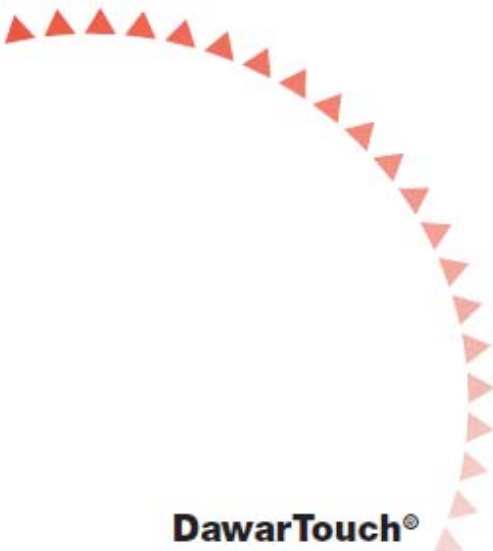# 4/5/8 – Wire USB/RS232
Resistive Touch Controller Board

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INTRODUCTION

ETP-MB-S4580GDW

4/5/8 - Wire USB/RS232 Resistive Touch Controller Board

1. 4W/5W/8W all in one, USB/RS232 dual interface
2. Supports 4W ZIF pitch 1.0mm connector and 4, 5 and 8 wire 2.54mm square pin header
3. CE/FCC certificate, meets RoHS/REACH
4. Calibrated data stored on EEPROM
5. Supports the following operating systems:

| OS supported	Version	Interfaces
Windows	Windows 7 Windows Vista, XP/2000, 9x/ME Windows CE 2.12/3.0/.net/5.0/6.0 Windows Embedded Windows XP Tablet PC edition	RS232/USB
Windows	Windows NT4	RS232
Linux	The new Linux public driver supports most of the Linux distribution 32/64 bit version, including Ubuntu, Debian, SuSE (openSuSE), Fedora Core, Mandriva, Slackware, etc.	RS232/USB (up to Kernel 2.6.x with xorg 1.7.x)
DOS	DOS	RS232
Mac	Mac OS, Mac OS X (IBM, Intel CPU)	USB
QNX	QNX RTOS v6.3	RS232/USB

Specification

Circuit Board Dimension	76mm(L) x 28.5mm(W) x 8.3mm(H)
Power Requirements	DC +5V (Max 50mA, 50mV peak to peak max ripple and noise)
Operating Temperature	-25 to 85°C
Storage Temperature	-40 to 125°C
Relative Humidity	95% at 60°C
Interface	Bi-directional RS232 serial communication No parity, 8 data bits, 1 stop bit, 9600 baud (N,8,1, 9600) USB Full Speed, USB 2.0 Compliant
Resolution	2048×2048 (HID: 4096x4096, OS supports HID USB with inbox driver or inbox kernel driver)
Report Rate	USB : Max 200points/sec RS232 : Max 160points/sec
Response Time	Max 20 ms
EMI	CE and FCC compliant
ESD	Contact ±8kV Air ±15kV
Panel Resistance	4/8 Wire resistive model: 200~900 ohm 5 Wire resistive model: 50~200 ohm

Driver Features

|	
Alignment	Fast 4 Point Alignment
Linearization	9 and 25 Point Linearization
Setting	Supports Multi-Controller and Dynamic Add/Remove
Languages Supports	Supports 11 languages in Windows
Mouse Emulation	Right/Left button emulation
HID Touch Digitizer	Supports Microsoft HID Touch Digitizer
Sound Feedback	Sound on Touch Sound on Lift No Sound
Double Click	Configurable Speed Configurable Range
Monitor Supports	Monitor Rotation Supported Multiple Monitor Supported Split Display Supported

Controller Board Dimensions
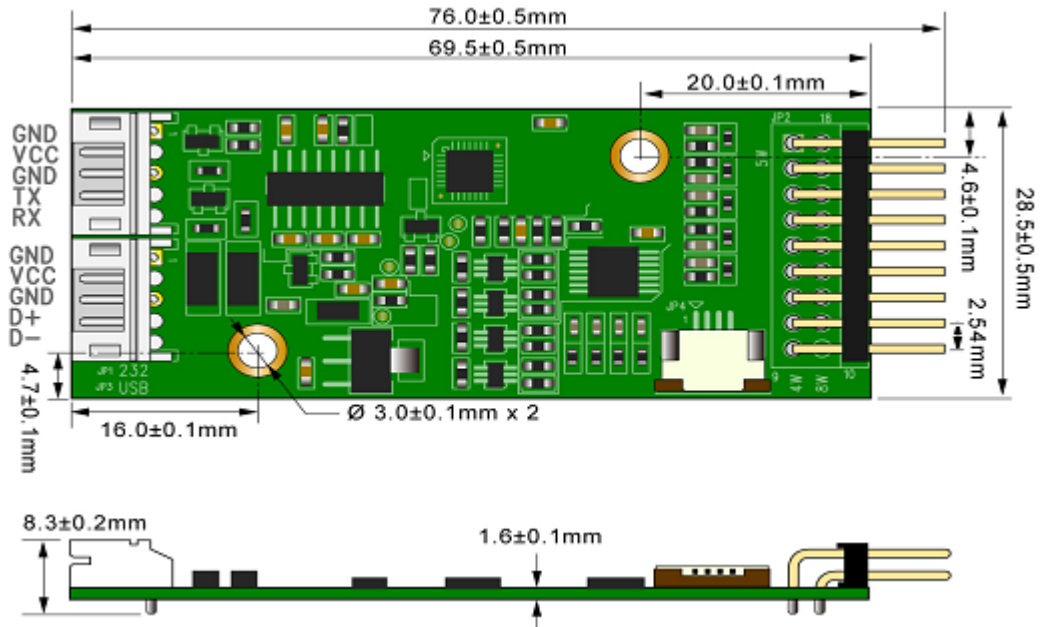
Label format

A. Part Number and Firmware Version

There are two labels on the back side of the controller. The first label shows the part number and firmware version information. Example:
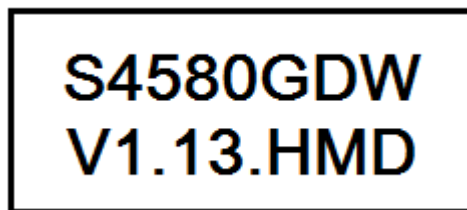

The first line is the abbreviation of ETP-MB-S4580GDW.

The second line is the firmware version, i.e., V1.13.HMD.

There are two ways to check your firmware version. First, look at the label on the back side of the controller board. You are able to find the firmware version under the S4580GDW, like V1.13.HMD. Alternately, make sure your controller has been connected and is recognized by

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the utility software. Click the "Hardware" tab to display the firmware version.
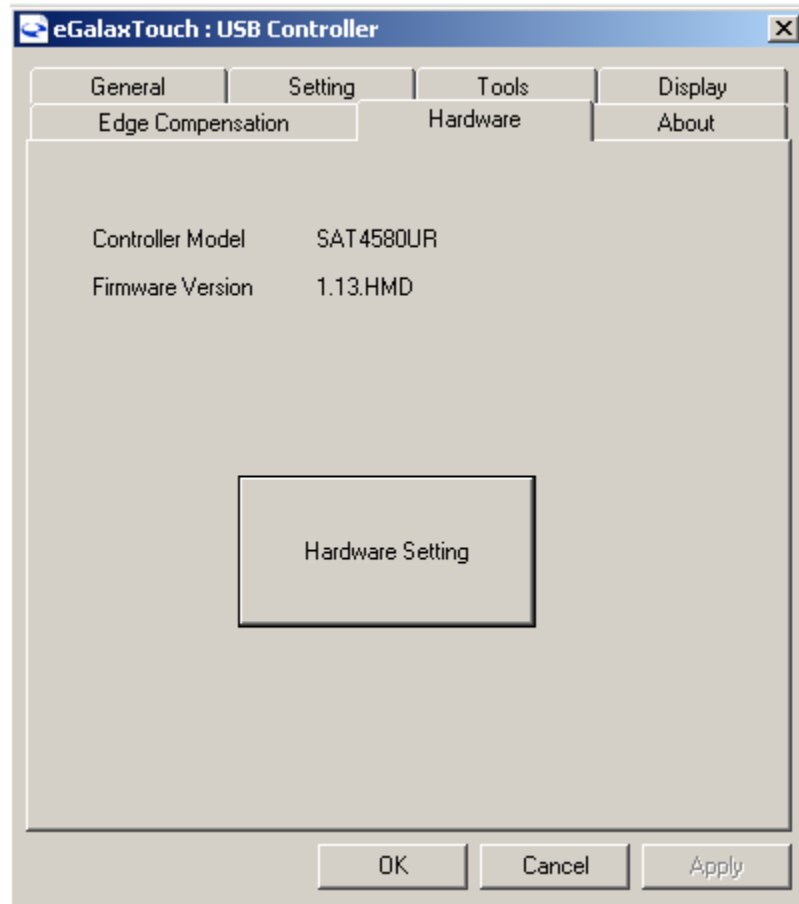
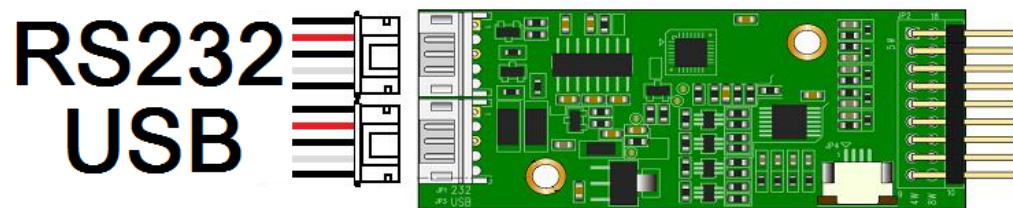

