



SBC6410 GPS User manual

Ver 0.1

Date: 2012-01-13

www.armdesigner.com



Rev	Date	Description
V0.1	2012-1-13	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.

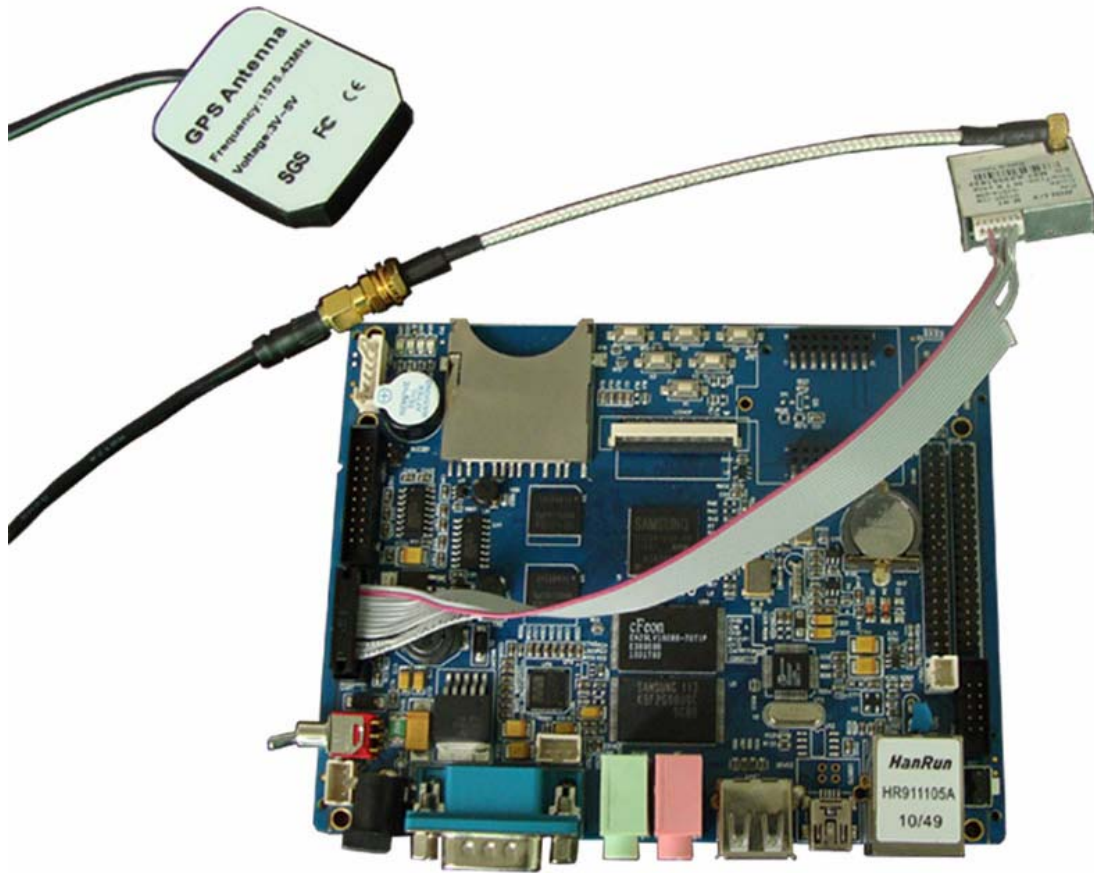
This warranty is limited to the repair or replacement of the defective unit. In no event shall Boardcon be liable or responsible for any loss or damages, including but not limited to any lost profits, incidental or consequential damages, loss of business, or anticipatory profits arising from the use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

How to install HOLUX M-87 GPS module as following picture:



NOTICE: users should put GPS Antenna on the outdoor when testing GPS. GPS for the first time positioning will take a long time.

2. Test GPS

Copy GPS test procedure [com](#) to the target board.

Execute the following command to test GPS

```
[root@EmbedSky /]# ./com /dev/tq6410_serial1 9600 8 0 1
```

NOTE: If the sixth parameters of **\$GPGGA** statement is 1, it means GPS positioning success. If it is 0, it means GPS positioning failure.

a. GPS positioning failure as follow:

```
RECV: $GPGGA,0  
RECV: 73421.49  
RECV: 9,2234.0  
RECV: 886,N,11  
RECV: 353.5657  
RECV: ,E,0,0,,  
RECV: 152.9,M,  
RECV: -2.9,M,,  
RECV: *58
```

b. GPS positioning success as follow:

```
RECV: $GPGGA,0  
RECV: 22740.00  
RECV: 0,2234.0  
RECV: 709,N,11  
RECV: 353.4894  
RECV: ,E,1,10,  
RECV: 0.01,32.  
RECV: 9,M,-2.9  
RECV: ,M,,*45
```