

PenMount 1100 control board is one of the cutting-edge innovations from PenMount. A collectively integrated feature with RS-232 interface supporting 3" to 4.9" projected capacitive touch screens; complemented by the superbly developed PenMount drivers which can be used directly in Windows 8.

PenMount 1100 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 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: 30 Pins ZIF connectors for PCI touch screen FPC cable, one RS232 connector for 6-pin RS232 cable (optional).

2.0 Specifications

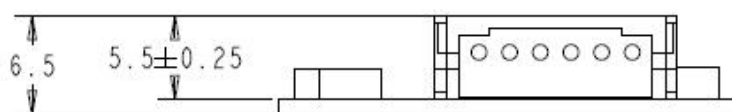
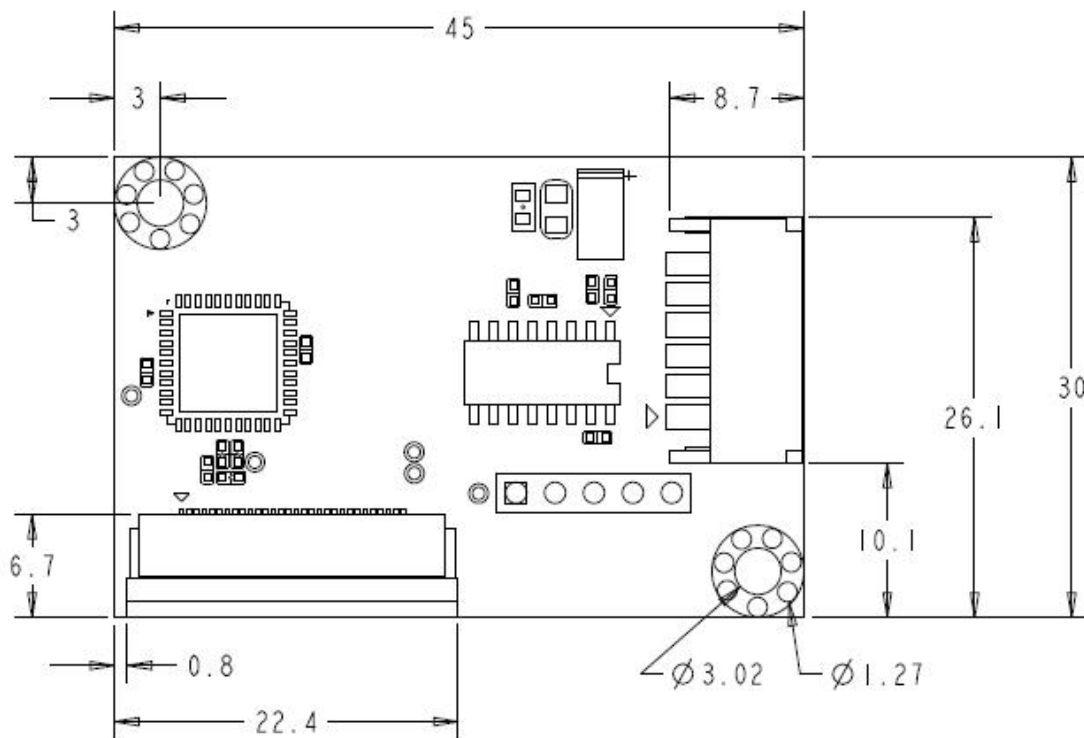
- 2.1 Controller part no : P2-02
- 2.2 Supporting Projected Capacitive touch panel size:
Projected capacitive type, size is 3" to 4.9"
- 2.3 Interface: RS-232
RS-232 Interface 38400 baud rate / 8bit data / non parity / one stop bit / non-PnP
- 2.4 ADC resolution: 10bits
- 2.5 Max Touch Line : 16 Driving lines, 13 Sensing line
- 2.6 Sampling rate:>100sps
- 2.7 Operating Voltage: +5V DC
- 2.8 Power Consumption : Typical -- Working Mode : 10mA
Idle Mode : 6.4mA
Sleep Mode : 2.2mA
- 2.9 RS specification: IEC61000-4-3 Level 2 , Criteria A
- 2.10 CS specification: IEC61000-4-6 Level 2 , Criteria A
- 2.11 Operating temperature: -20°C ~ +70°C
- 2.12 Storage temperature: -40°C ~ +85°C

Note :

Power consumption and sample rate will vary according to different firmware versions.

