

## PenMount 6500A Control Board Data Sheet

### PenMount 6500A USB and RS232 Interface Control Board

#### RoHS compliance

PenMount 6500A has collectively integrated features and functions of auto detecting USB and RS232 serial interfaces supporting 4, 8-wire or 5-wire resistive touch screens; complemented by the superbly developed PenMount drivers with auto installation driver capability. PenMount 6500A control board uses PenMount 6000 controller that has been designed for those who may like all-in-one solution with A/D converter built-in to make the total printed circuit board denser. There are three connectors on this board, one connector is for 4, 8-wire or 5-wire touch screen cable, and another is for 4-pin USB A type cable, the third is for RS232 cable.

#### Specifications:

Touch Screen	For 4, 8-wire or 5-wire analog resistive type	
Interface	USB	Full speed 12Mbps
	RS232	19200 baud rate, N81 PnP mode
Touch Screen Controller	PenMount 6000 controller IC	
Resolution	2048x2048	
Size	60x26 mm, two 3φ screw holes	
Cursor accuracy	< 1% (Active Area Diagonal of touch screen with PenMount Advanced calibration utility support)	
Resistance Range	50~1.3K ohm	
Diagnostic	LED	
Operating Voltage	+5V DC	
Electro Static Discharge (ESD)	Air Discharge 15KV , Contact Discharge 8KV	
Storage Temperature	-40 °C ~ 85 °C	
Operating Temperature	-20°C ~ 70 °C	
Power Consumption	Standby Mode : 14.4 mA ; Active Mode : 22.5 mA (VCC=+5V, Top sheet Panel Resistance: 365 ohm ; Bottom sheet Panel Resistance: 660 ohm) Note. Actual current will be different by touch panel's resistance.	

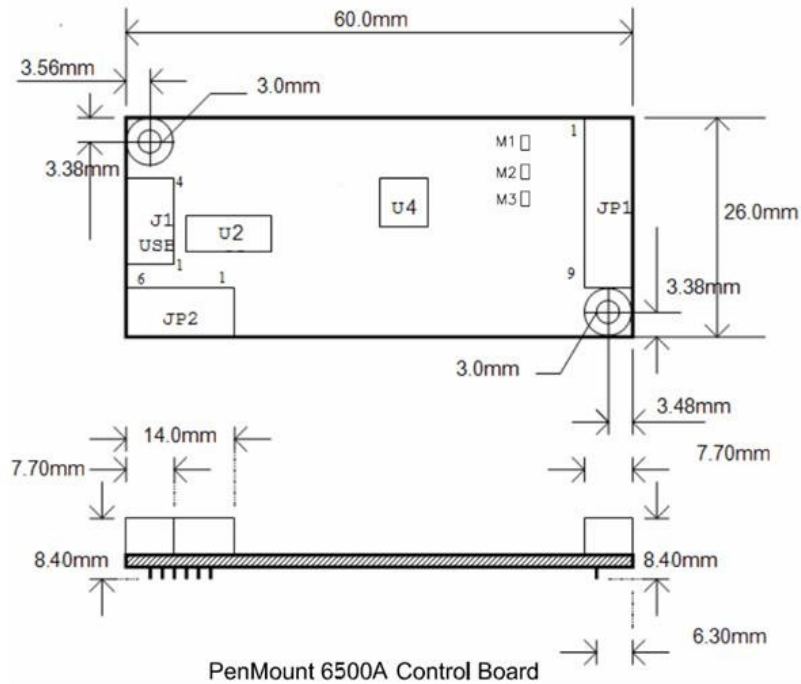
#### Driver Software:

**RS232 interface** : DOS, Windows 2000/ XP/ XPE/ 2003/ 2008/ Vista/ 7, WinCE 4.2/ 5.0/ 6.0, Linux (Kernel 2.6 and X-Window mode), QNX 6.2/ 6.3.2/ 6.4.1/ 6.5

