RE866 Interface User Guide

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DOCUMENTATION

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1. INTRODUCTION

1.1. Scope

This document gives an overview of the RE866 interface for EVK2

1.2. Audience

This document is intended only for Telit customers that wants to integrate the RE866 modules on their application.

1.3. Contact Information, Support

For general contact, technical support services, technical questions and report documentation errors contact Telit Technical Support at:

- TS-EMEA@telit.com
- TS-AMERICAS@telit.com
- TS-APAC@telit.com

Alternatively, use:

http://www.telit.com/support

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

http://www.telit.com

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.

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1.4. 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.

1.5. Related Documents

- 1VV0301365_RE866_AT_Command_Reference
- Telit EVK2 User Guide, 1VV0300704 Rev. 19
- RE866 Hardware user guide

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2. BUNDLE OVERVIEW

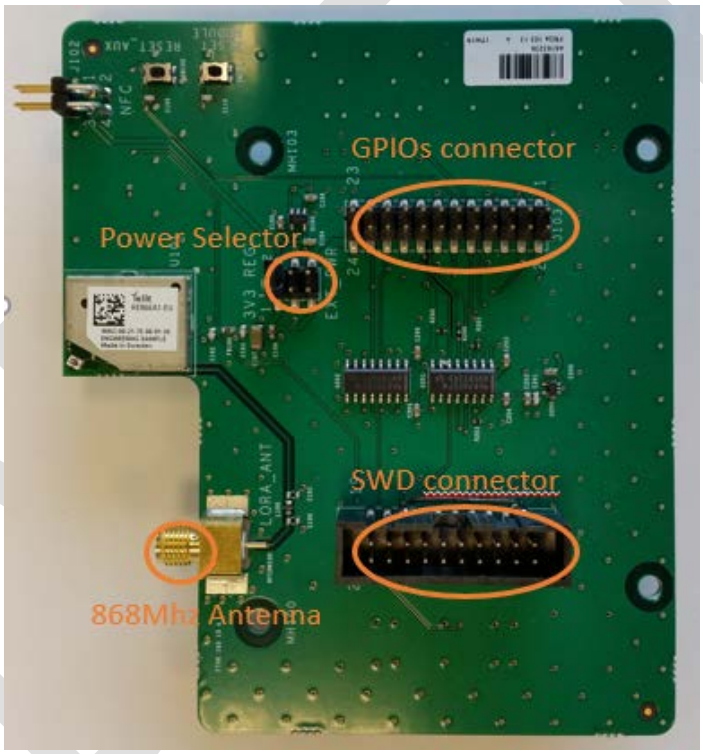
2.1. Setup

The RE866 interface board has been designed to be mounted on top of the EVK2 Telit evaluation board.

In the package of the RE866 Interface the 868 MHz Antenna for LoRa® is included.

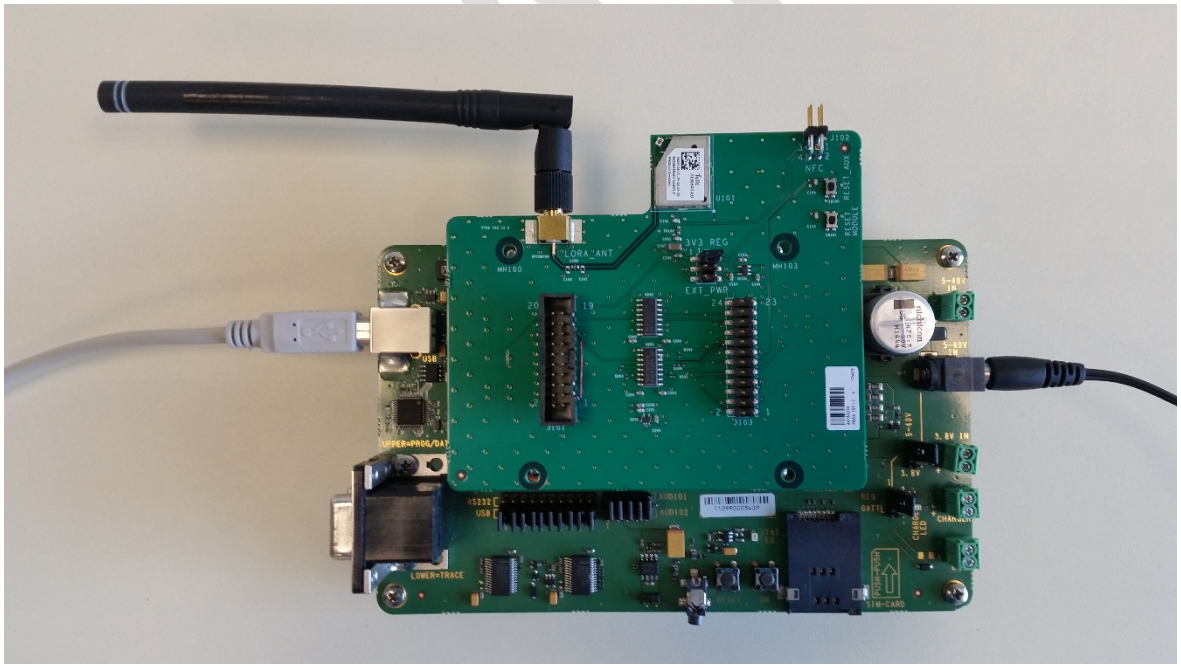
This is interface should be mounted on the Telit EVK 2 interface. In order to have a full kit you need to order RE866 interface board (cod. **3990251568**) and Telit EVK2 interface board (cod. **3990150474**).

On the picture below you find a picture of the RE866 interface with the indication of the main component interface

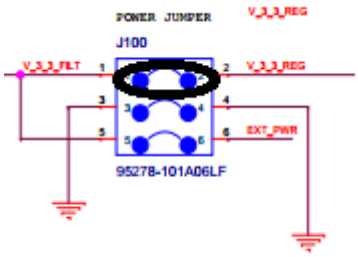


Below you can find the Telit EVK2 interface

After you plug the interface on top of the EVK and you connect the power cable and USB you will have the system below.



Before connecting the power please check that the Power Selector on the interface (J100) has the jumper that close the PINs 1 and 2 of the power selector J100 as in the picture below, leave the others open.



If the jumper is not present you can use one jumper present on USB jumpers on the EVK2 reserved for the the connection audio1 and audio 2 (red circle on the picture below).

Finally be sure that the USB Jumpers on the EVK2 are selected on USB as in the picture below:

.

2.2. RE866 Interface without EVK2

The interface can be used also standalone without mount it on top of the EVK2 but in this case you need and FTDI for the serial connection that is at 3.3Volt and set the power selector register (J100) to use the external power supply as in the figure below.

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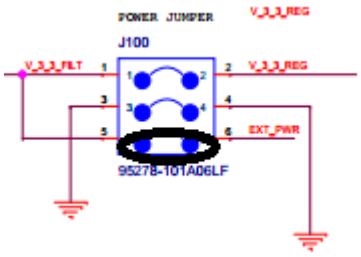
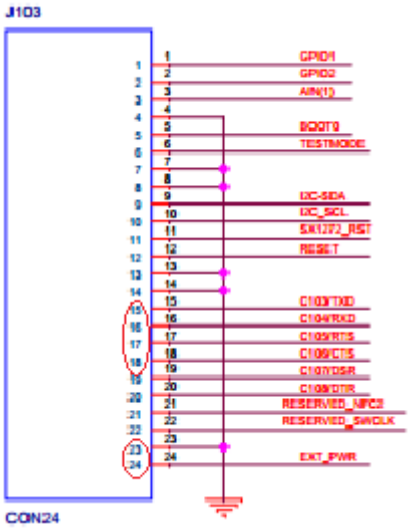


The jumper should close the PINs 5 and 6 of the J100 connector and the others open.

After that you can power the board externally providing 3.3Volt by the pin 24 (positive) and 23 (negative) on the connector J103 (GPIOs connector)



On the pin 15,16,17,18 can be find the RXD, TXD, RTS, CTS PINs at 3.3Volt level. In order to use this you need and FTDI cable in order to connect it to a USB port of the PC or and RS232 converted to connect to an UART port.

2.3. Software

No specific software is needed. After you power the and USB cable is connected you will have on the host the following 4 ports

Normally the USB port to be used is the last one.

