



SBC6410 GPRS User manual

Ver 0.1

Date: 2012-2-19

www.armdesigner.com



Rev	Date	Description
V0.1	2012-2-19	Initial version

1. Introduction

1.1. About this Manual

This manual is intended to provide the user with an overview of the board and benefits, complete features specifications, and set up procedures. It contains important safety information as well.

1.2. Feedback and Update to this Manual

To help our customers make the most of our products, we are continually making additional and updated resources available on the Boardcon website (www.armdesigner.com).

These include manuals, application notes, programming examples, and updated software and hardware. Check in periodically to see what's new!

When we are prioritizing work on these updated resources, feedback from customers is the number one influence. If you have questions, comments, or concerns about your product or project, please do not hesitate to contact us at support@armdesigner.com.

1.3. Limited Warranty

Boardcon warrants this product to be free of defects in material and workmanship for a period of one year from date of buy. During this warranty period Boardcon will repair or replace the defective unit in accordance with the following process:

A copy of the original invoice must be included when returning the defective unit to Boardcon. This limited warranty does not cover damages resulting from lightning or other power surges, misuse, abuse, abnormal conditions of operation, or attempts to alter or modify the function of the product.

This warranty is limited to the repair or replacement of the defective unit. In no event shall Boardcon be liable or responsible for any loss or damages, including but not limited to any lost profits, incidental or consequential damages, loss of business, or anticipatory profits arising from the use or inability to use this products.

Repairs made after the expiration of the warranty period are subject to a repair charge and the cost of return shipping. Please contact Boardcon to arrange for any repair service and to obtain repair charge information.

1. Kernel support

Configure the kernel to support GPRS

Device Drivers --->

Network device support --->

- <*>PPP (point-to-point protocol) support
- <*> PPP multilink support (EXPERIMENTAL)
- <*> PPP support for async serial ports
- <*> PPP support for sync tty ports
- <*> PPP Deflate compression
- <*> PPP BSD-Compress compression
- <*>SLIP (serial line) support
- <*> CSLIP compressed headers

Device Drivers --->

USB support --->

USB Serial Converter support --->

- <*>USB Serial Converter support
- <*>USB Prolific 2303 Single Port Serial Driver
- <M>USB driver for GSM and CDMA modems

2. Copy the files which are placed in the directory “CD-ROM\SBC6410\gprs\sbin” to the directory “/usr/sbin/” in target board. Then execute the following command to change file permissions.

```
[root@EmbedSky sbin]# chmod 777 ppp* chat
```

3. Copy the directory “CD-ROM\SBC6410\gprs\ppp” to the directory “/etc/”. Then execute the following command to change file permissions.

```
[root@EmbedSky ppp]# chmod 777 ppp-on-dialer
```

4. Go into “/var/” directory, then make “run/” directory

```
[root@EmbedSky /]# cd /var/
```

```
[root@EmbedSky /var]# mkdir run
```

5. Disable eth0 network card

```
[root@EmbedSky /]# ifconfig eth0 down
```

6. Execute the following command to dial-up

```
[root@EmbedSky /]# pppd call gprs
```

7. Check if the device ppp0 has existed

```
[root@EmbedSky /]# ifconfig
```

If you get the following information, it means GPRS dial-up success. if not ,dial-up again.

```
ppp0      Link encap:Point-to-Point Protocol  
          inet addr:10.32.180.199  P-t-P:192.168.254.254  Mask:255.255.255.255  
          UP POINTOPOINT RUNNING NOARP MULTICAST  MTU:1500  Metric:1  
          RX packets:4  errors:0  dropped:0  overruns:0  frame:0  
          TX packets:5  errors:0  dropped:0  overruns:0  carrier:0  
          collisions:0  txqueuelen:3  
          RX bytes:64 (64.0 B)  TX bytes:110 (110.0 B)
```

8. Update the file “[/etc/resolv.conf](#)”

```
[root@EmbedSky /]#cp /etc/ppp/resolv.conf  /etc/
```

9. Test the GPRS

```
[root@EmbedSky /]#ping www.baidu.com
```