

LoRaM3-D

**Performance STM32F103CBT6 LoRa 868Mhz
915Mhz compact board with 3.7V LiPo cell
management, native USB and 0.96" OLED.**

Applications

- LoRa communication in EU and US bands
- Low power applications
- LiPo cell powered applications
- Remote sensing & monitoring
- MCU and wireless development

Features

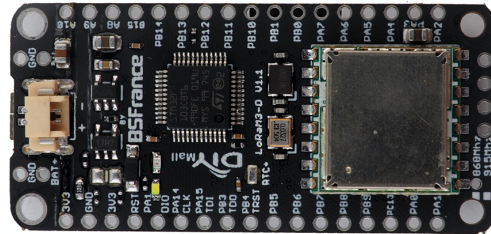
- Long range communication with LoRa 868/915M
- Low consumption, onboard LiPo cell management
- Virtual serial port via USB
- Arduino IDE compatibility, SWD /JTAG

General specifications

- Cortex M3 32bit MCU
- MCU : STM32F103CBT6 @72 MHz (108 max)
- ROM 128Kb RAM 20Kb RTC backup 20 bytes
- USB, I2C, CAN, 7 timers, 2 ADCs, 9 com interf.
- Logic level : 3.3V

Power specifications

- Operating voltage : 3.3V – 5.0V (6.0V max)
- XH 1.25mm pitch battery connector
- Ultra low dropout 600mA 3.3V regulator
- LiPo cell management IC
- Radio transmit current : 128mA for 70mS
- Radio receive current without sleep : 14mA
- Radio current idle + listen : 11mA
- Radio current receive + sleep : 1mA
- Radio current super sleep : 300uA
- LiPo charge : 100mA , 1000mA (default, max)