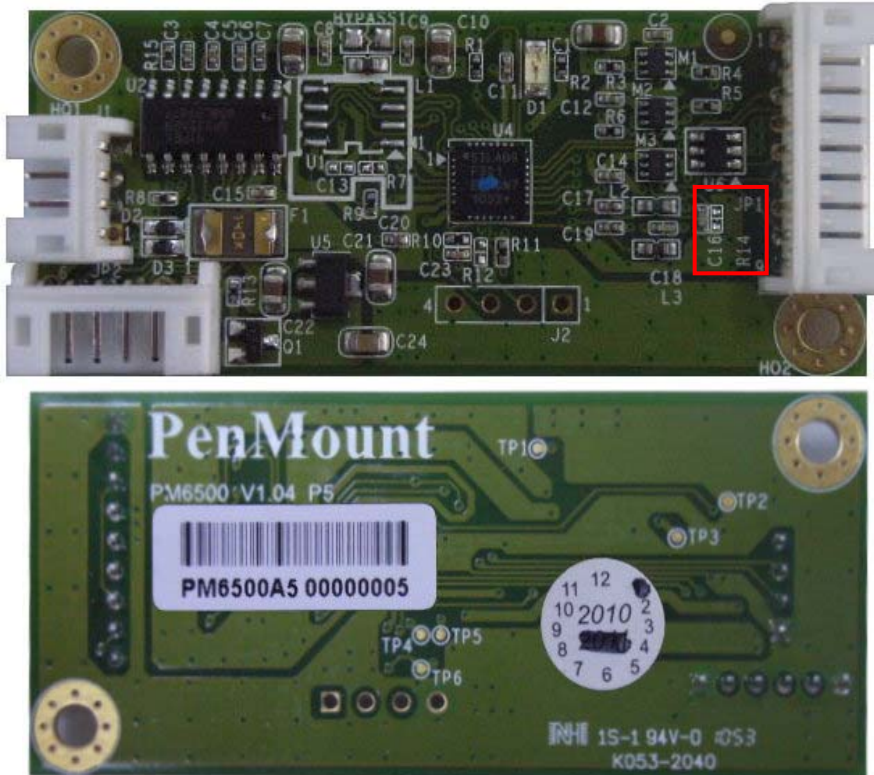
**USB interface** : Windows 2000/ XP/ XPE/ 2003/ 2008/ Vista/ 7, WinCE 4.2/ 5.0/ 6.0, Linux OS (Kernel 2.6 and X-Window mode), QNX 6.4.1/ 6.5 (Inbox support)

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**Mechanical Size** : PM6500A5 and PM6500A8 are the same mechanical size.

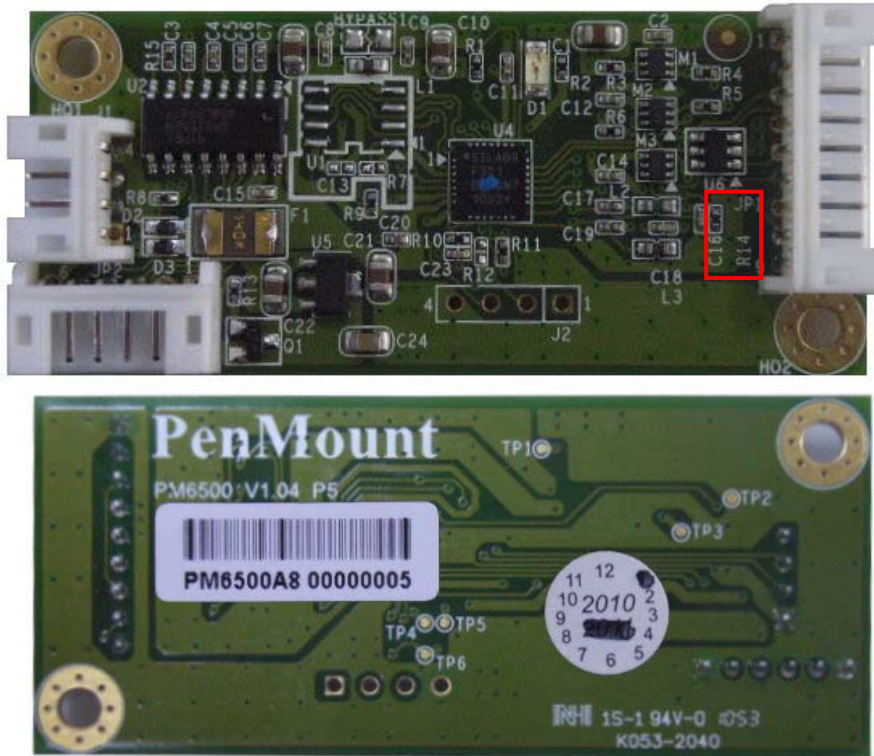


**PM6500A5** supports 5 wires touch panel, there's a 0 ohm resistance of R14 in the circuit- therefore we don't mount the component.



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PM6500A8 supports 4/8 wires touch panel, there's a 0 ohm resistance of R14 in the circuit.



### Connector Definition

J1 USB Connector :

PIN 1	GND
PIN 2	D+
PIN 3	D-
PIN 4	VCC

JP2 RS232 Connector :

PIN1	Ground
PIN2	+5V DC
PIN3	RTS
PIN4	TXD
PIN5	RXD
PIN6	Ground

JP1 Touch Screen Lines :

	PM6500A8		PM6500A5
	8-Wire	4-Wire	5-Wire
PIN1	Ground	Ground	Ground
PIN2	Top Excite	Top	UL (Y)
PIN3	Bottom Excite	Bottom	UR (H)
PIN4	Left Excite	Left	LL (L)
PIN5	Right Excite	Right	LR (X)
PIN6	Top Sense	---	Sense (S)
PIN7	Bottom Sense	---	---
PIN8	Left Sense	---	---
PIN9	Right Sense	---	---

The available PM6500A control board :

- PM6500A8 : 4 、 8 - wire , RS232 & USB COMBO Interface ◦
- PM6500A5 : 5 - wire , RS232 & USB COMBO Interface ◦