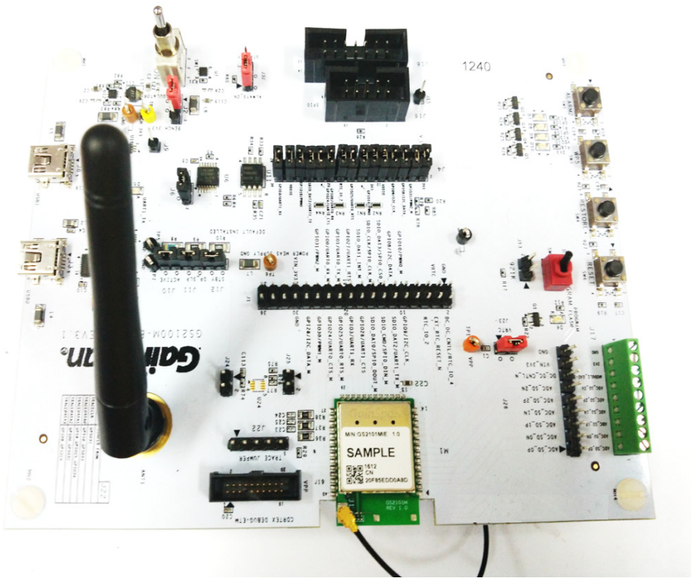
GS2101M Evaluation Board Quick Start Guide

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:

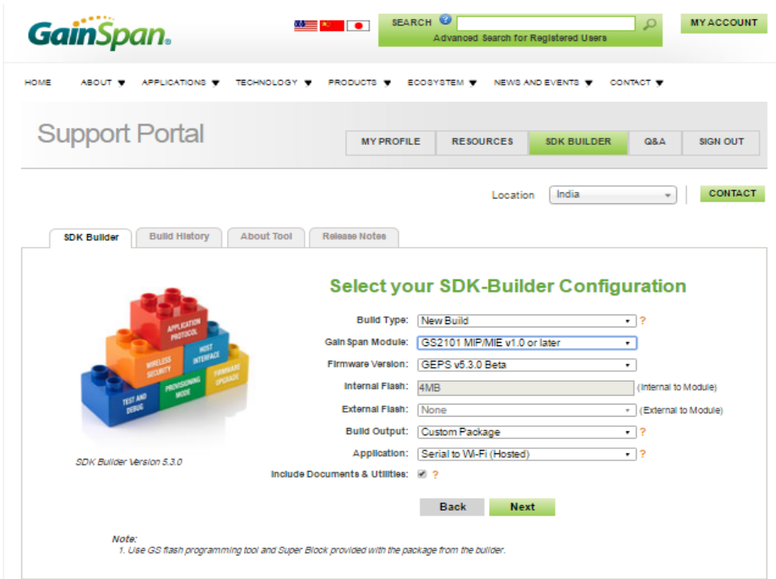
- Quick Start Guide (this document)
- GS2100M Evaluation Board
- Serial Cable (USB to Mini-USB)

