

## GE865-JF2 Interface Application Note

80000NT10067A Rev.1 – 2012-07-26



## APPLICABILITY TABLE

PRODUCT	P/N
GE865-JF2 INTERFACE	3990250868



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# 1. Introduction

## 1.1. Scope

Scope of this document is to provide customers with all the necessary information on how to configure the GE865-JF2 Interface and then evaluate the JF2 features through the Telit AT commands.

## 1.2. Audience

This document is intended for customers who are developing applications with GE865-JF2 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](mailto:TS-EMEA@telit.com)  
[TS-NORTHAMERICA@telit.com](mailto:TS-NORTHAMERICA@telit.com)  
[TS-LATINAMERICA@telit.com](mailto:TS-LATINAMERICA@telit.com)  
[TS-APAC@telit.com](mailto: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: “GE865-JF2 Interface”](#) provides instructions about the HW configuration that must be used to control the JF2 GPS module by means of the GE865 GSM module.

[“Chapter 3: “Configuring the GE865-JF2 Interface via AT Commands”](#) describes how to configure the GE865 in order to control the JF2 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. GE865-JF2 Interface

The GE865-JF2 Interface allows testing the functionalities and performance of the GE865 and JF2 modules.

To successfully control the JF2 GPS module by means of the GE865 GSM module, the GE865-JF2 Interface must be configured as follows:

1. Since the GE865 module (but not the whole interface) receives its power supply from the PL105 connector, a shunt jumper must always be plugged on the latter (see fig. 1).

For further information, please refer to [1], paragraph “Power Supply”.

