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

BoB
Break Out Board

TELIT WIRELESS SOLUTIONS

tGPS BoB

SL869-V2S Inside

FEATURES

- ◎ **Standards:** NMEA
- ◎ **Chipset:** Mediatek MT3337 core
- ◎ **Acquisition Chanels:** 66
- ◎ **Positionnal Accuracy:** 3 m
- ◎ **Sensitivity:**
   Acquisition: -148dBm, Navigation: -163dBm,
      Tracking: -165dBm
- ◎ **Current:**
   Acquisition: typ 27 mA, Tracking: typ 24 mA,
      Standby: typ <6.5 uA
- ◎ **GNSS Standards and bands supported:**
   GPS L1
- ◎ **Assisted GPS**
- ◎ **Header Form Factor**
- ◎ **PCB Dimensions:** 43 x 25.1
- ◎ **PPS (Red) - Power(Green) LEDs**

42.90mm
21.63mm
2.54mm
22.86mm
25.40mm
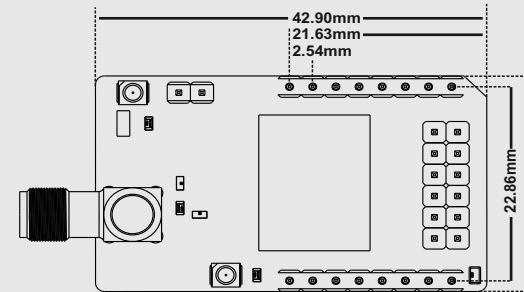
INTRODUCTION
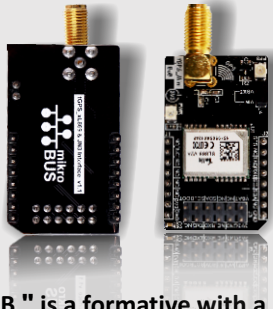
"tGPS BoB " is a formative with a microBUS structure. It is an effective and easy solution for adding GPS functionality to your design.It features the Telit SL869 - V2S module, a SMA connector for an GPS antenna also it has two LEDs for PPS and PWR. tGPS BoB can be interfaced with the target board microcontroller 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**
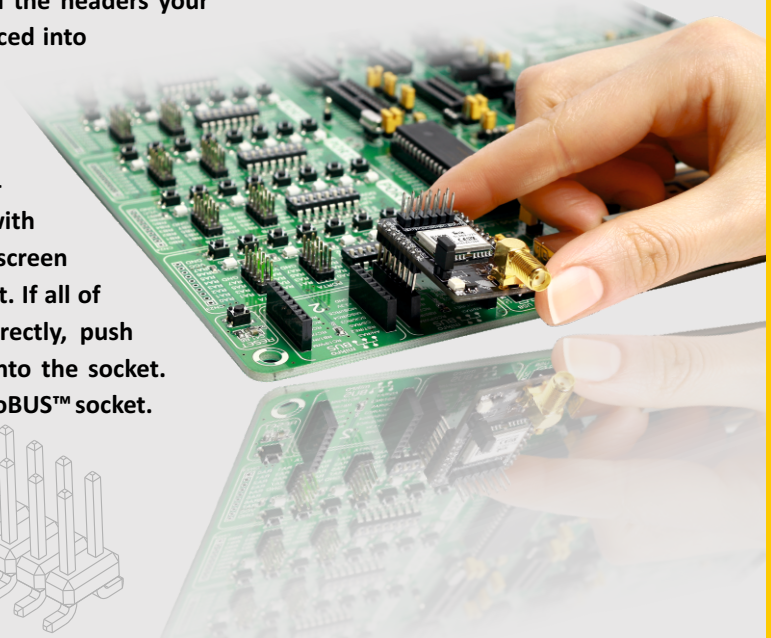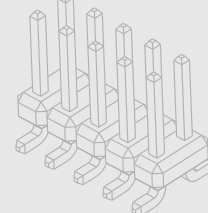- ◎ **Road Navigation Devices**

POWER SUPPLY

Power Supply Voltage: 3.3 V

Power Supply Current(Min) : 100 mA
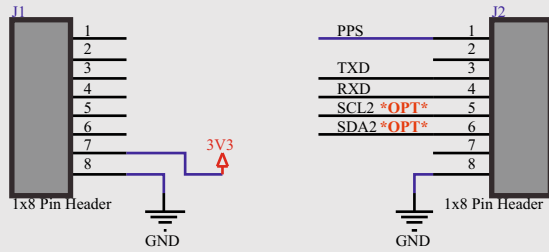
PLUGGING THE BOARD

Once you have soldered the headers your board is ready to be placed into d e s i r e d m i k r o B U S ™ 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.
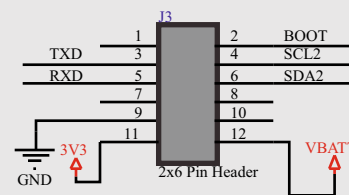
SCHEMATIC

mikroBUS

J1 — 1x8 Pin Header
1, 2, 3, 4, 5, 6, 7, 8

3V3
GND

J2 — 1x8 Pin Header
1 PPS
2
3 TXD
4 RXD
5 SCL2 *OPT*
6 SDA2 *OPT*
7
8

GND

AUX BUS

J3 — 2x6 Pin Header
1 — 2 BOOT
3 TXD — 4 SCL2
5 RXD — 6 SDA2
7 — 8
9 — 10
11 — 12

3V3
GND
VBATT

ANTENNA

3V3
ANT
C1 27pF
L1 47nH
C3 33pF
GND

Live Pin 1
GND 2
ANT1

U1 — SL 869-V2x / JN3

Pin	Name		Name	Pin
1	NC	GND	24
2	NC	VCC_IN	23
3	1PPS (PPS)	VBATT	22
4	NC	RX	21 (RXD)
5	NC	TX	20 (TXD)
6	NC	*OPT* SCL2	19 (SCL2)
7	BOOT *OPT* (BOOT)	*OPT* SDA2	18 (SDA2)
8	NC	NC	17
9	VCC_IN	NC	16
10	GND	NC	15
11	RF_IN (ANT)	NC	14
12	GND	GND	13

SL869-V2x / JN3

3V3
C2 1uF
GND

3V3
VBATT
J4 — 1x2 Pin Header
1, 2

3V3
GND

3V3
GND

VBATT

3V3
PPS
D2
R2 1K
Q2
PPS
Pre-Biased NPN
GND

3V3
POWER
D1
R1 1K
GND