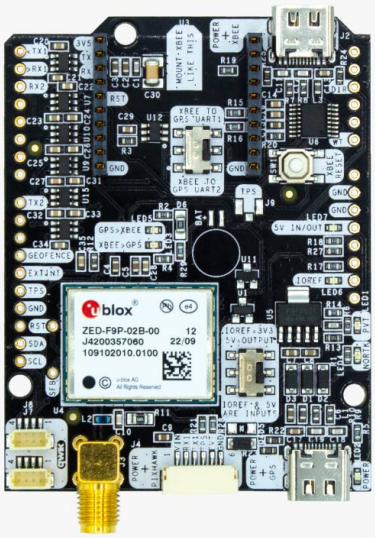
simpleRTK2B Pro

Includes:
- 1 simpleRTK2B Pro board (ZED-F9P)

More info about the product!



simpleRTK2B Pro has several different configurations to provide you with flexibility:

SKU	Variation Name
AS-RTK2B-PROF9P-L1L2-NH-00	Without headers / ZED-F9P
AS-RTK2B-PROF9P-L1L2-HS-00	Headers soldered (+26€) / ZED-F9P

Get a discounted bulk price on this product for orders of 50 units or more. Contact us at info@ardusimple.com to get a quote.

Description

simpleRTK2B Pro is a standalone board that allows to evaluate dual band RTK GNSS technology including centimeter level accurate position.
It's powered by u-blox ZED-F9P module and can be used standalone, or connected with Arduino, Ardupilot / Pixhawk (JST connector), Raspberry Pi, Nvidia Jetson and STM32 Nucleo platforms, as a shield. It can provide up to 10 RTK positions every second.

This board is ideal to start developing your own product with RTK inside.
More details are available in the Specifications and Documentation tabs.

Compared to the Budget board, the new Pro version is the latest generation supercharged with new features:
- High power XBee Socket to connect high power devices, like 4G NTRIP Client and XLR at 1W output power.
- Selectable UART1 / UART2 connection to the XBee socket, to be able to send UBX protocol over the air.
- Compatible with Sparkfun qwiic interface and I2C interface.
- Dual USB-C connector
- "NO RTK" LED in red color
- "GPS FIX" LED in green color
- EXTINT and TIMEPULSE available on the JST connector

Good to know:
- This product is compatible but doesn't include multiband GNSS antenna, which is necessary to use the product.
- The module will not give good performance with a standard GNSS antenna, requires a multiband one.
- This product can be used as Base or Rover
- This board is recommended if you want to test u-blox ZED-F9P performance.
- The onboard XBee socket can be used to expand functionality with Plugin accessories (MR/LR/XLR radios, Bluetooth, WiFi, Ethernet, Dataloggers, RS232, Canbus, L-Band, 4G/3G/2G).
- You can use the Shield for Second Plugin socket to connect 2 plugins at the same time.
- Compatible with Ardusimple plastic case
- This board has the option of mounting a backup battery to speed up the Time to First Fix after a short power down. Note that this will not speed up the Time to First RTK fix, fresh satellite data is needed for that. If you want the board with the onboard V_BCKP battery mounted you can add the Hand Soldering Service to your cart.

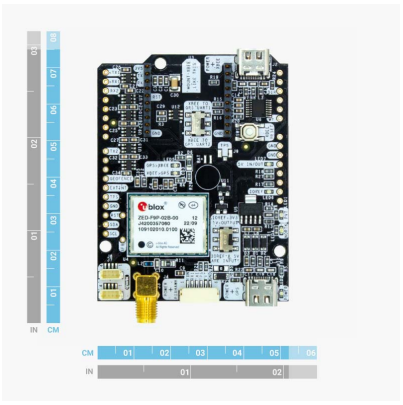
AS-RTK2B-PROF9P-L1L2-NH-00 AS-RTK2B-PROF9P-L1L2-HS-00

