GL865-JN3/SL869 Interface Application Note

APPLICABILITY TABLE

PRODUCT	P/N
GL865-JN3	3990250925
	3990250953

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Contents

1.   Introduction

1.1.   Scope

Scope of this document is to provide customers with all the necessary information on how to configure the GL865-JN3/SL869 Interface and then evaluate the JN3/SL869 features through the Telit AT commands.

1.2.   Audience

This document is intended for customers who are developing applications with GL865-JN3/SL869 Interface.

1.3.   Contact Information, Support

For general contact, technical support, to report documentation errors and to order manuals, contact Telit Technical Support Center (TTSC) at:

> TS-EMEA@telit.com
> TS-NORTHAMERICA@telit.com
> TS-LATINAMERICA@telit.com
> TS-APAC@telit.com

Alternatively, use:

http://www.telit.com/en/products/technical-support-center/contact.php

For detailed information about where you can buy the Telit modules or for recommendations on accessories and components visit:

http://www.telit.com

To register for product news and announcements or for product questions contact Telit Technical Support Center (TTSC).

Our aim is to make this guide as helpful as possible. Keep us informed of your comments and suggestions for improvements.

Telit appreciates feedback from the users of our information.

1.4.   Document Organization

This document contains the following chapters:

"Chapter 1: "Introduction" provides a scope for this document, target audience, contact and support information, and text conventions.

"Chapter 2: "GL865-JN3/SL869 Interface" provides instructions about the HW configuration that must be used to control the JN3/SL869 GPS module by means of the GE865 GSM module.

"Chapter 3: "Configuring the GL865-JN3/SL869 Interface via AT Commands" describes how to configure the GL865 in order to control the JN3/SL969 via the Telit GPS specific AT commands.

1.5.   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.

1.6.   Related Documents

- [1] Telit_EVK2_User_Guide_Rev13, 1vv0300704
- [2] Telit_AT_Commands_Reference_Guide_r13, 80000ST10025a

2.   GL865-JN3/SL869 Interface

The GL865-JN3/SL869 Interface allows testing the functionalities and performance of the GL865 and JN3/SL869 modules.

To successfully control the JN3/SL869 GPS module by means of the GL865 GSM module, the GL865- JN3/SL869 Interface must be configured as follows:

1. Since the GL865 module (but not the whole interface) receives its power supply from the PL101 connector, a shunt jumper must always be plugged on the latter (see fig. 1).
2. Since the JN3/SL869 module (but not the whole interface) receives its power supply from the PL201 connector, a shunt jumper must always be plugged on the latter (see fig. 1).

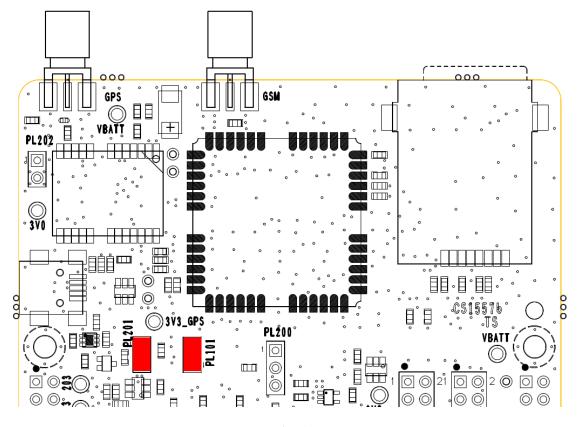For further information, please refer to [1], paragraph *"Power Supply"*.

Fig. 1

3. The JN3/SL869 serial port must be then connected to the GL865 one as depicted in fig. 2, by means of the PL302 connector, to make the GPS module communicate with the GSM side: this is the so called "Controlled Mode" configuration.

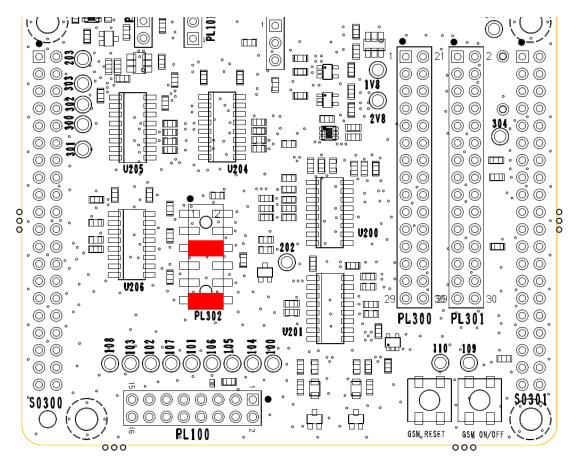   For further information, please refer to [1], paragraph *"GPS to GSM (internal host controlling configuration)"*.

Fig. 2

4. The JN3/SL869 GPS_PPS, GPS_BOOT and GPS_EN control signals must now be connected to a set of three GL865 GPIOs.
The configuration depicted in fig. 3 makes use of GPIOs # 4, 6 and 7 to drive and monitor the JN3/SL869 control signals.

For further information, please refer to [1], paragraphs:

- *"GPIO settings"*
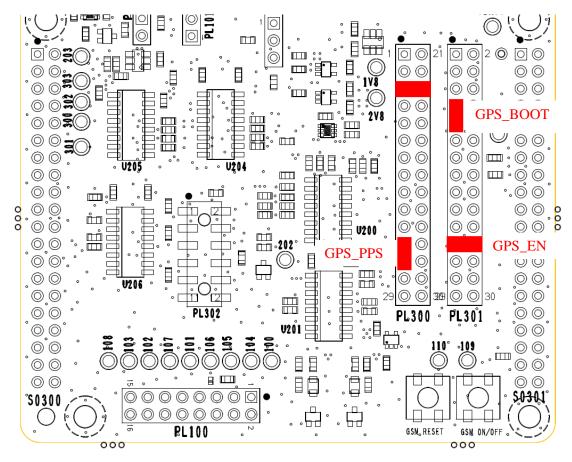- *"Internal host controlling configuration"*

Fig. 3

3. **Configuring the GL865-JN3/SL869 Interface via AT Commands**

Once the HW configuration shown in the previous paragraph has been applied, the GL865 can be configured to manage the JN3/SL869 GPS module.

This stage can be successfully accomplished by issuing the following AT commands (see [2]):

- **AT$GPSD=2**, this command configures the serial port #1 of the GL865 (TRACE) to be used with a GPS module (Controlled Mode). Also, it enables the entire GPS specific AT commands set.

- **AT$GPSGPIO= 4,6,7**, this command configures GPIOs # 4, 6 and 7 to drive and monitor the JN3/SL869 GPS_PPS, GPS_BOOT, and GPS_EN signals respectively.

- **AT$GPSP=1,** this command turns the JN3/SL869 ON.

- **AT$GPSSAV,** this command saves the configuration applied above.

  The GL865 must be then restarted to make effective the AT configuration.

  From now on, the JN3/SL869 GPS module can be fully managed through the GL865 GSM module.

NOTE:

The serial port and GPIO configurations above reflect the HW configuration shown in the previous paragraph.

For further information about the AT$ commands see [2].

4. Document History

Revision	Date	Changes
0	2013-02-19	First release