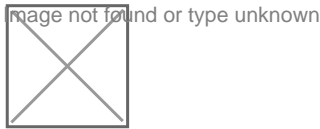


simpleRTK2B mPCIe

Includes:

- 1 simpleRTK2B mPCIe board



[More info about the product!](#)



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

SKU	Variation Name
AS-RTK2B-MPCIE-L1L2-F9P-01	ZED-F9P
AS-RTK2B-MPCIE-L1L2-F9R-01	ZED-F9R
AS-RTK2B-MPCIE-L1L2-F9T-01	ZED-F9T

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

Bring low cost high precision RTK GNSS positioning to your Mini PCI Express platforms thanks to ZED-F9 and this board fully compatible with MiniPCIe half-size and full-size sockets.

Good to know:

- The board by default is compatible with full size Mini PCI Express sockets, and it's pre-cut so you can convert it yourself to Half Size Mini PCI Express size.
- You will need a uFL to SMA pigtail to connect it to our Multiband GPS/GNSS antennas.
- ZED-F9T variant has an extra uFL connector for timepulse output.
- Bulk pricing starting 50 units

Specifications

ZED-F9P features

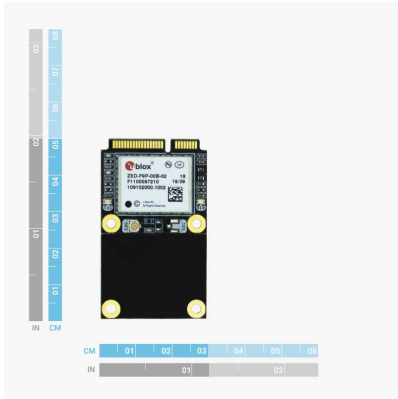
- Centimeter level precision
 - <1cm with a base station up to 35km
 - <1cm with NTRIP up to 35km
 - <4cm with SSR corrections
 - <1.5m in standalone mode
 - <0.9m standalone with SBAS coverage
- Update rate
 - Default: 1Hz
 - With maximum performance: up to 10Hz
 - With reduced performance: up to 20Hz
- 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

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 GNSS update rate: 4Hz
 - Maximum fusion update rate: 30Hz
- 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 +85deg
- Documentation: RED, RoHS

Image Gallery



Pinout

Description	Function	Pin		Function	Description
			1		
	VIN_3V3	2	3		
	GND	4	5		
		6	7		
		8	9	GND	
		10	11		
		12	13		
		14	15	GND	
		16	17		
	GND	18	19		
Feature disabled	W_DISABLE	20	21	GND	
Feature disabled	RESET	22	23		
	VIN_3V3	24	25		
	GND	26	27	GND	
		28	29	GND	
		30	31		
		32	33		
	GND	34	35	GND	
	USB_DN	36	37	GND	
	USB_DP	38	39	VIN_3V3	
	GND	40	41	VIN_3V3	
		42	43	GND	
		44	45		
		46	47		
		48	49		
	GND	50	51		
	VIN_3V3	52			

Documentation

User Guide	https://staging.ardusimple.com/user-guide-simplertk2b-mpcie/
Configuration files	https://staging.ardusimple.com/how-to-configure-ublox-zed-f9p/
Footprint	https://www.snapeda.com/search/?q=ardusimple
Download CAD models	https://staging.ardusimple.com/wp-content/uploads/3D_CAD/AS-RTK2B-MPCIE-L1L2-F9P-00-R00-fullsize.STEP https://staging.ardusimple.com/wp-content/uploads/3D_CAD/AS-RTK2B-MPCIE-L1L2-F9P-00-R00-halfsize.STEP

simpleRTK2B mPCIe 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.