Product summary
C102-F9R application board

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Easy evaluation of u-blox ZED-F9R with multi-band RTK

Highlights

- Application board for ZED-F9R
- User-configurable CAN-bus interface covering many implementations
- Robust housing suitable for in-vehicle use and installation

Product description

The C102-F9R evaluation kit allows industrial customers to evaluate ZED-F9R, the high precision sensor fusion (HPS) technology, on different vehicle types.

The ZED-F9R module includes multi-band GNSS with built-in RTK and sensor fusion technologies to provide decimeter-level accuracy. The C102-F9R application board integrates a micro-controller to directly interface to the vehicle's CAN-bus using a configuration file. When the CAN-bus cannot be directly supported due to the diverse nature of the specification, digital inputs are available for speed and direction inputs. It also includes the NEO-D9S L-band receiver to decode PointPerfect corrections delivered over satellite where the service is available.

The u-center evaluation software provides a powerful platform for evaluating u-blox GNSS receivers. With u-center, data can be logged as well as visualized in real time. The u-center software contains an NTRIP client that can be used to manage the RTCM correction stream from commercial services. In addition, it contains an MQTT client used with the PointPerfect service.

The 14-pin header provides access to additional functions beyond those depicted in the block diagram, such as the use of an external power supply, access to a microcontroller for the update of its firmware, and access to the UART2 of ZED-F9R.

Block diagram

Kit includes

- Application board with ZED-F9R
- Active multi-band GNSS antenna
- 14-pin connector breakout cable
- One-month trial license of PointPerfect augmentation service (may not operate in all regions of the world)
- USB cable
- Jumpers for configuration
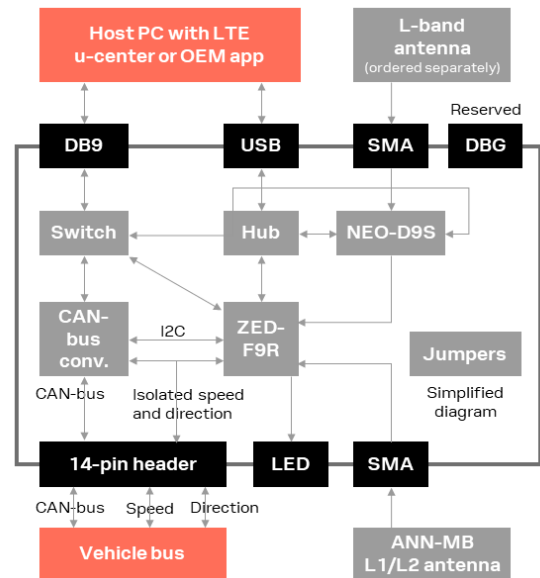
Interfaces and electrical data

USB	Micro USB port for GNSS data and power supply
DB9	UART communication
Antennas	SMA connector for active GNSS antenna
Power supply	USB connection or 5 to 24 VDC via 14-pin header
IO voltage	3.3 V
Protocols	NMEA, UBX, RTCM

Product variants

C102-F9R-1	For all regions globally

Further information

For contact information, see **www.u-blox.com/contact-u-blox**.

For more product details and ordering information, see the product data sheet.