

PenMount 1201 Control Board Data Sheet

PenMount PM1201 PCI Control Board

PenMount 1201 control board is one of the cutting-edge innovations from PenMount. A collectively integrated feature with USB / RS232 / I²C 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 1201 Control Board uses Microcontroller, 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 1201 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 four connectors on this board: 20PIN & 30PIN ZIF connectors for PCI touch screen FPC cable, one USB connector for 4-pin USB cable (optional) , and one RS232 connector for 5-pin RS232 cable (optional) , and one I²C connector for 7-pin I²C cable (optional).

Specifications

Touch Screen Size	Projected capacitive type, size is 5" to 7.9"
Interface	USB, Full-speed, 12Mbps
	RS-232 Interface 38400 baud rate / non-PnP
	I ² C, Slave, support 400 kHz specifications
	(If you use I ² C interface, please connect pin3/4/7 with typical 2.3K Ohm to high.)
Touch Screen Controller	PenMount P2-03 series
Mechanical Size	30X80 mm , two 3φscrew holes
Resolution	2048X2048
Operating Voltage	+5V DC
Storage Temperature	-40°C ~ +85°C
Operating Temperature	-20°C ~ +70°C
Power Consumption	Typical -- Standby Mode : 18 mA ; Active Mode : 35 mA Sleep Mode : 3 mA
Max. touch line:	15 sensing lines 24 driving lines
Sample rate / per second	> 100 sps

Driver Software:

RS232 & USB interface :

Windows XP / Vista / 7 *

Windows Embedded CE 6.0 · Windows Embedded Compact 7

Linux (provide the source code for Linux and Android)

*USB interface support Windows Vista and 7 inbox driver

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Version 1.01

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Utility:

Firmware adjustment utility is ready for user to fine tune the touch panel sensitivity for Windows XP / 7.

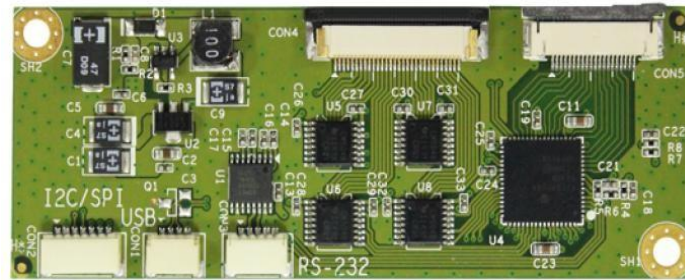
Pin Assignment

CON4 30Pin ZIF							
PIN	Description	PIN	Description	PIN	Description	PIN	Description
1	Shield	11	Cap Drive X5	21	Cap Drive X15		
2	NC	12	Cap Drive X6	22	Cap Drive X16		
3	GND	13	Cap Drive X7	23	Cap Drive X17		
4	Shield	14	Cap Drive X8	24	Cap Drive X18		
5	GND	15	Cap Drive X9	25	Cap Drive X19		
6	Cap Drive X0	16	Cap Drive X10	26	Cap Drive X20		
7	Cap Drive X1	17	Cap Drive X11	27	Cap Drive X21		
8	Cap Drive X2	18	Cap Drive X12	28	Cap Drive X22		
9	Cap Drive X3	19	Cap Drive X13	29	Cap Drive X23		
10	Cap Drive X4	20	Cap Drive X14	30	GND		
CON2 20Pin ZIF							
PIN	Description	PIN	Description	PIN	Description	PIN	Description
1	GND	6	Cap Sense Y11	11	Cap Sense Y6	16	Cap Sense Y3
2	GND	7	Cap Sense Y10	12	Cap Sense Y5	17	Cap Sense Y4
3	Cap Sense Y14	8	Cap Sense Y9	13	Cap Sense Y0	18	GND
4	Cap Sense Y13	9	Cap Sense Y8	14	Cap Sense Y1	19	GND
5	Cap Sense Y12	10	Cap Sense Y7	15	Cap Sense Y2	20	GND
CON1 4Pin				CON3 5Pin			
PIN	Description	PIN	Description	PIN	Description	PIN	Description
1	5V IN	3	D+	1	5V IN	4	GND
2	D-	4	GND	2	RXD0	5	GND
				3	TXD0		
CON2 7Pin							
PIN	Description	PIN	Description	PIN	Description	PIN	Description
1	5V IN	3	SCL / RXD / SDI	5	SCK	7	INTHM
2	GND	4	SDA / TXD / SDO	6	CS		

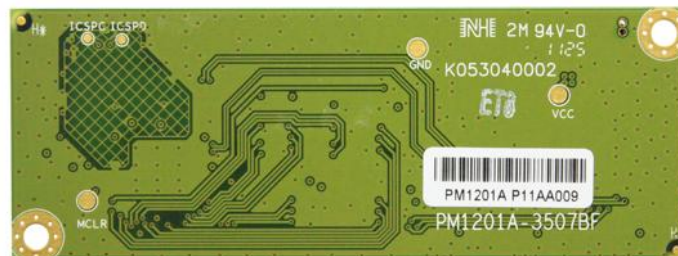
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Mechanical Drawing

TOP View

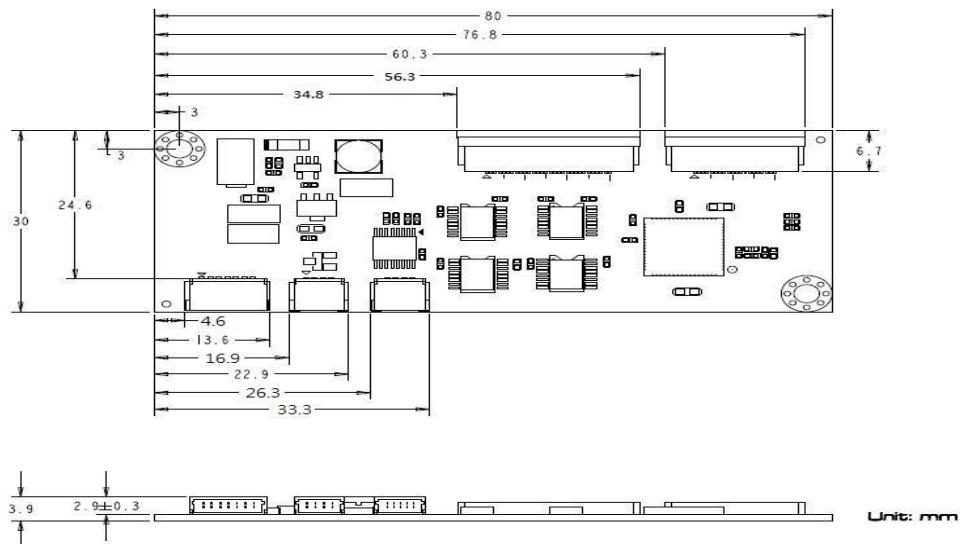


Bottom View



Mechanical size

PM1201A



Remark: Specification is subject to change without notice