simpleRTK2B Micro

u-blox ZED-F9P ZED-F9R in a easy to solder format. Centimeter GPS position with smallest footprint for your custom PCB design with RTK.

More info about the product!

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

SKU	Variation Name
AS-RTK2B-MICRO-F9P-L1L2SMATH-00	ZED-F9P / SMA / Through hole
AS-RTK2B-MICRO-F9P-L1L2UFLSMD-00	ZED-F9P / uFL / Surface mount
AS-RTK2B-MICRO-F9P-L1L2UFLTH-00	ZED-F9P / uFL / Through hole
AS-RTK2B-MICRO-F9R-L1L2SMATH-00	ZED-F9R / SMA / Through hole
AS-RTK2B-MICRO-F9R-L1L2UFLSMD-00	ZED-F9R / uFL / Surface mount
AS-RTK2B-MICRO-F9R-L1L2UFLTH-00	ZED-F9R / uFL / Through hole

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

Let simpleRTK2B Micro accelerate your RTK project thanks to its easy to integrate footprint, integrated RF connector & high availability. With u-blox ZED-F9P and ZED-F9R products. We take care of the RF design and complex module integration so you can focus on your PCB design and the application.

- Smallest Form Factor
- Many ZED-F9P pins available
- Re-usable: if you do a new PCB you can un-mount from your previous version the expensive GPS!
- Smaller PCB area needed: you can use the space below the module to place other components!
- Easy to solder by hand or machine
- No RF knowledge required, because all RF components are already inside: simply uFL for pigtail connection or long SMA for direct panel mount
- Bulk pricing starting 50 units

Includes:
– 1 simpleRTK2B Micro board

Specifications

ZED-F9P features

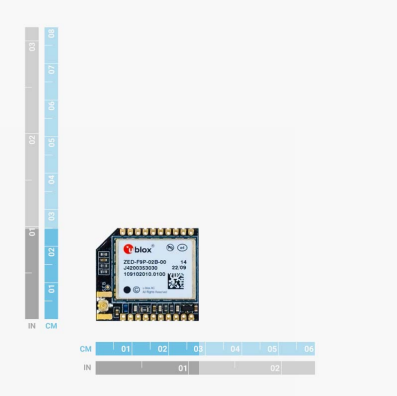
- Centimeter level precision
  - <1cm with a base station up to 35km
  - <1cm with NTRIP up to 35km
  - <4cm with SSR corrections
  - <1.5m in standalone mode
  - <0.9m standalone with SBAS coverage
- Update rate
  - Default: 1Hz
  - With maximum performance: up to 10Hz
  - With reduced performance: 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 +85degC
- Documentation: RED, RoHS

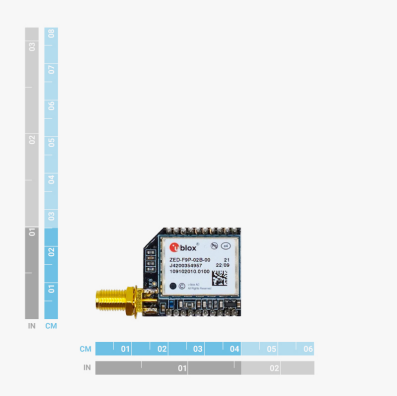
ZED-F9R features

- 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
  - Maximum fusion update rate: 30Hz
- Sensor fusion
  - Tilt: 10 mm + 0.7 mm/°tilt (accuracy 2.5 cm within 30°)
  - INS only: 2 % of the distance travelled without GNSS signals

