ETP-MB-EXC965680TDG-XXXX

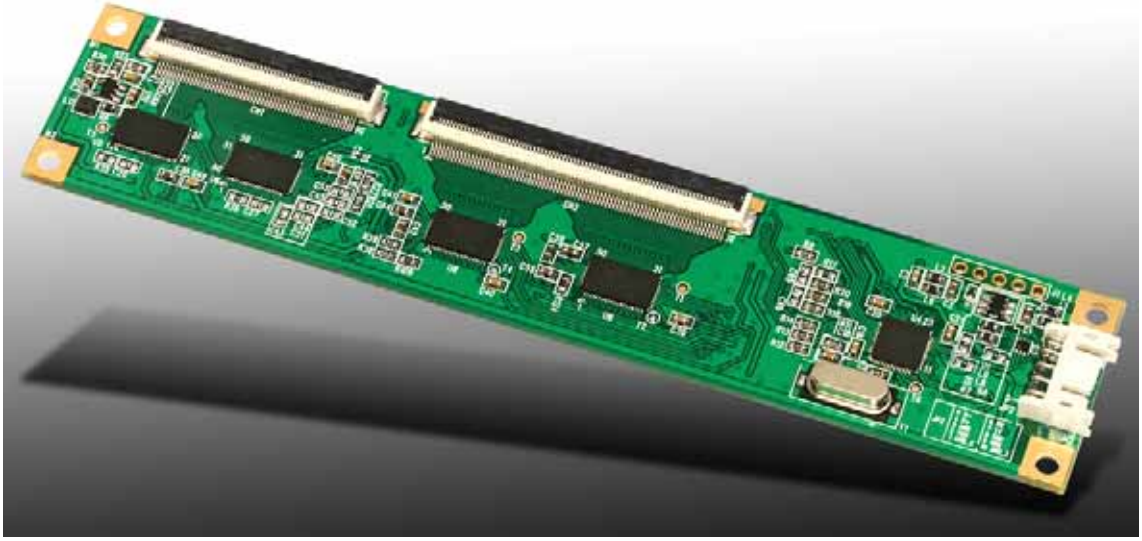
禾瑞亞科技股份有限公司
eGalax_eMPIA Technology Inc.

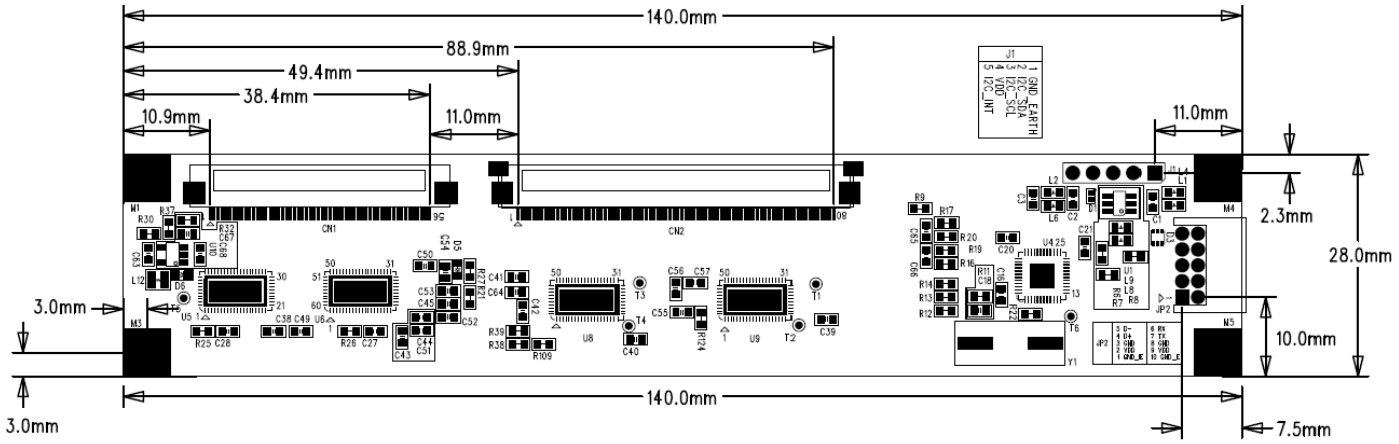
Projected Capacitive USB/RS232/I2C Touch Panel Controller

