PM6500D CONTROL BOARD
DATASHEET

Revision Table

Date	Revision	Changes
2024/11/8	V1.0	New Release

PenMount 6500D Control Board Data Sheet

RoHS Compliance

PenMount 6500D 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 6500D 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
Communications	USB Full-speed, 12Mbps
	RS232 19200 baud rate,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 on board
Operating Voltage	+5V DC
Electro Static Discharge (ESD)	Air Discharge 15KV , Contact Discharge 8KV
Storage Temperature	-40 ℃ ~ 85 ℃
Operating Temperature	-20℃ ~ 85 ℃
Power Consumption	Standby Mode : 13.4 mA ; Active Mode : 21.5 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 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)
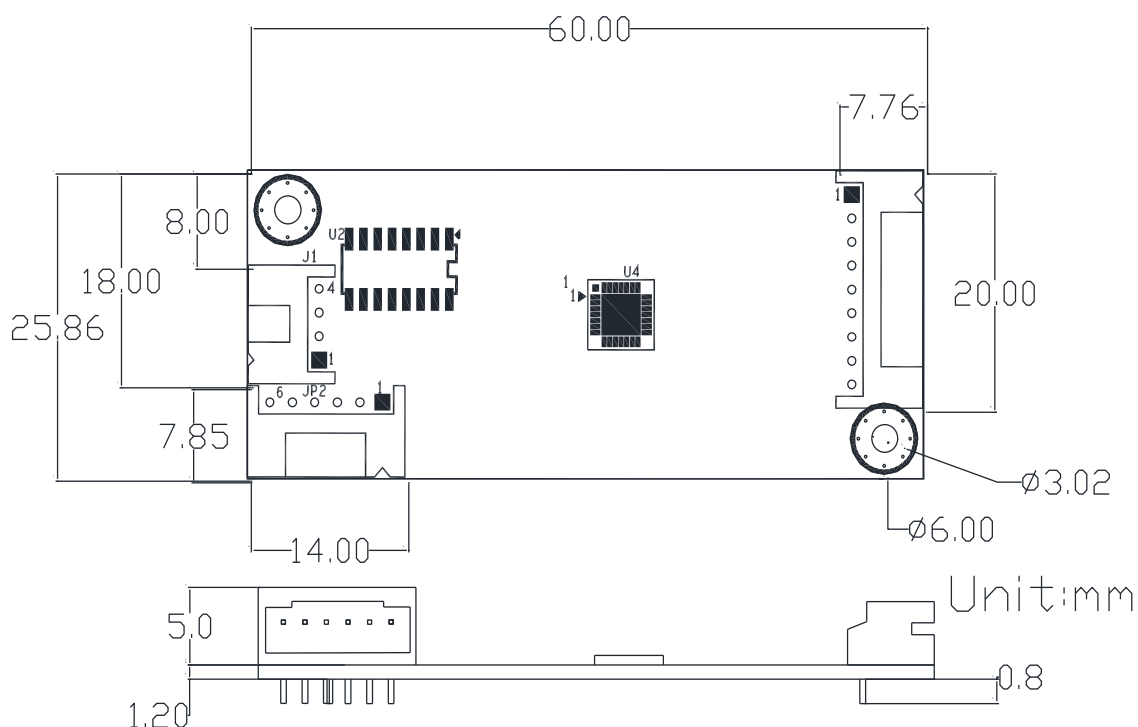
QNX 6.2/ 6.3/ 6.4/ 6.5

USB interface：

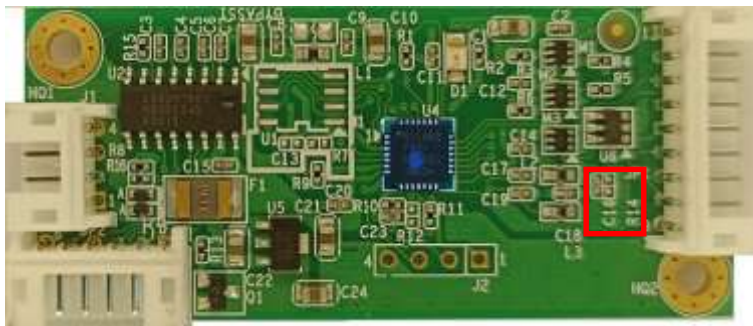Windows XP/ XPE/ 2003/ 2008/ Vista/ 7 /8 /10 /11

WinCE 4.2/ 5.0/ 6.0/7.0

Linux OS (Kernel 2.6 and X-Window mode)
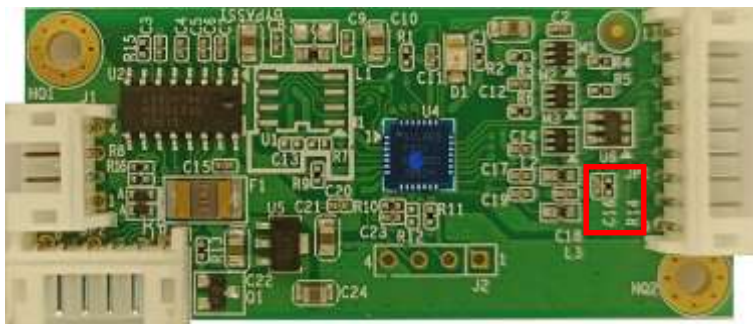
QNX 6.4.1/ 6.5 (Inbox support)

Mechanical Size： PM6500D5 and PM6500D8 are the same mechanical size.

Website: http://www.penmount.com
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PM6500D5 supports 5 wires touch panel, R14 is not mounted in the circuit.

PM6500D8 supports 4/8 wires touch panel, R14 is mounted in the circuit.

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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：

	PM6500D8		PM6500D5
	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 PM6500D control board：

-- PM6500D8：4、8 - wire，RS232 & USB COMBO Interface。

-- PM6500D5：5 - wire，RS232 & USB COMBO Interface。