

1. PenMount Controller Support

- PemMount 9000 series (Serial interface, 19200 / 9600 bps)
- PemMount 6000 series (USB interface, Serial interface, 19200 / 9600 bps)
- PemMount 5000 series (USB interface)
- PemMount P2 series (USB interface, Serial interface, 38400 bps)

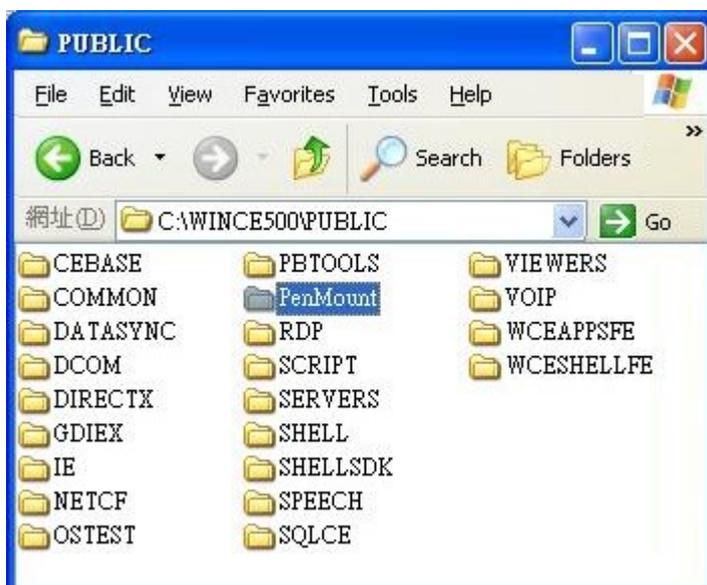
2. Driver Setup

The contents of this package are PenMount driver devices for Windows CE 5.0 and Windows Embedded CE 6.0 Platform Builder, which is used to build PenMount touch screen for supporting the image of Windows CE 5.0 or Windows Embedded CE 6.0 system. Please follow the procedures in the section below to setup the driver device.

A. The procedures to setup the driver devices to Windows CE 5.0 Platform Builder :

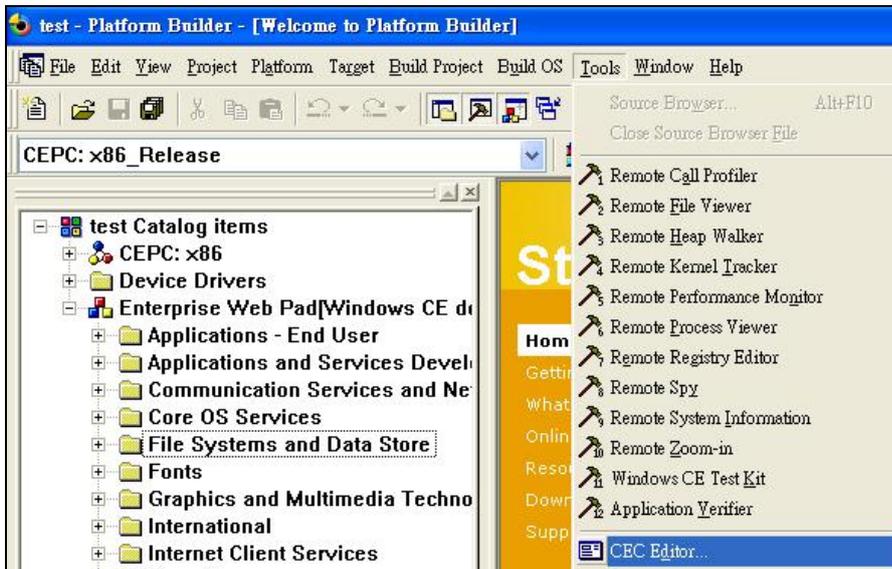
A-1. Please decompress the file: “PenMount WinCE5.0_6.0 x86_ARM_MIPSII Driver V3.4.2.zip”.

A “PenMount” directory will appear, please copy the whole directory into the Windows CE 5.0 public directory. For example, if Windows CE 5.0 root is C:\WINCE500, please put the PenMount directory in C:\WINCE500\PUBLIC.

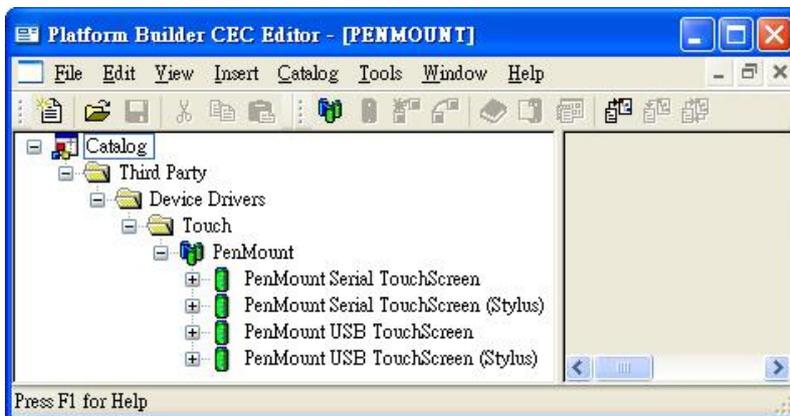


WinCE 5.0_6.0 x86_ARM_MIPSII Driver V3.4.2 README

A-2. Open “CEC Editor...” in Windows CE 5.0 Platform Builder.



A-3. Open “\$(_WINCEROOT)\PUBLIC\PenMount\CATALOG\ PENMOUNT.CEC” by CEC Editor.
PenMount driver devices can be found in CEC Editor View.