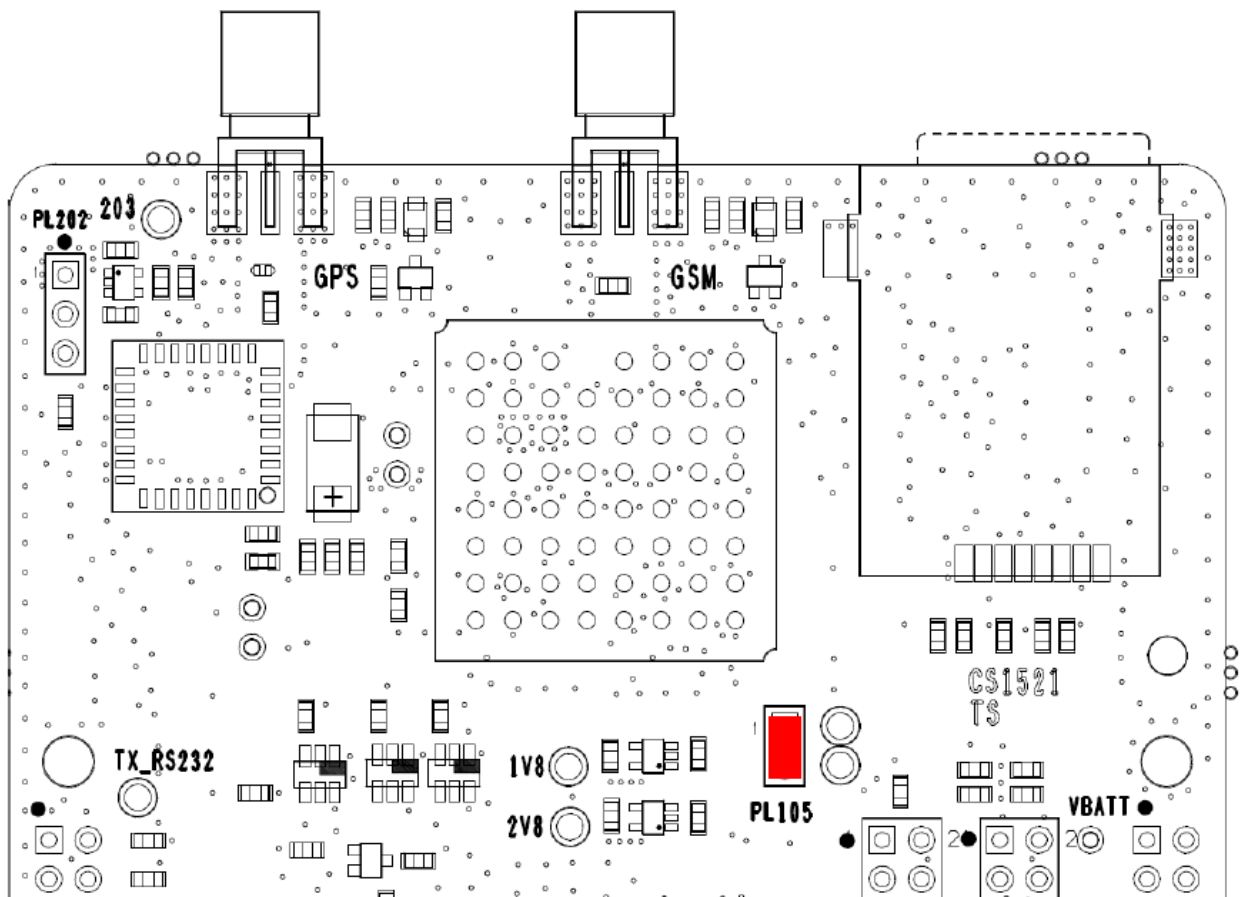


Fig. 1





- The JF2 serial port must be then connected to the GE865 one as depicted in fig. 2, by means of the PL303 connector, to make the GPS module communicate with the GSM side: this is the so called “Controlled Mode” configuration.

Also, PL304 connector must be configured, as shown below, in order to send the TX\_AUX and RX\_AUX to the EVK2.

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

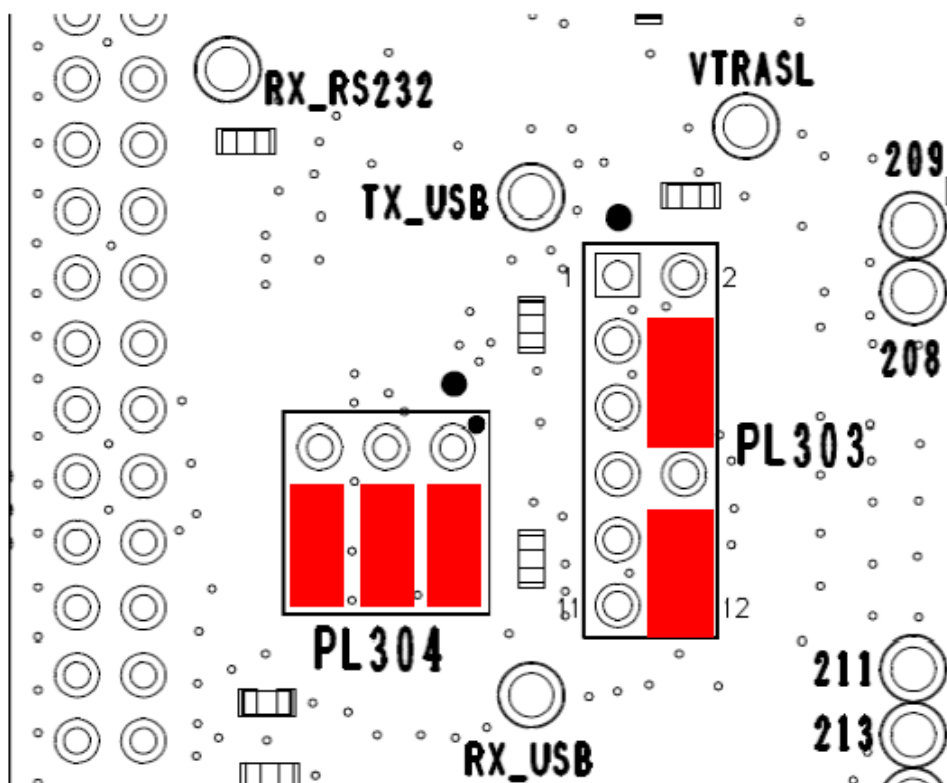


Fig. 2



3. The JF2 GPS\_ON/OFF, GPS\_SYSTEM\_ON, GPS\_BOOTSEL and GPS\_SRESET control signals must now be connected to a set of four GE865 GPIOs.

