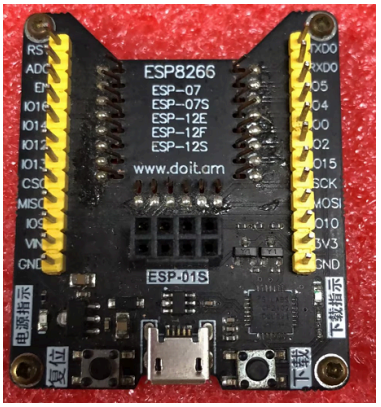
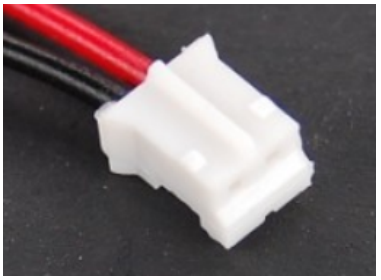
H2S-Dev V1.2 Flashing and testing instructions

I. Tools and accessories required for the test

#	Description	Example picture
1	External ESP32 flasher/programmer	
2	LiPo battery,about 50% charged, with 2-pin 2 mm JST socket connector	
3	USB-C 5V power source with current limit of 1A	No picture required

II. Flashing the ESP32

Flashing the ESP32 is based on an external programmer as the one shown above.

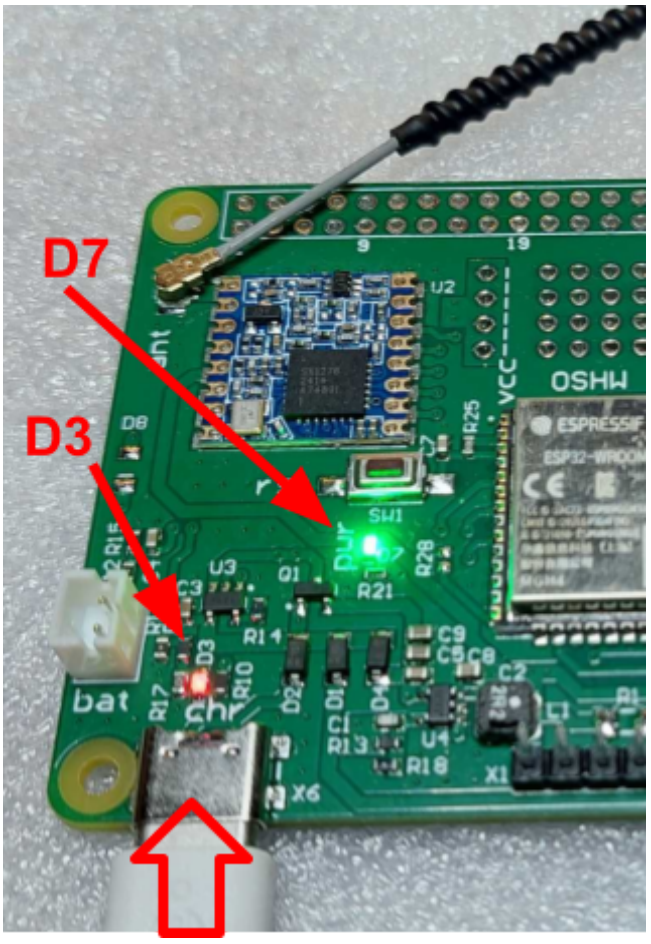
1. Use the bin file “H2S-Dev_V1.2_Basic_Test.bin” provided.
2. Set the starting address to 0x0000.
3. ESP32 is now ready for soldering.

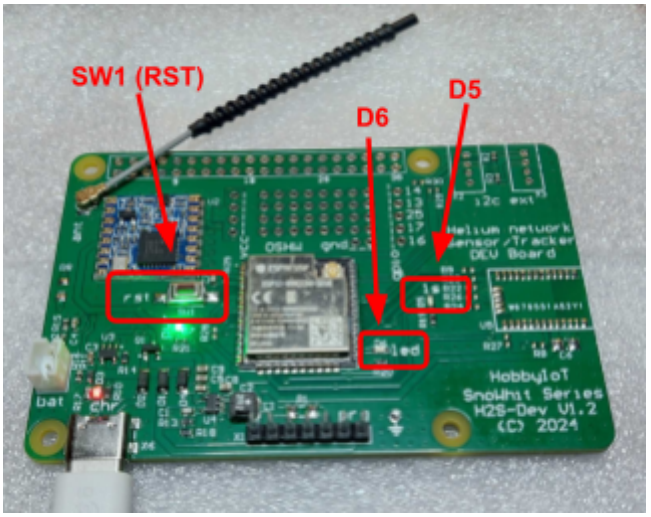
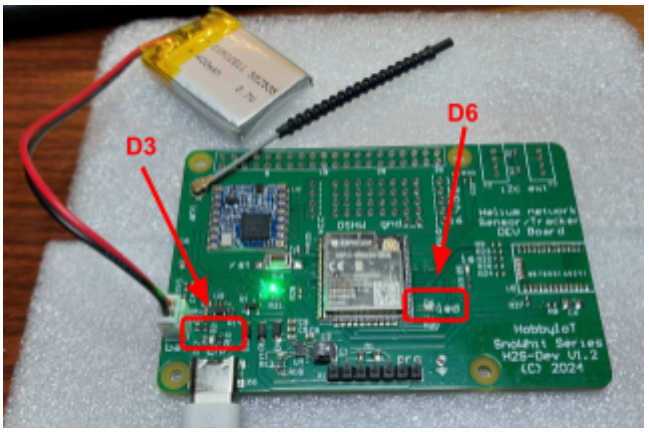
III. Testing the product

Summary

Testing the product is semi-automated by the software flashed into the ESP32 in step I-2 above. The very first step is to connect the LoRa antenna. After that one should connect the USB-C power source and later the battery watching for several LED patterns.

Test steps

#	Action	Picture / resolution	Result
1	Connect the X8-1 (LoRa antenna) into the ‘ant’ (X8) socket as shown on the picture		
2	Connect the USB-C 5V power source into the USB-C (X6) connector Watch D3 (Red LED) and D7 (Green LED) should both be ON permanently		

3	Press SW1 (RST) button and right after that watch D5 (Green LED) and D6 (Green LED) behaviour exactly as follows: • D5+D6 - flash three times together • D5 goes off • D6 flashes once • D6 flashes twice		
4	D6 continues flashing twice - the product is now waiting for battery		
5	Connect the LiPo battery and watch the D3 (Red LED) and D6 (Green LED) behaviour exactly as follows: • D3 goes nearly OFF • D6 flashes 3 times • D6 continues flashing fast - once per second		
6	D6 is flashing fast - once per second	Test is completed	

7	D6 is dimming periodically	Something is wrong with the board	
8	Overall result	PASS/FAIL	

Final steps

Disconnect the battery

Disconnect the USB-C

DO NOT disconnect the antenna (X8-1)

End of document.