

SL869-V3 EVK User Guide

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APPLICABILITY TABLE

PRODUCT
SL869-V3



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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1.3. Text Conventions



Danger – This information MUST be followed or catastrophic equipment failure or bodily injury may occur.



Caution or Warning – Alerts the user to important points about integrating the module, if these points are not followed, the module and end user equipment may fail or malfunction.



Tip or Information – Provides advice and suggestions that may be useful when integrating the module.

All dates are in ISO 8601 format, i.e. YYYY-MM-DD.

1.4. Related Documents

- Telit SL869-V3 Product User Guide
- Telit SL869-V3 Software User Guide

1.5. Product Usage Notes



- *To prevent ESD and EOS damage, a properly grounded ESD wrist strap should be worn when working inside the EVK*
- *Do not alter shunt jumpers while power is applied*
- *Do not short the RF signal to ground if antenna voltage is installed. Damage to the EVK may occur.*

Always follow ESD safety precautions when utilizing the evaluation kit.

Please refer to your sales representative for additional documentation.



2. Evaluation Kit Requirements

To use the SL869-V3 Evaluation Kit (EVK), you will need the following items:

1. An SL869-V3 Evaluation Unit (included in the kit)
2. GNSS Antenna (included in the kit)
3. FTDI USB Drivers (included in the kit)
4. Current version of TelitView (included in the kit)

Note: There is a version of TelitView on the USB Drive supplied in the kit, however for full functionality, the latest version should be downloaded from the Telit Support Site.

