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*Note: There may be some changes between versions. So, your cable may look a bit different from this manual.*

**Attention:**

Please read cable and software user manual carefully before running the software.

## **General Notices**

Please connect the wire with the JTAG connector pin having the same name on target board. No crossover is needed.

## **WH-USB-HiJTAG**

There are two internal part numbers for this cable.

### **Internal P/N 1: WH-USB-HiJTAG-G1**

### **Status**

Obsolete

## Appearance

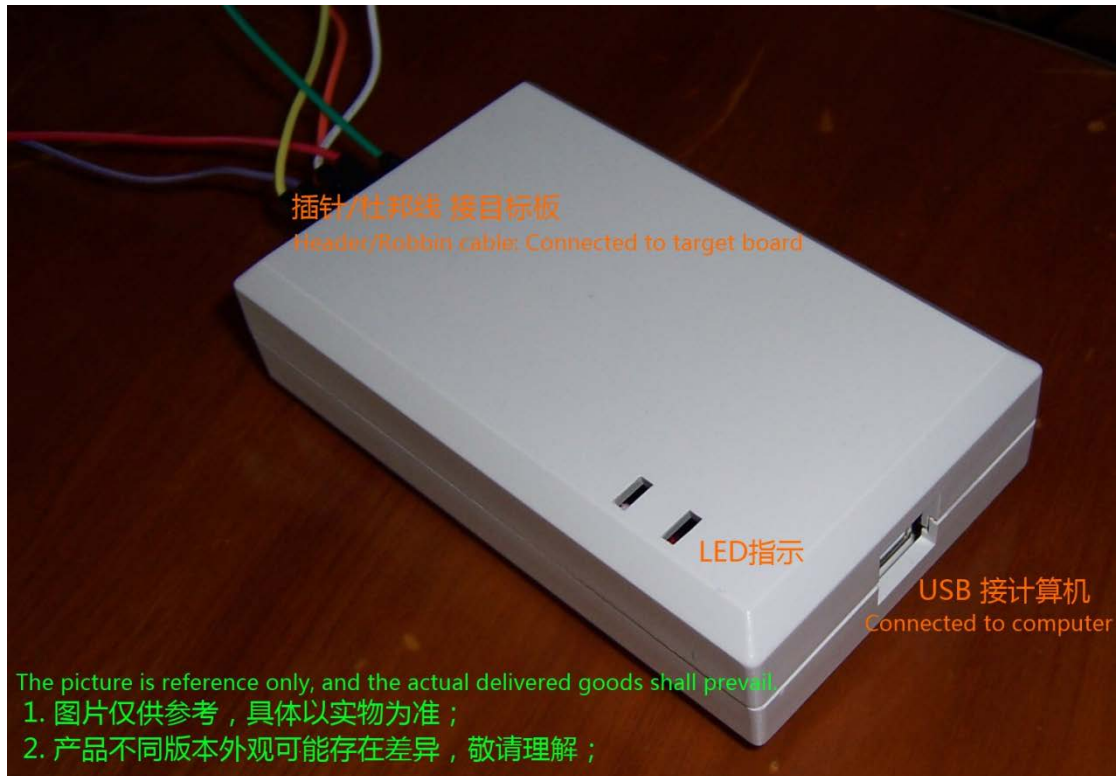


Figure 1 WH-USB-HijTAG-G1 Appearance

## Pin Map

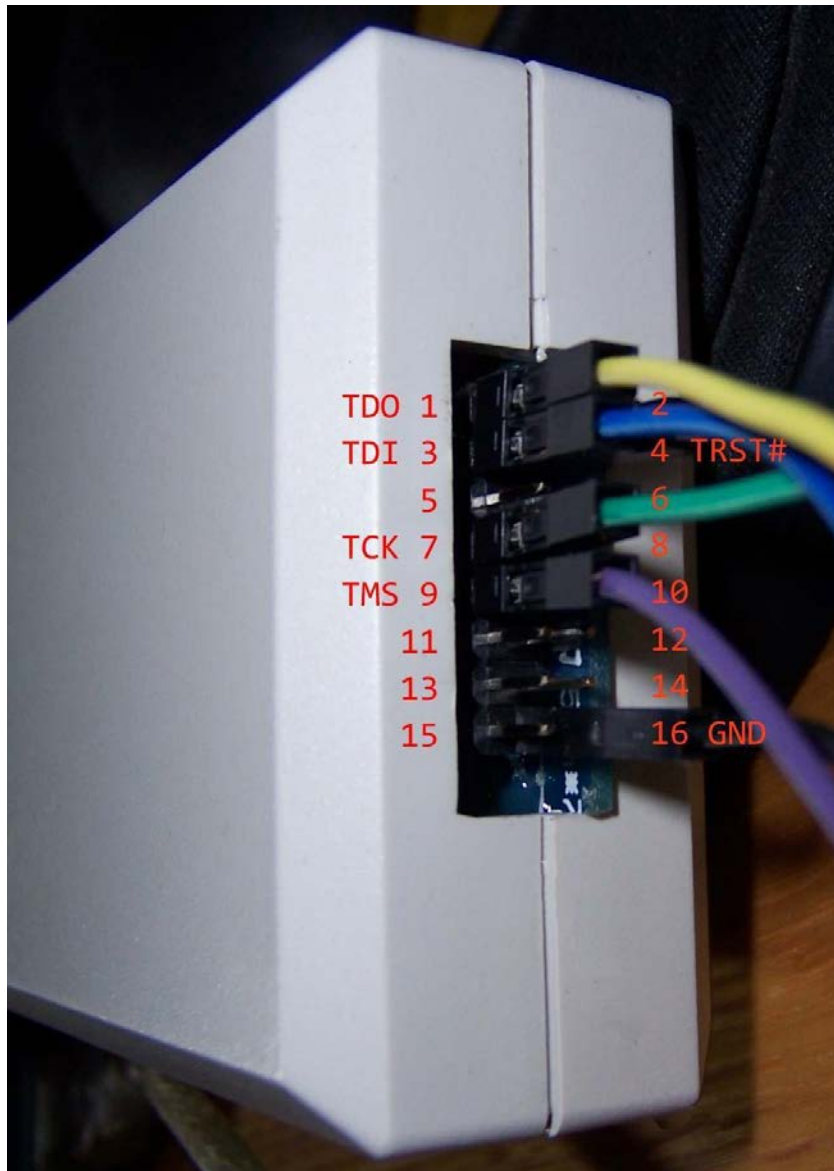


Figure 2 WH-USB-HiJTAG-G1 Pin Map

## Pin Definition

Table 1 WH-USB-HiJTAG-G1 Pin Definition

SPI Definition	MDIO Definition	JTAG Definition	Pin Number	Pin Number	JTAG Definition	MDIO Definition	SPI Definition
MISO	MDIn	TDO	1	2			
MOSI	MDOOut	TDI	3	4	TRST#		
			5	6			
SCK	MDC	TCK	7	8			
CS#		TMS	9	10			
			11	12			
			13	14			
			15	16	GND	GND	GND

Note:

- *Unused and undefined pins must be left unconnected.*
- *Wired cable MDOOut and MDIn together and connected to SDA pin of device.*
- *The receptacle wire color varies from cable to cable, so do NOT recognize the signal wire with its wire color.*
- *The cable is powered by USB port, so no power supply from target board is needed.*
- *When the cable is powered up properly, the red LED is lighten.*

## Dos and Don'ts

- Power off both target board and cable before plugging.
- Don't disassemble.
- Handle with care.
- I/O Interface: 3.3V TTL

## Internal P/N 2: C232HM-DDHSL-0

## Status

Active.

## Appearance



Figure 3 C232HM-DDHSL-0 Appearance

## Pin Definition

Table 2 C232HM-DDHSL-0 Pin Definition

Pin Number	Color	JTAG Definition	MDIO Definition	SPI Definition
1	RED	VCC	VCC	
2	ORANGE	TCK	MDC	SCK
3	YELLOW	TDI	MDOut	MOSI
4	GREEN	TDO	MDIn	MISO
5	BROWN	TMS		CS#
6	GREY	TRST#		
7	PURPLE			
