ADI Pronghorn SBC-201/SBC-210 (8MB flash) Installation Guide

RedBoot version:

RedBoot(tm) bootstrap and debug environment [ROM] Red Hat certified release, version 4.00 - built 17:16:52, Oct 11 2007

Platform: ADI Engineering Pronghorn Wifi Router (XScale) BE Copyright (C) 2000, 2001, 2002, 2003, 2004 Red Hat, Inc.

RAM: 0x00000000-0x02000000, [0x0002a0b8-0x01fc1000] available

FLASH: 0x50000000 - 0x50800000, 66 blocks of 0x00020000 bytes each.

Connect console cable and follow the steps:

1. Enter RedBoot command prompt. Press Ctrl+C to stop startup script (if enabled).

2. Configure IP addresses for local interface and TFTP server:

```
RedBoot> ip_address -l 192.168.1.20 -h 192.168.1.10
```

Here 192.168.1.20 is local IP address and 192.168.1.10 is TFTP server IP address.

3. Initialize FIS:

```
RedBoot> fis init
```

4. Load kernel from TFTP and store to FLASH

```
RedBoot> load zImage -r -b 0x01600000
RedBoot> fis unlock -f 0x50060000 -l 0x100000
RedBoot> fis create kernel1 -f 0x50060000 -l 0x100000 -b 0x01600000 -r 0x01600000
```

5. Load cramfs from TFTP and store to FLASH

```
RedBoot> fis unlock -f 0x50160000 -l 0x500000
RedBoot> load squashfs.img -r -b 0x00800000
RedBoot> fis create cramfs1 -f 0x50160000 -l 0x500000 -b 0x00800000 -r 0x00800000
```

6. Create cfg (configuration) and etc (jffs2 filesystem)

```
RedBoot> fis unlock -f 0x50660000 -l 0x0080000
RedBoot> fis create cfg -f 0x50660000 -l 0x0080000
```

if got message: "Invalid FLASH image size/length combination". Do reboot and back to Redboot pressing Ctrl+c to run one more time same command.

```
RedBoot> fis unlock -f 0x506E0000 -l  0x00E0000
```

```
RedBoot> fis create etc -f 0x506E0000 -l  0x00E0000
```

if got message: "Invalid FLASH image size/length combination". Do reboot and back to Redboot pressing Ctrl+c to run one more time same command.

7. Configure RedBoot - setup startup script and IP addresses

```
RedBoot> fconfig -i
Run script at boot: true
Boot script:
Enter script, terminate with empty line
>> fis unlock kernel1
>> fis unlock cramfs1
>> fis unlock etc
>> fis unlock cfg
>> fis unlock -f  0x507E0000 -l 0x00020000
>> fis load kernel1
>> exec
>>
Boot script timeout (100ms resolution): 1
Use BOOTP for network configuration: false
Gateway IP address:
Local IP address: 192.168.1.20
Local IP address mask: 255.255.255.0
Default server IP address: 192.168.1.254
Console baud rate: 115200
GDB connection port: 9000
Force console for special debug messages: false
Network debug at boot time: false
Default network device: npe_eth1
Update RedBoot non-volatile configuration - continue (y/n)? y
```

8. Reboot

```
RedBoot> reset
... Resetting.
```