B. 10-digit Serial Number with Barcode

The serial number is a 10-digit number which allows Dawar to track shipping record.

CABLE

A. Optional USB and Serial (RS-232) interface cable

TYPE	Tail Length	Connector	P/N	Picture
USB	183cm	Pitch 2.0mm 5pin housing to USB A Male	ETP-CB-SXU00	
Serial (RS-232)	183cm	Pitch 2.0mm housing to DB9 Female. PS/2 interface for 5V power input provided	ETP-CB-SXR00	
Serial (RS-232)	50cm	Pitch 2.0mm housing to DB9 Female. Black and red wire for 5V power input provided	ETP-CB-SXR01	

Note: The external power from mainboard or PS/2 interface is necessary when using Serial interface only. Custom cable solutions are available upon request.

B. Optional extended cable between touch screen and controller
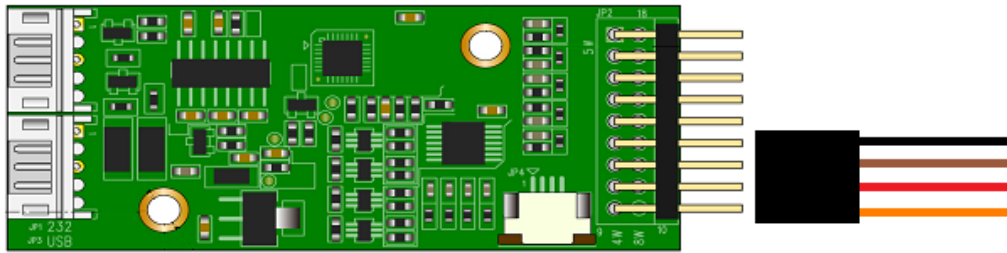
Type	Tail Length	Housing Type	Part Number	Picture
4W	40.5cm	2.54mm to 2.54mm	ETP-CB-4XN00	
5W	49.5cm	2.54mm to 2.54mm	ETP-CB-5CN11	
8W	45cm	2.54mm to 2.54mm	C18-080S1F-080G1M	

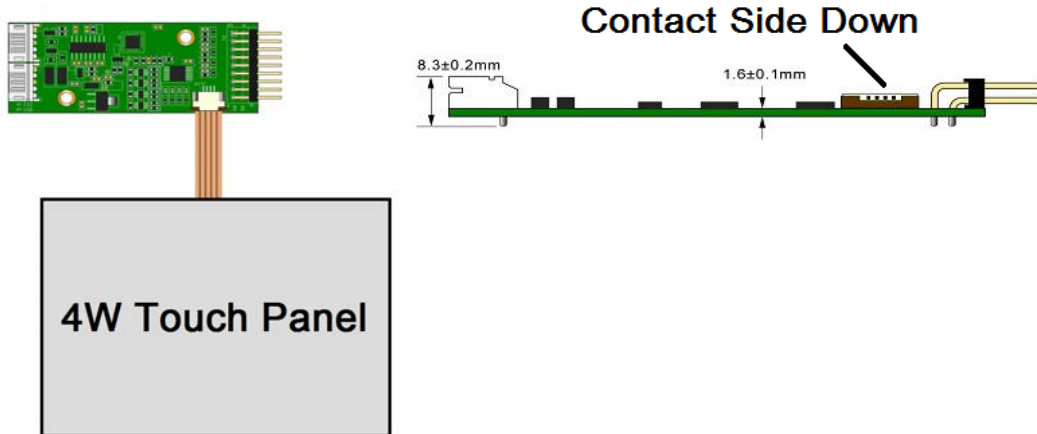Note: Custom cable solutions are available upon request.