The configuration depicted in fig. 3 makes use of GPIOs # 4, 5, 6 and 7 to drive the JF2 control signals.

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

- “GPIO settings”
- “Internal host controlling configuration”

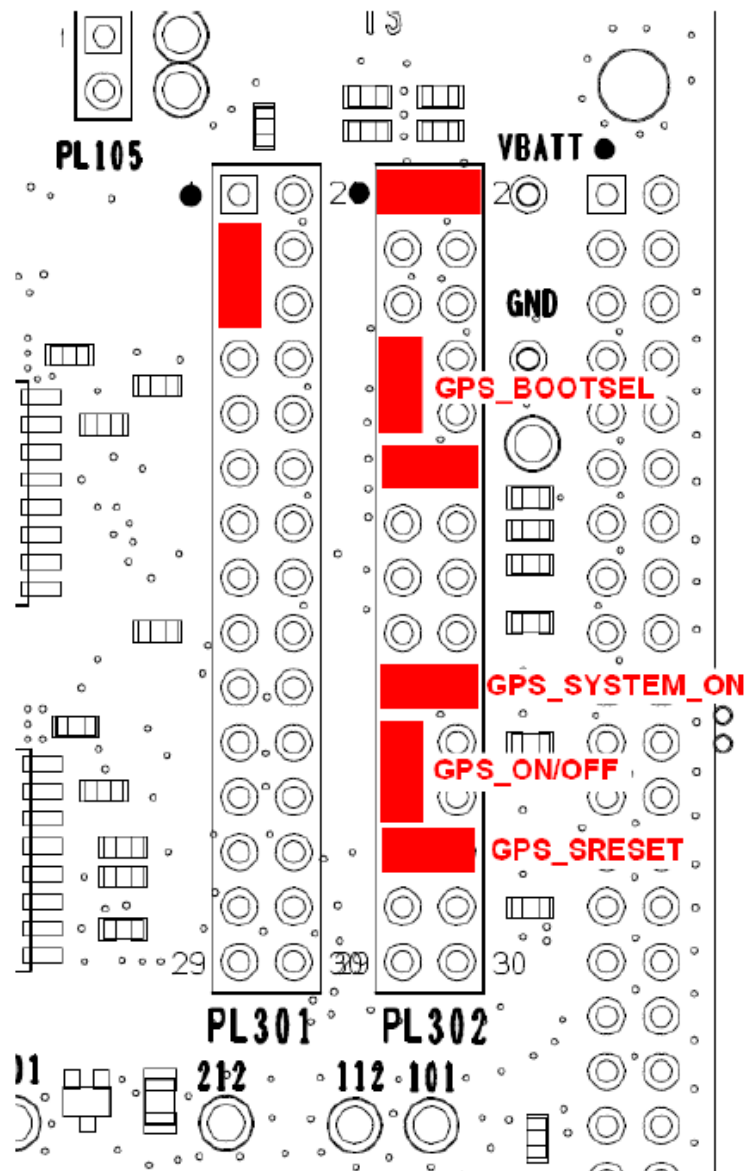


Fig. 3

### 3. Configuring the GE865-JF2 Interface via AT Commands

Once the HW configuration shown in the previous paragraph has been applied, the GE865 can be configured to manage the JF2 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 GE865 (TRACE) to be used with a GPS module (Controlled Mode). Also, it enables the entire GPS specific AT commands set.
- **AT\$GPSGPIO= 4,5,6,7**, this command configures GPIOs # 4, 5, 6 and 7 to drive the JF2 GPS\_ON/OFF, GPS\_SYSTEM\_ON, GPS\_BOOTSEL and GPS\_SRESET signals respectively.
- **AT\$GPSP=1**, this command turns the JF2 ON.
- **AT\$GPSSAV**, this command saves the configuration applied above.

The GE865 must be then restarted to make effective the AT configuration.

From now on, the JF2 GPS module can be fully managed through the GE865 GSM module.



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**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].

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## 4. Document History

Revision	Date	Changes
0	2012-05-11	First issue
1	2012-07-26	“GE865-JF2 Interface” paragraph changed (added hardware configuration instructions). Document name slightly changed (“SW” removed)