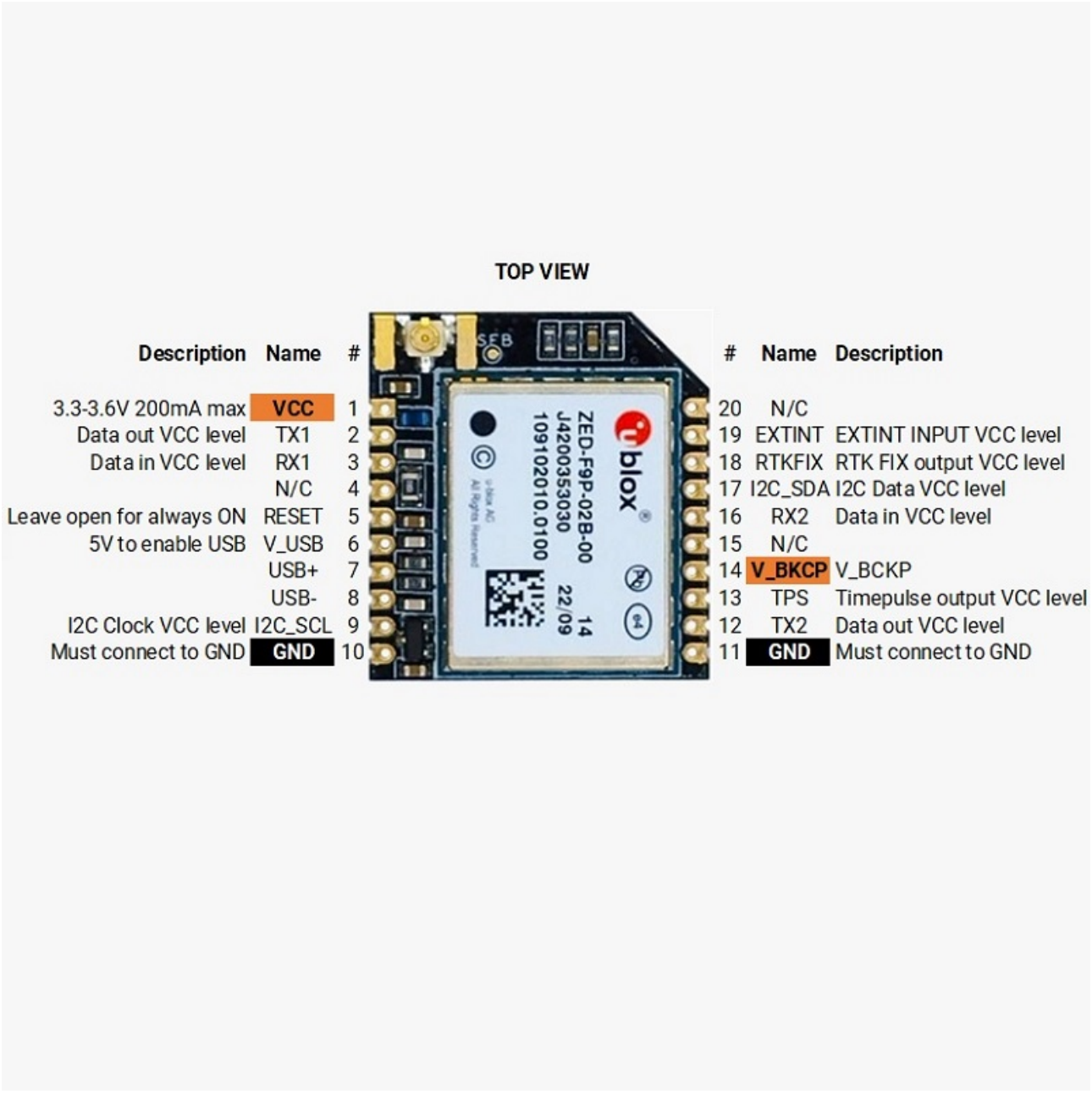
    - IMU RAW data: 100Hz
- Multi band: L1, L2 and E5b support
- Multifrequency and Multiconstellation:
    - GPS: L1C/A L2C
    - GLONASS: L1OF L2OF
    - Galileo: E1-B/C E5b
    - BeiDou: B1I B2I
    - QZSS: L1C/A L2C
    - SBAS: WAAS, EGNOS, MSAS, GAGAN and SouthPAN
- Start-up times:
    - First position fix: 25 seconds (cold), 2 seconds (hot)
    - First RTK fix: 35 seconds (cold)
- Dynamic models: ground vehicle, slow-moving service robots and electric scooters (drones, boats and pedestrians not supported)
- RAW data output in UBX format
- No Base Station function, only RTK Rover
- Operating temperature Range: -40 to +85degC
- Documentation: RED, RoHS

Image Gallery





Pinout



Documentation

Configuration files	https://www.ardusimple.com/how-to-configure-ublox-zed-f9p/
Footprint	https://www.snapeda.com/search/?q=ardusimple

simpleRTK2B Micro 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.