# GL865 V4 Shield Rev2 User's Manual





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## **Versions**

Version	Date	Author	Rationale
0.1	15 January 2019	Gintaras Drukteinis	First draft



#### Introduction

The GL865 V4 Shield is designed by Rutronik for quick start up and evaluation of Telit's GL865 QUAD V4 cellular modem.

#### **Features**

- Telit GL865 QUAD V4 Cellular Modem
- 2J Quad-Band antenna 2JE04.
- Nano SIM card slot.
- Micro USB connector for power supply.
- ISL80103 LDO 3A.
- ISL9021AIRUNZ LDO 250mA 3.3V.
- Arduino compatible extension connectors.



#### **Overview**

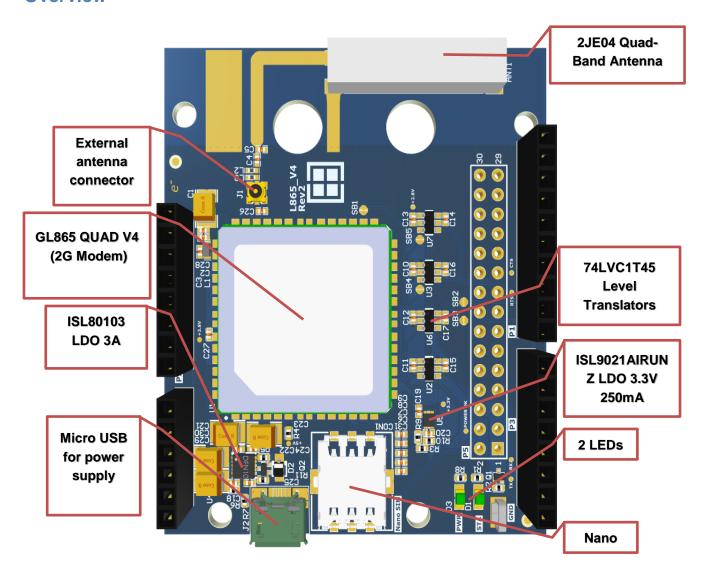


Fig. 1. GL865 V4 Shield Evaluation board's layout.



#### **Schematics**

#### **Pinout** 10 P2 9 8 7 2V8 1 2 **GND** 3 6 LDO CTRL 3V3\_AUX 5V\_AUX 4 5 LDO\_CTRL RESET RES\_CTRL 5 1 2 4 DTR PWR OK PWR OK GND 6 3 3 DSR RING CTS\_3V3 SB2 5 7 7 GND 6 2 DCD GPIO1 8 8 1 GPIO2 GPIO3 9 10 POWER GPIO4 DIGITAL 1 GND 11 12 TXDA P3 ADC IN1 GND ADC IN2 14 13 P4 RXDA TXD 3V3 15 16 1 RTS\_3V3 CTS\_3V3 RXD 3V3 17 2 18 EAR-2 19 3 20 EAR+ GND 21 22 4 GPIO5 MIC-4 23 24 5 GPIO6 MIC+ 25 26 6 DAC OUT VRTC GPIO7 27 28 7 6 GPIO8 29 30 GND 8 **ANALOG** Header 15X2 DIGITAL 2

Fig. 2. GL865 V4 Shield Pinout.

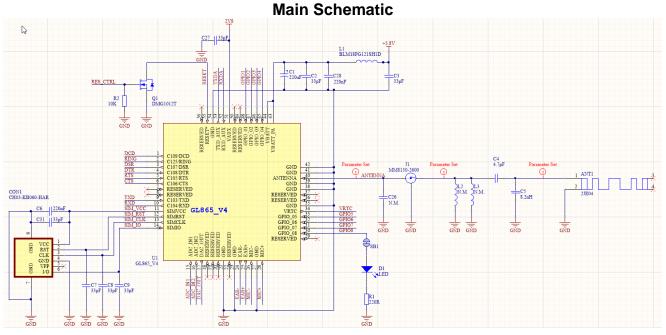


Fig. 3. GL865 V4 Shield Main Schematic.



