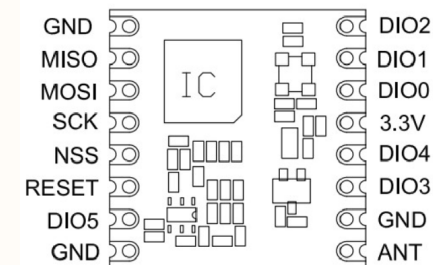
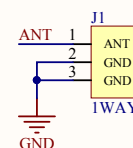
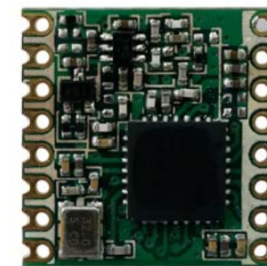


**MULTI MICRO HORNET**  
**ORG1510-MK04/MK05**  
 GPS / GNSS MODULE WITH INTEGRATED ANTENNA

Title GPS module		
Size A4	Number LoRa Beacon	Revision V1.0
Date:	9/30/2018	Sheet 1 of 4
File:	D:\WORKS\...\GPS.SchDoc	Drawn By: MGW



## KEY PRODUCT FEATURES

- ◆ LoRa™ Modem.
- ◆ 168 dB maximum link budget.
- ◆ +20 dBm - 100 mW constant RF output vs. V supply.
- ◆ +14 dBm high efficiency PA.
- ◆ Programmable bit rate up to 300 kbps.
- ◆ High sensitivity: down to -148 dBm.
- ◆ Bullet-proof front end: IIP3 = -12.5 dBm.
- ◆ Excellent blocking immunity.
- ◆ Low RX current of 10.3 mA, 200 nA register retention.
- ◆ Fully integrated synthesizer with a resolution of 61 Hz.
- ◆ FSK, GFSK, MSK, GMSK, LoRa™ and OOK modulation.

Title <b>LoRa Transceiver</b>			
Size <b>A4</b>	Number <b>LoRa Beacon</b>		Revision <b>V1.0</b>
Date:	9/30/2018		Sheet 2 of 4
File:	D:\WORKS\LoRa Transceiver\SchDoc		Drawn By: <b>MGV</b>

