SIN-020 Brief

High Power LoRa Tracker

FEATURE

System

- Chipset: nRF52832
- High performance ARM® Cortex®-M4 32-bit RISC core operating up to 64 MHz frequency
- Embedded memories (up to 512 Kbytes of Flash memory and 64 Kbytes of RAM)
- Hardware encryption AES 128-bit
- Software stacks available as downloads
- 1.8 V to 3.6 V power supply
- –10 ℃ to +55 ℃ temperature range

GPS

- Receiver type: 56-channel u-blox7 engine GPS/QZSS L1 C/A, GLONASS L1 FDMA, SBAS: WAAS, EGNOS, MSAS
- Accuracy Position: 2.5 m (GPS) , 4.0 m (GLONASS)
- Acquisition: Cold starts: 29 s (GPS)
  Reacquisition: 1 s(GPS)
- Sensitivity: Tracking: –161 dBm (GPS)
  Cold starts: –148 dBm(GPS)
  Warm starts: –148 dBm(GPS)

LoRa

- Compliance to LoRaWAN 1.0.2
- Built-in antenna connect with i-pex type
- Command set with LoRaWAN chip for easy configuration
- LoRa Frequency Band: 902 ~ 928MHz ISM
- LoRa Transmit Power : 0.5W (up to 27 dBm)
- LoRa Receive Sensitivity: -130dBm
- Operating Temperature: -10 ℃ ~ 55 ℃
- LoRa Number of Channels: Configurable 16 channels
- LoRa Security: AES 128

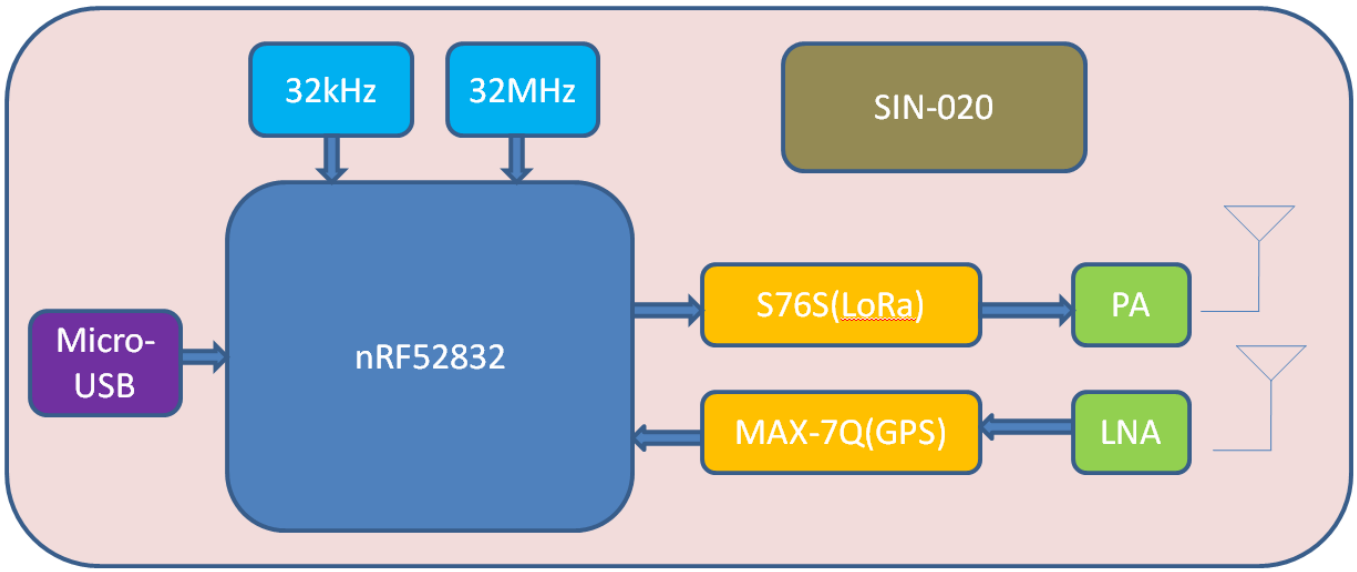
Power Consumption

- Battery: 800mAhr(3.7V, Li)
- Working: 45mA(Average)
- Sleep: 1.2mA

PCBA Dimension

- About : 74mm(L) x 36mm(W)

SIN-020 Block Diagram



SIN-020 Appearance