

ATouch Technologies Co., Ltd.



Specification of
4 Wire Analog Resistive
USB Control Board
Model No.: 4WRUSBS



A. Application

This specification applies to the following

USB Control Board for 4 Wire Analog Resistive Touch Panel.

Model No. : 4WRUSBS

B. Environmental Conditions

1. **Operating Temperature Range**
-10°C ~ 60°C
2. **Operating Temperature Humidity**
5% to 95% RH (no dew falls)
3. **Storage Temperature Range**
-25°C ~ 85°C
4. **Storage Temperature Humidity**
5% to 95% RH (no dew falls)

C. Electrical Characteristics

1. **Power Requirement**
+5V DC (±10%)
2. **Power Consumption**
Operating : 80~90mA
Non-operating : 120~130 mA
Max. current : 140mA
Min. current : 80mA
3. **Expend Power**
124 mA
4. **Interface**
USB 1.1
Plug and play compatible
5. **Electrostatic Protection**
Per EN 61000-4-2, 1995 : Meets Level 4
(15 kV air / 8 kV contact discharges).



4 WIRE ANALOG RESISTIVE USB CONTROL BOARD

6. Touch Resolution

4096x4096

7. Conversion Time

Approximately 10 ms per coordinate set.

D. Mechanical Characteristics

1. Dimensions

PCB board outside dimension : 55 (L) x 22.5 (W) x 12 (H) mm

Refer to Appendix A.

2. Standard Cables, Connectors and Pin Definitions

- Standard external USB cable connecting the controller with the computer USB port. Refer to Appendix B.
- USB Output Connector : JUSB
Mini USB 4 Pin Female SMD A Type connector on board for connection with USB port.
Refer to Appendix B.
- Touchscreen Connector : J4W
1x4 male header with pins on 2.54mm centers for connection with the touch panel.
Refer to Appendix C.

E. Software Driver

Under Windows : Mouse emulation.

Support Operating System

- Microsoft Windows NT4.0/XP/2000/ME/98/95
- Linux : Red Hat 9.0, Mandrake 10.0, SuSE9.2,
Fedora Core I & II & III, Yellow Dog 3. x



F. Reliability

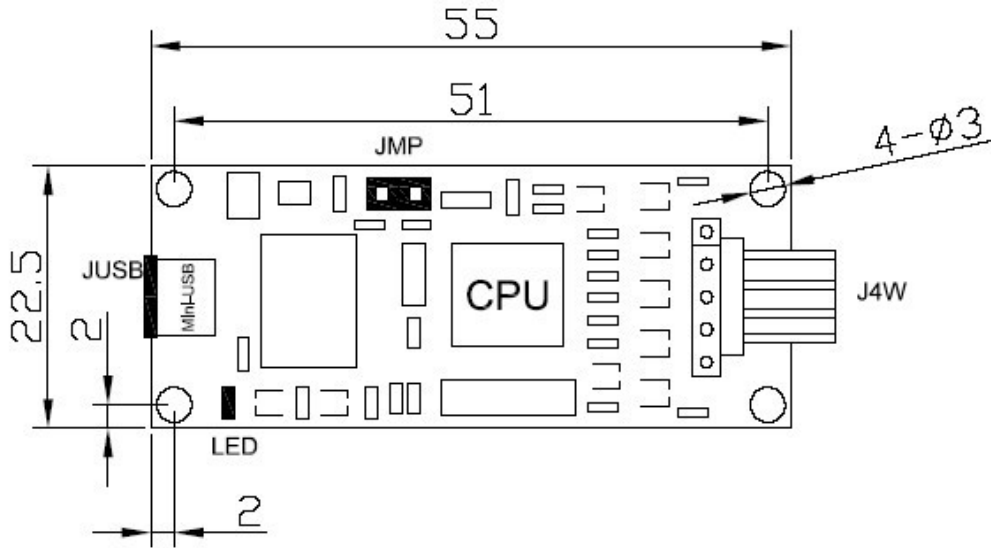
The following characteristics are generated by evaluating test samples after 2 hours leaving in the room condition when each of the reliability tests finishes.

Test Item	Result	Remark
Storage Temperature-high	85°C for 240hours	At ambient humidity
Storage Temperature-low	-25°C for 240hours	
Thermal Shock	-10°C (1 hr.)~ 60°C (1 hr.) 10cycles	
High Temp./Humidity Test	60°C/95%RH : 240hours	



4 WIRE ANALOG RESISTIVE USB CONTROL BOARD

Appendix A Dimension Drawing



Unit : mm



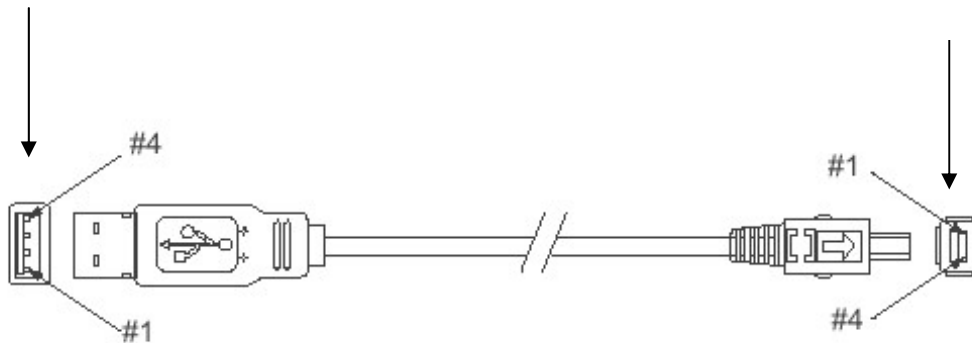
Appendix B Standard External USB Cable

USB Output Connector : JUSB

P2 PC USB port

P1 Mini USB 4 Pin Female SMD

A Type connector on board : JUSB



Mini USB cable with 4 position male

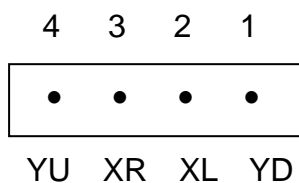
Contact Position

P2		P1
4	-----	1
3	-----	2
2	-----	3
1	-----	4

JUSB, pins and signal names

Pin	Signal Name
1	GND
2	D+
3	D-
4	Vcc

Appendix C Touchscreen Connector : J4W



J4W Touchscreen Connector Pin Positions, End View