



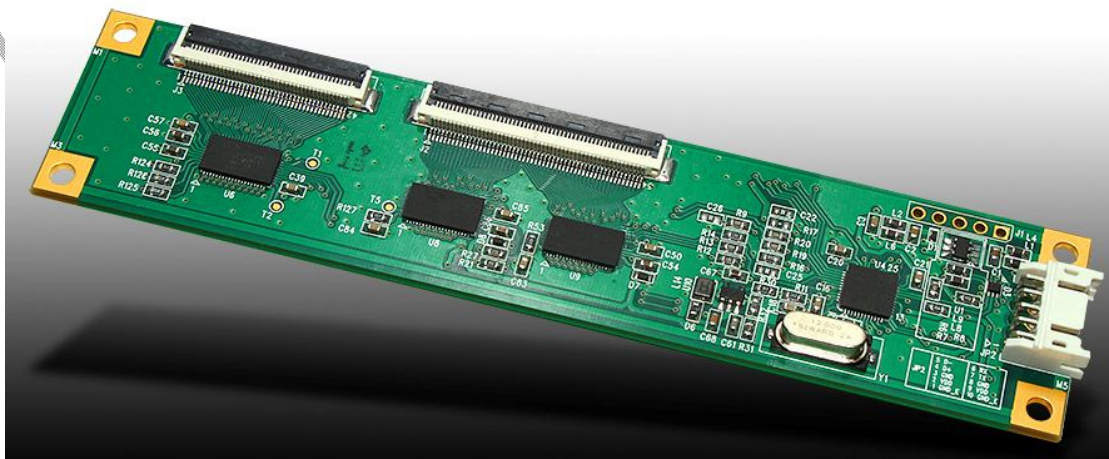
禾瑞亞科技股份有限公司  
eGalax\_eMPIA Technology Inc.

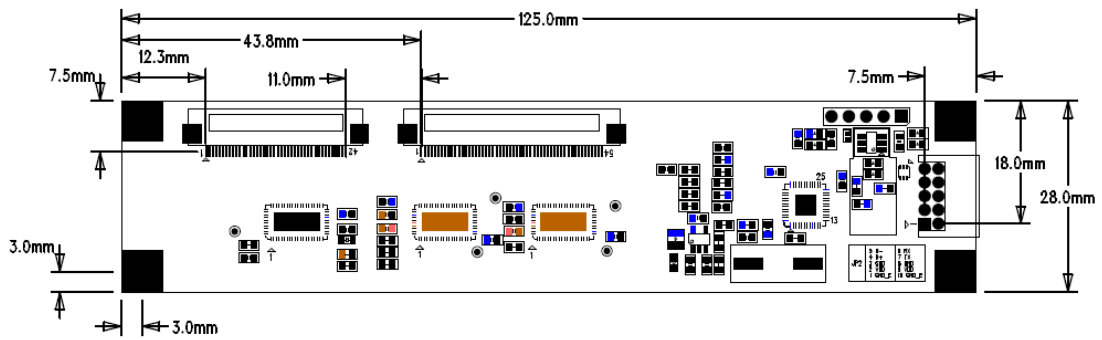
## Projected Capacitive USB/RS232/I2C Touch Panel Controller

eGalax\_eMPIA launched touch control board to meet latest Restriction of Hazardous Substances (RoHS) Directive. This touch panel controller provides the optimistic performance of your projected capacitive touch panels. It communicates with PC system directly through USB/UART/I2C connector. You can see how superior the design is in sensitivity, accuracy and friendly operation. The touch panel driver emulates mouse left and right button function and supports operation systems as following.

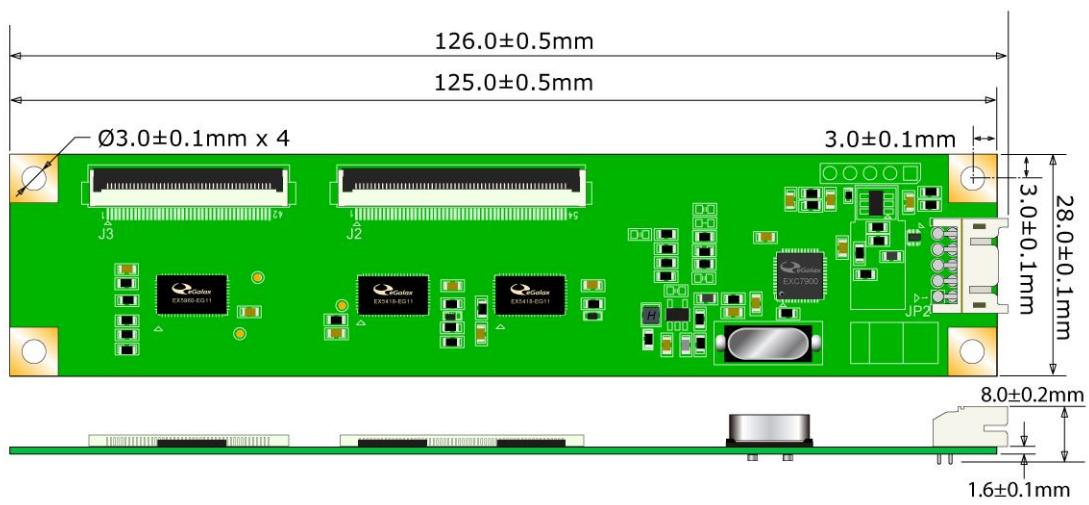
OS	Version	Interfaces
<b>Windows</b>	Windows 8(Need logo submission)	USB/RS232 I2C (Win8)
	Windows 7	
	Windows Vista, XP/2000	
	Windows CE.net/5.0/6.0/7.0	
	Windows Embedded	
	Windows XP Tablet PC edition	
<b>Linux</b>	Distribution based on Kernel 2.6.24 and later. (Ubuntu/Linux Mint Debian Fedora Red Hat/CentOS Magaie/Mandriva/Mandrake SUSE/openSUSE	USB/RS232/I2C
	Android 2.3 ~ 4.4	USB/RS232/I2C
<b>Mac</b>	Mac OS, Mac OS X (PowerPC, Intel CPU)	USB
<b>QNX</b>	QNX RTOS v6.3~v6.5	USB/RS232

**Controller:**





DRUKSCHEIDEN TOP SIDE



**Thickness:**

Total thickness: 8.0mm ± 0.2mm

(Including PCB: 1.6mm, USB/RS232 connector: 5.1mm. Soldering pin: 1.3 mm)

## Specifications:

<b>USB/RS232/I2C Type Controller</b>	
Circuit Board Dimension	28mm x 125mm
Channels of Panel	Max. Tx:52 Rx:40 channels (exclude 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(Note 1)	Line drawing accuracy : 1pt +/- 1mm offset /10mm Touch (point) accuracy : 1pt +/- 1mm Refer to Windows 8 Logo regulation
Interface	USB: 1.1 Full Speed RS232: No parity,8 data bits,1 stop bit, baud rate 115200bps I2C:100K/400K Hz
Resolution	4096×4096 resolution
Power consumption (mA)	Active Mode: <60mA Idle Mode : 10~12mA Sleep Mode : < 5mA (Operation Mode :Active Mode only)
Report rate(points/sec) (Note 2)	> 100 Hz
Response time	Max. 25 ms

**Note 1: Channel pitch should be design 4.8mm- 6mm**

**Note 2: Report rate will vary by channel number, cover thickness and other parameters**

## Product Package:

- (1) PCAP Controller Board(ETP-MB-EXC965442TAG-XXXX)
- (2) Y-Cable (ETP-CB-SXC00)
- (3) USB or RS232 cable

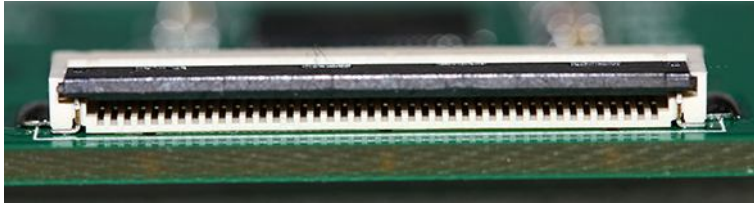
## FPC Connector Pin Assignment:

### J2 Connector



J2																				
PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	SHIELDING_TX1	TX51	TX50	TX49	TX48	TX47	TX46	TX45	TX44	TX43	TX42	TX41	TX40	TX39	TX38	TX37	TX36	TX35	TX34	TX33
PIN	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	TX32	TX31	TX30	TX29	TX28	TX27	TX26	TX25	TX24	TX23	TX22	TX21	TX20	TX19	TX18	TX17	TX16	TX15	TX14	TX13
PIN	41	42	43	44	45	46	47	48	49	50	51	52	53	54						
	TX12	TX11	TX10	TX9	TX8	TX7	TX6	TX5	TX4	TX3	TX2	TX1	TX0	SHIELDING_TX0						

### J3 Connector

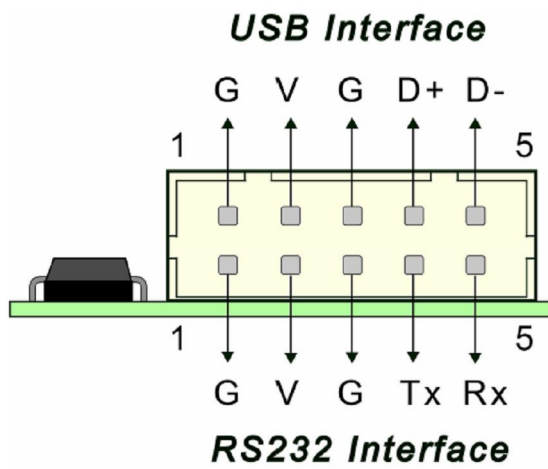
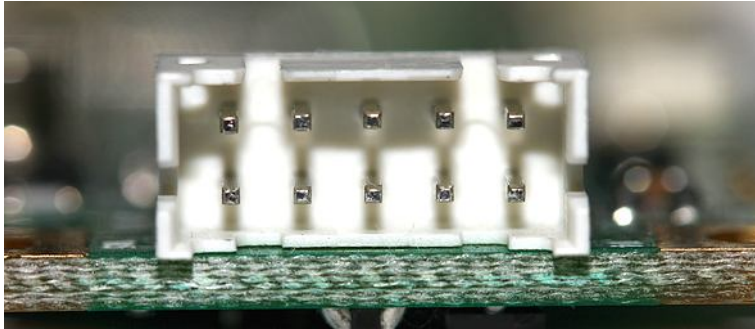


J3																				
PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	SHIELDING_RX1	RX40	RX39	RX38	RX37	RX36	RX35	RX34	RX33	RX32	RX31	RX30	RX29	RX28	RX27	RX26	RX25	RX24	RX23	RX22
PIN	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	RX21	RX20	RX19	RX18	RX17	RX16	RX15	RX14	RX13	RX12	RX11	RX10	RX9	RX8	RX7	RX6	RX5	RX4	RX3	RX2
PIN	41	42																		
	RX1	SHIELDING_RX0																		

### USB/RS232 Combo Connector Pin Assignment:



**USB&RS232 interface:**



**I2C interface:**