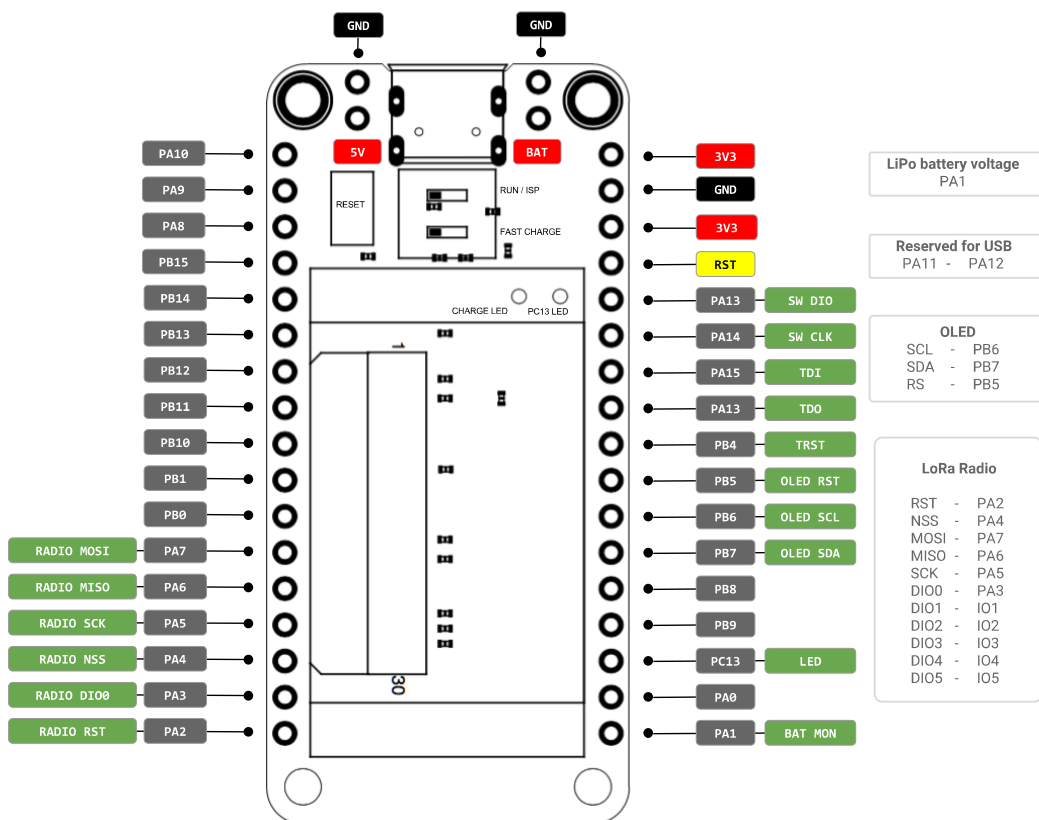
LoRa Specifications

- Chipset Semtech® SX1276
- uFL (IPEX) socket
- Pin hole (allows wire antenna)
- Hardware SPI communication with MCU
- Transmitting power : +20dBm
- Receive sensitivity :
 - 139dBm LoRa 62.5Khz SF12 146bps
 - 136dBm LoRa 125Khz SF12 293bps
 - 118dBm LoRa 125Khz SF6 9380bps
 - 123dBm FSK 5Khz 1.2Kbps
 - 117dBm FSK 5Khz 4.8Kbps
 - 110dBm FSK 20Khz 38.4Kbps
- FIFO : 64 Bytes
- Data rate :
 - FSK 1.2K~300Kbps
 - LoRa 0.018K~37.5Kbps
- Modulations :
 - FSK, MSK, GFSK, GMSK, LoRa, OOK
- Operating frequency : 868MHz - 915MHz
- Digital RSSI function
- Automatic frequency correction
- Automatic gain control
- RF wake-up function
- Low voltage detection and temperature sensor
- Fast wakeup and frequency hopping
- Highly configurable data packet processing
- Antenna diversity and TX/RX switching control

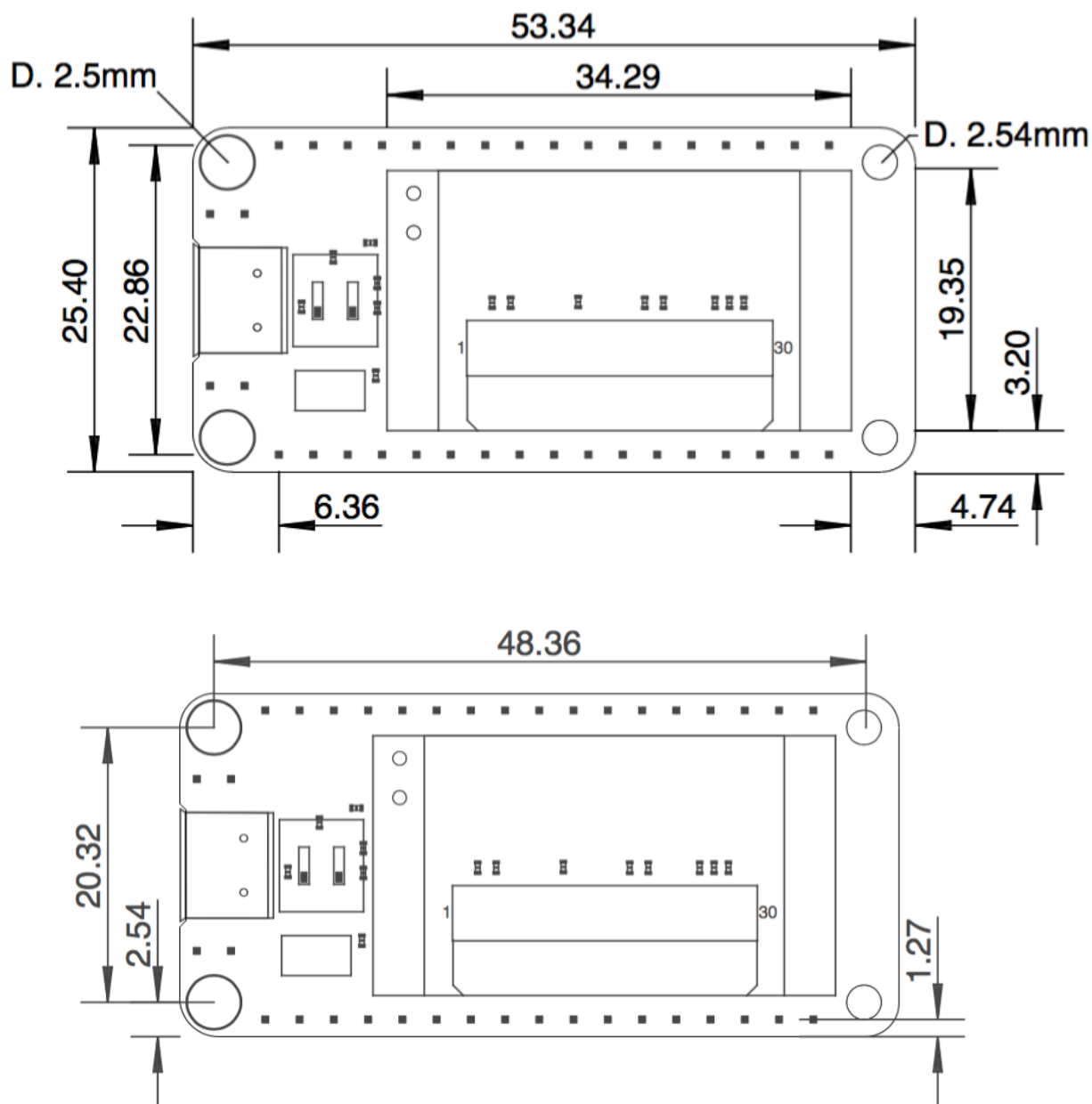
Pinout diagram

LoRaM3-D Pinout Diagram

LoRaM3-D



Dimensions



Support, wholesale, customisation

Reach us by email on contact@bsfrance.fr phone +33 430 346 930 for questions, remarques, support ,wholesale inquiry or custom requests.