Chipsmall

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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
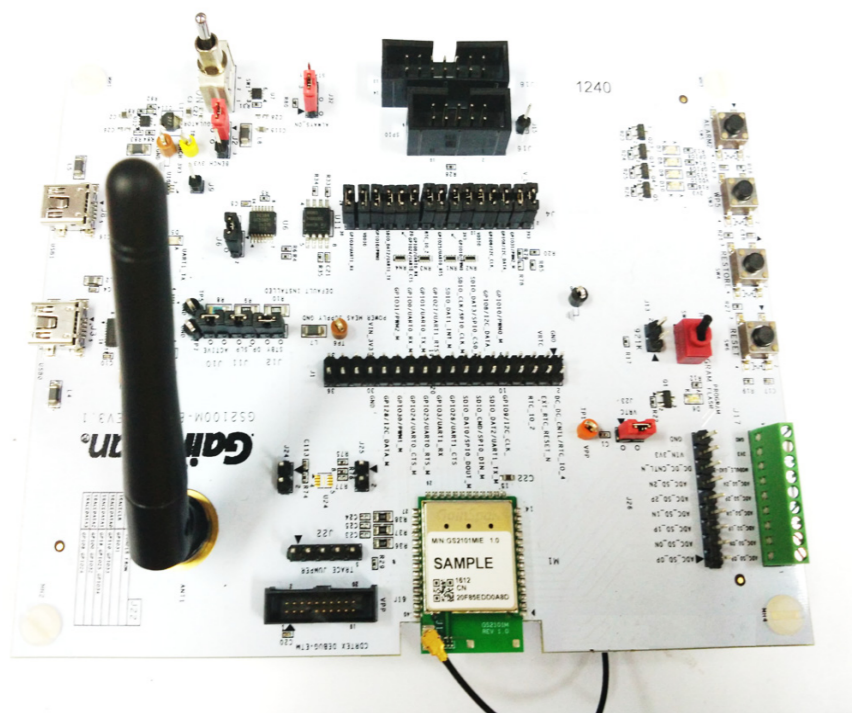Email & Skype: info@chipsmall.com Web: www.chipsmall.com
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GS2101M Evaluation Board Quick Start Guide

Supports GS2101M Module

This Quick Start Guide will walk you through the easy steps to setup and run the GS2101M EVB Board for Serial to WiFi and/or IP to WiFi APP.

You will need the following items:

- Quick Start Guide (this document)
- GS2100M Evaluation Board
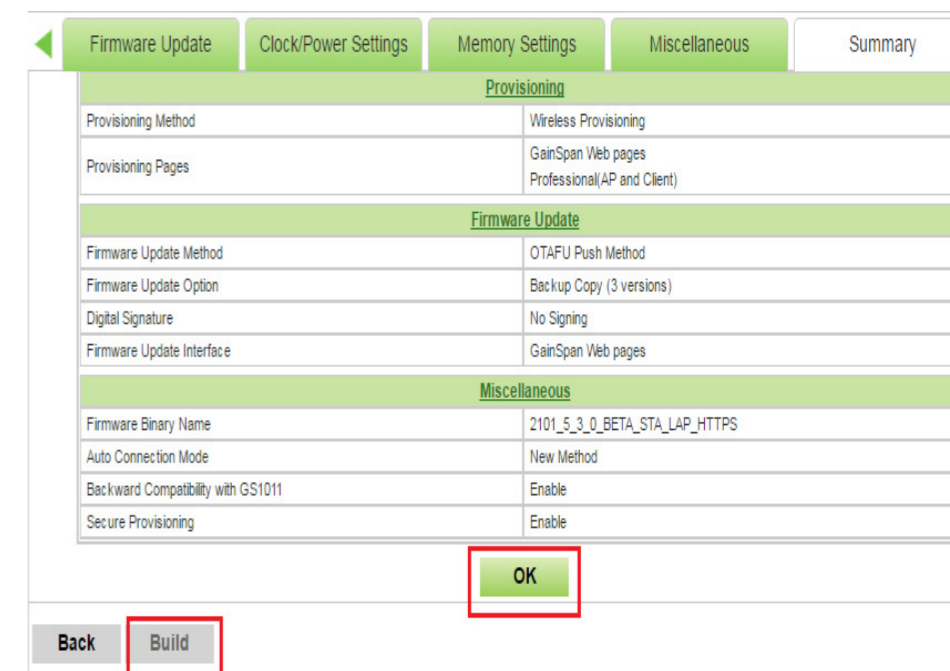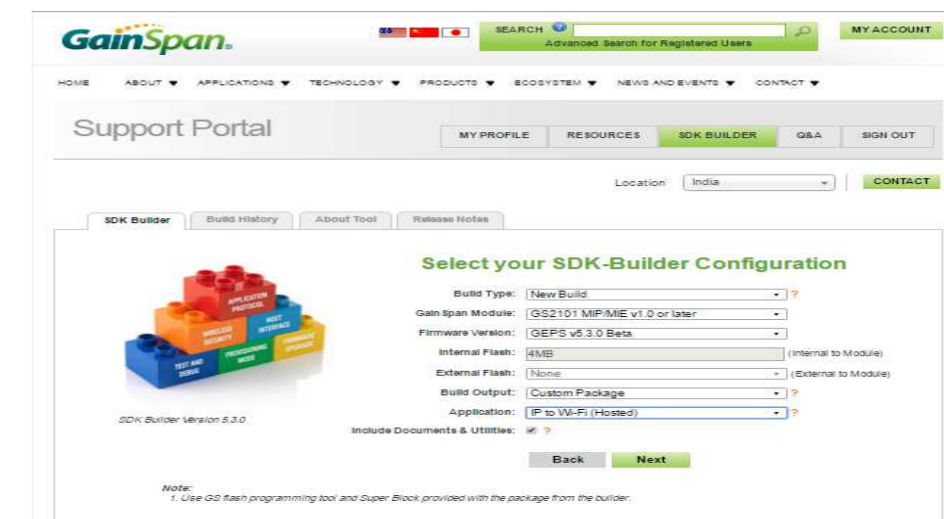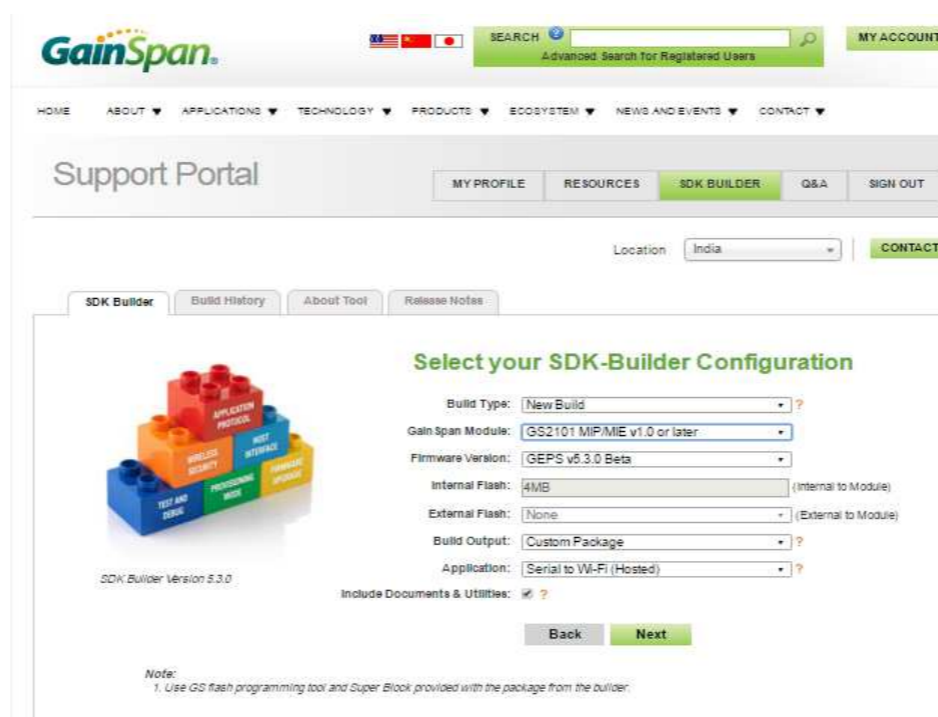- Serial Cable (USB to Mini-USB)

1 Build the Package

Step 1 Open the SDK Builder *www.gainspan.com/ secure/login*

If you do not have a login, sign up and register for a Portal account at:
https://www.gainspan.com/secure/register

Step 2 **Select Build Type, Module, Firmware Version, Build Output and Application to build as shown in the below snapshot.** Click the **Build** button to generate the binaries. The build configuration will be submitted and a confirmation email will be sent notifying that the package is complete and ready to download the zip file containing the firmware and binaries used to program the board.

The following figures shows the SDK Builder screen for building Serial to WiFi or IP to WiFi custom binaries.
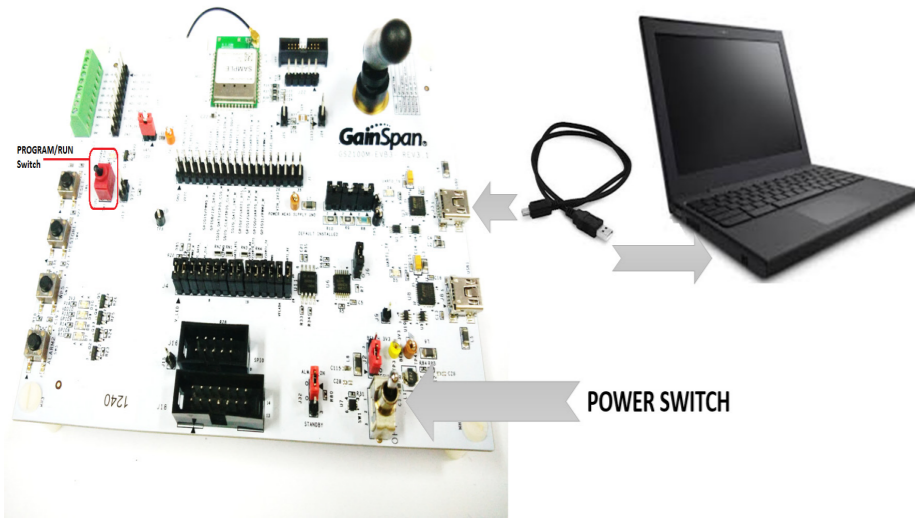

