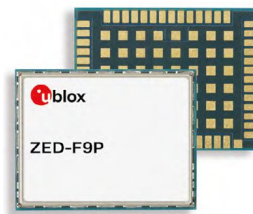**P**

ZED-F9P FW 1.00 HPG 1.32

ZED-F9P

Release Note

Abstract

This document contains general information, interface changes and firmware changes (features, improvements), along with known limitations for ZED-F9P FW 1.00 HPG 1.32.

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Document information

Title	**ZED-F9P FW 1.00 HPG 1.32**	
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Contents

1 General information

1.1 Scope

This Release Note applies to ZED-F9P with Firmware 1.00 HPG 1.32.

The document covers the changes in the ZED-F9P firmware compared to firmware version FW 1.00 HPG 1.30. Please refer to u-blox ZED-F9P Release Note FW 1.00 HPG 1.30 for a full description.

1.2 Released firmware image

File	UBX_F9_100_HPG_132_ZED_F9P.df73486d99374142f3aabf79b7178f48.bin
Firmware version	EXT CORE 1.00 (0fa0ae)
	FWVER=HPG 1.32
ROM base support	ROM 1.02 - ROM BASE 0x118B2060
	ROM 1.01 - ROM BASE 0xDD3FE36C
	ROM 0.40 - ROM BASE 0xCAAF619C

Table 1: Released firmware image for u-blox ZED-F9P

1.3 Related software

It is recommended to use u-center GNSS evaluation software version 22.05 (or later) with the released product.

1.4 Related documents

[1] HPG 1.32 Interface description, UBX-22008968
[2] ZED-F9P-04B Data sheet, UBX-21044850
[3] ZED-F9P Integration manual, UBX-18010802
[4] ZED-F9P Release note FW 1.00 HPG 1.30, UBX-21047459

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2 Message interface

2.1 UBX

ZED-F9P FW 1.00 HPG 1.32 supports UBX protocol version 27.31.

2.2 NMEA

ZED-F9P FW 1.00 HPG 1.32 supports up to NMEA protocol version 4.11.

Five NMEA standards are supported. The default NMEA version is 4.11, and, alternatively, versions 4.10, 4.0, 2.3, and 2.1 can be enabled.

2.3 RTCM

ZED-F9P FW 1.00 HPG 1.32 supports up to RTCM3 standard version 3.3.

2.4 SPARTN

ZED-F9P FW 1.00 HPG 1.32 supports up to SPARTN protocol version 2.0.1.

2.5 Interface changes

2.5.1 New

Message / Configuration item	Description / Comment
-	-

2.5.2 Modified

Message / Configuration item	Description / Comment
UBX-RXM-SPARTNKEY	Message can be send at any time to overwrite previously saved keys, without needing a system restart or without needing to wait for previously saved keys to expire
CFG-UART2INPROT-UBX	Default value changed from false to true; enables UBX input protocol support on UART2 by default
CFG-QZSS-SLAS_MAX_BASELINE	Default value changed from 200 km to 350 km

2.5.3 Removed

Message / Configuration item	Description / Comment
-	-

3 Improvements

- Increased receiver robustness in southern hemisphere when SPARTN input is provided
- When QZSS L1S is enabled, QZSS L1C/A reports now correct 'Half cycle validity' information in UBX-RXM-RAWX
- UBX-RXM-SPARTNKEY can be polled on all ports, not only on UART1
- UBX-RXM-SPARTNKEY can be send at any time to overwrite previously saved keys, without needing a system restart or without needing to wait for previously saved keys to expire
- SPARTN IP stream decryption robustness improvements to ensure decryption is performed only on valid data verified fully as a SPARTN frame

4 Known limitations

- A receiver moving at very slow speed (less than 10 cm/s) does not update the heading information in UBX-NAV-PVT. The velocity vectors can be used reliably.
- Geofence status pin must not be re-assigned to another pin
- If the receiver is configured to output RTCM messages on several ports, the ports must have the same RTCM configuration, otherwise the MSM multiple message bit might not be set correctly
- Time pulse can only be synced to GNSS. Configuration items and relevant flag cannot be set to false (CFG-TP-SYNC_GNSS_TP1, UBX-CFG-TP5)
- If the receiver is configured to GLONASS only operation, it cannot get a PPP-RTK fix when using SPARTN corrections
- Static hold mode is unreliable at navigation rates larger than 1 Hz
- Incorrect SBAS pseudo range value corresponding to 4 ms shift may be reported in UBX-RXM-SFRBX messages. This can be detected by monitoring the halfCyc flag in UBX-RXM-RAWX.
- Lower navigation rate achievable compared to previous firmware; performance figures available in related Data sheet document
- UART2 may report different UBX-INF-ERROR messages than the ones reported on the other interfaces
- UBX-RXM-COR message does not get output for SPARTN protocol corrections, while the configuration item CFG-SPARTN-USE_SOURCE is set to LBAND
- UBX-RXM-COR and UBX-RXM-SPARTN messages do not get output for encrypted SPARTN protocol corrections, while the configuration item CFG-SPARTN-USE_SOURCE is set to IP and no valid key is available in UBX-RXM-SPARTNKEY
- Encrypted SPARTN protocol corrections received on UART2 are not reported as SPARTN input in UBX-MON-COMMS and UBX-MON-MSGPP, while the configuration item CFG-SPARTN-USE_SOURCE is set to IP and no valid key is available in UBX-RXM-SPARTNKEY