

## PenMount 6500 Control Board Data Sheet

### PenMount 6500 USB and RS232 Interface Control Board

#### RoHS compliance

PenMount 6500, one of PenMount's newest innovation, the ultimate combo board. A collectively integrated features and functions of auto detecting USB and RS232 serial interfaces supporting 4, 5 & 8 wire resistive touch screens; complemented by the superbly developed PenMount drivers with auto installation driver capability.

PenMount 6500 control board using 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-, 5-, 8-wire analog resistive type	
Interface	USB	Full speed 12MHz bps
	RS232	19200 / 9600 baud rate non-PnP / PnP mode
Touch Screen Controller	PenMount 6000 controller IC	
Resolution	2048x2048	
Size	60x26 mm, two 3φscrew 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 for USB +5V~12V DC for RS232 (+5~12V for 4/8-wire; +5V only for 5-wire)	
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.	

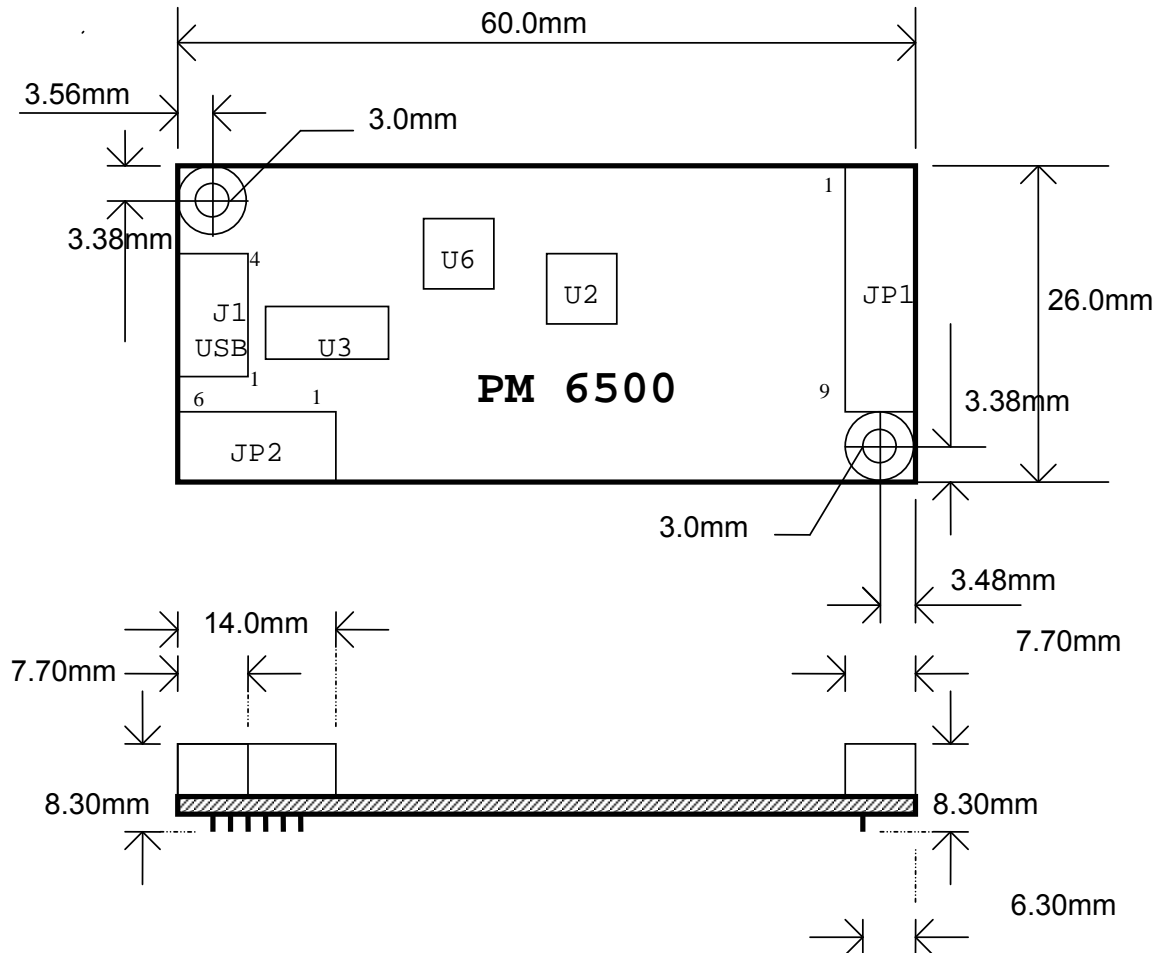
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### Driver Software:

**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/ 6.4/ 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 6.2/ 6.3/ 6.4/ 6.5 (Inbox support)

### Mechanical Size:



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### Connector Definition

#### J1: USB / Interface:

Pin 1: GND  
Pin 2: D+  
Pin 3: D-  
Pin 4: VCC

#### JP2 / RS232 Interface:

Pin 1: Ground  
Pin 2: +5~12V DC  
Pin 3: RTS  
Pin 4: TXD  
Pin 5: RXD  
Pin 6: Ground

#### JP1: Touch Screen Lines:

	8 wire	4 wire	5 wire
PIN 1	Ground	Ground	Ground
PIN 2	Top Excite	Top	UL (Y)
PIN 3	Bottom Excite	Bottom	UR (H)
PIN 4	Left Excite	Left	LL (L)
PIN 5	Right Excite	Right	LR (X)
PIN 6	Top Sense	N/A	Sense (S)
PIN 7	Bottom Sense	N/A	N/A
PIN 8	Left Sense	N/A	N/A
PIN 9	Right Sense	N/A	N/A

#### SW1:

	ON	OFF
1	4,8 wire	5 wire
2	*PNP mode	Non-PNP mode
3	9600 baud rate	*19200 baud rate
4	Reserved	Reserved

\* Default