Important: Newer version of the firmware maybe available on the GainSpan Portal. Login to the Gain-Span Portal (www.gainspan.com/secure/login) and check the latest version available for your board on the SDK Builder. If the SDK Builder has a newer version, follow the steps in the *SDK Builder User Guide* to build the latest binary and update your evaluation board using the *gs2k_module_programming* utility.
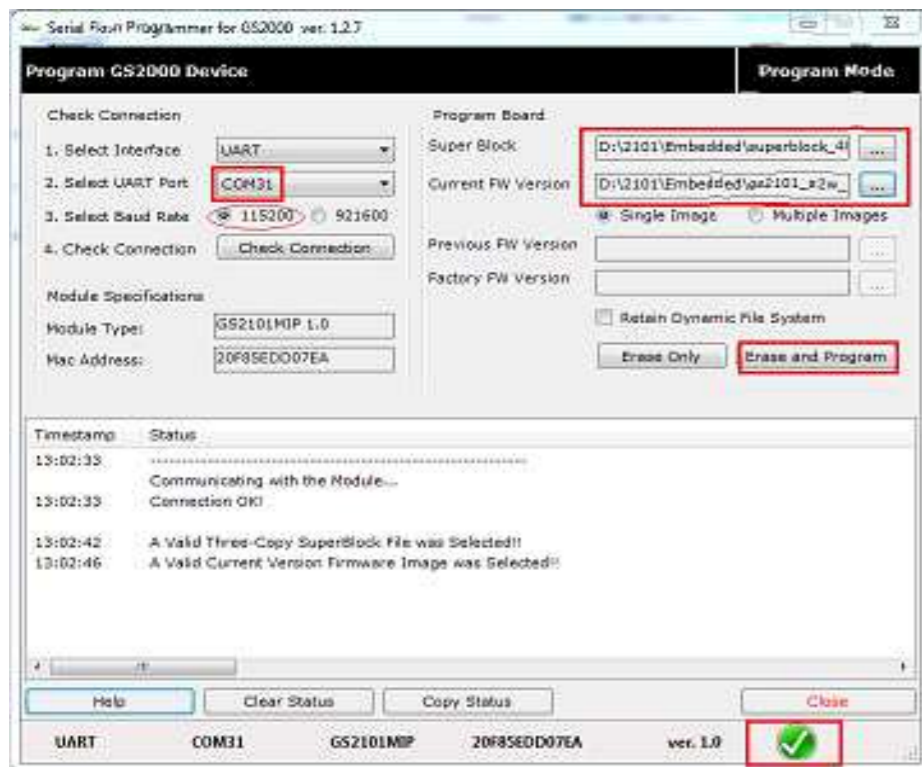
2 Program the GS Module

Step 1 Plug the mini-USB cable, one end of the **USB** port to GS2101M board USB0 and the other end of the USB port to the computer or laptop.

Step 2 Turn the PROGRAM/RUN switch to **PROGRAM** mode on the EVB and perform a power cycle.

Step 3 Open the GainSpan Serial Flash Programmer GUI application and select Serial-to-WiFi firmware using the UART interface from location <EVK PACKAGE>\Tools\GS_programming_tool\gs2k_flashprogram.exe
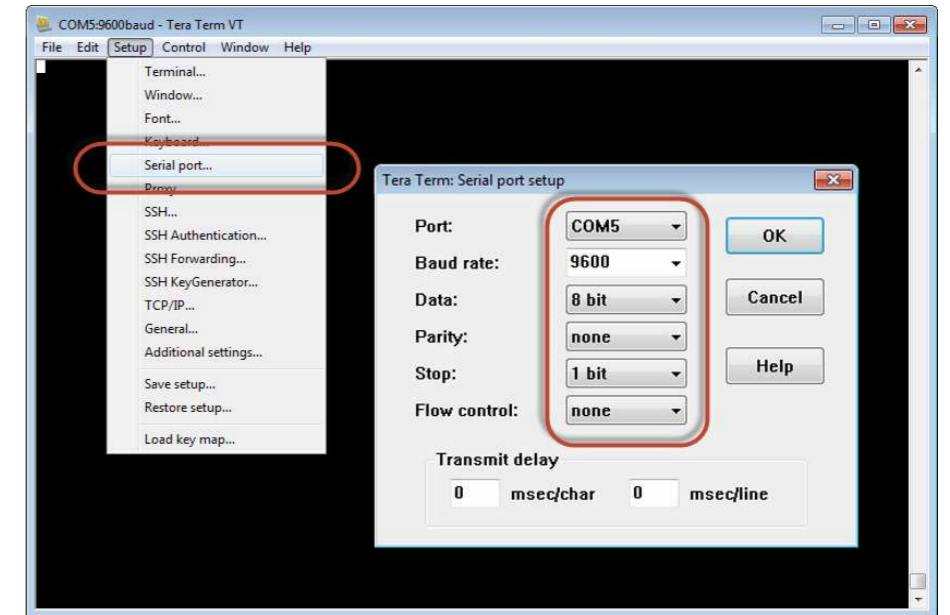Program the EVB.

