



Application Engineering

Design review report

Code: AE-32846
Rev: 7
Date: 2020-07-16
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1. Scope

Aim of this document is to describe suggestions and corrections that Telit advises to improve Oovo Electronics application that integrates a Telit GE910-QUAD V3 module.

2. Design review

Design review is based on the following received documentation:

- Schematic files: B106AA-R6.PDF
- Gerber file: Gerberfiles.zip (rev. 7)
- Other: Telit Design Review R06 (PCB).pdf
Stack Up (00.00.04).PDF

Summary Tables:

Schematic Review	P	F	I	MI	N/A
Power Supply	V				
SIM Pins	V				
Digital Pins	V				
Audio					V
RF	V				

PCB Layout Review	P	F	I	MI	N/A
General Placement	V				
Antenna Waveguide	V				
RF Aspects	V				
Audio Aspects					V

P: Pass; F: Fail; I: Improvements possible; MI: Missing Information; N/A: Not Applicable

The following symbols will be used throughout the Design Review to indicate:

- ✓ OK: No design changes are required.
- ℹ Tip: information or possible improvement, not mandatory but recommended.
- ⚠ Warning: if you don't follow the recommendation there's a risk of malfunctioning or issues during the homologation phase, strongly recommended.
- 🛑 Error: it's mandatory to follow the recommendation otherwise the module could be damaged or could not work properly or there's high probability of facing issues during the homologation phase.
- ? Missing Information: some relevant information is missing therefore the DR cannot be accurate on this item.

2.1. Schematic review


2.1.1. Power supply

✓ Ok.

2.1.2. SIM pins

✓ OK

2.1.3. Digital pins

 All signals connected to our modules must be in tristate while they are OFF and during start-up or HW_SHDN procedures.

2.1.4. Audio pins

✓ N.A.

2.1.5. RF aspects

✓ Ok.

2.2. PCB Layout review

2.2.1. General placement

✓ OK

2.2.2. RF aspects

✓ Your Cellular waveguide has the correct characteristic impedance of about 50 Ohms. We calculated its characteristic impedance based on the stackup provided on Stack Up (00.00.04).PDF.

2.3. General comments

Please check and follow Telit Modem Integration Design Guide.

Review is related to received application information and the supposed use of it.

3. Quality record

This design review is registered internally in Bugzilla with ID #32846.

The customer request is registered internally in Support Center Plus with ID #00157856.