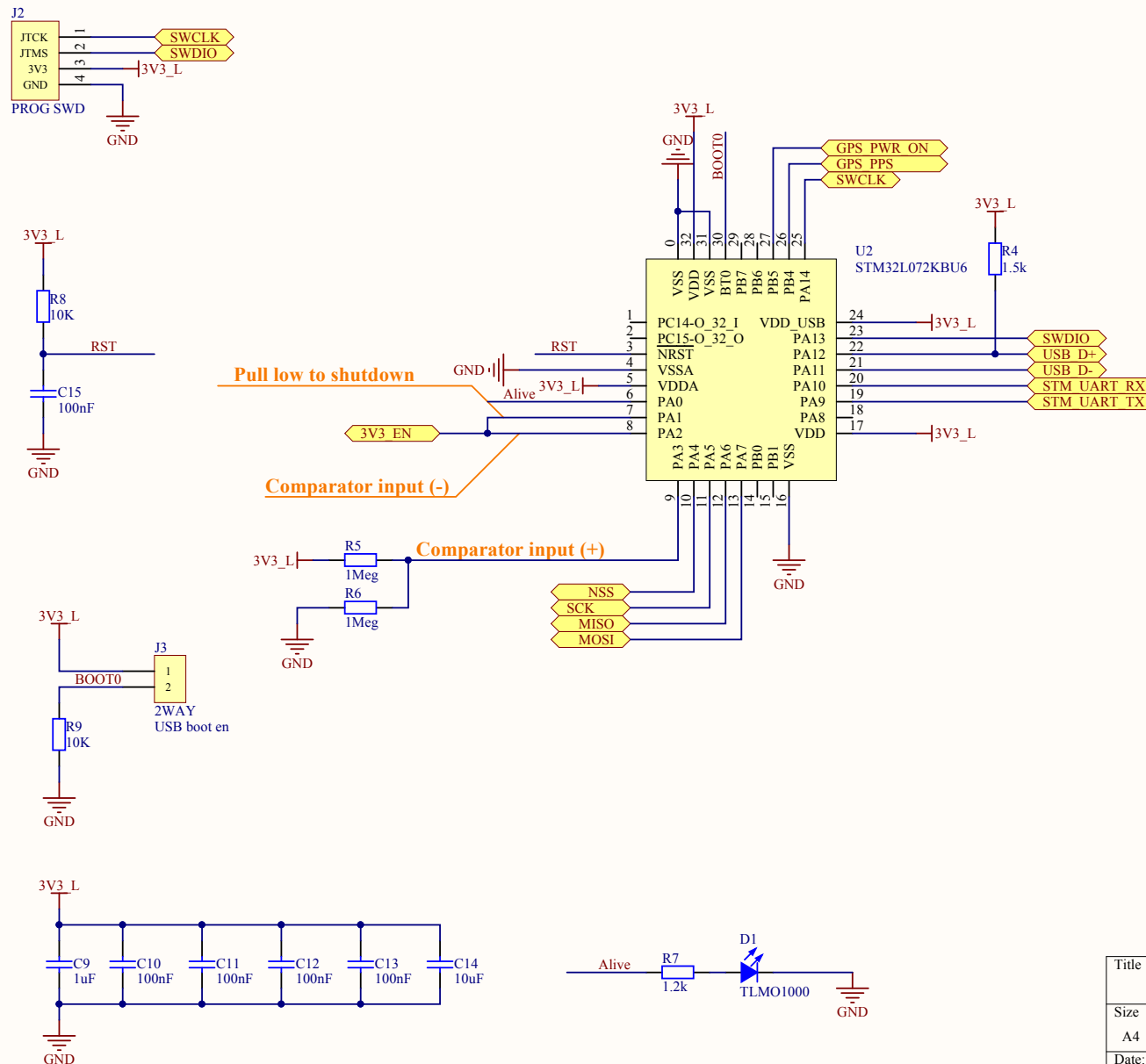


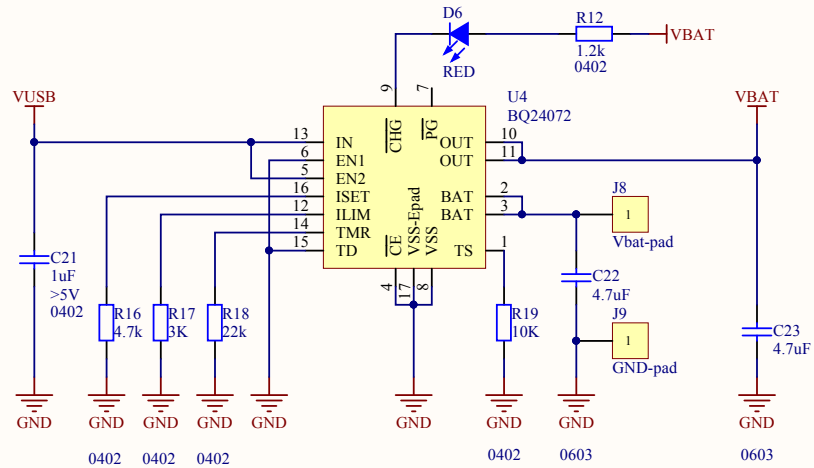
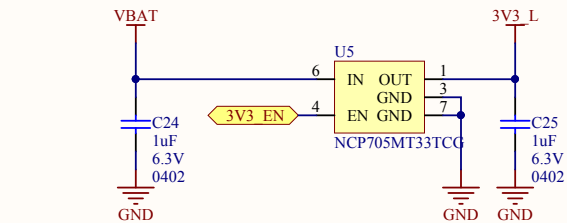
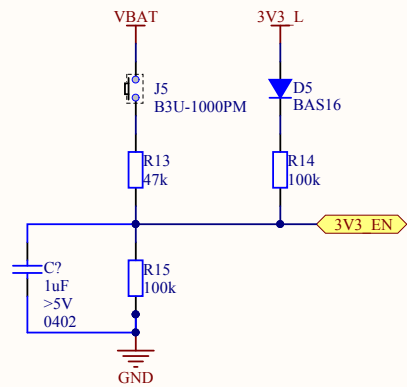
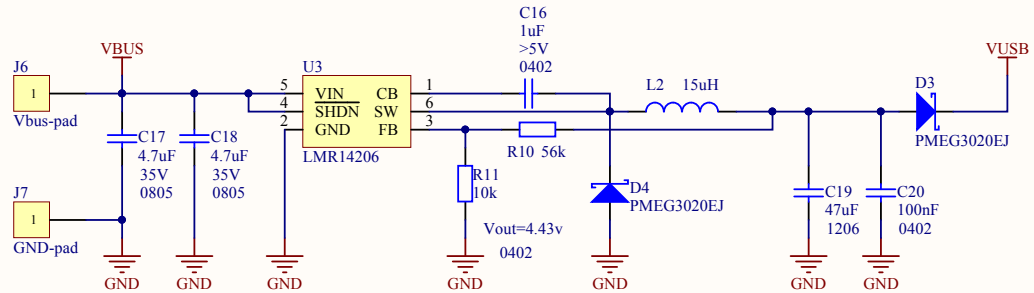
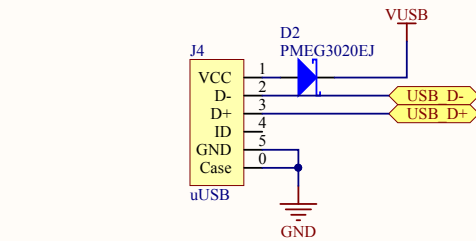
UFQFPN32  
5x5 mm

## Features

- Ultra-low-power platform
  - 1.65 V to 3.6 V power supply
  - -40 to 125 °C temperature range
  - 0.29 µA Standby mode (3 wakeup pins)
  - 0.43 µA Stop mode (16 wakeup lines)
  - 0.86 µA Stop mode + RTC + 20 KB RAM retention
  - Down to 93 µA/MHz in Run mode
  - 5 µs wakeup time (from Flash memory)
  - 41 µA 12-bit ADC conversion at 10 ksp/s
- Core: Arm® 32-bit Cortex®-M0+ with MPU
  - From 32 kHz up to 32 MHz max.
  - 0.95 DMIPS/MHz

Title MCU		
Size A4	Number LoRa Beacon	Revision V1.0
Date: 9/30/2018	Sheet 3 of 4	
File: D:\WORKS\...\MCU.SchDoc	Drawn By: MGV	





Title Power		
Size A4	Number LoRa Beacon	Revision V1.0
Date: 9/30/2018	Sheet 4 of 4	
File: D:\WORKS\...\Power.SchDoc	Drawn By: MGV	