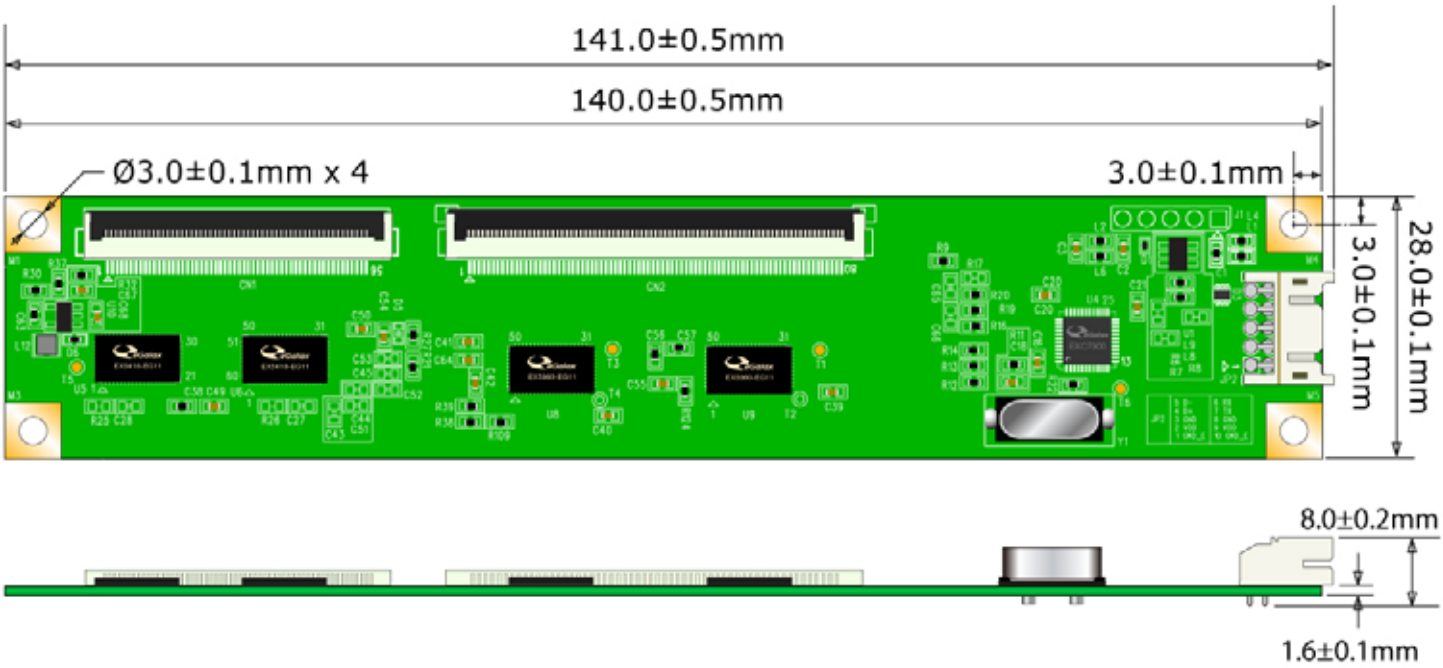
eGalax_eMPIA launched touch control board to meet latest Restriction of Hazardous Substances (RoHS) Directive. This touch panel controller provides the optimistic performance of your projected capacitive touch panels. It communicates with PC system directly through USB/UART/I2C connector. You can see 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
Windows	Windows 8(Need logo submission) 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	USB/RS232
Linux	Mandrake (Mandrake 9.1/9.2/10, Mandriva 2005, Mandriva 2006), Red Hat (7.3/8.0/9.0), Fedora (Core I/II/III/IV/V/VI), Yellow Dog (3.X) , SuSE (9.2/9.3/10/10.1), Ubuntu (5.1/6.06), Debian (3.1, Kernel 2.4.x/2.6.x)	USB/RS232 (up to Kernel 2.6.x)
	Android 4.0 – Google Moblin V2/Meego - Intel	USB/RS232/I2C
Mac	Mac OS9, Mac OS X (IBM, intel CPU)	USB
QNX	QNX RTOS v6.3	USB/RS232

Controller:







Thickness:

Total thickness: 8.0mm ± 0.2mm

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

Specifications:

USB/RS232/I2C Type Controller	
Circuit Board Dimension	28mm x 140mm
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 Line drawing accuracy : 2pt +/- 2mm offset /10mm Touch (point) accuracy : 1pt +/- 2.5mm Touch (point) accuracy : 2pt +/- 5.0mm Refer to Windows 7 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: Max 75 mA Idle Mode : 25 mA Sleep Mode :2 mA
Report rate(points/sec) (Note 2)	＞100 Hz
Response time	Max. 25 ms

Note 1: Channel pitch should be 4.8mm - 6mm
Note 2: Report rate will vary by channel number, cover thickness and other parameters

Product Package:

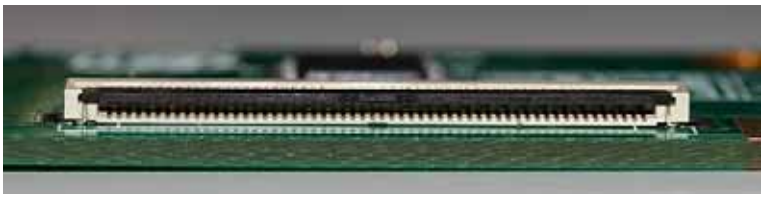
(1) PCAP Controller Board(ETP-MB-EXC965680TDG-XXXX)