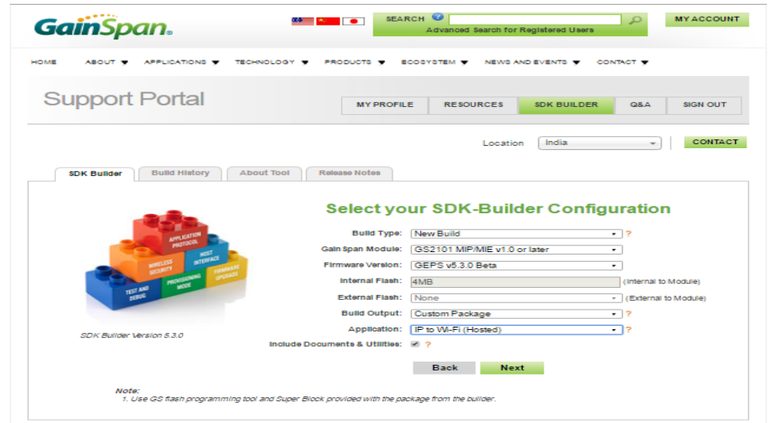
1 Build the Package

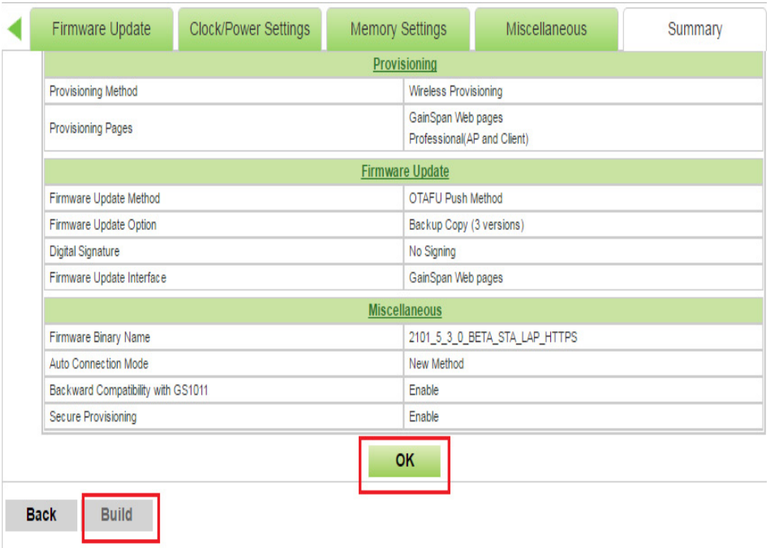
Step 1 Open the SDK Builder *www.gainspan.com/secure/login*
If you do not have a login, sign up and register for a Portal account at:
https://www.gainspan.com/secure/register

Step 2 **Select Build Type, Module, Firmware Version, Build Output and Application to build as shown in the below snap-shot.** 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.





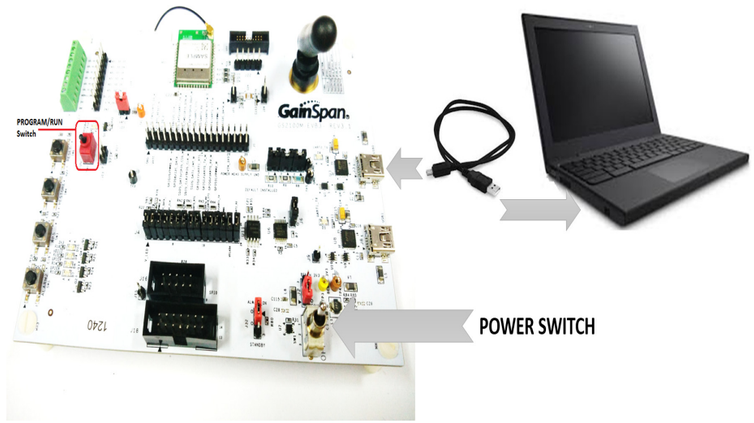


Important: Newer version of the firmware maybe available on the GainSpan Portal. Login to the GainSpan Portal (www.gainspan.com/secure/login) and check the latest version available for your board on the SDK Builder. If the SDK Builder has a newer version, follow the steps in the *SDK Builder User Guide*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

