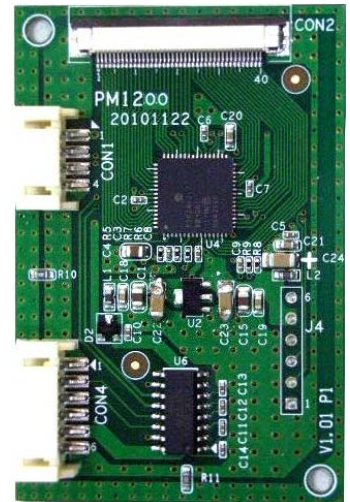# PenMount 1200 USB / RS232 Interface Control Board

PenMount 1200 control board is one of the cutting-edge innovations from PenMount. A collectively integrated feature with USB / RS232 interface supporting 5" to 7.9" projected capacitive touch screens; complemented by the superbly developed PenMount drivers which can be used directly in Windows 7.
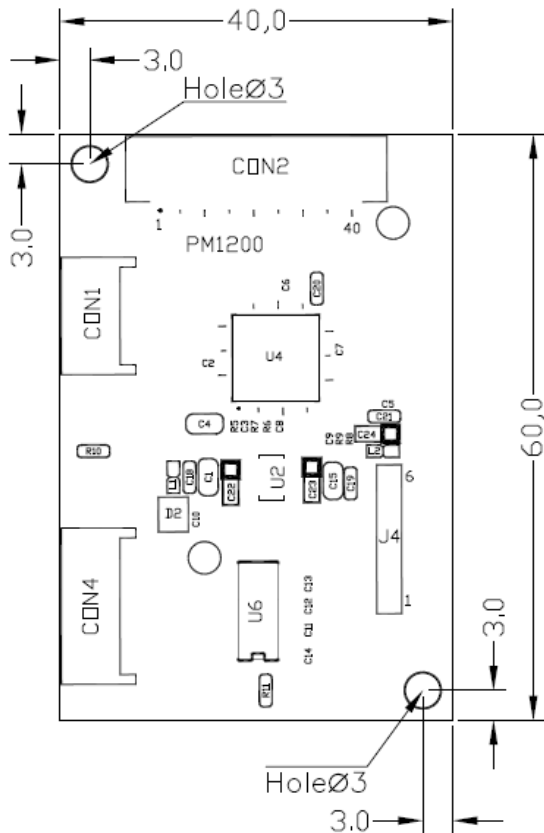
PenMount 1200 Control Board uses P2-03 Series controller, which is a capacitive sensing IC designed for AMT Projected Capacitive Input (PCI) touch panel and other projected capacitive touch panel. It is designed for PCI touch screen size up to 7.9". PenMount 1200 Control Board has the programmable filter, gain amplifier; with the functions of single, dual touch; and the gestures of one and two fingers. There are three connectors on this board: one 40 Pins ZIF connectors for PCI touch screen FPC cable, one USB connector for 4-pin USB cable (optional) , and one RS232 connector for 6-pin RS232 cable (optional).

Specifications

Touch Screen:	Projected capacitive type, size is 5" to 7.9"
Host interface:	USB : Full-speed, 12Mbps
	RS232 : 19200- 38400 baud rate / non-PnP mode
Touch Screen Controller:	PenMount P2-03 series
Size:	40X60 mm , two 3φscrew holes
ADC resolution:	10 bits
Operating Voltage:	+5V DC for USB &RS232
Storage Temperature Range:	-40°C ~ +85°C
Operating Temperature:	-10°C ~ +70°C
Power Consumption:	Typical 25mA
Max. touch line:	15 sensing lines
	24 driving lines
Sample rate:	> 100 sps (sample per second)

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Page 1 of 2
Version 1.01
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PenMount 1200 Control Board Data Sheet

Mechanical size

Unit : mm

Connector Definition

● CON1 Pin	Description	● CON4 Pin	Description	● J4 Pin	Description
1	5V Vdd	1	GND	1	NA
2	USB D- signal	2	RX	2	ICSPD1_C1AN7
3	USB D+ signal	3	TX	3	ICSPC1_C1AN6
4	GND	4	Blank	4	GND
		5	5V Vdd	5	VCC
		6	GND	6	MCLR

● CON2 40Pin ZIF, PH 0.5mm

Pin	Description	Pin	Description	Pin	Description
1	Shield	16	CapDrive X14	31	CapSense Y5
2	CapDrive X0	17	CapDrive X15	32	CapSense Y6
3	CapDrive X1	18	CapDrive X16	33	CapSense Y7
4	CapDrive X2	19	CapDrive X17	34	CapSense Y8
5	CapDrive X3	20	CapDrive X18	35	CapSense Y9
6	CapDrive X4	21	CapDrive X19	36	CapSense Y10
7	CapDrive X5	22	CapDrive X20	37	CapSense Y11
8	CapDrive X6	23	CapDrive X21	38	CapSense Y12
9	CapDrive X7	24	CapDrive X22	39	CapSense Y13
10	CapDrive X8	25	CapDrive X23	40	CapSense Y14
11	CapDrive X9	26	CapSense Y0		
12	CapDrive X10	27	CapSense Y1		
13	CapDrive X11	28	CapSense Y2		
14	CapDrive X12	29	CapSense Y3		
15	CapDrive X13	30	CapSense Y4		

Driver Software:

Windows XP & Vista: single touch, mouse driver for USB Interface.

Windows 7 : dual touch, Inbox driver for USB interface

Linux: driver by request

Utility:

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

Remark: Specification is subject to change without prior notice