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Touch Panel Connection

A. 4W ZIF Pitch=1mm (JP4)

Pin 1	Pin 2	Pin 3	Pin 4
X	Y	X	Y
X	X	Y	Y

Note: After connection to controller is made, a four point calibration must be performed.

Contact Side Down

8.3±0.2mm   1.6±0.1mm

4W Touch Panel

B. 4W Pitch=2.54mm (JP2)

Pin 9	Pin 8	Pin 7	Pin 6
X	Y	X	Y
X	X	Y	Y

Note: After connection to controller is made, a four point calibration must be performed.

4W Touch Panel

Pin 1   Pin 18

4-wire

Pin 9   Pin 10
(removed)

C. 5W, Pitch=2.54mm (JP2)

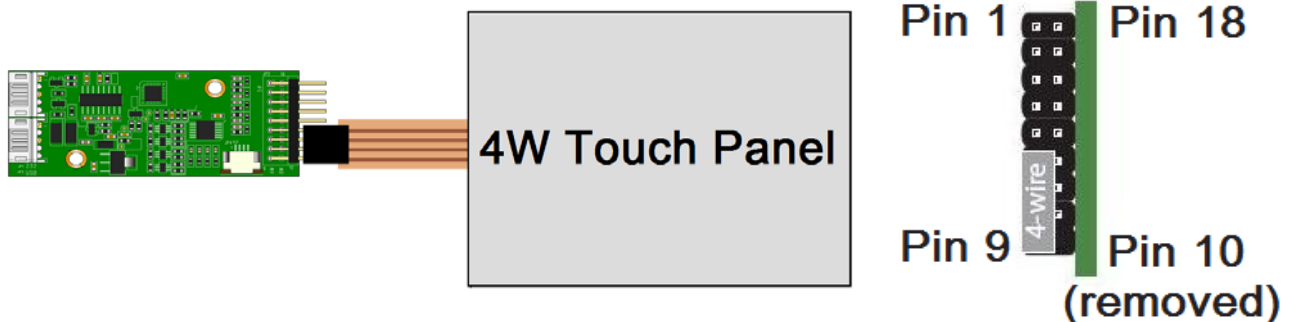| Pin 5	Pin 4	Pin 3	Pin 2	Pin 1
UL	UR	COM	LL	LR
UL	UR	COM	LR	LL

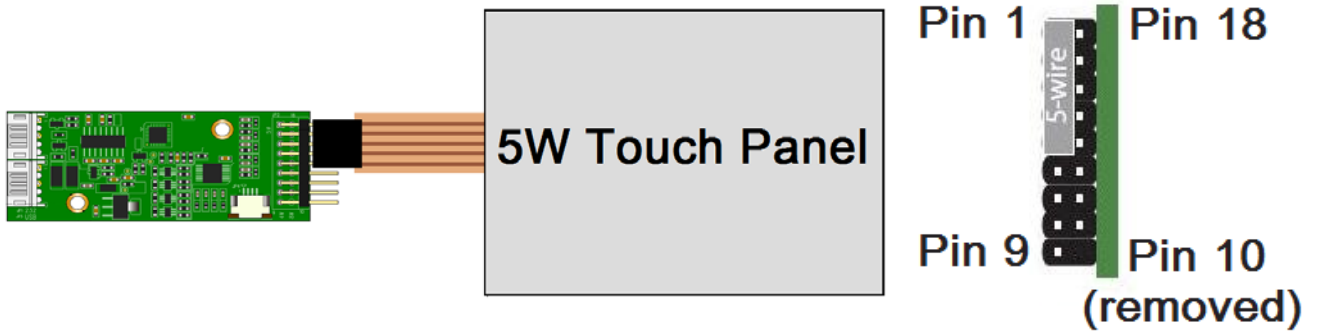Note: After connection to controller is made, a four point calibration must be performed.

D. 8W, Pitch=2.54mm (JP2)

Pin 11	Pin 12	Pin 13	Pin 14	Pin 15	Pin 16	Pin 17	Pin 18
X	Xref	Y	Yref	X	Xref	Y	Yref
X	Xref	X	Xref	Y	Yref	Y	Yref

Note: After connection to controller is made, a four point calibration must be performed.