Winson Demo Board (WDB) Application Note

1. WDB Test Platform

WDB is a multi-function test board, which are applicable to most products of Winson Semiconductor. WDB can be used for users to test before system development, and provide test daughter boards for IC or WCS testing. Test products include Hall switch ICs, Hall linear ICs, current sensors, current modules and digital current sensors.

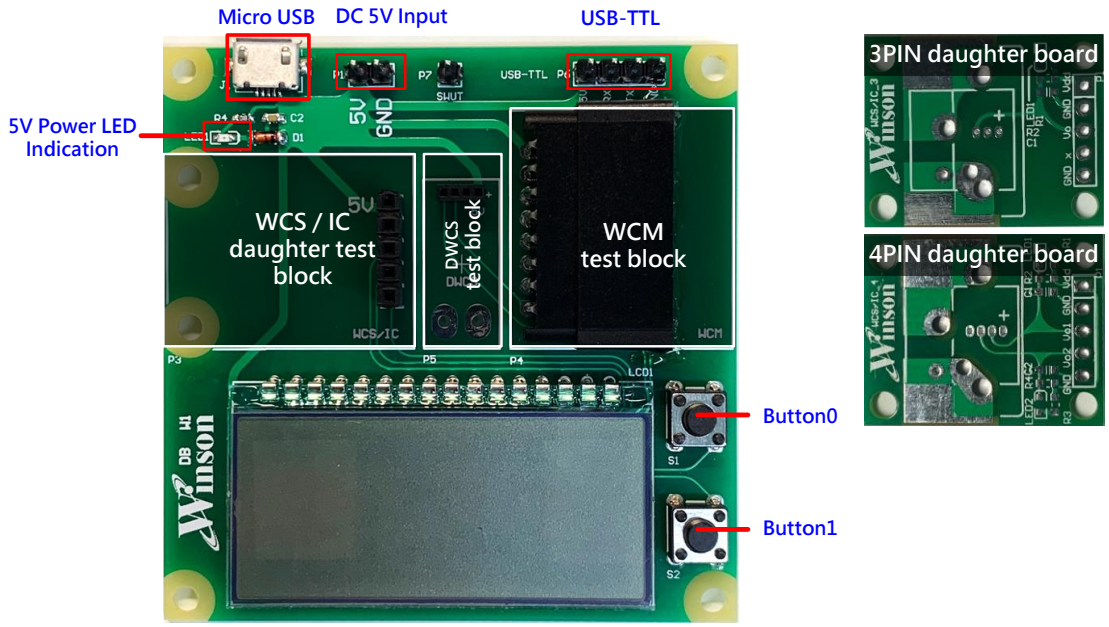


Figure 1 WDB Test Mother Board and Daughter Board

Power Selection: DC 5V Input、Micro USB

Button Function:

Button 0	WCS / IC	DWCS / WCM
short press 1 second	-	Reset Current
long press 2 seconds		Measure AC or DC Current

Button 1	WCS / IC	DWCS / WCM
short press 1 second	Vo1 / Vo2	Measure Current or Temperature
long press 2 seconds	-	Change Modbus-RTU Slave Address

Winson reserves the right to make changes to improve reliability or manufacturability.

2. Test Procedures

After insert the WCS / IC daughter board, DWCS or WCM, supply DC 5V voltage, and the system will automatically check the signal, and the LCD startup screen is as below.

2.1 WCS / IC:

Button 1 : switch to Vout1 or Vout2。

Vout1 will display "S" in the upper left corner of the LCD, and Vout2 will display "N".

2.2 Digital Current Sensor (DWCS)、Digital Current Module (WCM):

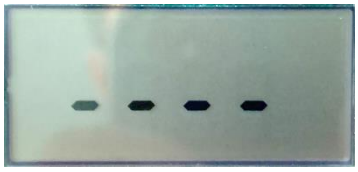
Button 0: reset current。

Button 1: switch to current or temperature。

Button 0: long press 2 seconds to enter the setting to measure AC or DC current. Short press to switch the AC current or DC current until long press 2 seconds to exit the setting.

Button 1: long press 2 seconds to enter the setting of Modbus-RTU slave address, address 1~9. Short press to change the read address until long press 2 seconds to exit the setting.

