ETP-MB-EXC324254TAG-XXXX


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
Windows	Windows 8(Need logo submission) Windows 7 Windows Vista, XP/2000 Windows CE.net/5.0/6.0/7.0 Windows Embedded Windows XP Tablet PC edition	USB/RS232 I2C (Win8)
Linux	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
Mac	Mac OS, Mac OS X (PowerPC, Intel CPU)	USB
QNX	QNX RTOS v6.3	USB/RS232

Controller:
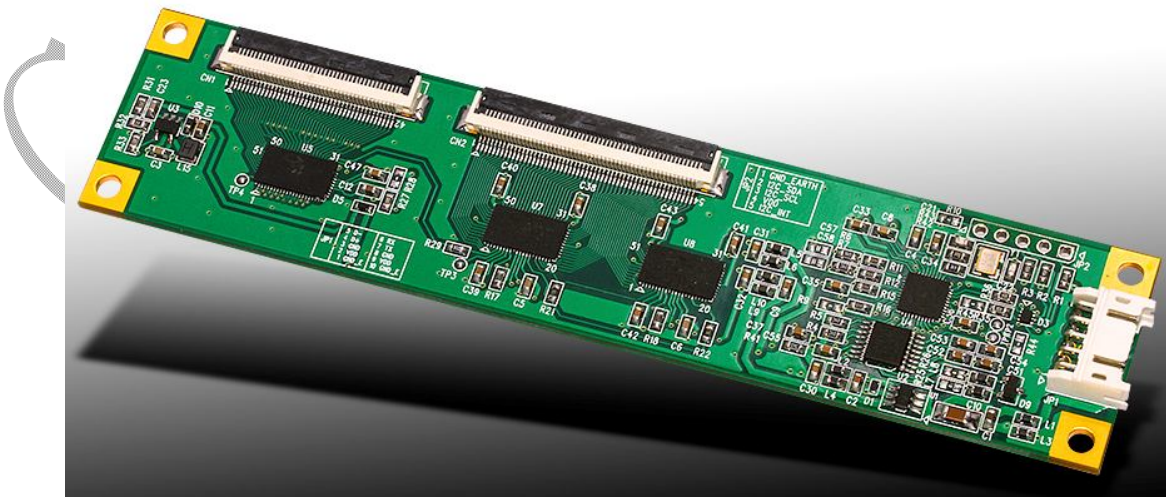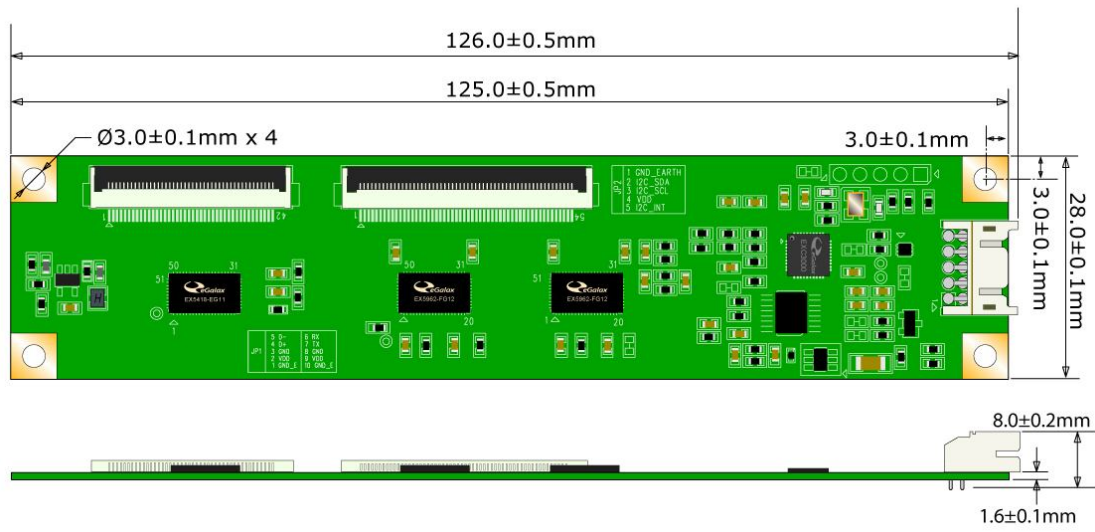
Thickness:

Total thickness: 8.0mm ± 0.2mm
(Including PCB: 1.6mm ± 0.1mm. USB/RS232 connector: 5.1mm.
Soldering pin: 1.3 mm)

Specifications:

USB/RS232/I2C Type Controller	
Circuit Board Dimension	28mm x 125mm
Channels of Panel	Max. Tx:40 Rx:52 channels (exclude shielding pin)
Input Voltage	3.5V~5.5V.Typical 5V.
Operating Temperature	-40 to 85 ℃
Storage Temperature	-40 to 90 ℃
Relative Humidity	95% at 60 ℃, 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: 82~85mA Idle Mode : 36~38mA Sleep Mode :< 5mA (Operation Mode :Active Mode only)
Report rate(points/sec) (Note 2)	> 100 Hz
Response time	Average < 25 ms

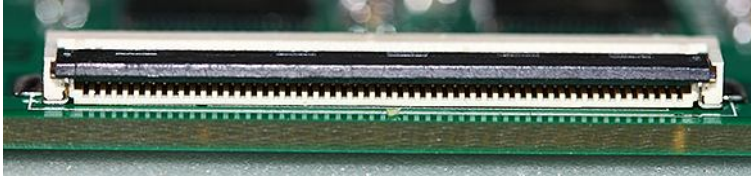**Note 1: Channel pitch should be design 4.8mm (Win8) or < 6mm (Non-Win8).**
Note 2: Report rate will vary by channel number, cover thickness and other parameters.

Product Package:

(1) PCAP Controller Board(ETP-MB-EXC324254TAG-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_RX0	RX0	RX1	RX2	RX3	RX4	RX5	RX6	RX7	RX8	RX9	RX10	RX11	RX12	RX13	RX14	RX15	RX16	RX17	RX18
PIN	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	28	39	40
	RX19	RX20	RX21	RX22	RX23	RX24	RX25	RX26	RX27	RX28	RX29	RX30	RX31	RX32	RX33	RX34	RX35	RX36	RX37	RX38
PIN	41	42	43	44	45	46	47	48	49	50	51	52	53	54						
	RX39	RX40	RX41	RX42	RX43	RX44	RX45	RX46	RX47	RX48	RX49	RX50	RX51	SHIELDING_RX1						

J3 Connector
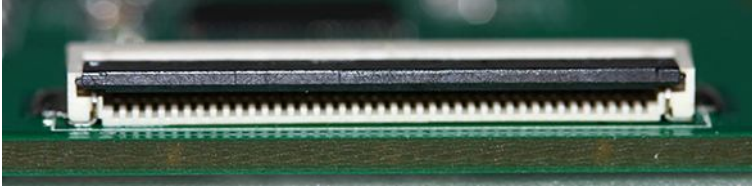
J3																			
PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	SHIELDING_TX1	TX39	TX38	TX37	TX36	TX35	TX34	TX33	TX32	TX31	TX30	TX29	TX28	TX27	TX26	TX25	TX24	TX23	TX22	TX21
PIN	21	22	23	24	25	26	27	28	39	30	31	32	33	34	35	36	37	38	39	40
	TX20	TX19	TX18	TX17	TX16	TX15	TX14	TX13	TX12	TX11	TX10	TX9	TX8	TX7	TX6	TX5	TX4	TX3	TX2	TX1
PIN	41	42																		
	TX0	SHIELDING_TX0																		

USB/RS232 Combo Connector

USB&RS232 interface:

I2C interface: