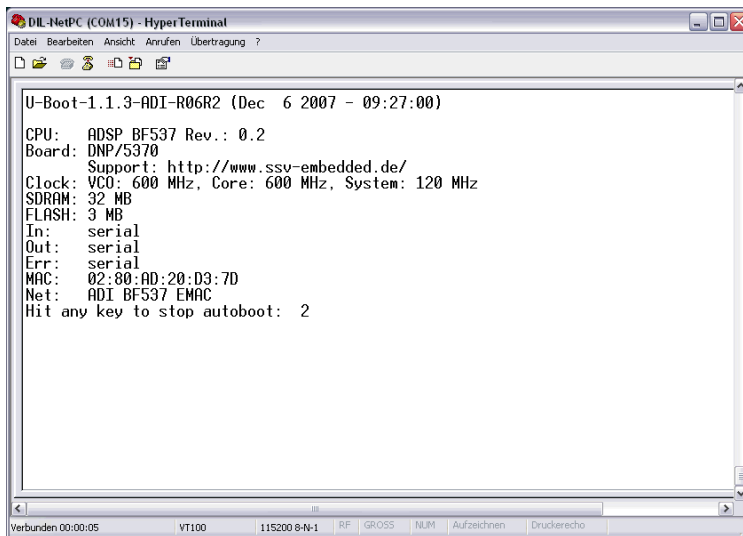


How to understand the DNP/5370 Boot Process with RCM enabled

Direct after power-up the DIL/NetPC DNP/5370 starts an automatic boot process from the on-board flash memory chip. This process consists of two steps.

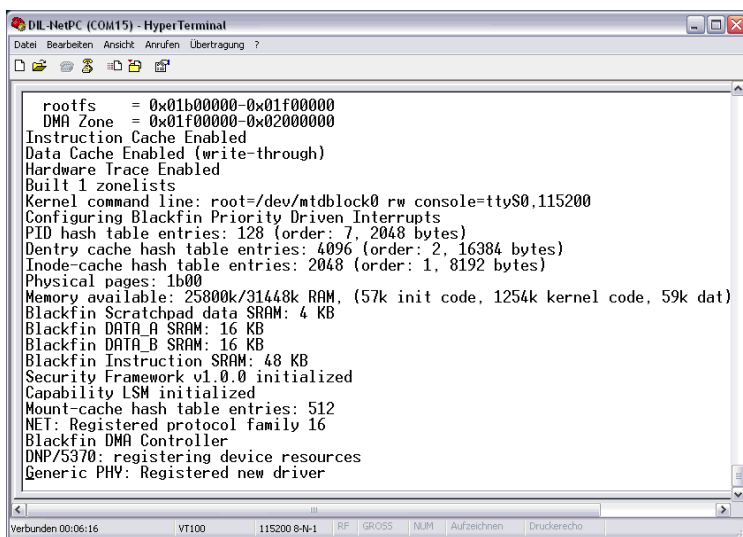
- **1. Step:** The DNP/5370 runs the U-Boot boot loader program. This software shows a wait message over the DNP/5370 COM1 serial interface if **RCM is enabled** (please see the *DIL/NetPC DNP/5370 Hardware Reference Manual* for details). It is possible to interrupt the boot process and switch to the U-Boot command line interface. Just hit a key of your terminal emulation program.



```

DIL-NetPC (COM15) - HyperTerminal
Datei Bearbeiten Ansicht Anrufen Übertragung ?
U-Boot-1.1.3-ADI-R06R2 (Dec 6 2007 - 09:27:00)
CPU: ADSP BF537 Rev.: 0.2
Board: DNP/5370
      Support: http://www.ssv-embedded.de/
Clock: VCO: 600 MHz, Core: 600 MHz, System: 120 MHz
SDRAM: 32 MB
FLASH: 3 MB
In: serial
Out: serial
Err: serial
MAC: 02:80:AD:20:D3:7D
Net: ADI BF537 EMAC
Hit any key to stop autoboot: 2
  
```

- **2. Step:** Without interruption the U-Boot boot loader starts a Linux O/S image after the wait period from the DNP/5370 flash memory.



```

DIL-NetPC (COM15) - HyperTerminal
Datei Bearbeiten Ansicht Anrufen Übertragung ?
rootfs = 0x01b00000-0x01f00000
DMA Zone = 0x01f00000-0x02000000
Instruction Cache Enabled
Data Cache Enabled (write-through)
Hardware Trace Enabled
Built 1 zonelists
Kernel command line: root=/dev/mtdblock0 rw console=ttyS0,115200
Configuring Blackfin Priority Driven Interrupts
PID hash table entries: 128 (order: 7, 2048 bytes)
Dentry cache hash table entries: 4096 (order: 2, 16384 bytes)
Inode-cache hash table entries: 2048 (order: 1, 8192 bytes)
Physical pages: 1b00
Memory available: 25800k/31448k RAM, (57k init code, 1254k kernel code, 59k dat)
Blackfin Scratchpad data SRAM: 4 KB
Blackfin DATA_A SRAM: 16 KB
Blackfin DATA_B SRAM: 16 KB
Blackfin Instruction SRAM: 48 KB
Security Framework v1.0.0 initialized
Capability LSM initialized
Mount-cache hash table entries: 512
NET: Registered protocol family 16
Blackfin DMA Controller
DNP/5370: registering device resources
Generic PHY: Registered new driver
  
```

Please note: The U-Boot command line interface allows you to change the wait time of the first step. Please see the U-Boot environment variable **bootdelay** for details.

That is all.