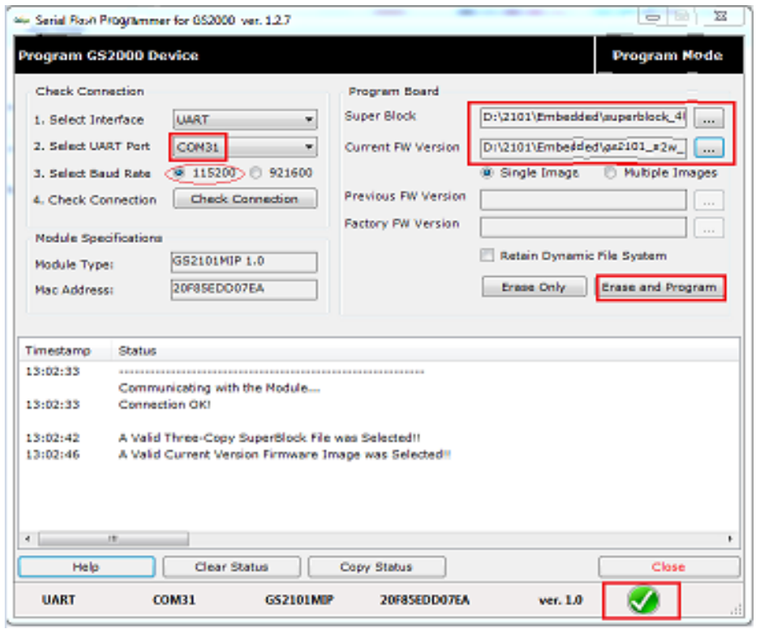
2 Program the GS Module

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.

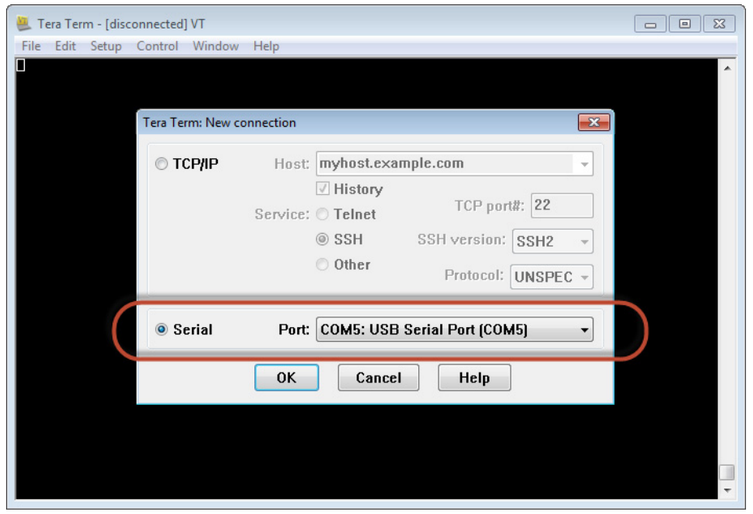


Step 4 Put the PROGRAM/RUN switch to **RUN** mode and perform a power cycle.

4 Configure the Serial Port

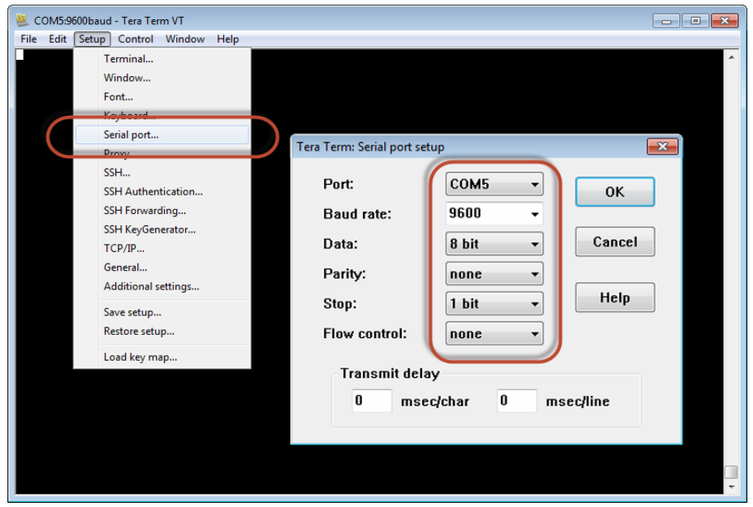
Note: To verify you have the correct Serial COM port, open the Windows Control Panel and select Device Manager.

