

Embedded IIoT platform

Proof of Concept, Time to Market

Tired of all the successful proof of concepts (PoC) with as follow up a time consuming and expensive development, to conceptualize the proven concept? The use of unsuited consumer electronics or unsuited development kits during the conceptual phase are often the main reasons behind this.

This is why we created AnySens, a modular embedded IIoT platform, consisting of proven hardware modules and associated software. By combining existing AnySens hardware and software, and optionally customer specific modules, any IIoT challenge can be solved, minimizing time to market.

AnySens concept

In consultation, we define the customer's needs and create a custom AnySens configuration, a recipe. This recipe contains the following ingredients:

- o Sensors / actuators (Conduction, Humidity, Temperature, Orientation, Pressure, Liquid level, Motion, Relais, ..)
- o Wireless communication (LoRa, NB-IoT, LTE-M, Sigfox)
- o Local communication (RS-232, RS-485, RS-422, Modbus, BLE, ..)
- o Power supply (Battery, Fixed, Solar cell)
- o Environment (Industry, Rail, ATEX, ..)
- o Case / Housing (Ingress Protection, ..)



AnySens modules

Base / edge module

[ASLP-001] LPWAN Module

The LPWAN Module is the AnySens base module / edge device. Besides the local processing power, the module is equipped with:

- o Sigfox / LoRa communication (TTN, KPN, Private)
- o 6-axis IMU
- o 3-axis magnetometer
- o Temperature sensor
- o Barometric pressure sensor
- o Local storage
- o Expansion interface to connect the other (AnySens) add-on modules

[ASLP-002] LPWAN+ Module

The LPWAN Module is the AnySens base module / edge device. Besides the local processing power, the module is equipped with:

- o LTE Cat M1 / LTE Cat NB1
- o 6-axis IMU
- o 3-axis magnetometer
- o Temperature sensor
- o Barometric pressure sensor
- o Local storage
- o Expansion interface to connect the other (AnySens) add-on modules

Add-on module

[ASAN-001] Analog Input Module

The Analog Input Module is the extension that interfaces with external sensors / connections. This module is a 4-channel fully programmable analog Input module which can measure:

- o Current: 4 - 20mA
- o Voltage: 0 - 10V
- o Resistive: 2-wire / 4-wire (RTD, Load cell, ..)
- o Thermocouples

[ASDI-001] Digital Input / Output Module

AnySens is also capable reading and controlling digital signals using the Digital Input / Output Module. This makes it possible to add control loops (edge device or cloud based):

- o 4 / 8 Isolated digital inputs
- o 4 Potential-free digital outputs (24V / 1A)

[ASBL-001] BLE Module

The BLE Module (BLE 5) support the following features and functionalities:

- o BLE advertising
- o Localisation using iBeacons
- o Interact with BLE devices / sensors

[ASLT-001] LTE-M / NB-IoT Module

For applications that require a higher bandwidth, the LTE-M / NB-IoT Module is used. It is even possible to combine LTE-M / NB-IoT with Sigfox / LoRa for redundant communication.

- o LTE Cat M1
- o LTE Cat NB1

[ASSE-001] Serial Interface Module

The Serial Interface Module is used for local communication with external peripherals or devices with a serial interface. This module contains 2 serial interfaces and supports the following standards:

- o RS-232
- o RS-422
- o RS-485

Additional

Cloud

The AnySens platform can be integrated in an existing cloud platform or delivered as a complete secured and maintained cloud solution with dashboard, app and API.

Custom

Besides the standard off the shelf modules and firmware, we can create custom add-on modules and firmware on customer request.

