

# Cinterion® Support Package

HW10

## 5G Thermal Design Consulting

Security Consulting

Design-In Consulting

Schematics, Layout Review

Hardware Consulting

Antenna, ESD, Spurious, Thermal

Software/Application  
Consulting

ATC, USB, MUX, RIL

Approval Consulting

Protocol, Toolkit, SIM (SW, HW)

Production Consulting

Production line, End of Line

### Motivation

The professional support during the development, deployment and ramp-up phases is one of the valuable qualities of Telit Cinterion. The goal of our Support is to increase the product-reliability, reduce the time to market and reduce cost for our customers. Based on our long-term experience we have developed the most suitable support packages and workshops for each project phase.

### Package Description

The thermal design of the application is a critical phase during research and development. Realising superior power dissipation and management will lead to an application which is robust to variation of the ambient temperature. An optimised thermal solution is required for the modem/ modem-card as well as for the mmWave antennas e.g. to reduce degradation of the output power.

The target of this support package is to help, design, evaluate and optimize the best thermal solution for your application.



## Package Offer

### Package Content

- | Analyze the thermal concept of the modem, antennas and application
- | Thermal model creation of the application
- | Thermal simulation
- | Analysis and optimization
- | Thermal performance measurement

### Requirements/Pre-Conditions

- | Provide mechanical and electrical information about the project at the concept and early development phase (e.g. requirements, datasheets, design files)

### Results/Outcome

- | Thermal model
- | Thermal simulation analysis and detailed description to realize an optimized thermal design for the module and the 5G mmWave antennas

### Conclusion – Next

Our experienced engineers will be glad to share their expertise with you, to improve the hardware and software design of your application. We offer further project attendant services which may be valuable for your project. Feel free to contact our representative for further information.



### Estimated effort:

3 - 4 Weeks

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