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/*



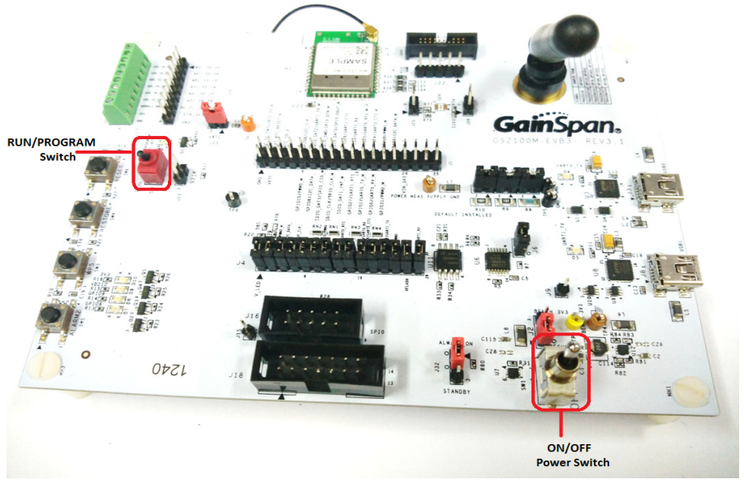
Setup the Serial port:

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



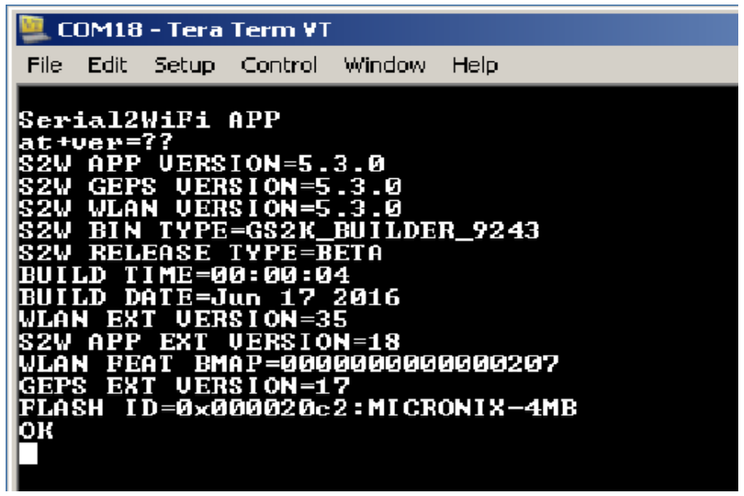
5 Run the GS Module

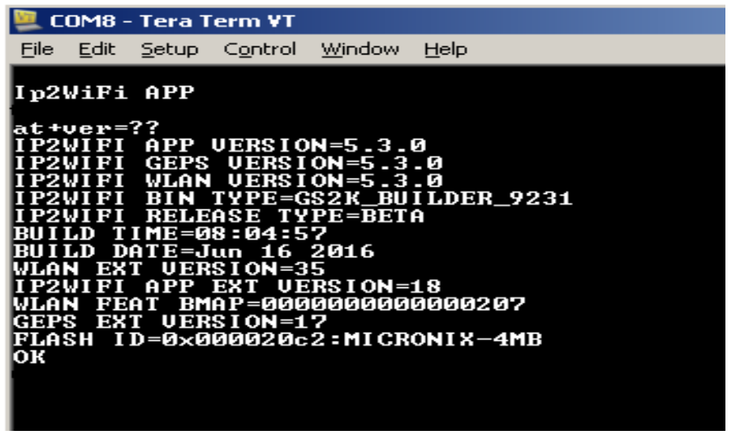
Step 1 Ensure that the RUN/PROGRAM switch is in RUN mode. Turn the ON/OFF switch to the ON position. The Serial to WiFi or IP to WiFi APP will display in the Tera Term VT window.



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:





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.

3590 N. First Street, Suite 300
San Jose, CA 95134
Tel +1 (408) 627-6500
www.gainspan.com