5. A PC with a USB port and:
 - Windows 7 or later
 - .NET Framework 4.0

2.1. Installing the USB Drivers

Before connecting the SL869-V3 EVK, install the necessary USB drivers

1. Double-click the USB driver executable and follow the onscreen directions for installation.



3. Evaluation Kit Description

3.1. SL869-V3 EVK Contents

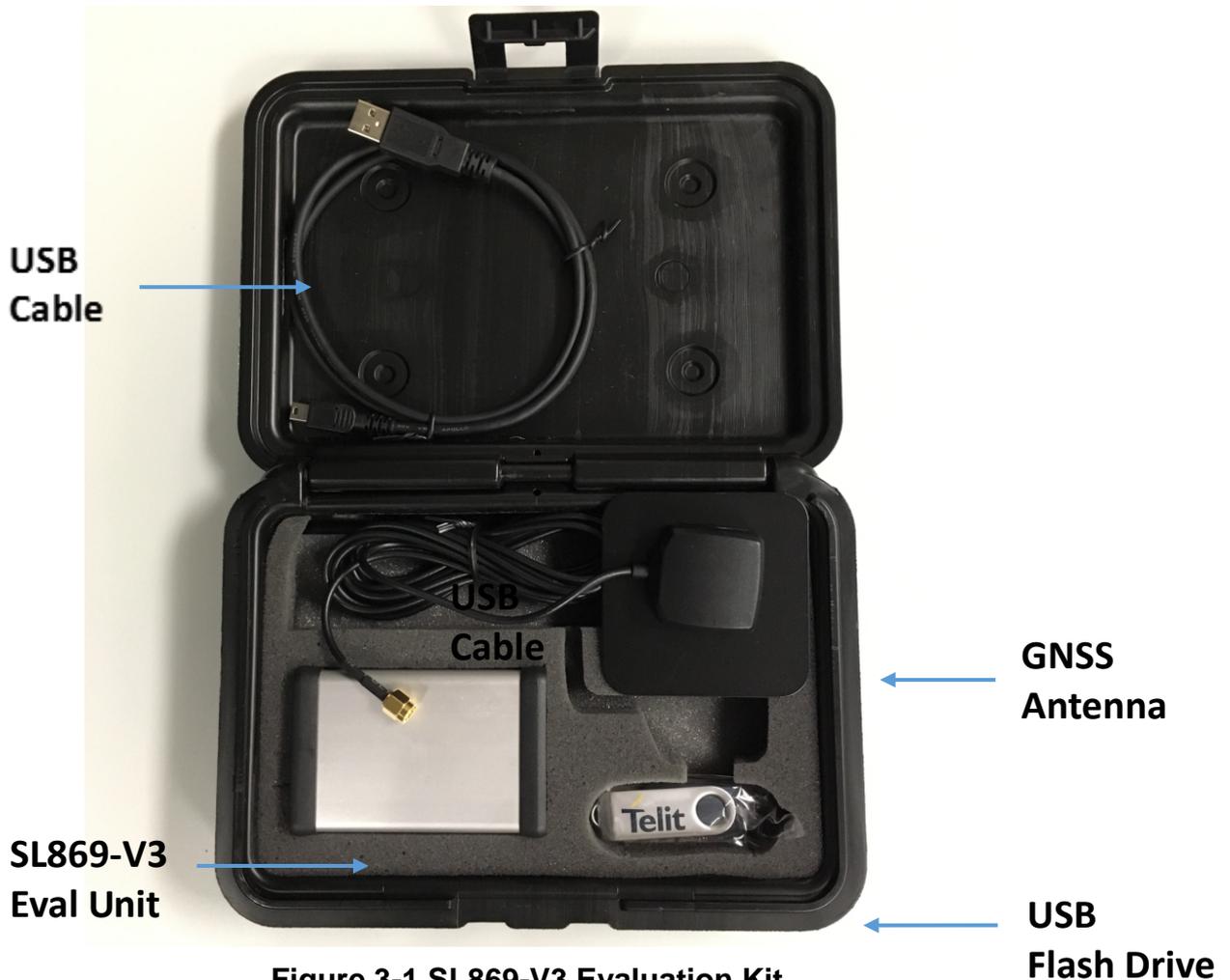


Figure 3-1 SL869-V3 Evaluation Kit

Contents Description

SL869-V3 Eval Unit: Evaluation Unit including the Telit SL869-V3

GNSS Antenna: An active antenna powered by the EVK.

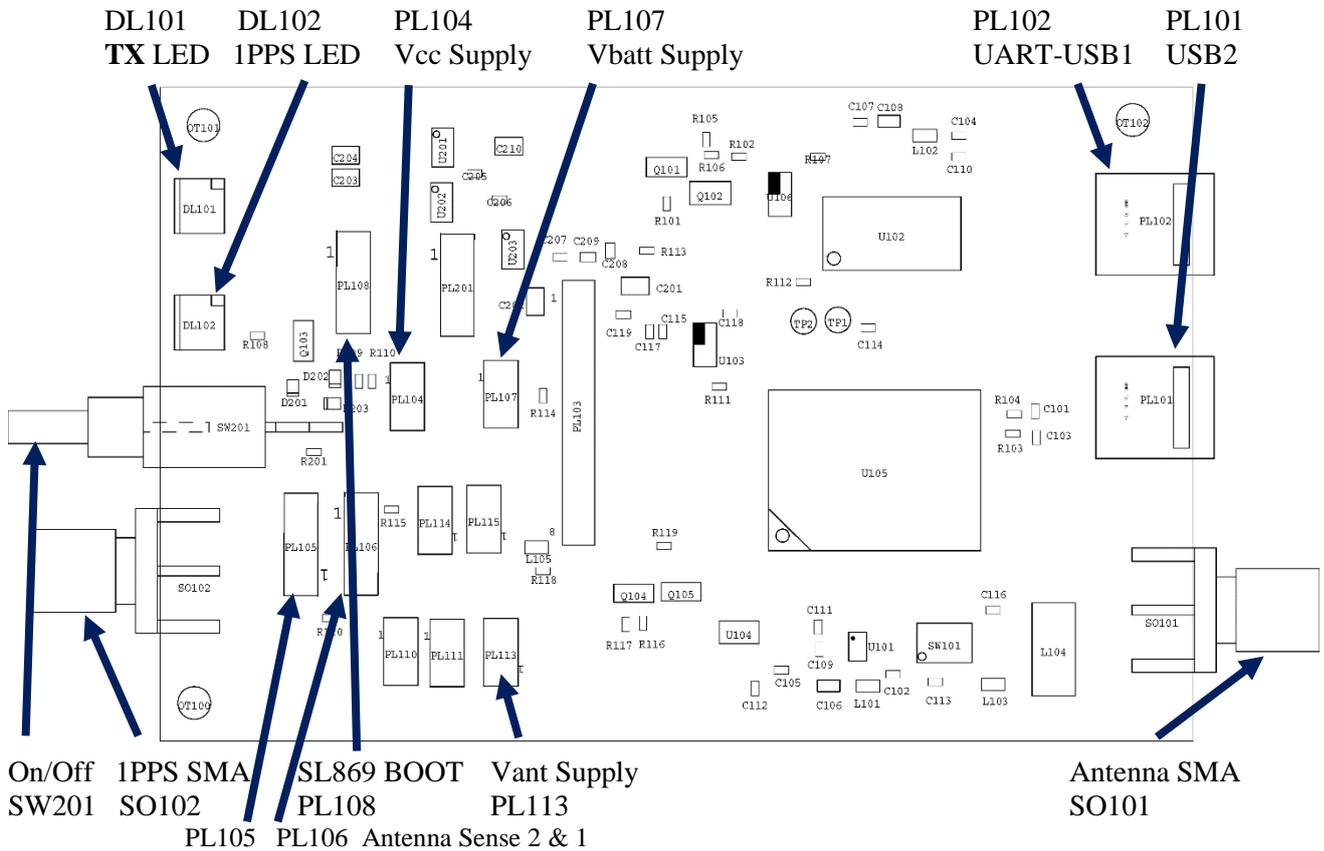
The antenna supports GPS/Glonass/Beidou with an LNA Gain 30 dB)

