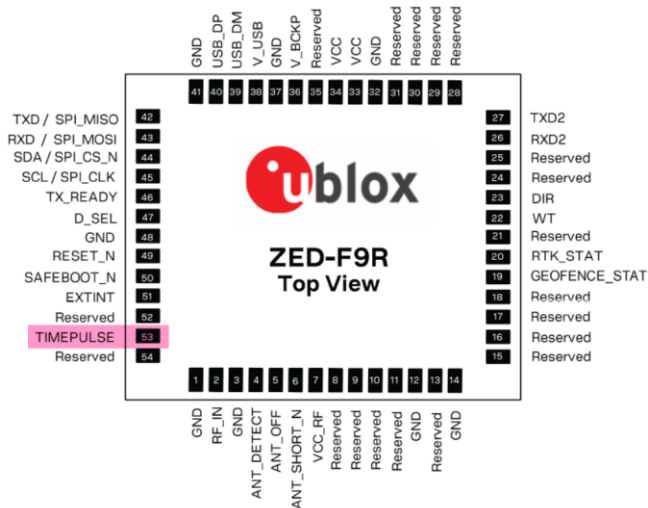


## Enable Time Pulse Message

Currently, the PPS signal (hardware level) on ANNA series products is not available for host PC connection. (It is designed for LED indicator on the card)



Besides the PPS signal, you could get “**time pulse time data**” from the GNSS module. To enable the time pulse messages, please use the command below:

b5 62 06 01 03 00 0d 01 01 19 69

u-blox receivers include a time pulse function providing clock pulses with configurable duration and frequency. The time pulse function can be configured using the CFG-TP-\* configuration group. The UBX-TIM-TP message provides time information for the next pulse and the time source.

### Pulse Mode: Rising



### Pulse Mode: Falling

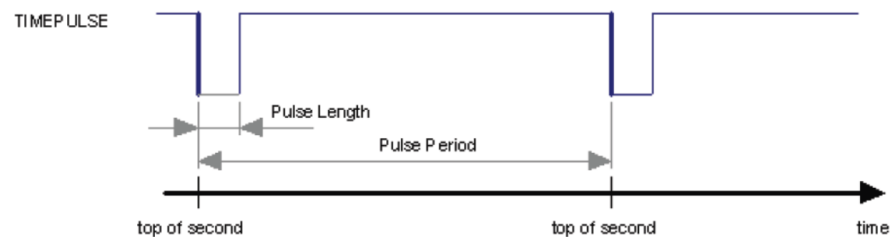


Figure 20: Time pulse

- ### 3.18.2 UBX-TIM-TP (0x0d 0x01)

<b>Message</b>	<b>UBX-TIM-TP</b> <b>Time pulse time data</b>					
<b>Type</b>	Periodic/pollled					
<b>Comment</b>	This message contains information on the timing of the next pulse at the TIMEPULSE0 output. The recommended configuration when using this message is to set both the measurement rate (CFG-RATE) and the timepulse frequency (CFG-TP) to 1 Hz.					
<b>Message structure</b>	<i>Header</i>	<i>Class</i>	<i>ID</i>	<i>Length (Bytes)</i>	<i>Payload</i>	<i>Checksum</i>
	0xb5 0x62	0x0d	0x01	16	see below	CK_A CK_B


- 
- The screenshot shows a software interface titled "Messages - UBX - TIM (Timing) - TP (Time Pulse)". On the left is a tree view containing various message types such as RAWX, RLM, RTC5, RTCM, SFRB, SFRBX, SVSI, SEC, SUBX, TIM (selected), DOSC, FCHG, HOC, SMEAS, SVIN, TM2, TOS, TP, VCOCAL, VRFY, UPD, and UNKNOWN.
- The main area displays the configuration for the selected "TIM (Timing) - TP (Time Pulse)" message:
- Time of next pulse:** 2152.269509.000000000 [wno:tow]
  - Time base:** UTC
  - GNSS reference:** N/A
  - UTC standard:** USNO
  - Quant. Error:** N/A [ps]
  - RAIM status:** active
- Below these settings is a hex dump of the message data:
- ```

0000 B5 62 0D 01 10 00 88 61 10 10 00 00 00 00 ub a
000E 00 00 00 00 68 08 1B 3F F1 43 h ?nC




```
- At the bottom of the window is a toolbar with icons for Send, Poll, and other actions.

- For detailed information about timing information from ZED-F9, please refer to the Chapter 3.18 of the “Interface Description” from ublox.

<https://www.u-blox.com/en/product/zed-f9r-module#tab-documentation-resources>




[Products & Services](#)
[Solutions](#)
[Support](#)
[Company](#)

---

**Interface Manual**

ZED-F9R Interface Description
24-Mar-2021

2.56 MB

PDF Download

New
System/software design

---

3.18
UBX-TIM (0x0d).....
123

3.18.1
UBX-TIM-TM2 (0x0d 0x03).....
123

3.18.1.1
Time mark data.....
123

3.18.2
UBX-TIM-TP (0x0d 0x01).....
124

3.18.2.1
Time pulse time data.....
124

3.18.3
UBX-TIM-VRFY (0x0d 0x06).....
125