Base Cube nRF52840 Mesh
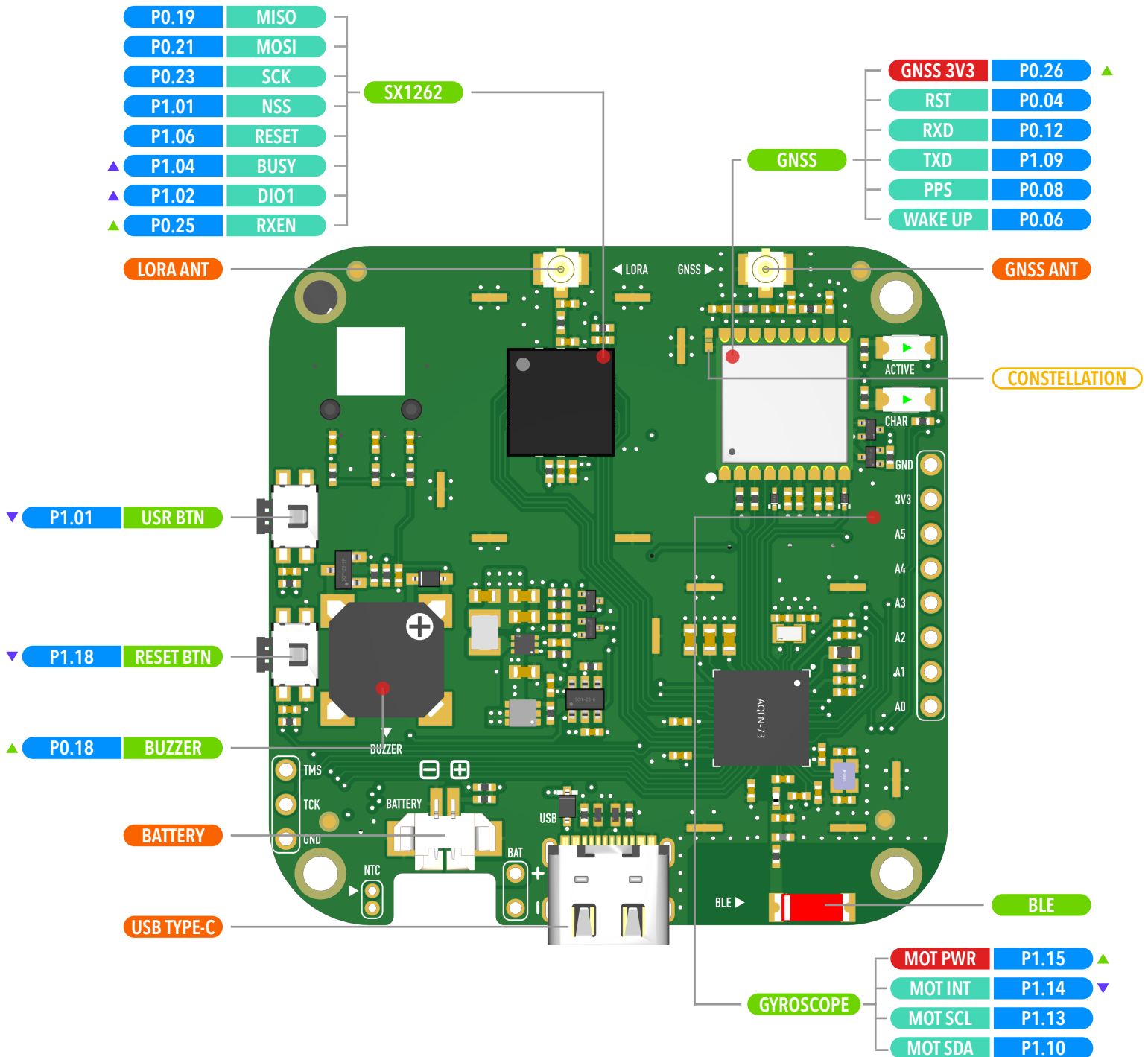
Devlopment Board for LoRa Mesh

▲ Pull-Up to enable
▼ Pull-Down to enable
▼ Low level is detected
▲ High level is detected
● 3.3V IO Operating Vlotage
◌ Jumper Pads
Ⓣ Interface
Ⓣ Voltagle
Ⓣ Function Pin
Ⓣ IC

