GPRS - 3G - GPS - GNSS - RF - ETHERNET

BoB Break Out Board

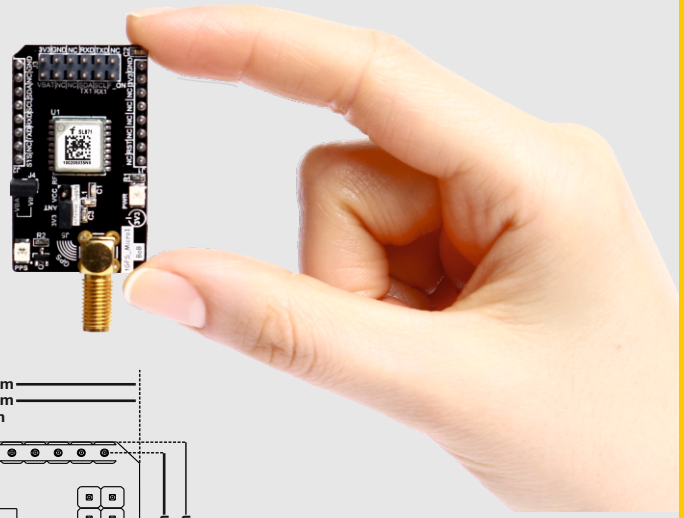
TELIT WIRELESS SOLUTIONS

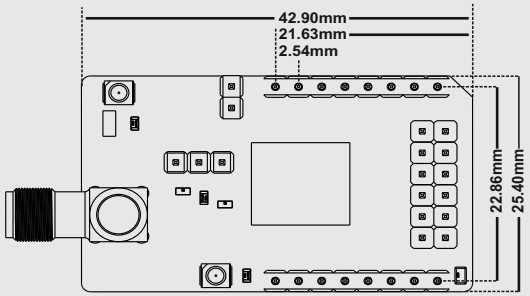
tGPS Micro BoB

SL871 Inside

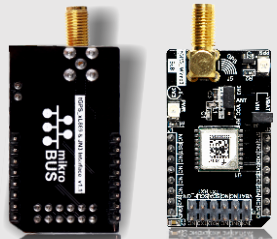
FEATURES

- **GNSS (GPS, Glonass, Galileo, QZSS, Compass)**
- **Standards:** NMEA
- **Chipset:** Mediatek MT3333 core
- **Acquisition Chanels:** 48
- **Positionnal Accuracy:** 3 m
- **Sensitivity:**
  Acquisition: -148dBm, Navigation: -163dBm,
  Tracking: -165dBm
- **Current:**
  Low power Tracking: 0.4 mA
  Full power Tracking: 22 mA (GPS+GLO)
  Full power Acquisition: 24 mA (GPS+GLO)
- **Compliant with GPS and GLONASS Standards**
- **Header Form Factor**
- **PCB Dimensions:** 43 x 25.1
- **PPS (Red) - Power(Green) LEDs**





INTRODUCTION



"tGPS BoB " is a formative with a microBUS structure. It is an effective and easy solution for adding GPS functionality to your design. It features the Telit SL871 module, a SMA connector for a GPS antenna also it has two LEDs for PPS and PWR. tGPS BoB can be interfaced with the target board microcontroller via microBUS UART (Rx, Tx), lines. It has a LED diode in order to power indicator. It can function on 3.3 V power supply only.

APPLICATIONS

- **Vehicle Tracking**
- **Personal Tracking**
- **Pet Tracking**
- **Asset Tracking**
- **Road Navigation Devices**