3.0 Mechanical Drawing

3.1 Mechanical size

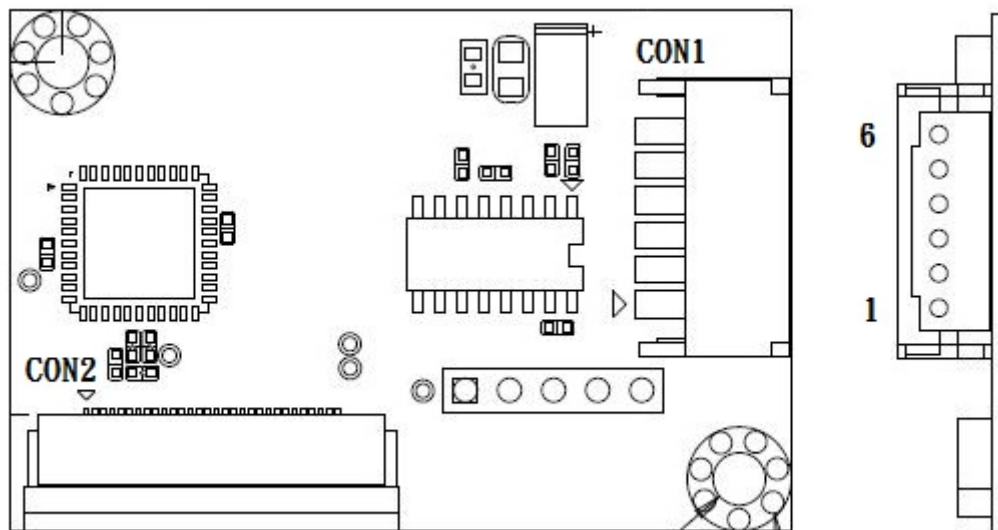


Unit: mm

3.2 Touch line pin definition

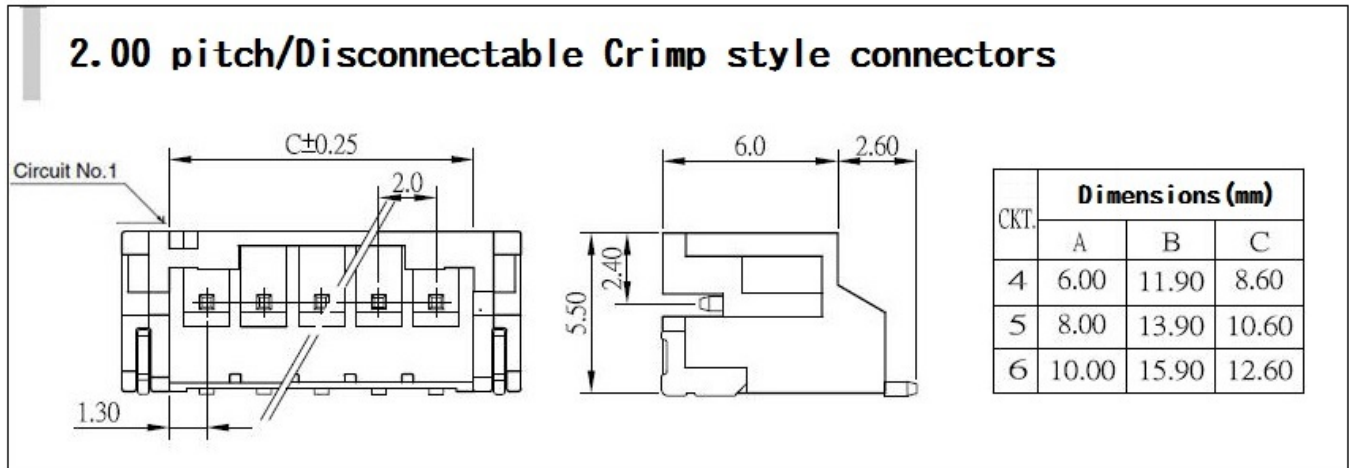
CON2 30Pin ZIF , PH 0.5mm ; ACES 88707-3001							
PIN	Description	PIN	Description	PIN	Description		
1	Cap Sense Y12	11	Cap Sense Y2	21	Cap Drive X8		
2	Cap Sense Y11	12	Cap Sense Y1	22	Cap Drive X7		
3	Cap Sense Y10	13	Cap Sense Y0	23	Cap Drive X6		
4	Cap Sense Y9	14	Cap Drive X15	24	Cap Drive X5		
5	Cap Sense Y8	15	Cap Drive X14	25	Cap Drive X4		
6	Cap Sense Y7	16	Cap Drive X13	26	Cap Drive X3		
7	Cap Sense Y6	17	Cap Drive X12	27	Cap Drive X2		
8	Cap Sense Y5	18	Cap Drive X11	28	Cap Drive X1		
9	Cap Sense Y4	19	Cap Drive X10	29	ICSPD_Cap Drive X0		
10	Cap Sense Y3	20	Cap Drive X9	30	ICSPD_Shield		

3.3 Interface pin definition



CON1 / 6PIN / RS-232	
PIN NO.	DESIGNATION
1	GND
2	RX
3	TX
4	N/A
5	5V VDD
6	GND

3.4 Connector specification



4.0 Drivers, Utilities

4.1 Drivers:

For RS-232

Windows 2000, XP, 2003: single touch, mouse driver.

Windows Vista: single touch, inbox driver.

Windows 7,8: dual touch, Inbox driver.

Linux: Ubuntu, Android, other Linux distributions under development.

4.2 Utility:

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

Note :

Drivers, Utilities : all the drivers are available in AMT and PenMount website. The PenMount utilities is also available, contact us

5.0 Others

5.1 ROHS compliance: This control board is met ROHS compliance

5.2 For EMC protection recommendations please refer to the AMT touch screen integration guides.

Remark: Specification is subject to change without notice