P0.19	MISO
P0.21	MOSI
P0.23	SCK
P1.01	NSS
P1.06	RESET
▲ P1.04	BUSY
▲ P1.02	DIO1
▲ P0.25	RXEN

SX1262

GNSS 3V3	P0.26	▲
RST	P0.04	
RXD	P0.12	
TXD	P1.09	
PPS	P0.08	
WAKE UP	P0.06	

GNSS

LORA ANT ◀ LORA   GNSS ▶ **GNSS ANT**

ACTIVE
CHAR **CONSTELLATION**

GND
3V3
A5
A4
A3
A2
A1
A0

▼ P1.01	USR BTN

▼ P1.18	RESET BTN

▲ P0.18	BUZZER

BUZZER

TMS
TCK
BATTERY
GND
USB TYPE-C
NTC
BATTERY
USB
BAT
+

BLE ▶ **BLE**

MOT PWR	P1.15	▲
MOT INT	P1.14	▼
MOT SCL	P1.13	
MOT SDA	P1.10	

GYROSCOPE

AQFN-73

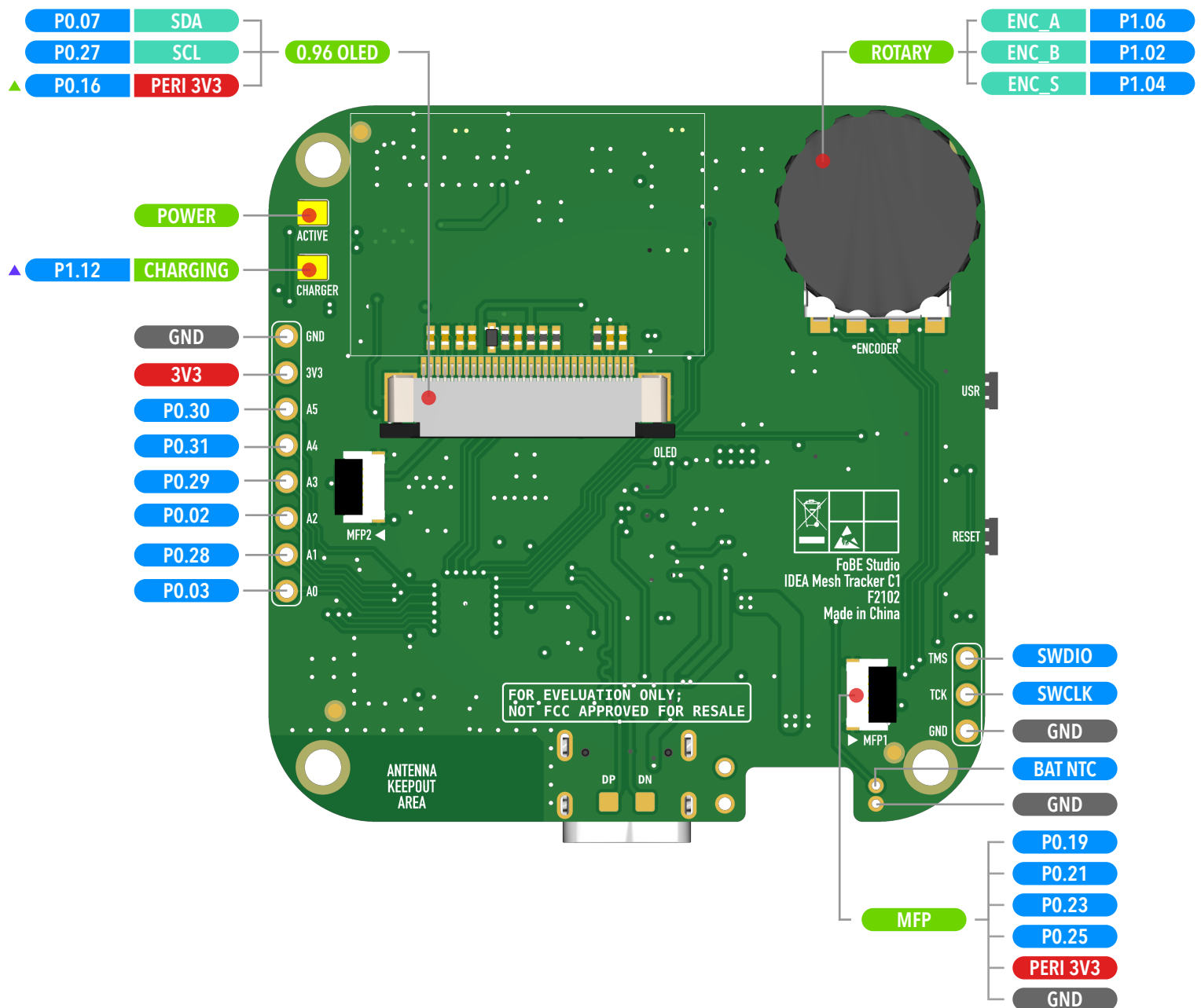CONSTELLATION: Soldering or shorting to select galaxy: GPS + GLONASS or BeiDou + GPS

The battery voltage is measured through a voltage divider consisting of 1 MΩ (top) and 1.5 MΩ (bottom) resistors connected to the ADC pin.

FOBE

Base Cube nRF52840 Mesh

Devlopment Board for LoRa Mesh

P0.07	SDA
P0.27	SCL
▲ P0.16	PERI 3V3

0.96 OLED

ENC_A	P1.06
ENC_B	P1.02
ENC_S	P1.04

ROTARY

POWER — ACTIVE

▲ P1.12 | **CHARGING** — CHARGER

GND	GND
3V3	3V3
P0.30	A5
P0.31	A4
P0.29	A3
P0.02	A2
P0.28	A1
P0.03	A0

MFP2 ◄

•ENCODER

USR

OLED

RESET

FoBE Studio
IDEA Mesh Tracker C1
F2102
Made in China

FOR EVELUATION ONLY;
NOT FCC APPROVED FOR RESALE

ANTENNA
KEEPOUT
AREA

DP   DN

► MFP1

TMS	**SWDIO**
TCK	**SWCLK**
GND	**GND**

BAT NTC
GND

MFP

| P0.19 |
| P0.21 |
| P0.23 |
| P0.25 |
| PERI 3V3 |
| GND |

FOBE

Base Cube nRF52840 Mesh

Devlopment Board for LoRa Mesh

21.50mm

13.43mm

R1.91mm

R7.50mm

◀ LORA   GNSS ▶

7.50mm

3.81mm

ACTIVE

CHAR

2.54mm

50.00mm

42.38mm

GND

3V3

A5

A4

A3

A2

A1

A0

10.16mm

AQFN-73

19.92mm

2.54mm

TMS

TCK

GND

3.81mm

BATTERY

USB

BUZZER

NTC

BAT

+

BLE ▶

12.93mm

9.00mm

42.38mm

50.00mm

H3.57mm

H3.16mm

H2mm

H1.60mm

H4mm

H2mm

FOBE