USB Cable: A 6ft mini USB cable used to supply power and communicate to the EVK

USB Flash Drive: Contains the tools and documentation for the SL869-V3



3.2. SL869-V3 Evaluation Board components



Note: PL105 and PL106 must be jumpered 1-2 to operate the on-board Teseo 3 Antenna Sense circuit.

Figure 3-2 SL869-V3 Evaluation Board components

Required External Connections

Connect the PC to UART-USB (PL102)

Connect the GNSS antenna to RF-IN (SO101)



5. TelitView

Launch the TelitView application



Figure 5-1 TelitView application

5.1. Main Interface

After launching TelitView, first notice the application’s main interface.

Connecting to the EVK

5.1.1. Main Menu Bar

Under the “Tools” option on the *Main Menu Bar*, select “Connect to GPS.” This will open the ‘Connect to GPS’ window.

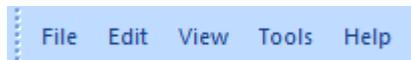


Figure 5-2 Main Menu Bar

5.1.2. Main Tool Bar

Select the “Connect to GPS” icon under the *Main Tool Bar* and the ‘Connect to GPS’ window will open.



Figure 5-3 Main Tool Bar

5.1.3. 'Connect to GPS' Window

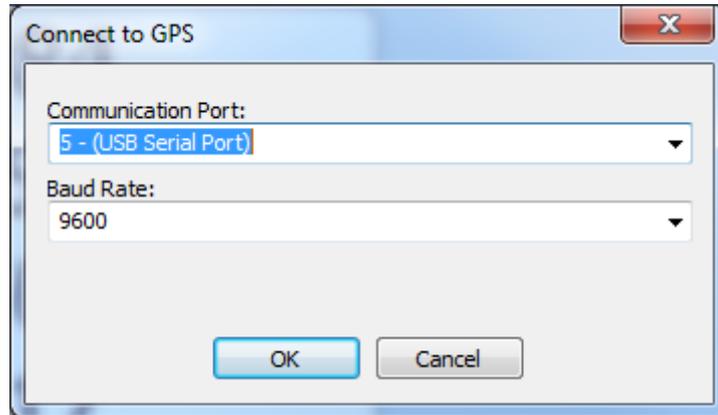


Figure 5-4 Connect to GPS Window

1. Select the correct Communication Port
2. Select the correct baud rate (default – 9600)

5.2. TelitView Tabular View

TelitView implements a tabular view. Switching between tabs displays different information parsed from the receiver.