Specifications

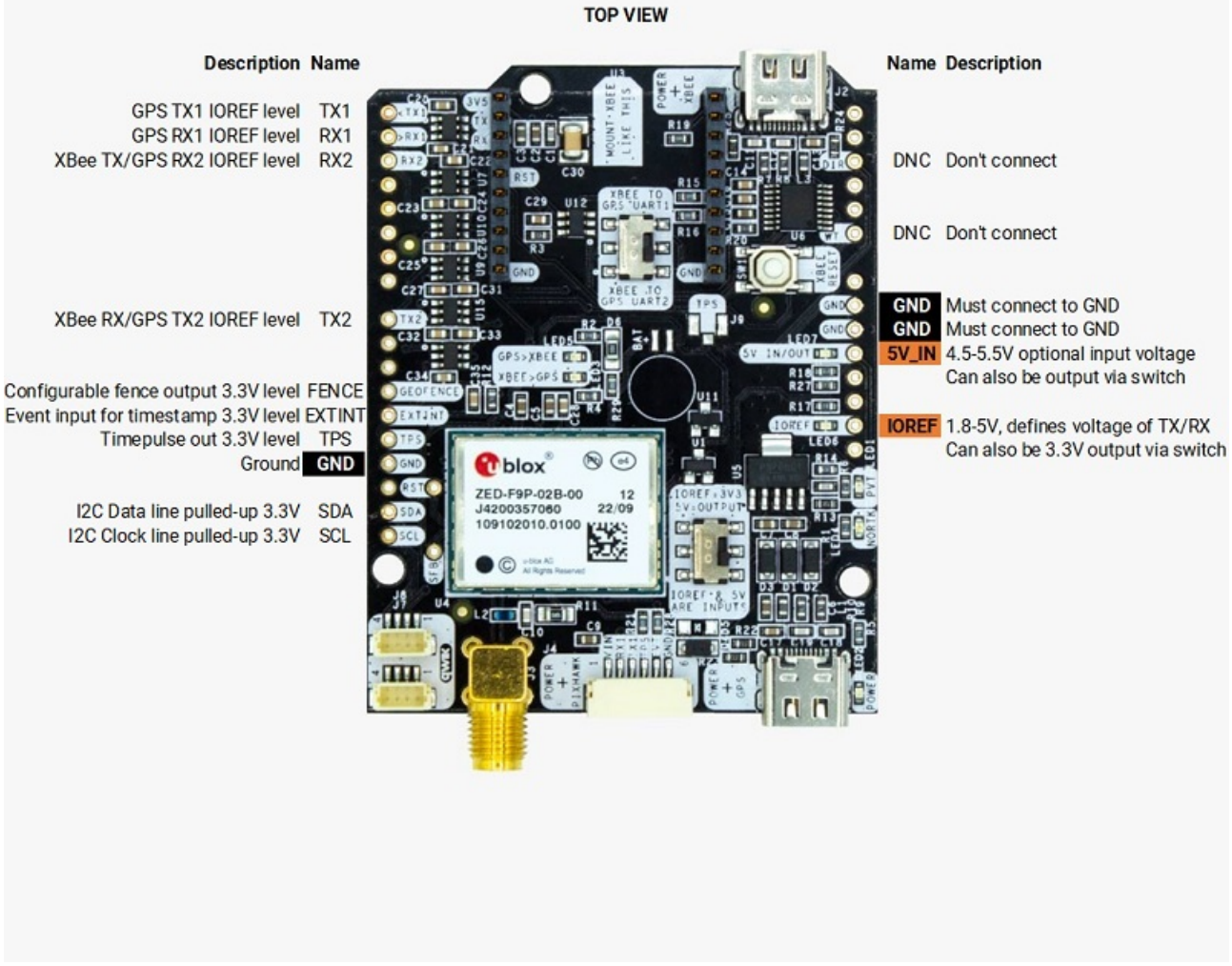
ZED-F9P features

- Centimeter level precision
  - <1cm with a base station up to 35km
  - <1cm with NTRIP up to 35km
  - <4cm with SSR corrections
  - <1.5m in standalone mode
  - <0.9m standalone with SBAS coverage
- Update rate
  - Default: 1Hz
  - With maximum performance: up to 10Hz
  - With reduced performance: up to 20Hz
- Multi band: L1, L2 and E5b support
- Multifrequency and Multiconstellation:
  - GPS: L1C/A L2C
  - GLONASS: L1OF L2OF
  - Galileo: E1-B/C E5b
  - BeiDou: B1I B2I
  - QZSS: L1C/A L2C
  - SBAS: WAAS, EGNOS, MSAS, GAGAN and SouthPAN
- Start-up times:
  - First position fix: 25 seconds (cold), 2 seconds (hot)
  - First RTK fix: 35 seconds (cold)
- RAW data output in UBX format
- Base and Rover functionality
- Operating temperature Range: -40 to +85deg
- Documentation: RED, RoHS

Image Gallery



Pinout



Documentation

User Guide	https://www.ardusimple.com/simplertk2b-pro-hookup-guide/
Configuration files	https://www.ardusimple.com/how-to-configure-ublox-zed-f9p/
Download CAD models	https://www.ardusimple.com/wp-content/uploads/3D_CAD/AS-RTK2B-PROF9P-L1L2-HS-00-R00.STEP https://www.ardusimple.com/wp-content/uploads/3D_CAD/AS-RTK2B-PROF9P-L1L2-NH-00-R00.STEP

simpleRTK2B Pro includes free basic technical support. Contact info@ardusimple.com for more information.
Data and descriptions in this document are subject to change without notice. Product photos and pictures are for illustration purposes only and may differ from the real product appearance.

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