

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.

Electrical Specifications:

Touch Screen:	for 4-, 5-, 8-wire analog-resistive type
Interface:	USB: full speed, 12MHz RS232: 19200 baud rate, N81, PnP mode
Touch Screen Controller:	PenMount 6000 Controller IC
Resolution:	2048 x 2048 (up to 4096 x 4096)
Size:	60 x 26 mm, two 3 mm Ø screw holes
Cursor Accuracy:	> 1 % (Active Area Diagonal of Touch Screen with PenMount Advanced Calibration Utility Support)
Diagnostic:	LED
Resistance Range:	50 - 1300 ohm
Operating Voltage:	+5V DC
Electro Static Discharge (ESD):	Air Discharge 15 KV, Contact Discharge 8 KV
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 = +5 V, Top Sheet Panel Resistance: 365 ohm, Bottom Sheet Panel Resistance: 660 ohm)

Changes that contribute to technical improvement are subject to alternations

				Datum	Name	Touch Controller Combo Board USB and RS232 4-, 5-, 8-wire SPEZIFICATIONS PenMount 6500A Manufactured by Apex Material Technology Corp.	
				Bearb	20.07.11		Maurer
				Gepr.	20.07.11		Maurer
				Vert.			
				EDV-Datasheet			
				don't change manually			
				 SCHURTER ELECTRONIC COMPONENTS		H 1070.0068	
a		21.05.12	Maurer	D 79346 Eendingen		page 1 of 4 Index: a	
Zu	Änd.	Datum	Name				

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:

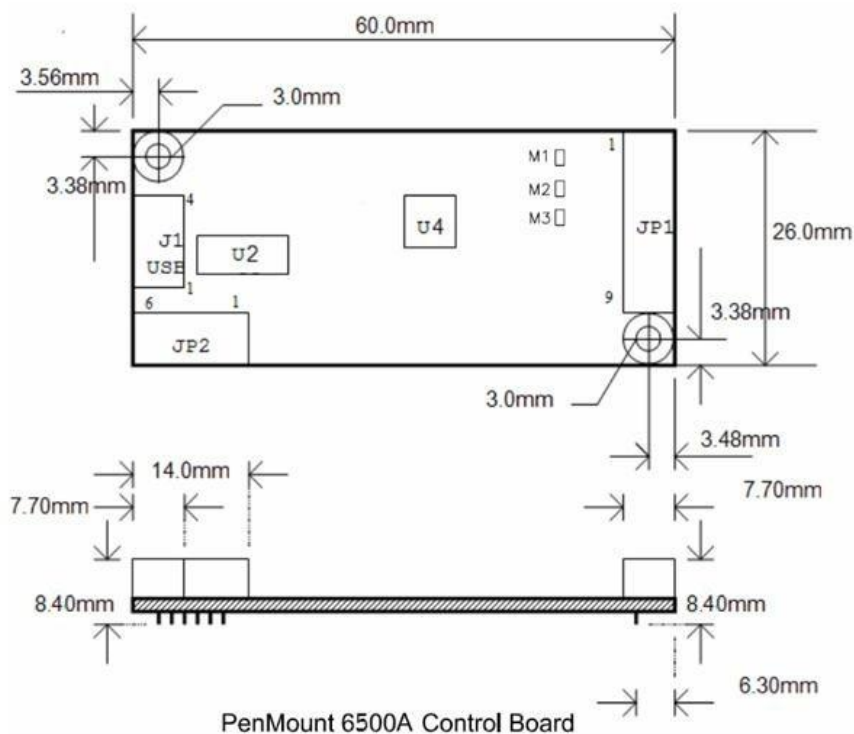
Windows 2000/ XP/ XPE/ 2003/ 2008/ Vista/ 7
 WinCE 4.2/ 5.0/ 6.0
 Linux OS (Kernel 2.6 and X-Window mode)
 QNX 6.4.1/ 6.5 (Inbox support)

Updated driver overview and download:

<http://www.amtouch.com.tw/support-downloads/penmount-drivers-and-utilities/>

Mechanical Size

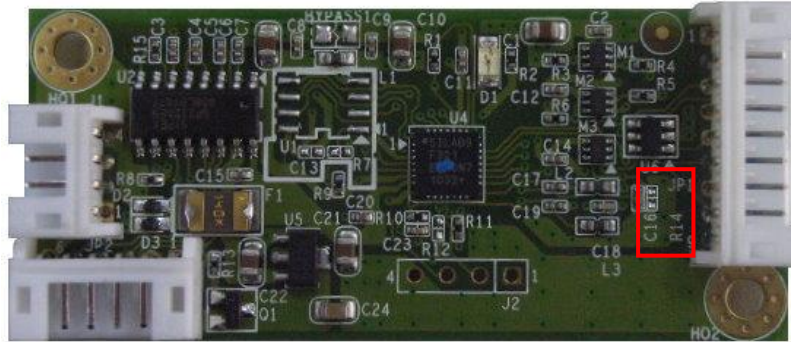
PM 6500A5 and PM 6500A8 are the same mechanical size.



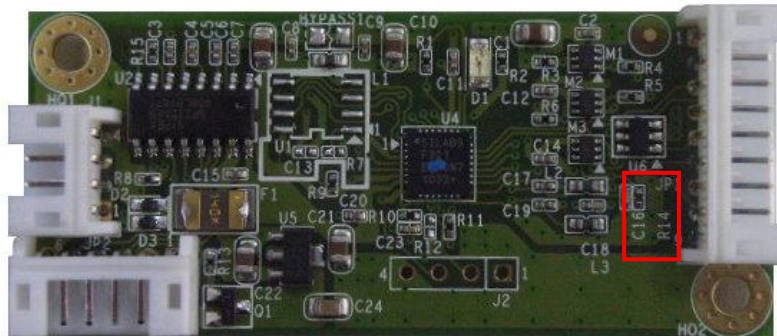
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			EDV-Datasheet			<p>don't change manually</p>
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Zu	Änd.	Datum	Name	D 79346 Endingen		page 2 of 4 Index: a

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



PM6500A8 supports 4/8 wires touch panel, there's a 0 ohm resistance of R14 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 :

	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

Item Numbers

1070.0068.01	PM 6500 A8	cable set 4-wire ZIF	USB	connector with cable 450 mm
1070.0068.02	PM 6500 A8	cable set 4-wire AMPC	USB	connector with cable 450 mm
1070.0068.03	PM 6500 A8	cable set 8-wire AMPC	USB	connector with cable 450 mm
1070.0068.04	PM 6500 A5	cable set 5-wire AMPC	USB	connector with cable 450 mm
1070.0068.11	PM 6500 A8	cable set 4-wire ZIF	RS232	connector with cable 450 mm
1070.0068.12	PM 6500 A8	cable set 4-wire AMPC	RS232	connector with cable 450 mm
1070.0068.13	PM 6500 A8	cable set 8-wire AMPC	RS232	connector with cable 450 mm
1070.0068.14	PM 6500 A5	cable set 5-wire AMPC	RS232	connector with cable 450 mm

USB cable, type A, 1500 mm / RS232 cable, with sub-D connector 9-pin, 450mm

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