



EXC80W462341STAG

Projected Capacitive Touchscreen Controller

The EXC80W462341STAG is a projected capacitive (PCAP) touch screen controller that powered by EETI's high performance MCU EXC80W46. By integrating the advantages of self and mutual capacitance sensing technology, built-in high driving voltage transceiver and a powerful MCU, this controller incorporate most desired features to boost the noise immunity, and support high demand applications in most categories.

Features

- USB, RS-232 and I2C interface
- Support advanced water resistance
- Support active stylus
- Support RS232 flow control
- Support OGS, SITO, DITO, G/F, G/F/F, G/G, and Metal Mesh sensor.
- Comprehensive driver support
- eGalaxTouchManger tool support
- API support
- RoHS compliant

OS Support Matrix

OS	Version	Interfaces
Windows	Windows 10 IOT (#1) / Windows 10 / Windows 8 / Windows 7 Windows Vista / Windows 2000 / Windows XP (#1: Windows 10 IOT: support it with inbox driver only) (#2: I2C interface: need additional system configuration)	USB / RS232 I2C (#2)
Win CE	Win Embedded Compact 2013 / Win Embedded Compact 7 WinCE 6 / WinCE.Net	USB / RS232
Linux	CentOS, Debian, Fedora, Gentoo, Mandrake (Mandriva), Meego, Red Hat, Slackware, SuSE (OpenSuSE), Ubuntu (Xubuntu) and Yellow Dog etc. <i>Support most 32/64 bit Linux distribution versions, including Kernel 2.6.x / 3.x.x / 4.x.x</i>	USB / RS232 I2C
Android	Android 2.3 to latest version	USB / I2C
Mac	OSX 10.7.5 to 10.12	USB
QNX	RTOS V6.3 to V6.6	USB/ I2C

Technical Specifications

Circuit Board Dimension	28mm x 72mm x 4.9mm
Channels of Panel	Max Tx:25 Rx:43 (包含 shielding)
Input Voltage	3.5V~5.5V.Typical 5V.
Operating Temperature	-40 to 85 °C
Storage Temperature	-40 to 90 °C
Relative Humidity	95% at 60 °C, RH Non-condensing
Linearity*	Line drawing accuracy : 1pt +/- 1mm offset /10mm Touch (point) accuracy : 1pt +/- 1mm
Interface	USB 2.0 compliant full speed with LPM L1 supported. Configurable Serial Interface. UART: baud rate 115200, none parity, 8 data bits, 1 stop bit, support hardware flow control I2C: up to 400KHz, Voltage Level 3.3V.
Resolution	16384 ×16384 resolution
Power consumption(mA)	Active Mode: < 90mA Idle Mode : depends on firmware
Report rate(points/sec)*	> 100 Hz
Response time	Average < 25 ms

Disclaimer

- Performance spec such as report rate can be vary depends on touch sensor channel number, cover thickness, system condition and other parameters.
- Reference sensor channel pitch should be ranged from 5.0mm (Win10) to 8mm (Non-Win10).
- Special input performance can be influenced depends on module condition, contact material and volume, subjects including through thick glass touch, gloved-hand input, water resistance and noise immunity etc.
- Special features require to be pre-defined and pre-tuned during project development.
- For product that needing Windows 7/8/10 WHQL logo certification, please contact your supplier for a WHQL logo grade touch module.



FPC Pin Description

CN1							
PN		PN		PN		PN	
1	TX_S1	21	TX20	41	RX15	61	RX35
2	TX1	22	TX21	42	RX16	62	RX36
3	TX2	23	TX22	43	RX17	63	RX37
4	TX3	24	TX23	44	RX18	64	RX38
5	TX4	25	TX_S2	45	RX19	65	RX39
6	TX5	26	RX_S1	46	RX20	66	RX40
7	TX6	27	RX1	47	RX21	67	RX41
8	TX7	28	RX2	48	RX22	68	RX_S2
9	TX8	29	RX3	49	RX23		
10	TX9	30	RX4	50	RX24		
11	TX10	31	RX5	51	RX25		
12	TX11	32	RX6	52	RX26		
13	TX12	33	RX7	53	RX27		
14	TX13	34	RX8	54	RX28		
15	TX14	35	RX9	55	RX29		
16	TX15	36	RX10	56	RX30		
17	TX16	37	RX11	57	RX31		
18	TX17	38	RX12	58	RX32		
19	TX18	39	RX13	59	RX33		
20	TX19	40	RX14	60	RX34		

