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# Datasheet

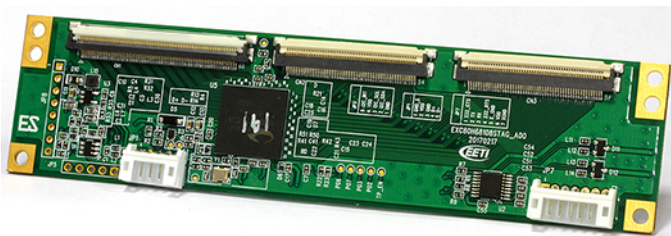
## EETI

**EXC80H\* , %\$ST5 G**

TO-02-3G

# EXC80H68108STAG

## Projected Capacitive Touchscreen Controller



The EXC80H68108STAG is a projected capacitive (PCAP) touch screen controller that powered by EETI's high performance MCU EXC80H100. 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 mesh sensors.
- Comprehensive driver support
- eGalaxTouchManger tool support
- API support
- RoHS compliant

### OS Support Matrix

OS	Version	Interfaces
<b>Windows</b>	*Windows 10 IOT / *Windows 10 / *Windows 8 / Windows 7 Windows Vista / Windows 2000 / Windows XP	USB / RS232 *I2C
<b>Win CE</b>	Win Embedded Compact 2013 / Win Embedded Compact 7 WinCE 6 / WinCE.Net	USB / RS232
<b>Linux</b>	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 2.4.x / 2.6.x / 3.x.x / 4.x.x</i>	USB / RS232 I2C
<b>Android</b>	Android 2.3 to 7	USB / I2C
<b>Mac</b>	OS 9 to 10.12	USB
<b>QNX</b>	RTOS V6.3 to V6.6	USB/ I2C

## Technical Specifications

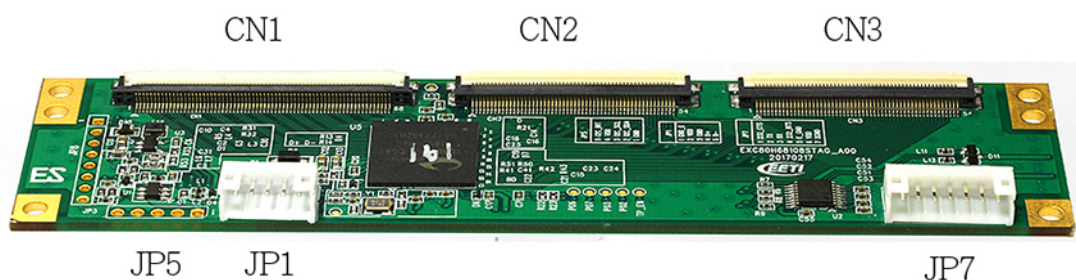
Circuit Board Dimension	33mm x 135mm
Channels of Panel	Max.Tx:64 Rx:100 channels (include shielding pin)
Input Voltage	3.5V~5.5V.Typical 5V.
Operating Temperature	-40 to 85 °C
Storage Temperature	-40 to 90 °C
Relative Humidity	95% at 60 °C, RH Non-condensing
Linearity*	Line drawing accuracy : 1pt +/- 1mm offset /10mm Touch (point) accuracy : 1pt +/- 1mm
Interface	USB: 1.1 Full Speed RS232: No parity,8 data bits,1 stop bit, baud rate 115200bps, support hardware flow control
Resolution	4096×4096 resolution
Power consumption(mA)	Active Mode: < 200mA Idle Mode : < 100mA
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 (Win8) to 8mm (Non-Win8).
- 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.

## Accessory Cables

- ETP-CB-SXU00, External USB cable
- ETP-CB-SXU01, Internal USB cable
- ETP-CB-SXR17 , External RS232 cable



### FPC Pin Description

CN1							
PN		PN		PN		PN	
1	GND_E	21	TX46	41	TX26	61	TX6
2	GND_E	22	TX45	42	TX25	62	TX5
3	NC	23	TX44	43	TX24	63	TX4
4	NC	24	TX43	44	TX23	64	TX3
5	TX_S1	25	TX42	45	TX22	65	TX2
6	TX61	26	TX41	46	TX21	66	TX1
7	TX60	27	TX40	47	TX20	67	TX0
8	TX59	28	TX39	48	TX19	68	TX0_S0
9	TX58	29	TX38	49	TX18		
10	TX57	30	TX37	50	TX17		
11	TX56	31	TX36	51	TX16		
12	TX55	32	TX35	52	TX15		
13	TX54	33	TX34	53	TX14		
14	TX53	34	TX33	54	TX13		
15	TX52	35	TX32	55	TX12		
16	TX51	36	TX31	56	TX11		
17	TX50	37	TX30	57	TX10		
18	TX49	38	TX29	58	TX9		
19	TX48	39	TX28	59	TX8		
20	TX47	40	TX27	60	TX7		

CN2							
PN		PN		PN		PN	
1	GND_E	21	RX81	41	RX61		
2	NC	22	RX80	42	RX60		
3	NC	23	RX79	43	RX59		
4	RX_S1	24	RX78	44	RX58		
5	RX97	25	RX77	45	RX57		
6	RX96	26	RX76	46	RX56		
7	RX95	27	RX75	47	RX55		
8	RX94	28	RX74	48	RX54		
9	RX93	29	RX73	49	RX53		
10	RX92	30	RX72	50	RX52		
11	RX91	31	RX71	51	RX51		
12	RX90	32	RX70	52	RX50		
13	RX89	33	RX69	53	RX49		
14	RX88	34	RX68	54	GND		
15	RX87	35	RX67				
16	RX86	36	RX66				
17	RX85	37	RX65				
18	RX84	38	RX64				
19	RX83	39	RX63				
20	RX82	40	RX62				

CN3							
PN		PN		PN		PN	
1	GND	21	RX29	41	RX9		
2	RX48	22	RX28	42	RX8		
3	RX47	23	RX27	43	RX7		
4	RX46	24	RX26	44	RX6		
5	RX45	25	RX25	45	RX5		
6	RX44	26	RX24	46	RX4		
7	RX43	27	RX23	47	RX3		
8	RX42	28	RX22	48	RX2		
9	RX41	29	RX21	49	RX1		
10	RX40	30	RX20	50	RX0		
11	RX39	31	RX19	51	RX0_S0		
12	RX38	32	RX18	52	NC		
13	RX37	33	RX17	53	NC		
14	RX36	34	RX16	54	GND_E		
15	RX35	35	RX15				
16	RX34	36	RX14				
17	RX33	37	RX13				
18	RX32	38	RX12				
19	RX31	39	RX11				
20	RX30	40	RX10				

### Connector Pin Configuration

#### JP1 USB connector

JP1	
1	GND_E
2	VDD
3	GND
4	D+
5	D-

#### JP5 I2C connector

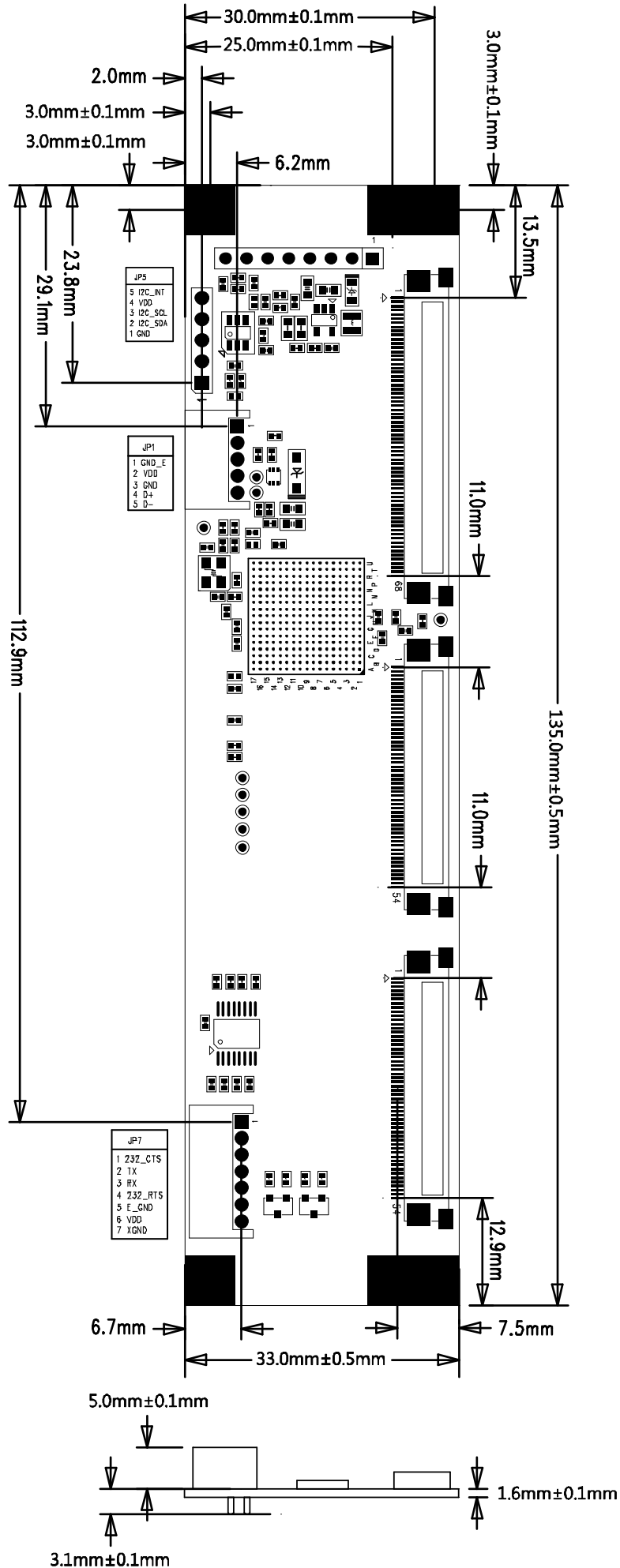
JP5	
1	GND
2	I2C_SDA
3	I2C_SCL
4	VDD
5	I2C_INT

#### JP7 RS232 connector

JP7	
1	UR_CTS
2	UR_TX
3	UR_RX
4	UR_RTS
5	GND_E
6	VDD
7	GND

# Mechanical Specification

## EXC80H68108STAG



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