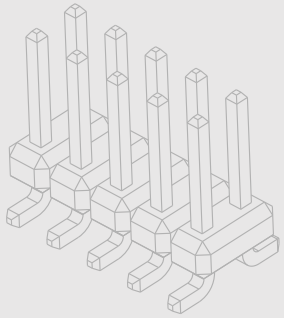
POWER SUPPLY

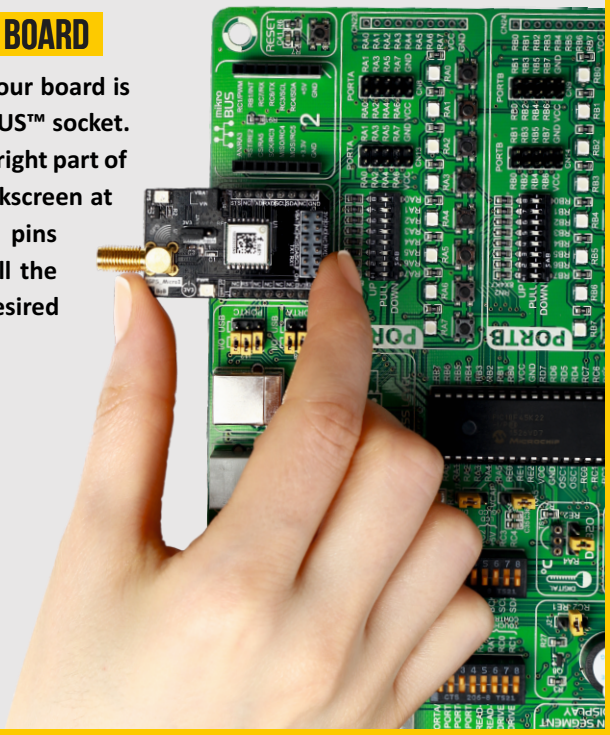
Power Supply Voltage: 3.3 V

Power Supply Current(Min) : 100 mA

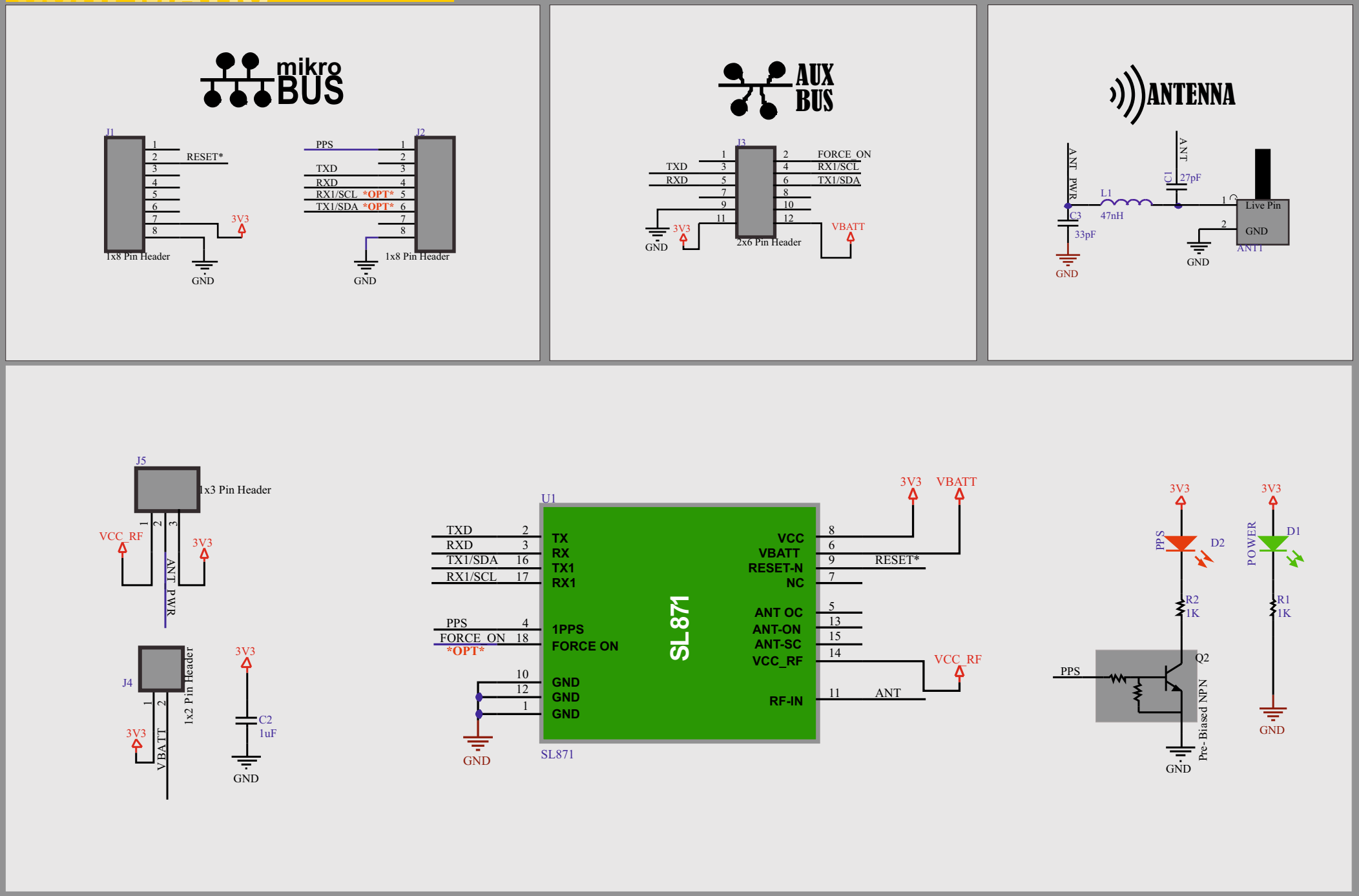
PLUGGING THE BOARD

Once you have soldered the headers your board is ready to be placed into desired mikroBUS™ socket. Make sure to align the cut in the lower-right part of the board with the markings on the silkscreen at the mikroBUS™ socket. If all of the pins arealigned correctly, push the board all the way into the socket. your board is esired mikroBUS™ socket.





SCHEMATIC


mikro BUS
J1
1
2
3
4
5
6
7
8
RESET*
3V3
1x8 Pin Header
GND
J2
PPS
TXD
RXD
RX1/SCL *OPT*
TX1/SDA *OPT*
1x8 Pin Header
GND
AUX BUS
J3
TXD
RXD
FORCE_ON
RX1/SCL
TX1/SDA
3V3
GND
2x6 Pin Header
VBATT
ANTENNA
ANT_PWR
ANT
C1
27pF
L1
47nH
C3
33pF
Live Pin
GND
ANT1
J5
1x3 Pin Header
VCC_RF
3V3
ANT_PWR
J4
1x2 Pin Header
VBATT
C2
1uF
U1
TXD
RXD
TX1/SDA
RX1/SCL
PPS
FORCE_ON
OPT
TX
RX
TX1
RX1
1PPS
FORCE ON
GND
GND
GND
SL871
VCC
VBATT
RESET-N
NC
ANT OC
ANT-ON
ANT-SC
VCC_RF
RF-IN
RESET*
ANT
VBATT
PPS
POWER
D1
D2
R1
1K
R2
1K
Q2
Pre-Biased NPN