

UC10: Green Soil Probe - Technologies for green IoT devices for agriculture

Motivation and objectives

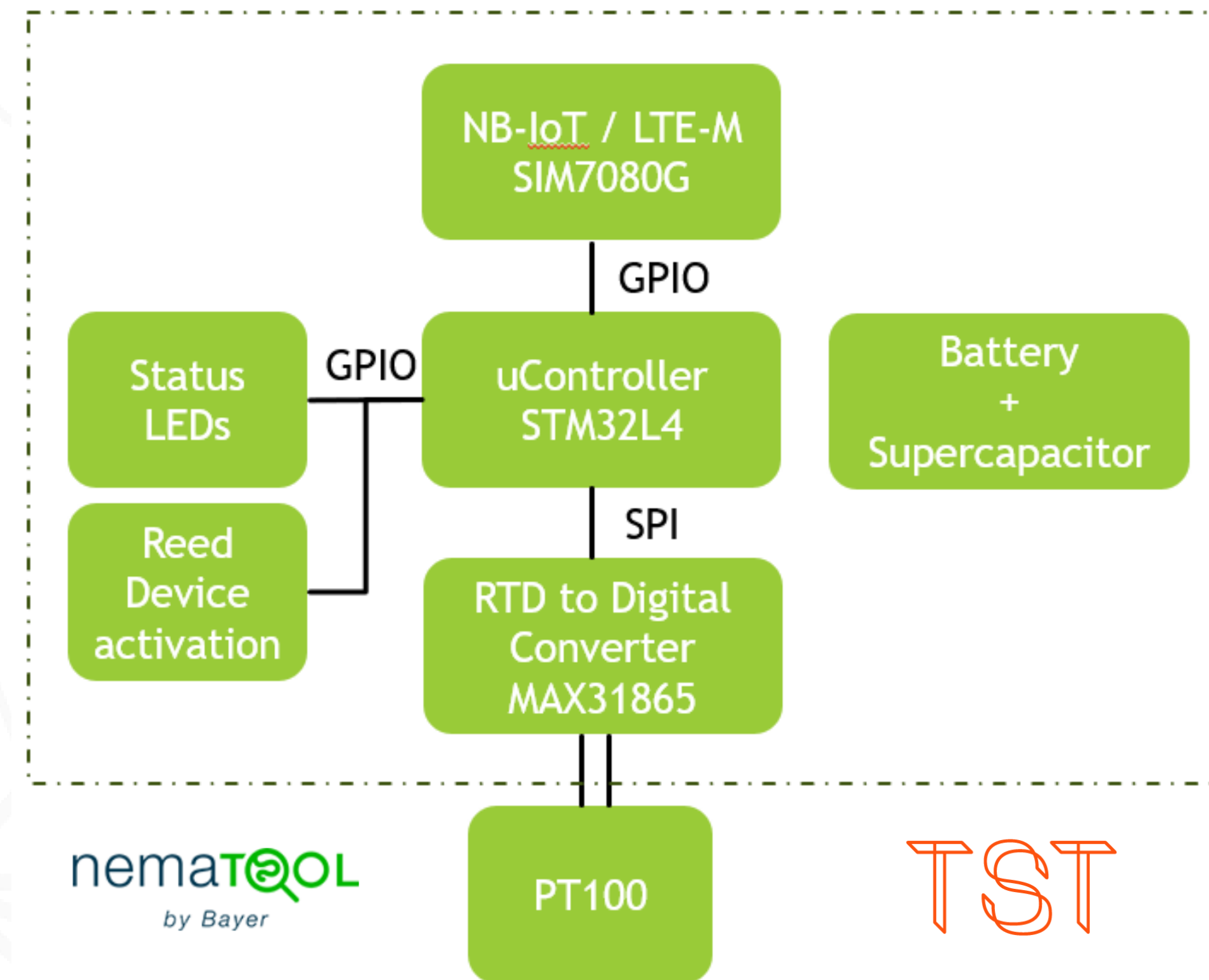
Development of technologies and methods for the design of a more sustainable solution for soil monitoring in agriculture that involves the reduction of e-waste generation and lower e-waste impact on costs and the environment

Innovations

1. Tools for battery selection and state of charge estimation [T3.3]
2. Use of organic substrates and conductive inks [T4.1]
3. Battery-less solution [T4.2]
4. Modular design [T4.3]
5. Improved recyclability of the battery [T4.5]



Baseline design



Involved Partners and Resources

- TST (SME) leads the UC and the development of tools for the selection and management of batteries
- CSEM (RTD) leads the development of a new Lithium battery
- CSIC (RTD) contributes with the recyclability aspects
- ACORDE (SME) contributes to the definition and design of communication and power management systems
- PREMO (LE) provides advice and components with minimum e-waste impact
- DTI (RTD) contributes to the recyclability aspects of batteries
- SMARTSOL (SME) contributes to the development of tools for battery management

