

## Release Note

Topic	<b>ZED-F9P FW 1.00 HPG 1.12</b> UBX- 19026698
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## 1 General information

### 1.1 Scope

This Release Note applies to ZED-F9P module firmware version 1.00 HPG 1.12.

The document covers the changes in the firmware for ZED-F9P compared to firmware version 1.00 HPG 1.11.

Please refer to release notes [4], [5], and [6] for a full description.

### 1.2 Related documentation

- [1] u-blox ZED-F9P Interface Description, [UBX-18010854](#)
- [2] u-blox ZED-F9P Data Sheet, [UBX-17051259](#)
- [3] u-blox ZED-F9P Integration Manual, [UBX-18010802](#)
- [4] u-blox ZED-F9P Release Note FW 1.00 HPG 1.00, [UBX-18052237](#) R02
- [5] u-blox ZED-F9P Release Note FW 1.00 HPG 1.10, [UBX-18070245](#)
- [6] u-blox ZED-F9P Release Note FW 1.00 HPG 1.11, [UBX-19004753](#)

## 2 Released firmware image

Released firmware image for u-blox ZED-F9P	
File	UBX_F9_100_HPG_112_ZED_F9P.a26bfd58dfd11c233f8fdb6b99adc5a.bin
Firmware version	EXT CORE 1.00 (61b2dd) FWVER=HPG 1.12
ROM base support	ROM 1.02 - ROM BASE 0x118B2060 ROM 1.01 - ROM BASE 0xDD3FE36C ROM 0.40 - ROM BASE 0xCAA619C

### 2.1 Related software

Version 19.06 (or later) of u-center GNSS evaluation software is recommended to be used with the released product.

## 3 Message interface

### 3.1 UBX protocol

This firmware supports the UBX Protocol version 27.11.

#### 3.1.1 Modified messages

Message / Configuration item	Description / Comment
UBX-NAV-GEOFENCE	A reserved byte in repeated block of UBX-NAV-GEOFENCE now identifies the geofence for which the state refers to.
UBX-NAV-RELPOSND	The flag field holds a new relPosNormalized bit. This is not used and not relevant for ZED-F9P product.

## 4 Firmware changes

### 4.1 New features

There are no new features in this firmware release compared to firmware version 1.00 HPG 1.11.

### 4.2 Improvements

- Improved RTK performance.
- RTK\_STAT pin behavior correction. When the receiver is in RTK Float mode, the RTK\_STAT pin level alternates as described in the product documentation.
- Geofence pin configuration and behavior corrections. The geofence status is reported consistently in UBX-NAV-GEOFENCE (protocol version 27.11) when using multiple geofences.
- GPS signal tracking improvements.
- Four QZSS L2C signals can always be tracked. In earlier ZED-F9P firmware this number was limited to three signals in situations where all GNSS constellations were enabled.
- BDS tracking of PRN 31-37 is enabled.

- Improved interference monitoring.
- Various NMEA message corrections:
  - GLGSV (fixed inconsistencies between reported number of SVs and reported SV information)
  - GSV and GRS sentences are only output for signals that are enabled
  - Fixed inconsistencies issues between GRS and GSA sentences
  - Fixed version 2.3 compatibilities issue for VLW (Dual Ground/Water Distance) and THS (True Heading and Status)

#### **4.3 Changes**

- BeiDou B2I is enabled in the default configuration.

#### **4.4 Firmware known limitations**

- A receiver moving at very slow speed (<10 cm/s) does not update the heading information in UBX-NAV-PVT. The velocity vectors can be used reliably.
- The Geofence status pin is only available on the default pin configuration.