Step 4 Put the PROGRAM/RUN switch to **RUN** mode and perform a power cycle.

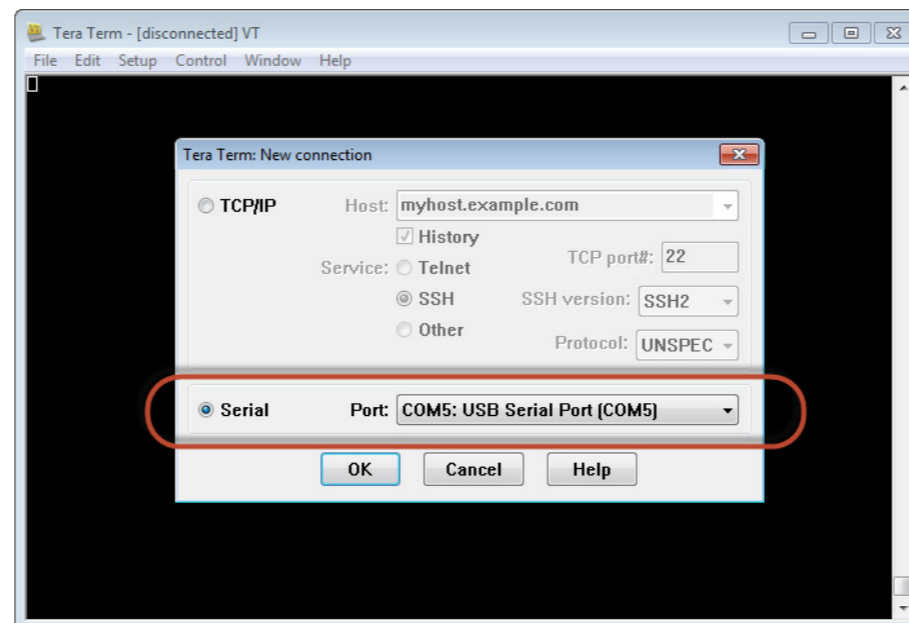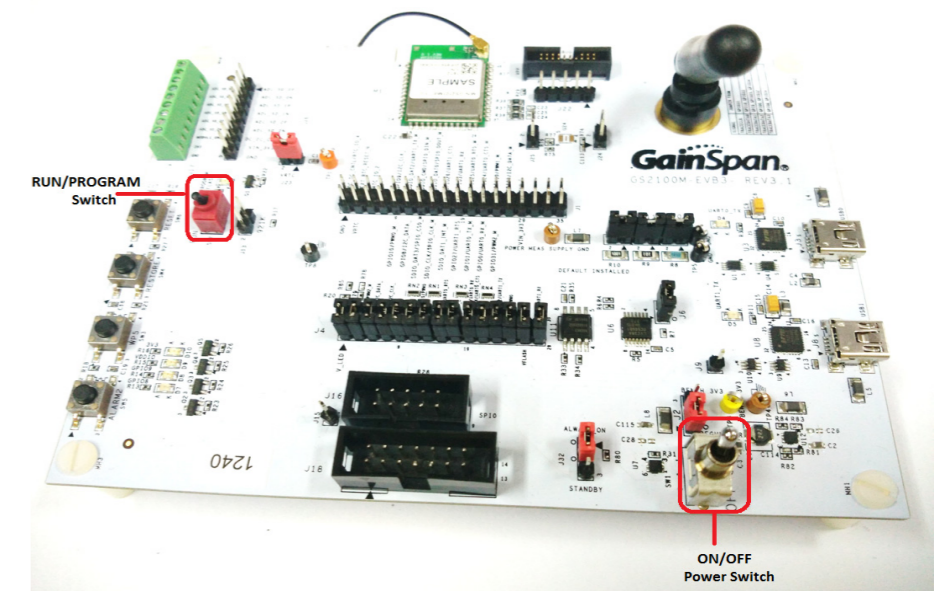# 4 Configure the Serial Port

Note: To verify you have the correct Serial COM port, open the Windows Control Panel and select Device Manager.