8	WHITE			
9	BLUE			
10	BLACK	GND	GND	GND

*Note:*

- *Unused and undefined pins must be left unconnected.*
- *Wired cable MDOut and MDIn together and connected to MDIO pin of device.*
- *The receptacle wire color is fixed, so you could recognize the signal wire with its wire color.*
- *The cable is powered by USB, and VCC is DC 3.3V/200mA power supply output to target board. So if target board is not powered by the cable, left VCC floated. Currently the software*

*does not support the cable to output power supply.*

- *If you are using BSTest V2.4.0 0 and later version, yaJFPb V2.5.1.23 and later version, jscan V1.0.0.8 and later version and other updated software, when the cable is powered up properly and the software initializes the cable correctly, the red LED is lighted. No LED indicator to early version software.*
- *When EMUx pins are needed, connect pin 8 (in white) to EMU0 and pin 9 (in blue) to EMU1.*

## **Dos and Don'ts**

- Power off both target board and cable before plugging.
- Don't disassemble.
- Handle with care.
- I/O Interface: 3.3V TTL
- Please read '*DS\_C232HM\_MPSSE\_CABLE.PDF*'.
- Latest manual could be found at FTDI's official website: <http://www.ftdichip.com>.

## Revision History:

Date	Version	Author	Changes
2019/2/15			Add EMUx pins;
2019/1/18			Add Figure and Table index;
2015/12/09			● Add 'SPI Definition';
2015/10/22			● Change VCC note of C232HM-DDHSL-0; ● Add LED indication to C232HM-DDHSL-0;
2015/10/09			● Add 'General Notices' section;
2015/4/10			● Add LED instructions;
2014/12/23			● Correct mistyping; ● Remove definition for these pins: RESET#, EMU0 and EMU1;
2014/12/5			● Add definition for these pins: RESET#, EMU0 and EMU1;
2014/11/20			● Update C232HM-DDHSL-0 photo;
2014/11/11			● Add C232HM-DDHSL-0 pin definition and notes;
2014/11/7			● Add C232HM-DDHSL-0 cable;
2014/10/30			● Add MDIO pinout definition;
2014/6/9			● Add line above footer;
2013/7/28			● First release;