2.3 When no signal is detected, the LCD will continue to display "-"→"- -"→"- - -"→"- - - -" until there is.



3. Daughter Board and Sensor Connecting Diagram Example

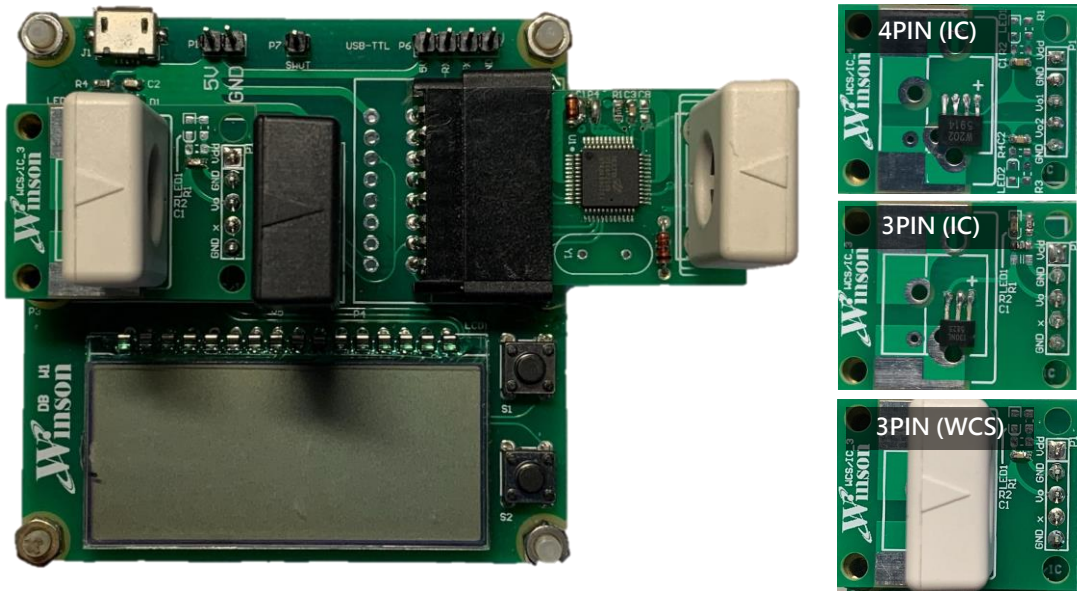


Figure 2 Connecting Diagram

<Note: WDB can only test one daughter board or sensor at once, unless it is in digital Modbus-RTU mode (Multipoint)>

4. Flow Chart

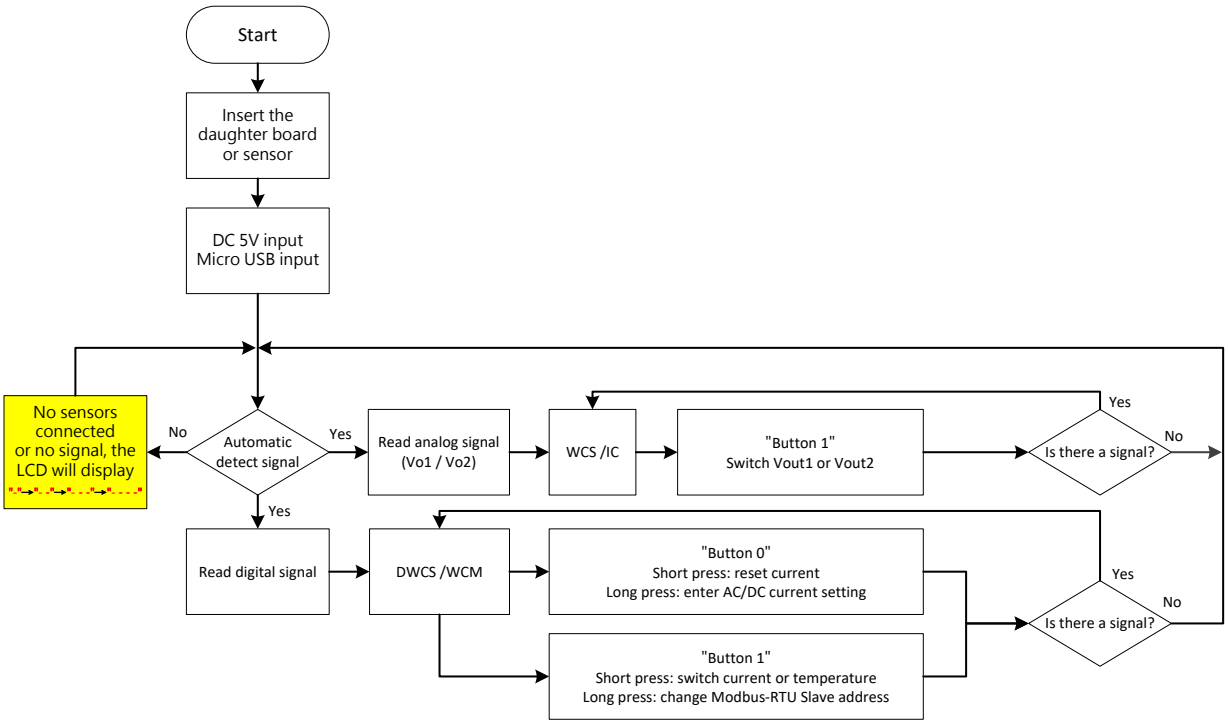


Figure 3 Flow Chart 1

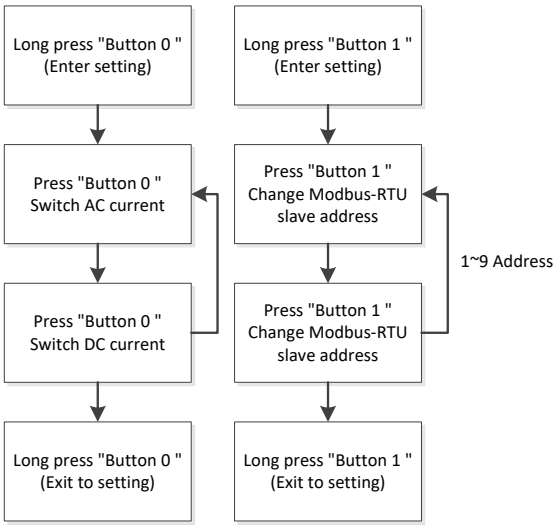


Figure 4 Flow Chart 2