

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 using PenMount 6000 controller that has been designed for those who may like and 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. | |

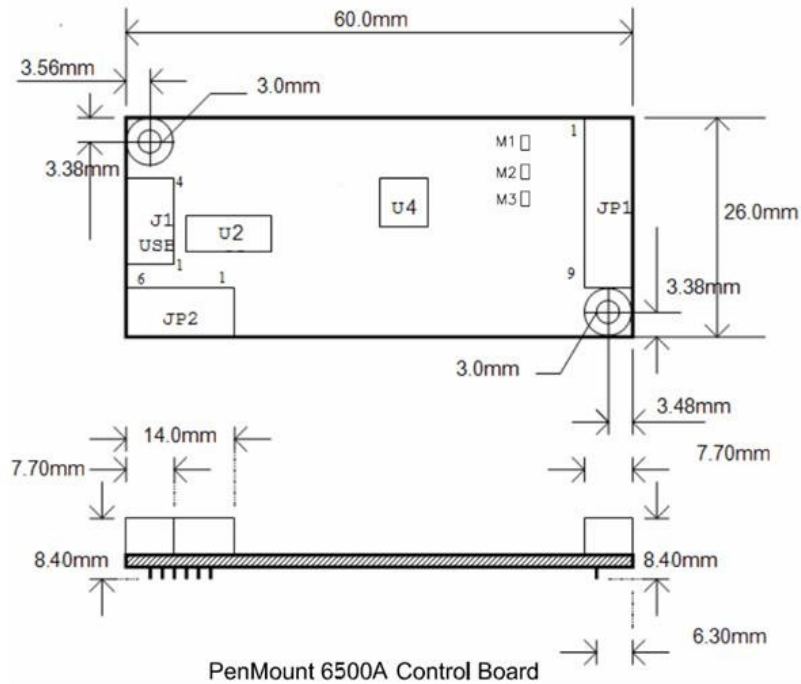
Driver Software:

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

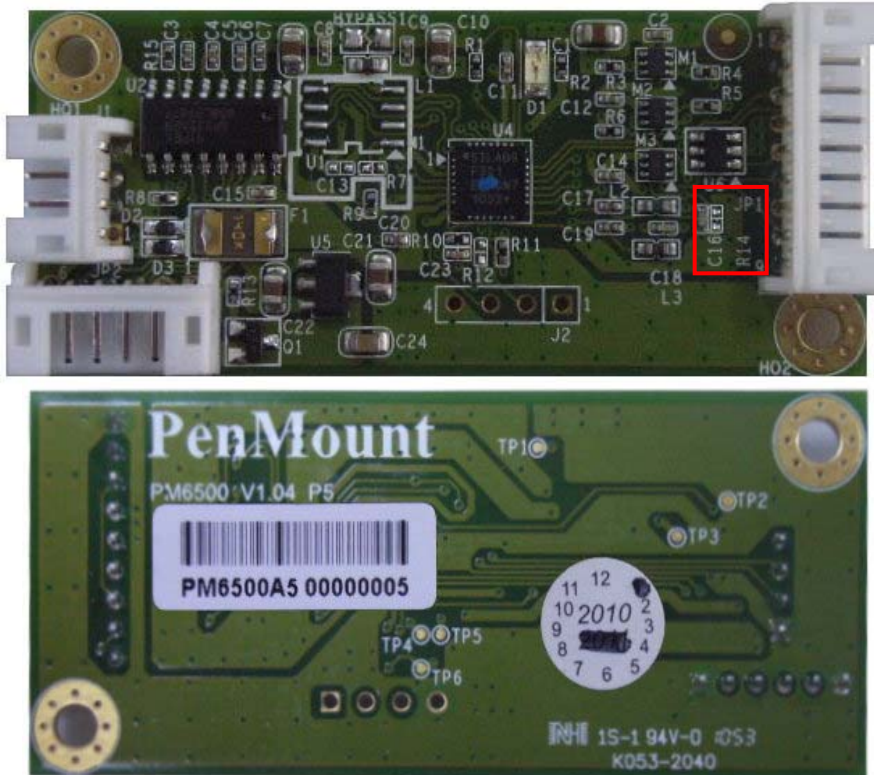
USB interface : Windows 2000/ XP/ XPE/ 2003/ 2008/ Vista/ 7, WinCE 4.2/ 5.0/ 6.0, Linux OS (Kernel 2.6 and X-Window mode), QNX 6.4.1/ 6.5 (Inbox support)

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

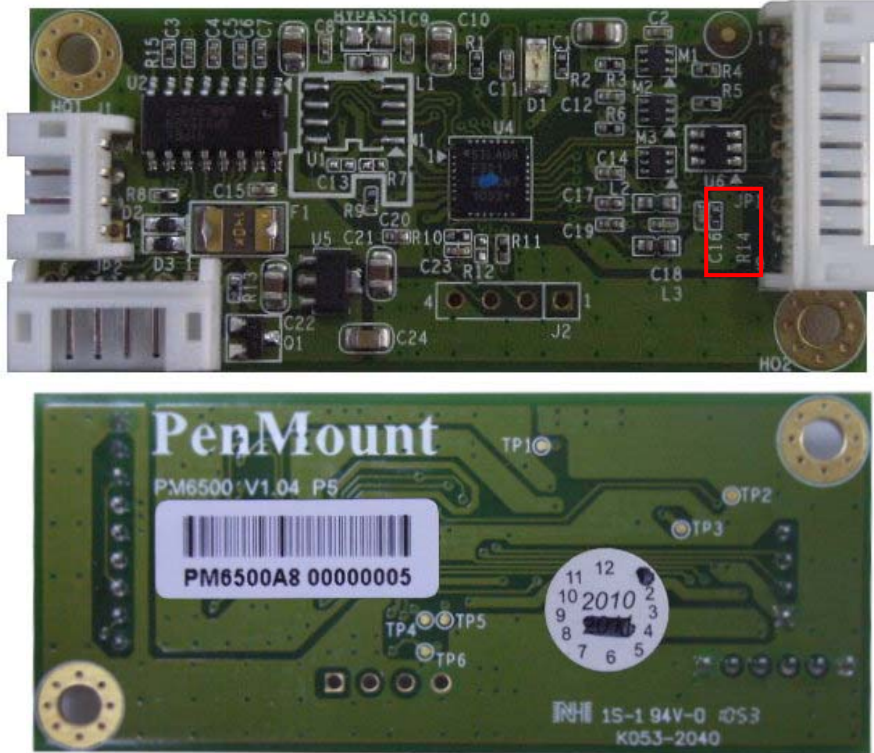


PM6500A5 supports 5 wires touch panel, there's a 0 ohm resistance of R14 in the circuit- therefore we don't mount the component.



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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 :

| | PM6300A8 | | PM6300A5 |
|------|---------------|--------|-----------|
| | 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 ◦