Connector Pin Configuration

JP1 USB connector

JP1	
1	VDD
2	D-
3	D+
4	GND

JP2 I2C connector

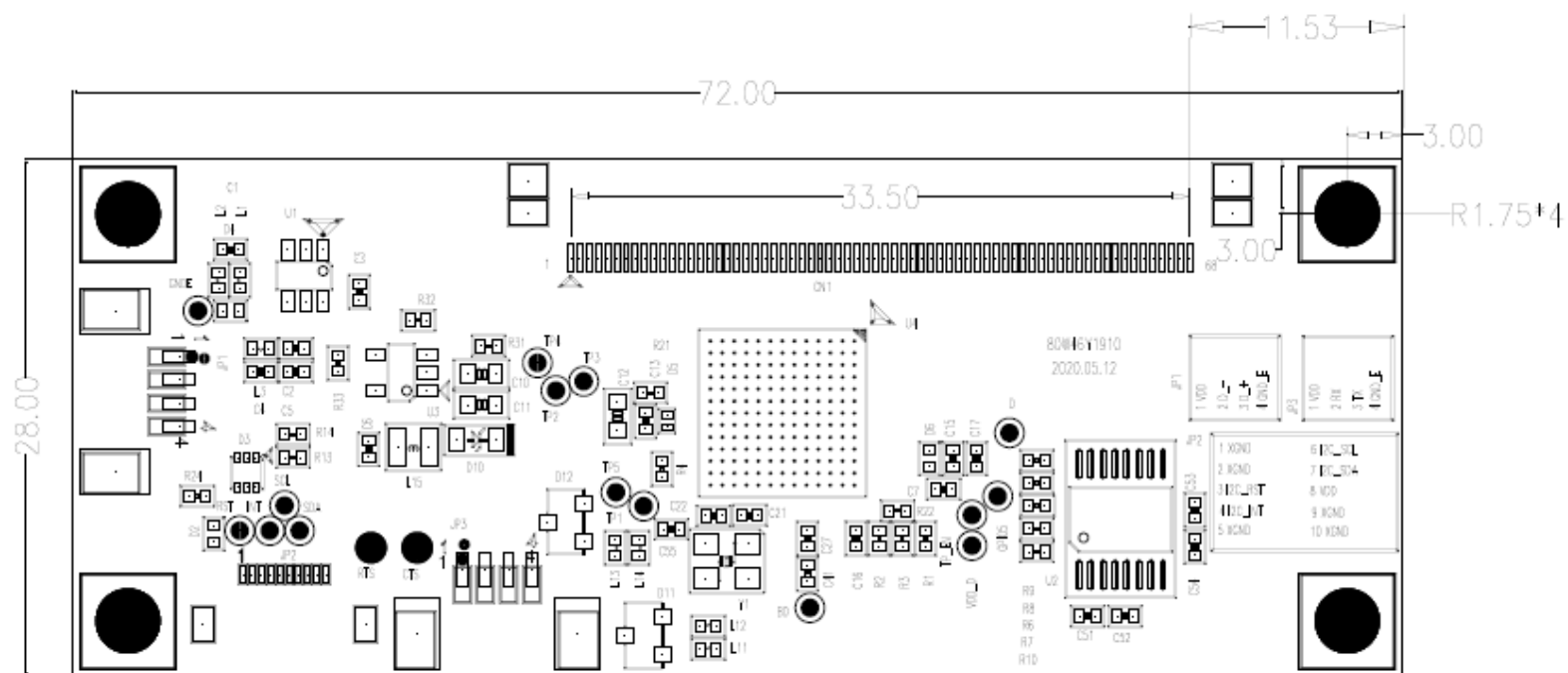
JP5	
1	GND
2	GND
3	RESET
4	I2C_INT
5	GND
6	I2C_SCL
7	I2C_SDA
8	VDD
9	GND
10	GND

JP3 RS232 connector

JP7	
1	VDD
2	RX
3	TX
4	GND_E

Mechanical Specification

EXC80W462341STAG



Thickness:
 Total thickness: 4.9mm \pm 0.2mm
 (Including PCB: 1.6mm \pm 0.1mm. USB/I2C connector: 2.0mm.
 Soldering pin: 1.3 mm)

