simpleRTK4 Optimum

We get regular but limited shipments of u-blox ZED-X20P. This product will resume shipments on September 29th, thank you for your patience.
Includes:
- 1 simpleRTK4 Optimum board (ZED-X20P)

More info about the product!

simpleRTK4 Optimum SKU is: AS-RTK4-X20P-L1256-NH-00

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

simpleRTK4 Optimum is a u-blox ZED-X20P evaluation board.

It 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 25 RTK positions every second.

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

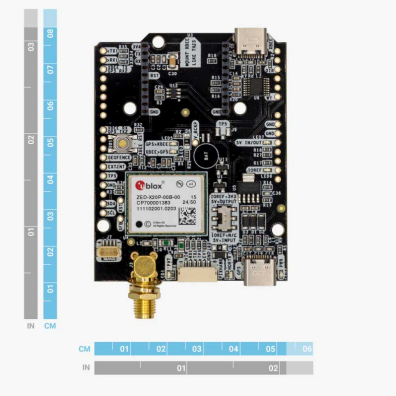
Good to know:
- This product is compatible but doesn't include multiband GNSS antenna, which is necessary to use the product.
- The module will not give good performance with a standard GNSS antenna, requires a multiband one.
- This product can be used as Base or Rover
- This board is recommended if you want to test u-blox ZED-X20P performance.
- This product is an alternative to u-blox X20P high precision GNSS evaluation kit.
- 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.

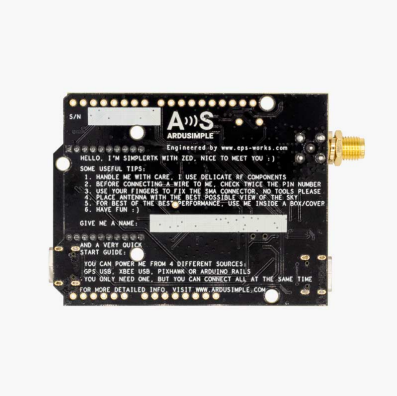
Specifications

ZED-X20P features

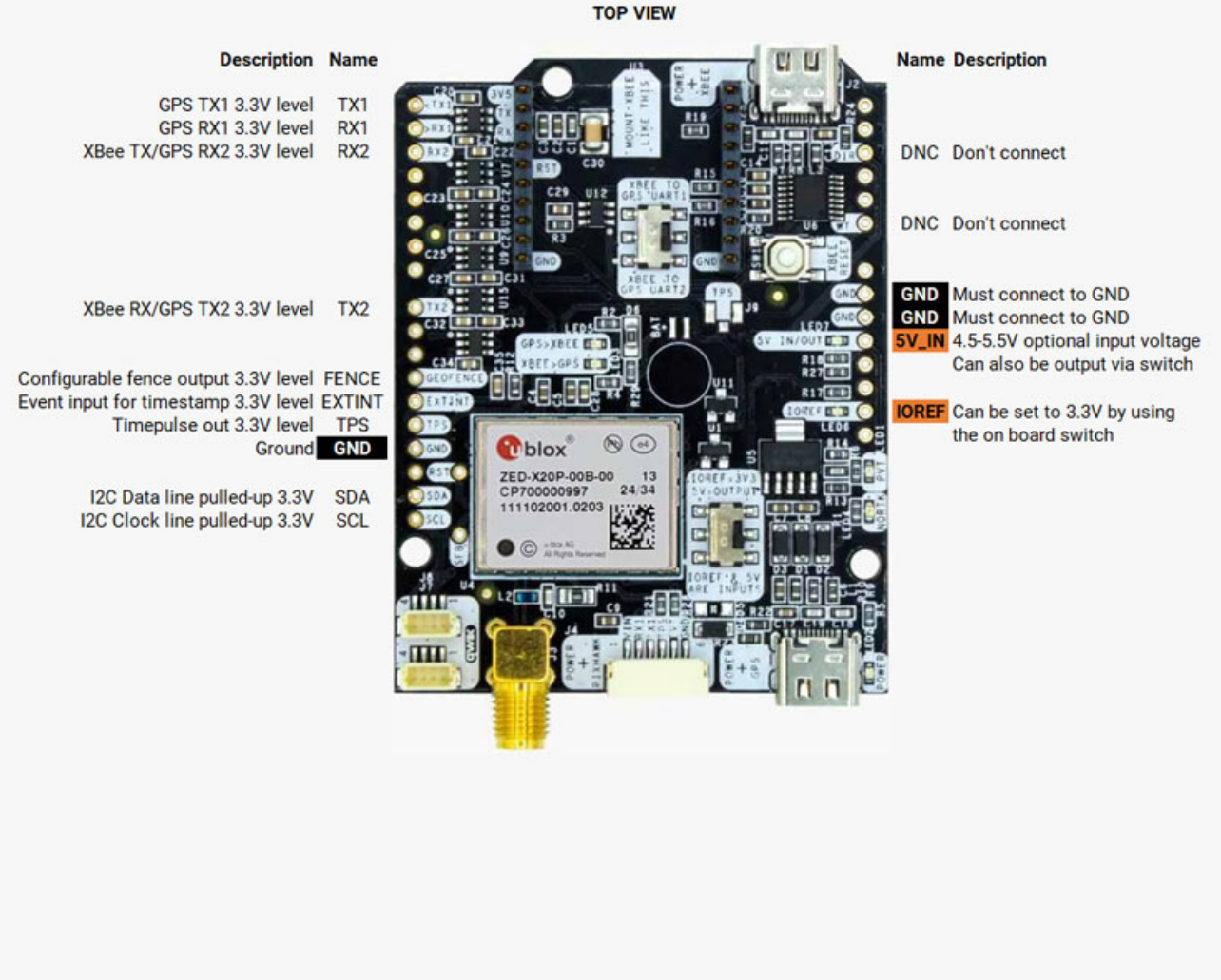
- Centimeter level precision:
  - <1cm with a base station up to 35km
  - <1cm with NTRIP up to 35km
  - <4cm with SSR corrections
  - <1.5m in standalone mode
  - <0.9m standalone with SBAS coverage
- Update rate
  - Default: 1Hz
  - With maximum performance: up to 25Hz
- Multi band: L1, L2, L5 and L6 support
- Multifrequency and Multiconstellation:
  - GPS: L1C/A L2C L5
  - Galileo: E1-B/C E5a E6
  - BeiDou: B1I B1C B2a B3I
  - QZSS: L1C/A L2C/B L2C L5 L6
  - Navic: SPS-L5
  - SBAS: WAAS, EGNOS, MSAS, GAGAN and SouthPAN
- Start-up times:
  - First position fix: 25 seconds (cold), 2 seconds (hot)
  - Warm start: <10s
  - First RTK fix: 35 seconds (cold)
- RAW data output in UBX format
- Base and Rover functionality
- Operating temperature Range: -40 to +85degC
- Certification: CE
- Documentation: RED, RoHS

Image Gallery





Pinout



Documentation

Learn how to configure u-blox ZED-X20 boards	https://www.ardusimple.com/how-to-configure-u-blox-zed-x20p/

simpleRTK4 Optimum 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.