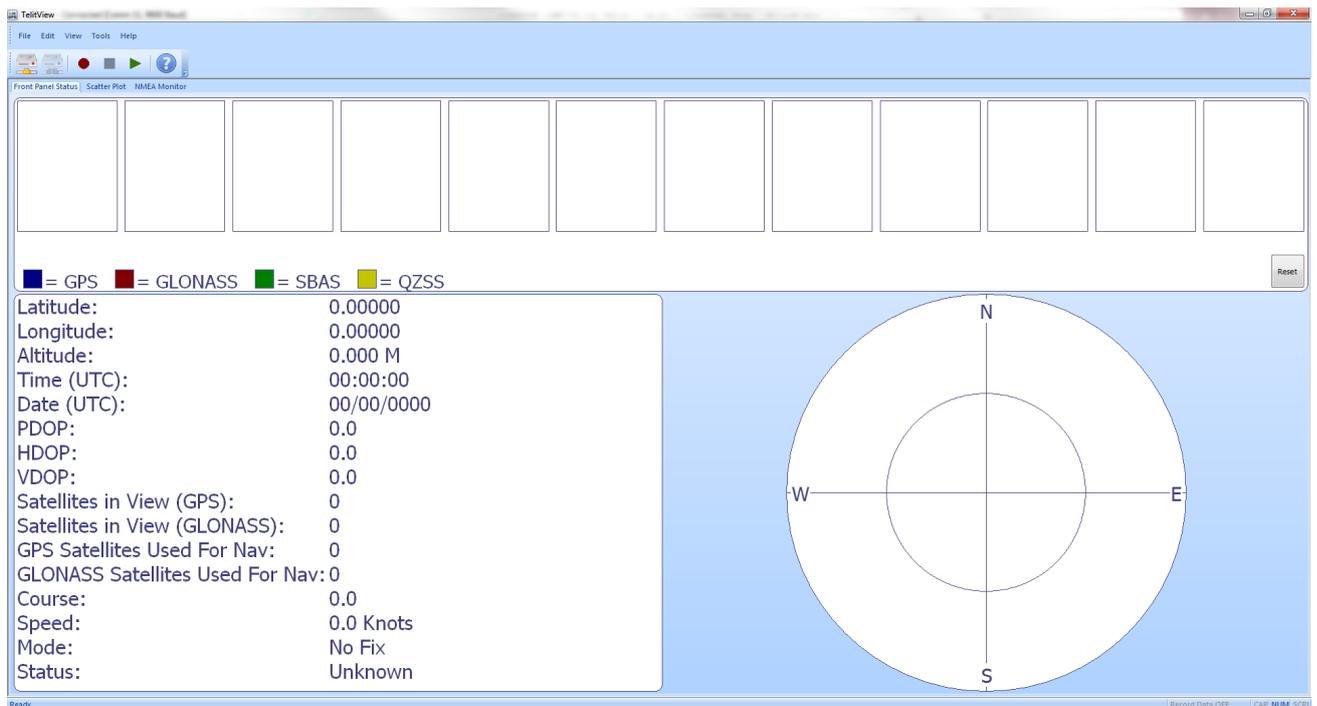


Figure 5-5 TelitView Application

5.2.3. NMEA Monitor

The NMEA Monitor displays the NMEA output of the receiver. The user can also type in commands in the Transmit toolbar.

TelitView automatically adds a checksum to the command being sent.