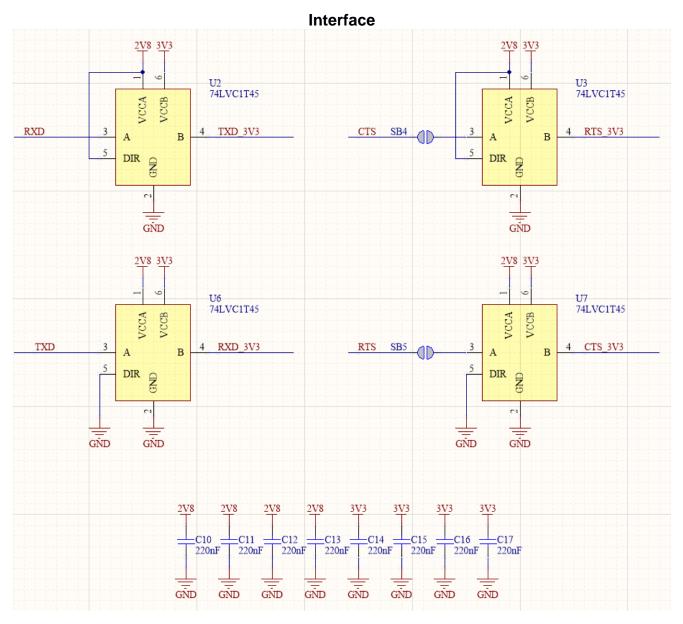


Fig. 4. GL865 V4 Shield Interface Schematic.



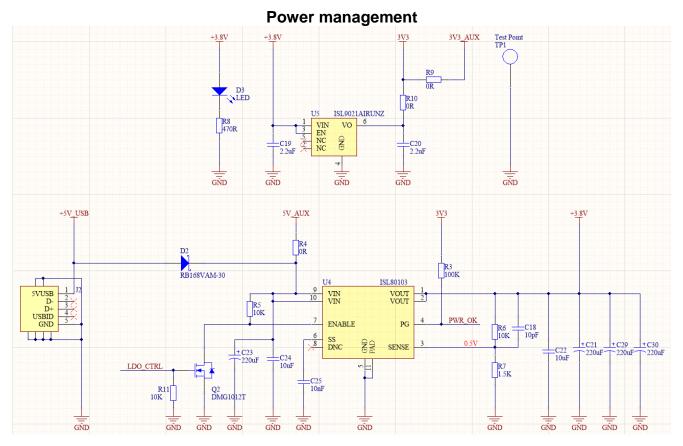


Fig. 5. GL865 V4 Power Management Schematic.

### **Code examples**

All available code examples for this board could be downloaded from GitHub: <a href="https://github.com/RutronikKaunas">https://github.com/RutronikKaunas</a>

GL865 V4 Shield code example list:

- Telit IoT Portal uploader example for Renesas Synergy SK-S7G2 starter kit: https://github.com/RutronikKaunas/gl865v4\_sk\_s7g2
- Telit IoT Portal uploader example for ST Nucleo STM32F334R8T6 board:
  <a href="https://github.com/RutronikKaunas/gl865v4\_nucleo\_F334R8">https://github.com/RutronikKaunas/gl865v4\_nucleo\_F334R8</a>
- Telit IoT Portal uploader example for ST Nucleo-64 STM32F401RET6 board: https://github.com/RutronikKaunas/gl865v4\_nucleo\_f401
- Telit IoT Portal uploader example for ST Nucleo-64 STM32L476RG board: https://github.com/RutronikKaunas/gl865v4\_nucleo\_l476

Telit IoT Portal view only account:

User name: rutronik\_lt@rutronik.com



Password: Rutron1k\_user

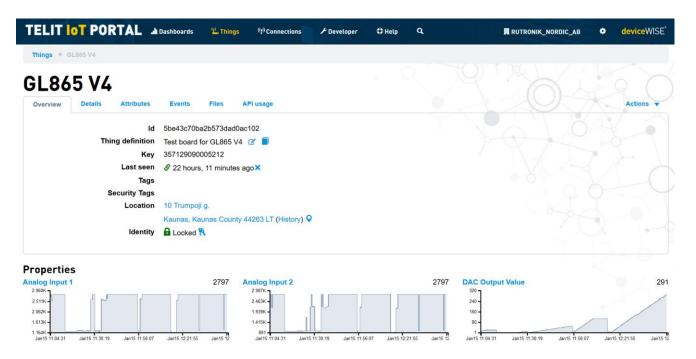


Fig. 6. Telit IoT Portal Things review