Open a Serial Terminal Emulation Software of your choice. Select the serial COM port associated with the board. In this example we are using Tera Term VT. You can download a copy of Tera Term VT at: http://ttssh2.sourceforge.jp/

Setup the Serial port:

- Port: **COMx** (x is the number of the COM port)
- Baud Rate: **9600**
- Data: **8 bit**
- Parity: **none**
- Stop: **1 bit**
- Flow Control: **none**

5 Run the GS Module

Step 1 Ensure that the RUN/PROGRAM switch is in RUN mode. Turn the ON/OFF switch to the ON position. The Serial to WiFi or IP to WiFi APP will display in the Tera Term VT window.

Step 2 Enter AT comand, *at+ver=??,* to verify that the board is communicating and the firmware version on the board is displayed.

The Tera Term VT logs of the command for Serial to WiFi and IP to WiFi is as shown below:

```
COM18 - Tera Term VT
File  Edit  Setup  Control  Window  Help

Serial2WiFi APP
at+ver=??
S2W APP VERSION=5.3.0
S2W GEPS VERSION=5.3.0
S2W WLAN VERSION=5.3.0
S2W BIN TYPE=GS2K_BUILDER_9243
S2W RELEASE TYPE=BETA
BUILD TIME=00:00:04
BUILD DATE=Jun 17 2016
WLAN EXT VERSION=35
S2W APP EXT VERSION=18
WLAN FEAT BMAP=0000000000000207
GEPS EXT VERSION=17
FLASH ID=0x000020c2:MICRONIX-4MB
OK
```

```
COM8 - Tera Term VT
File  Edit  Setup  Control  Window  Help

Ip2WiFi APP

at+ver=??
IP2WIFI APP VERSION=5.3.0
IP2WIFI GEPS VERSION=5.3.0
IP2WIFI WLAN VERSION=5.3.0
IP2WIFI BIN TYPE=GS2K_BUILDER_9231
IP2WIFI RELEASE TYPE=BETA
BUILD TIME=08:04:57
BUILD DATE=Jun 16 2016
WLAN EXT VERSION=35
IP2WIFI APP EXT VERSION=18
WLAN FEAT BMAP=0000000000000207
GEPS EXT VERSION=17
FLASH ID=0x000020c2:MICRONIX-4MB
OK
```

Note: The Evaluation Package includes documentation, EVB schematics, EVB firmware, software utilities such as Tera Term, and gs2k_flashprogram utility. Use the gs2k_flashprogram utility provided with the EVB package to re-flash the EVB if needed.

Information

For general questions, visit:
http://www.gainspan.com/contactform

For sales, visit:
http://www.gainspan.com/contact/sales_distributors

For technical and product support, visit:
https://www.gainspan.com/secure/question

For additional information, refer to the following documents for:

- Configuring and generating custom firmware binary images:
  - *GS2K SDK Builder User Guide*

- Programming module:
  - *GS2K Module Programming User Guide*

- Serial-to-WiFi AT command description:
  - *S2W Adapter Command Reference Guide*

- IP-to-WiFi AT command description:
  - *IP2WiFi Adapter Command Reference Guide*

- AT command examples for setting UDP/TCP client/server configurations HTTP/HTTPS, and EAP secure connection:
  - *GS2K S2W Use Case Reference Guide*

- For evaluation board description and hardware setup, jumper settings, component description, board specifications, and pin outs:
  - *GS2K Module Evaluation Board Hardware User Guide*

- If SDK is purchased:
  Setting up, compiling, and debugging firmware using IAR IDE:
  - *GS2K SDK Application Programming Guide*

Congratulations!
You have successfully setup your GS2101M Evaluation Board.

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