Low Power IoT Reference Design

« A complete package including hardware, software, tools & recommendations to prototype and produce a cost-efficient final product in a very short time span »

Key Features

RF Characteristics:
- Frequency range 863MHz to 928MHz
- RX sensitivity: -136dbm
- TX conducted power up to 15dBm (EU) / 22dBm (US)

Microcontroller:
- STM32L0’s family
- ARM Cortex-M0+ core

Certification:
- CE & FCC certification ready
- LoRaWAN™ EU868 & US915 certified

Sensor:
- Accelerometer
- Temperature & humidity sensor
- Easily adaptable to any sensor

Security:
- Secure element

Software:
- LoRaWAN specification v1.1 compliant
- Real time operating system
- Kerlink Wanesy™ device management compliant

Delivery content

Hardware:
- Full bill of materials (BOM) with referenced cost for 10k pieces
- Electronic plan:
  > Schematic
  > Layout

Documentation:
- Technical implementation recommendations
- Validation reports
- Certifications recommendations
- Antenna characteristics recommendations
- Production recommendations

Software:
- Complete source code
- Development environment “plug and play”
- Documentation:
  > Source code documentation
  > Software environment description
  > Technical recommendations
  > Features descriptions
  > Build script descriptions

Tools:
- 1 Demonstration board
- 1 Evaluation board
- 1 Kerlink Wirnet™ iFemtocell + Wanesy™ SPN

All product specifications are subject to change without notice
Software architecture

Hardware architecture

sales@kerlink.fr
+33 2 99 12 29 00
Kerlink – 1 rue Jacqueline Auriol
35235 Thorigné-Fouillard
France