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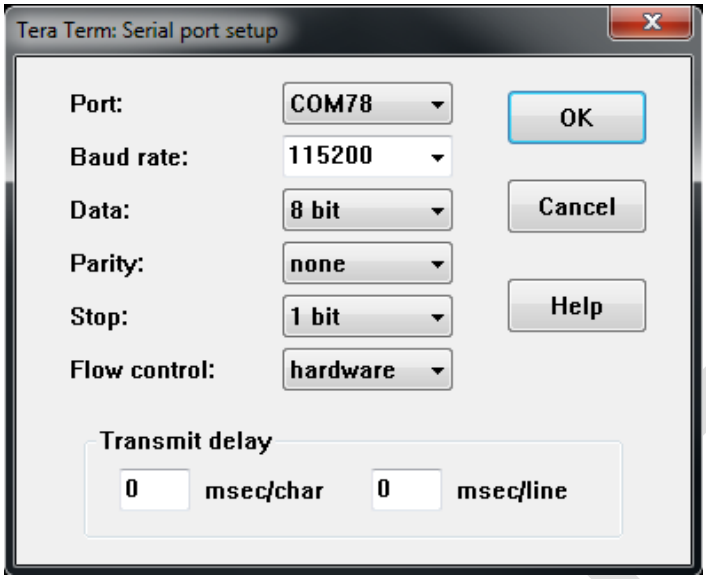
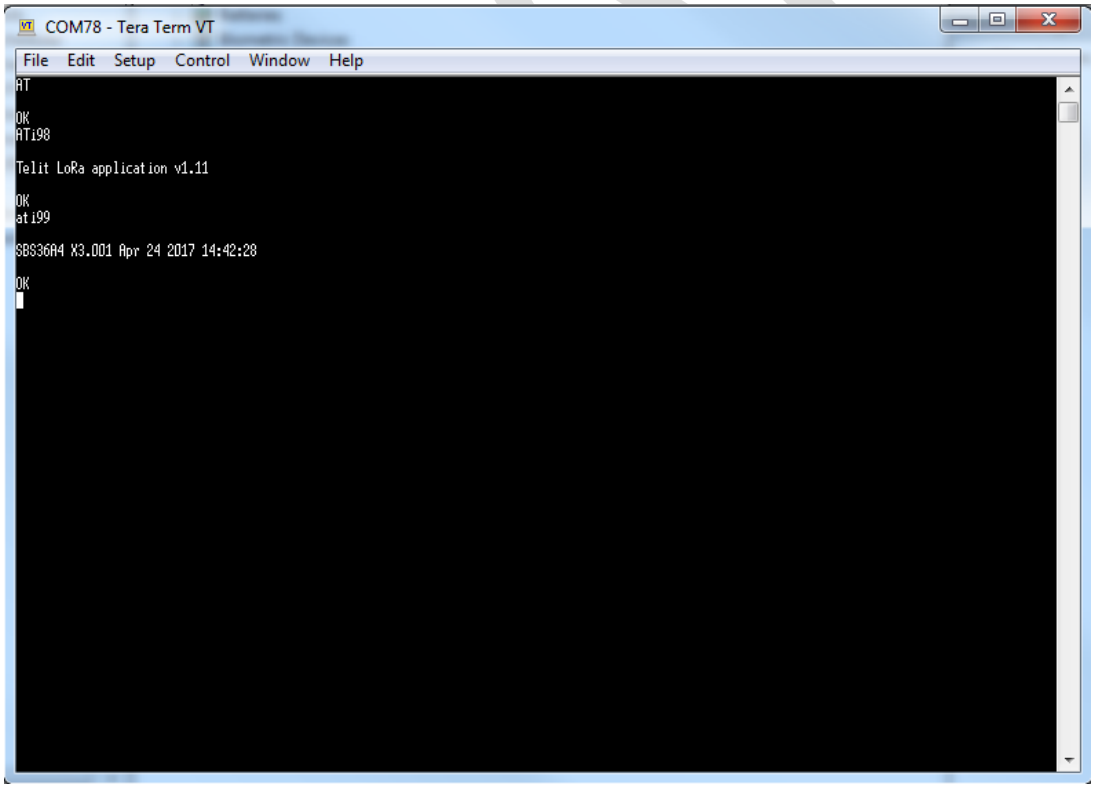
Open a terminal software (TeraTerm in the picture) with 115000 bps, 8, N, 1 and HW flow control enable setting like below:



Press Ok and after connect and after that send AT followed by carriage return, you should get OK response as below:



You can ask also the SW version with ATi98 and ATi99.

To proceed now you can read the SW AT command user guide where you can find all the instruction to start using LoRa®

Note: the numbering of the USB ports can be different, if it in not the last in the numbering try the others with the same serial configuration.

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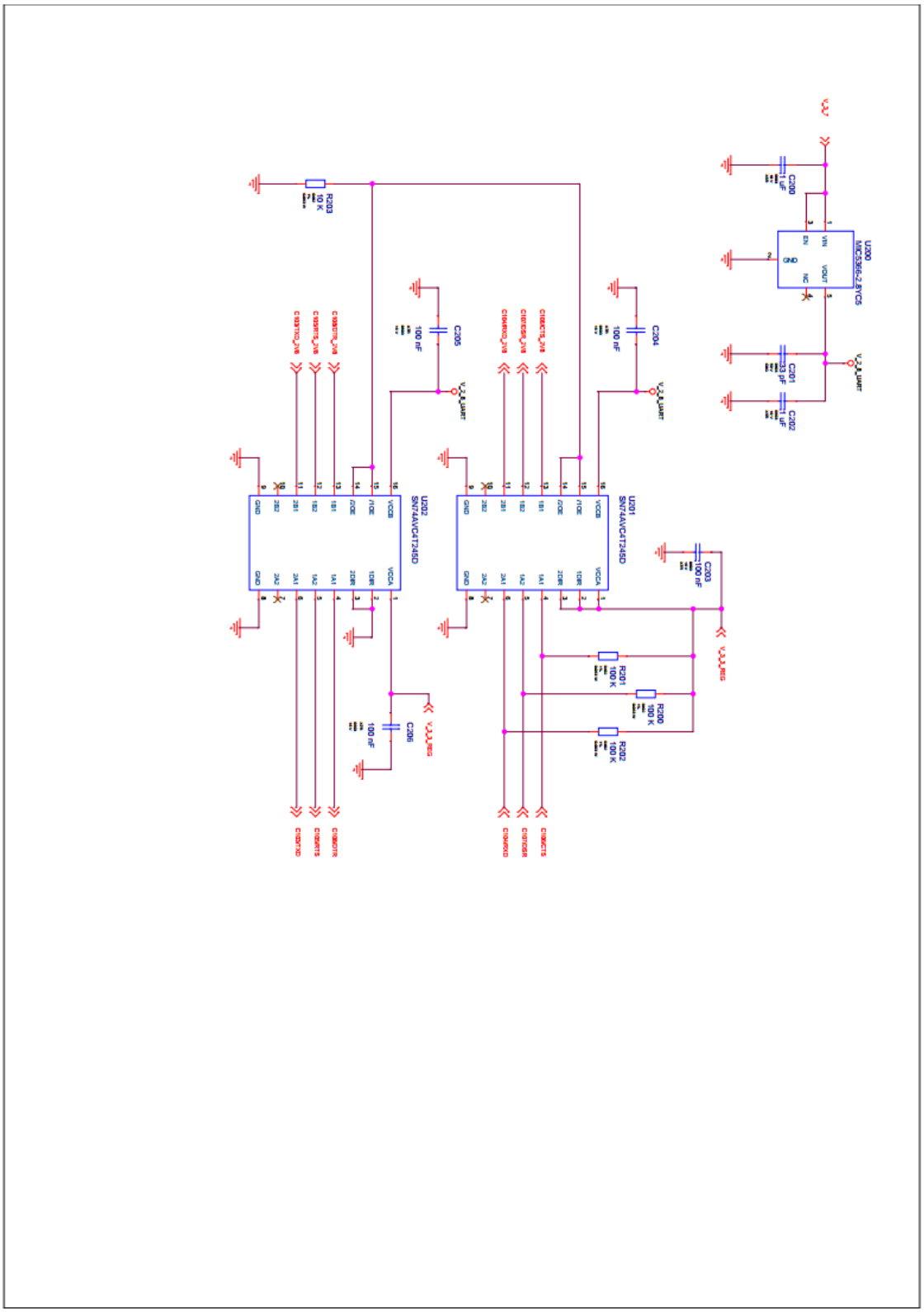
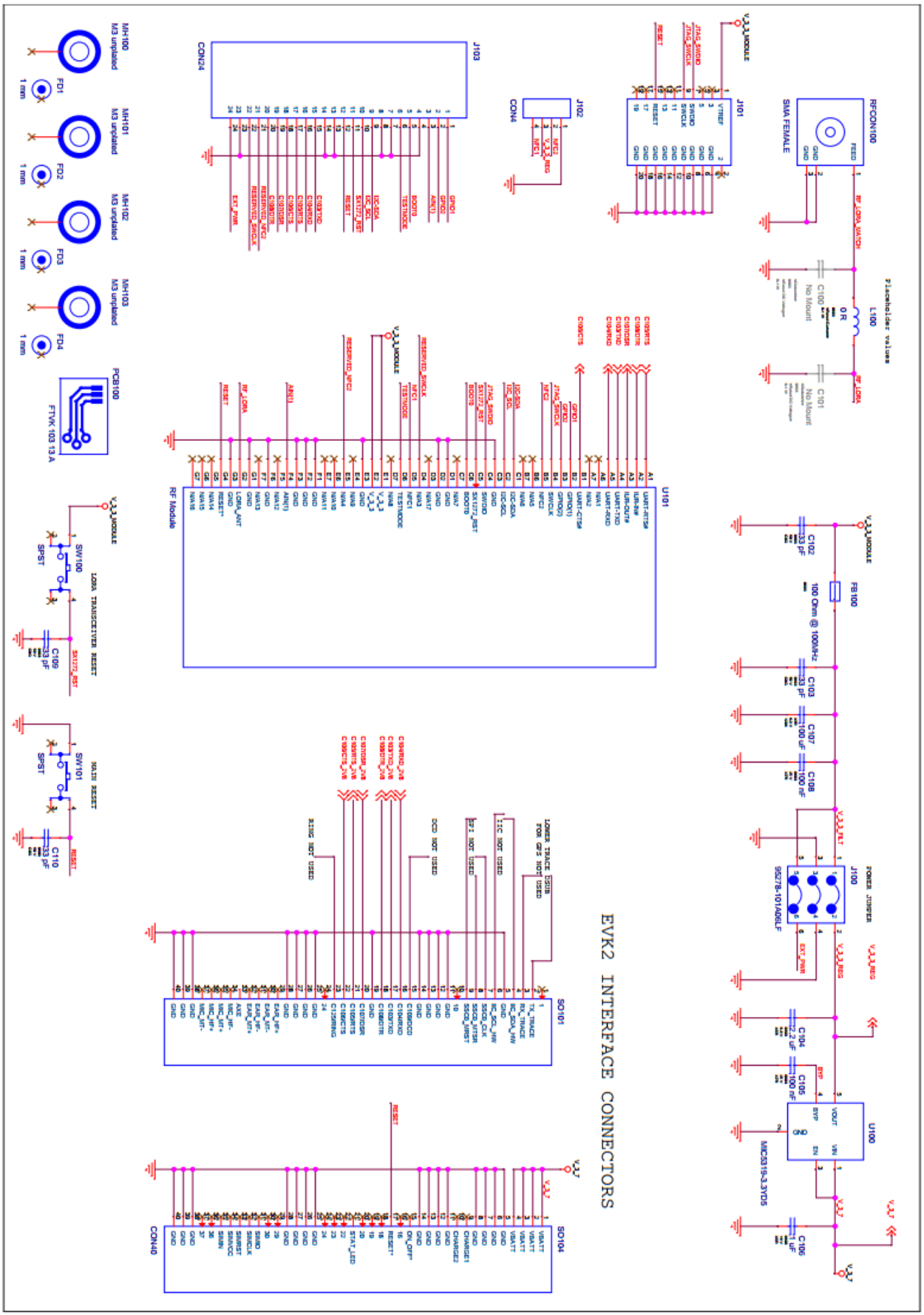
3. SCHEMATICS




EVK2 INTERFACE CONNECTORS

Revision	Date	Changes
0	6/16/2017	First issue

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SUPPORT INQUIRIES

Link to **www.telit.com** and contact our technical support team for any questions related to technical issues.

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