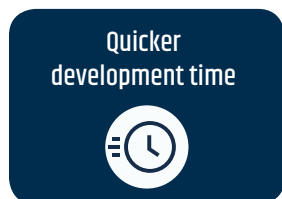


Low Power IoT Reference Design

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



Quicker
development time

DEVELOPMENT

- Hardware design
- Full software access



Safer Design

VALIDATION

- Design fully validated
- Hardware & software validation reports



Easier certification
process

CERTIFICATION



Fast time to market

MASS PRODUCTION

- Testbench recommendations
- Firmware with test mode commands

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:

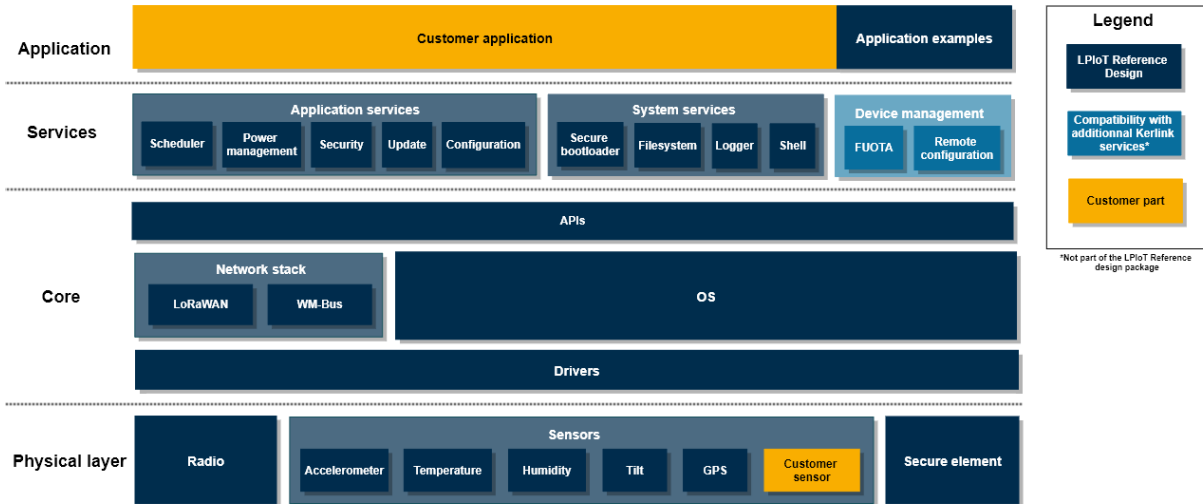
- Complete source code
- Development environment "plug and play"
- Documentation:
 - > Source code documentation
 - > Software environment description
 - > Technical recommendations
 - > Features descriptions
 - > Build script descriptions

Tools:

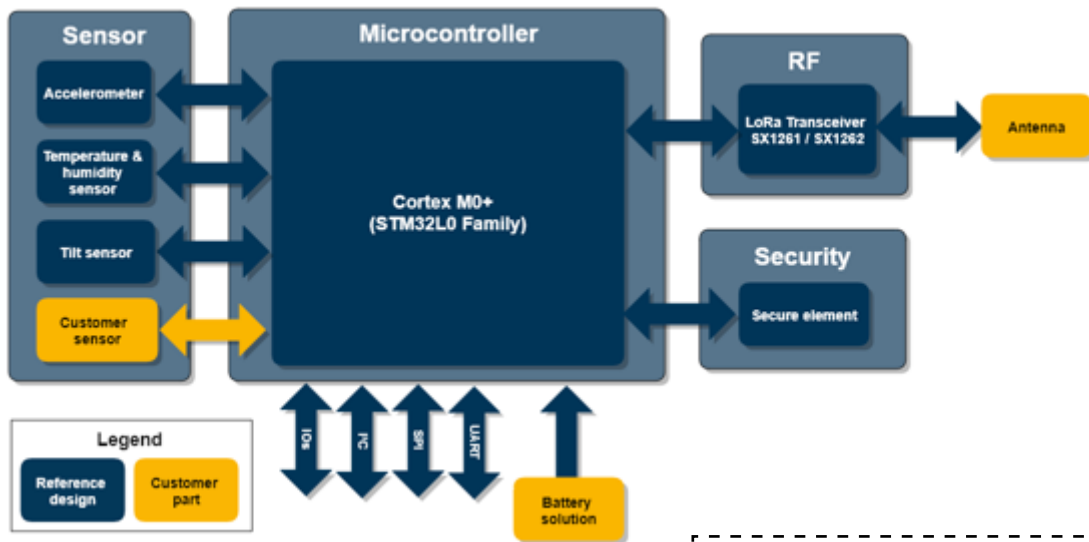
- 1 Demonstration board
- 1 Evaluation board
- 1 Kerlink Wirnet™ iFemtocell + Wanesy™ SPN

Low Power IoT Reference Design

Software architecture



Hardware architecture



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