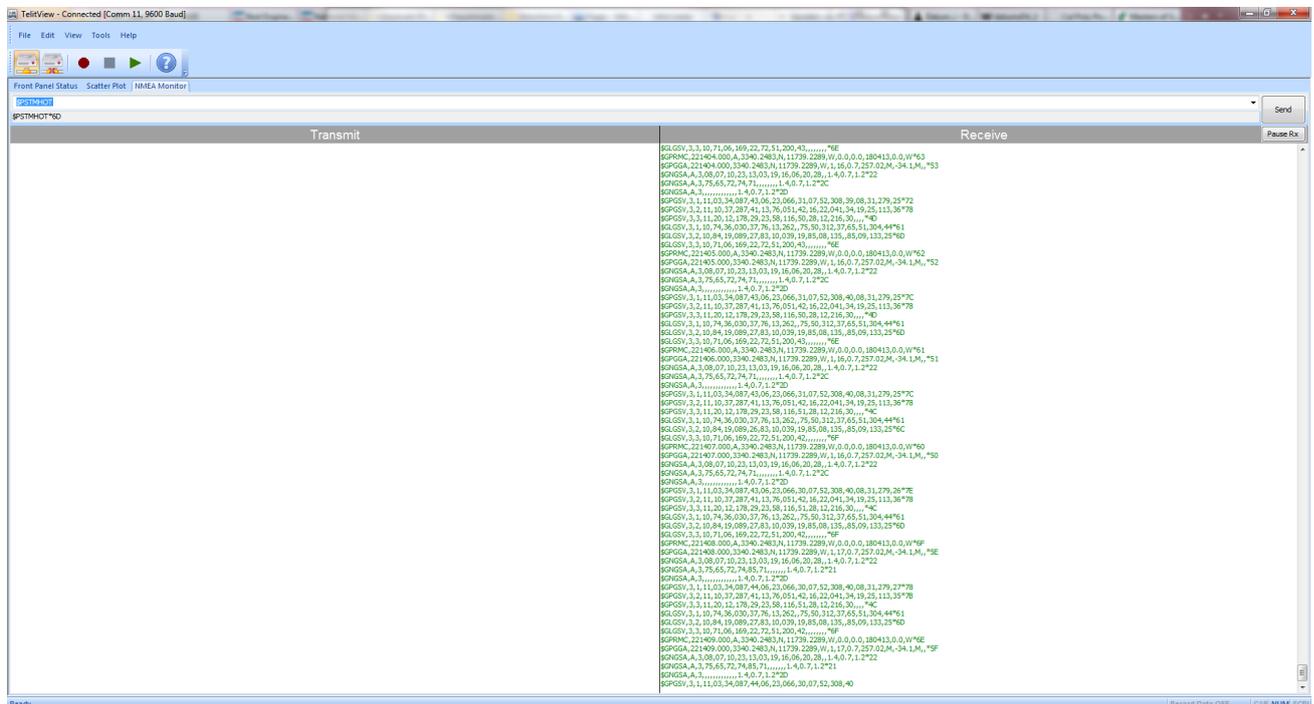


Figure 5-8 NMEA Monitor Tab

5.3. User Menu Commands Manager

The TelitView user has the option to enter in custom commands through the “User Menu Command Manager.” There are 10 available slots for custom commands. Each slot requires a ‘Menu Caption’ and ‘NMEA Command.’

The User Menu Command Manager is accessible through the “Tools” selection on the **Main Menu Bar**.

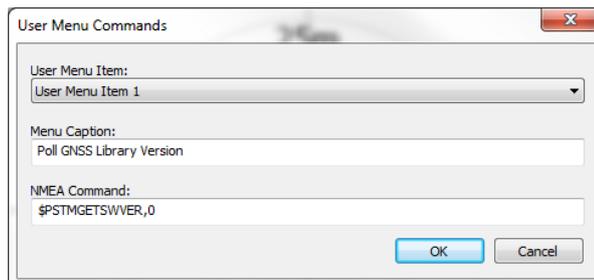


Figure 5-9 User Menu Command Manager



6. Flashing Firmware with TeseoIII X-Loader

Note that X-loader requires use of the BOOT pin. If this pin is not available in a user's design, you will need to run the FW Upgrade Tool (UPG).

The EVK will be preloaded with firmware, however if updates are required, perform the following steps:

6.1. Flashing Requirements

- SL869-3DR software from TELIT
- TESEOIII X-Loader v1.13 (or newer) from TELIT

6.2. Flashing Instructions



Note: Do not erase NVM, or the Initialization procedure will have to be performed.

1. Install a shunt jumper on Main Board SL869 BOOT (pins 2 & 3), shorting the pins together.
2. Connect the USB cable and let the Host PC machine enumerate the USB connection.
3. Set SW201 (Main Power) to ON (up) to power the SL869-3DR receiver.
4. Launch the TESEOIII X-Loader and set the selections as shown in the figure below.

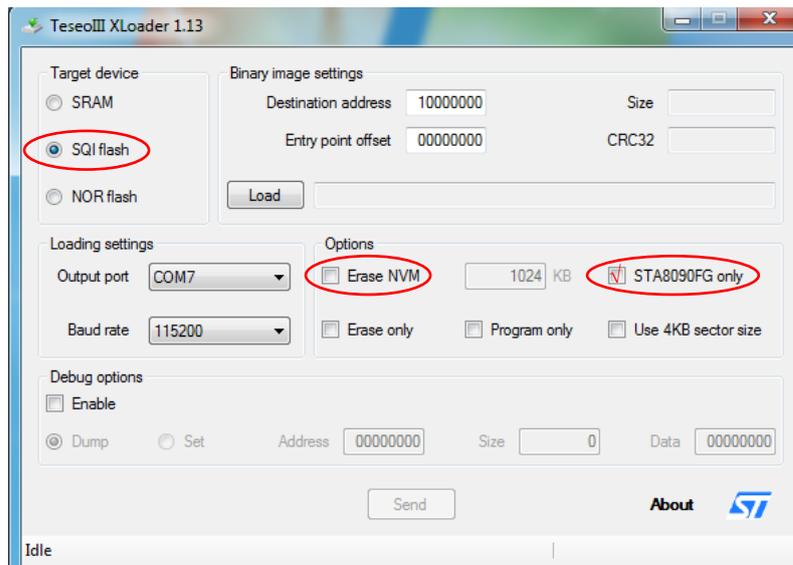


Figure 6-1TESEOIII X-Loader



8. Document History

Revision	Date	Changes
0	2016-08-19	First Issue

