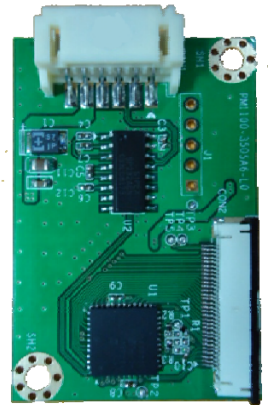# PenMount 1100 RS232 / I^{2}C Interface Control Board

PenMount 1100 control board is one of the cutting-edge innovations from PenMount. A collectively integrated feature with RS232 / I^{2}C interface supporting 3" to 4.9" projected capacitive touch screens; complemented by the superbly developed PenMount drivers which can be used directly in Windows 7.

PenMount 1100 Control Board uses P2-02 Series controller, which is a capacitive sensing IC designed for AMT Projected Capacitive Input (PCI) touch panel and other projected capacitive touch panel. It is designed for PCI touch screen size up to 4.9". PenMount 1100 Control Board has the programmable filter, gain amplifier; with the functions of single, dual touch; and the gestures of one and two fingers. There are two connectors on this board: one 40 Pins ZIF connector for PCI touch screen FPC tail, one RS232 connector for 6-pin RS232 cable (optional). Also I^{2}C interface designed on baord

Specifications

Touch Screen:	Projected capacitive type, size is 3" to 4.9"
Host interface:	RS232 : 19200- 38400 baud rate / non-PnP mode
Touch Screen Controller:	PenMount P2-02 series
Size:	30X45 mm , two 3φscrew holes
ADC resolution:	10 bits
Operating Voltage:	+5V DC for RS232& I2C
Storage Temperature Range:	-40°C ~ +85°C
Operating Temperature:	-10°C ~ +70°C
Power Consumption:	Typical 20mA
Max. touch line:	13 sensing lines
	15 driving lines
Sample rate:	> 100 sps (sample per second)

Apex Material Technology Corp.
www.amtouch.com.tw   email: amt1@amtouch.com.tw
Tel: 886-2-24302666   Fax: 886-2-24303255

Page 1 of 2
Version 1.01
Release Date:2011.02.09

Mechanical size

Unit : mm

Connector Definition

CON1 RS-232		CON2 30Pin ZIF，PH 0.5mm			
Pin	Description	Pin	Description	Pin	Description
1	Ground	1	ICSPD_Shield	16	Cap Drive X14
2	RX	2	ICSPC_Cap Drive X0	17	Cap Drive X15
3	TX	3	Cap Drive X1	18	Cap Sense Y0
4	NC	4	Cap Drive X2	19	Cap Sense Y1
5	VCC	5	Cap Drive X3	20	Cap Sense Y2
6	Ground	6	Cap Drive X4	21	Cap Sense Y3
		7	Cap Drive X5	22	Cap Sense Y4
J1 I2C		8	Cap Drive X6	23	Cap Sense Y5
Pin	Description	9	Cap Drive X7	24	Cap Sense Y6
1	Ground	10	Cap Drive X8	25	Cap Sense Y7
2	INT	11	Cap Drive X9	26	Cap Sense Y8
3	SDA	12	Cap Drive X10	27	Cap Sense Y9
4	SCL	13	Cap Drive X11	28	Cap Sense Y10
5	VCC	14	Cap Drive X12	29	Cap Sense Y11
		15	Cap Drive X13	30	Cap Sense Y12

Driver Software:

Windows 7 : dual touch, Digitizer device for RS-232 interface.
Linux: Linux distributions drivers by request.

Utility:

Firmware adjustment utility is ready for user to fine tune the touch panel sensitivity.

Remark: Specification is subject to change without notice

Apex Material Technology Corp.
www.amtouch.com.tw   email: amt1@amtouch.com.tw
Tel: 886-2-24302666   Fax: 886-2-24303255

Page 1 of 2
Version 1.01
Release Date:2011.02.09