(2) Y-Cable (ETP-CB-SXC00)

(3) USB (ETP-CB-SXU00) or RS232 cable (ETP-CB-SXR00)

FPC Connector Pin Assignment:

CN1 Connector



CN1

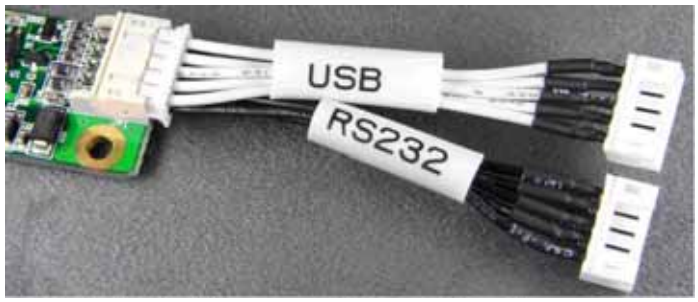
20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	PIN
TX36	TX37	TX38	TX39	TX40	TX41	TX42	TX43	TX44	TX45	TX46	TX47	TX48	TX49	TX50	TX51	TX52	TX53	TX54	Shield_TX1	
40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	PIN
TX16	TX17	TX18	TX19	TX20	TX21	TX22	TX23	TX24	TX25	TX26	TX27	TX28	TX29	TX30	TX31	TX32	TX33	TX34	TX35	
				56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	PIN
				Shield_TX0	TX1	TX2	TX3	TX4	TX5	TX6	TX7	TX8	TX9	TX10	TX11	TX12	TX13	TX14	TX15	

CN2 Connector

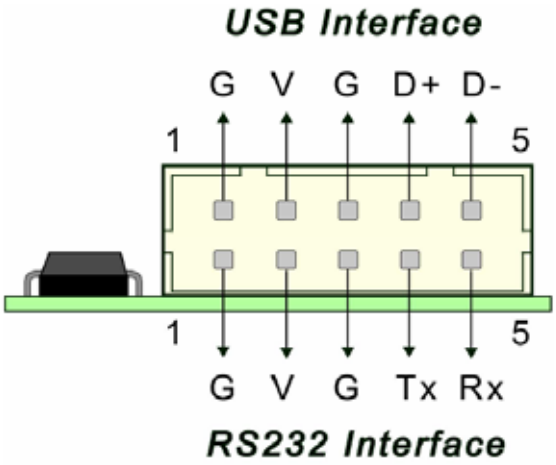
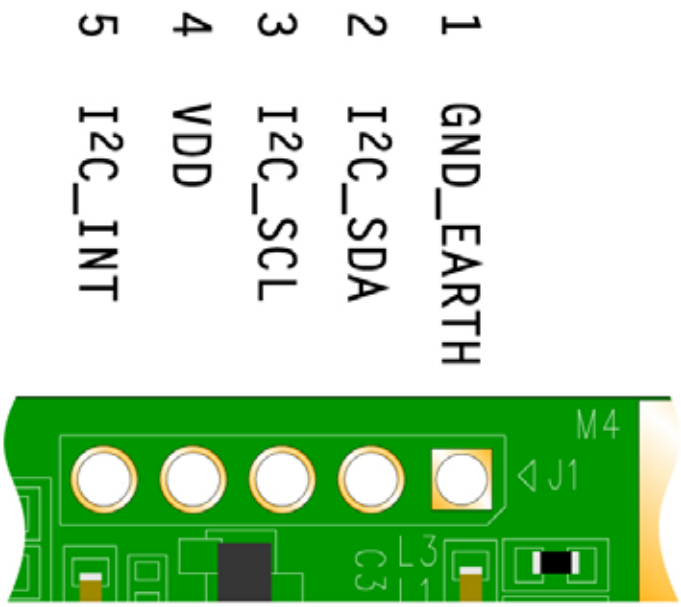
CN2

20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	PIN
RX60	RX61	RX62	RX63	RX64	RX65	RX66	RX67	RX68	RX69	RX70	RX71	RX72	RX73	RX74	RX75	RX76	RX77	RX78	Shield_RX1	
40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	PIN
RX40	RX41	RX42	RX43	RX44	RX45	RX46	RX47	RX48	RX49	RX50	RX51	RX52	RX53	RX54	RX55	RX56	RX57	RX58	RX59	
60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	PIN
RX20	RX21	RX22	RX23	RX24	RX25	RX26	RX27	RX28	RX29	RX30	RX31	RX32	RX33	RX34	RX35	RX36	RX37	RX38	RX39	
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	PIN
Shield_RX0	RX1	RX2	RX3	RX4	RX5	RX6	RX7	RX8	RX9	RX10	RX11	RX12	RX13	RX14	RX15	RX16	RX17	RX18	RX19	

USB/RS232 Combo Connector Pin Assignment:



USB&RS232 interface:



I2C interface: