

## PenMount 6500C Control Board Data Sheet

### RoHS Compliance

PenMount 6500C 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 6500C control board uses PenMount 6010 controller that has been designed for those who may like all-in-one solution with 12bit 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  |
| Communications                 | USB Full-speed, 12Mbps   |
|                                | RS232 19200 baud rate,PnP mode   |
| Touch Screen Controller        | PenMount 6010 controller IC  |
| Resolution                     | 4096X4906 (Maximum)  |
| 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 on board   |
| Operating Voltage              | +5V DC   |
| Electro Static Discharge (ESD) | Air Discharge 15KV ,<br>Contact Discharge 8KV  |
| Storage Temperature            | -40 °C ~ 85 °C   |
| Operating Temperature          | -20°C ~ 85 °C  |
| Power Consumption              | Standby Mode : 9 mA ; Active Mode : 52mA<br>(VCC=+5V, Touch Panel Resistance: 95 ohm)<br>Note. Actual current will be different by touch panel's resistance. |

**Driver Software:**

**RS232 interface :**

DOS

Windows 2000/ XP/ XPE/ 2003/ 2008/ Vista/ 7 /8 /10 /11

WinCE 4.2/ 5.0/ 6.0/7.0

Linux (Kernel 2.6 and X-Window mode)

QNX 6.2/ 6.3/ 6.4/ 6.5

**USB interface :**

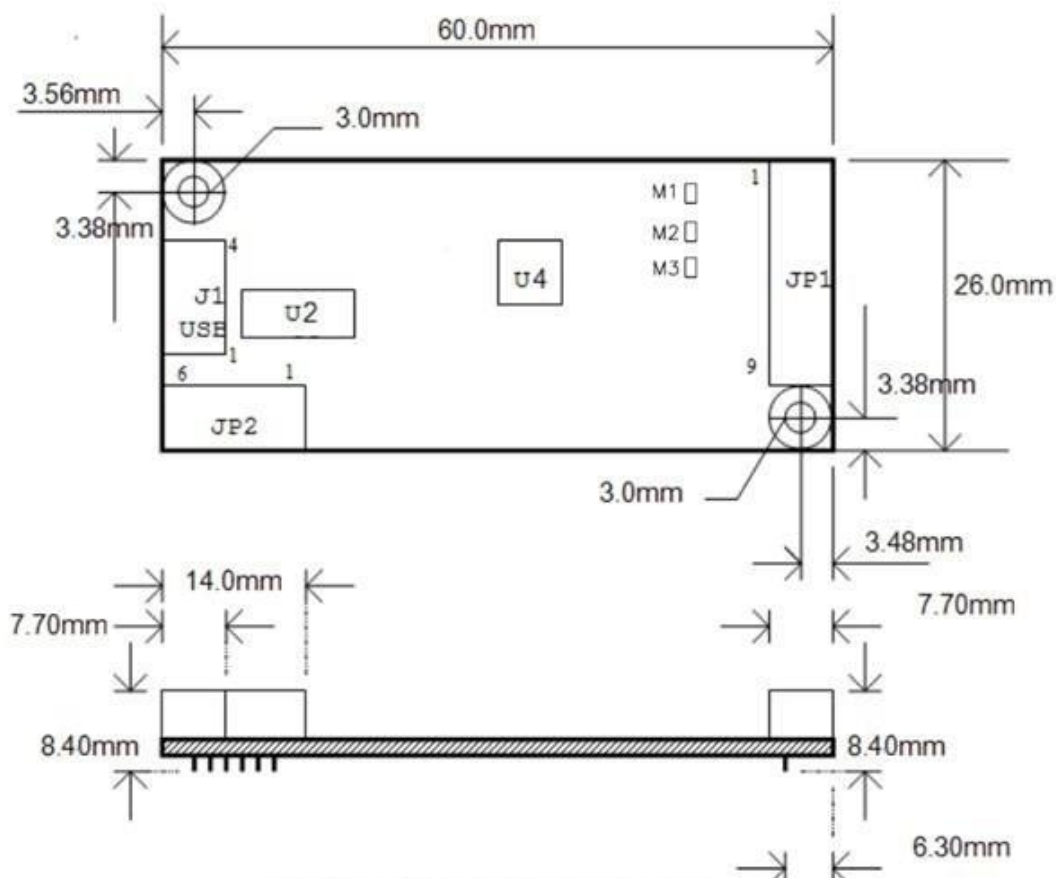
Windows 2000/ XP/ XPE/ 2003/ 2008/ Vista/ 7 /8 /10 /11

WinCE 4.2/ 5.0/ 6.0/7.0

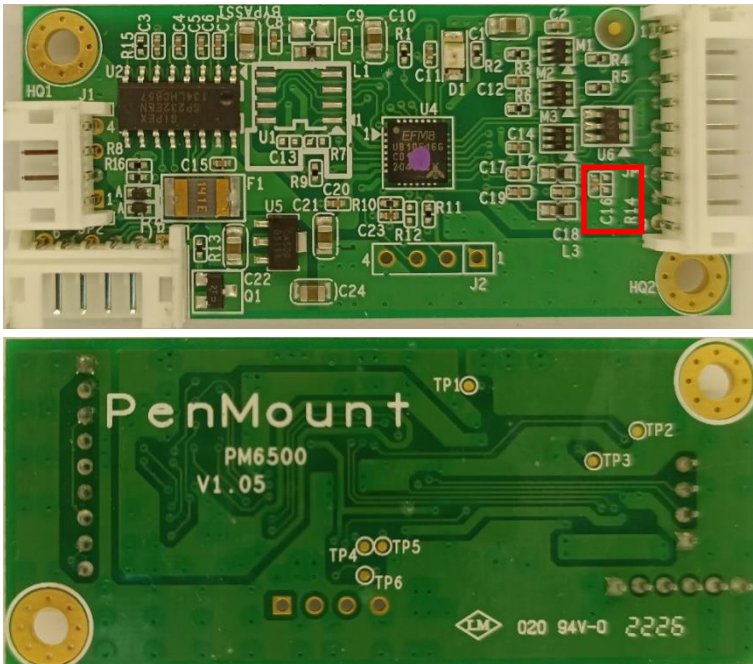
Linux OS (Kernel 2.6 and X-Window mode)

QNX 6.4.1/ 6.5 (Inbox support)

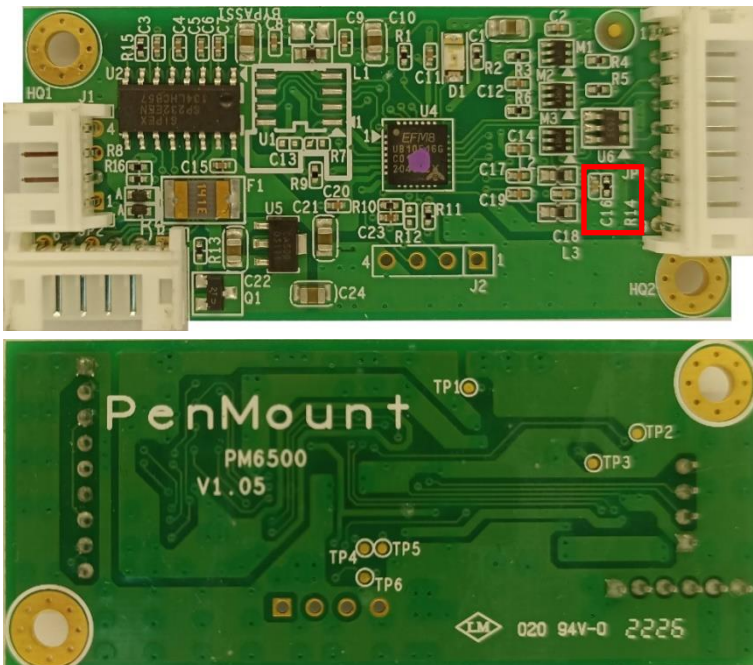
**Mechanical Size :** PM6500C5 and PM6500C8 are the same mechanical size.



PM6500C5 supports 5 wires touch panel, R14 is not mounted in the circuit.



PM6500C8 supports 4/8 wires touch panel, R14 is mounted 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 :

|      | PM6500C8      |        | PM6500C5  |
|------|---------------|--------|-----------|
|      | 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 PM6500C control board :

- PM6500C8 : 4 、 8 - wire , RS232 & USB COMBO Interface ◦
- PM6500C5 : 5 - wire , RS232 & USB COMBO Interface ◦