C102-F9R application board

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 microcontroller 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.

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.

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 microcontroller for the update of its firmware, and access to the UART2 of ZED-F9R.

Kit includes
- Application board with ZED-F9R
- Active multi-band GNSS antenna
- 14-pin connector breakout cable
- One-month trial license from Correction Service Partners (may not operate in all regions of the world)
- USB cable
- Jumpers for configuration
- Quick start guide

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
All variants have the same application board and software.

C102-F9R-0: For all regions with full GNSS RAW data enabled by default.

Further information
For contact information, see www.u-blox.com/contact-us.
For more product details and ordering information, see the product data sheet.