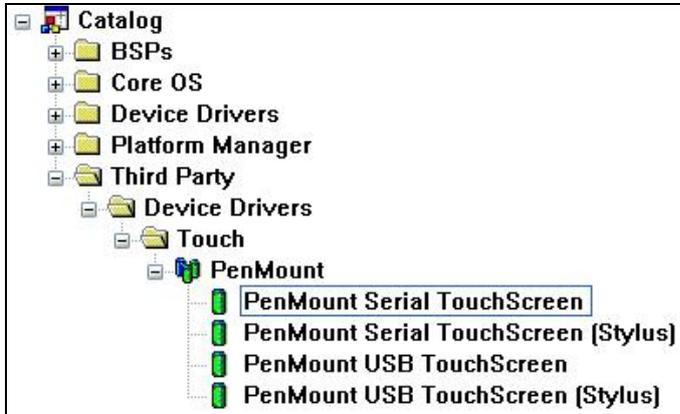


A-4. Add PenMount driver to Catalog.



WinCE 5.0_6.0 x86_ARM_MIPSII Driver V3.4.2 README

A-5. PenMount driver devices can be found in [Third Party] > [Device Drivers] > [Touch] > [PenMount] in Catalog Items View. There are four components that PenMount supports :



“PenMount Serial TouchScreen” & “PenMount Serial TouchScreen (Stylus)”:

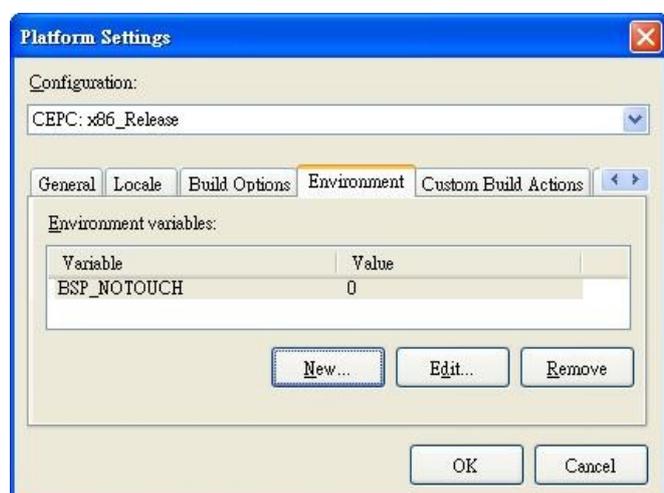
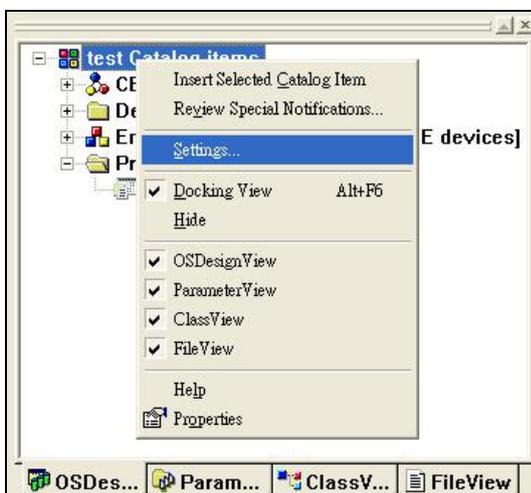
The components are for PenMount serial interface. Please follow the instructions in section C and change the values in \$(_WINCEROOT)\PUBLIC\PenMount\FILES\PenMount.reg.

“PenMount USB TouchScreen”& “PenMount USB TouchScreen (Stylus)”:

The components are for PenMount USB interface. The PenMount USB driver device can automatically determine the controller type, so there is no need to change any settings in PenMount.reg.

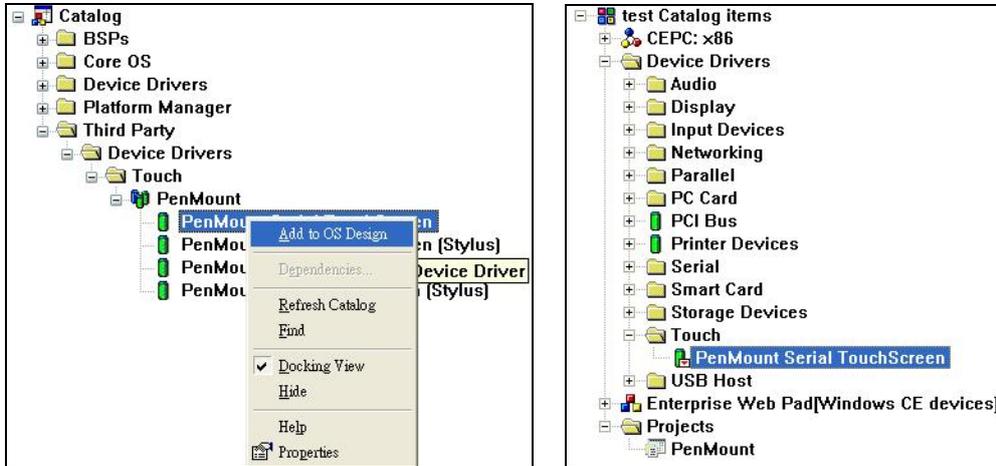
Please check the driver device according to which interface PenMount controller uses.

The driver’s name with “Stylus” must work with Microsoft stylus calibration. Please click mouse’s right button on the “Calalog items” and input “BSP_NOTOUCH=0” in [Settings...] > [Environment] to add Microsoft stylus calibration in your WinCE 5.0 system image.

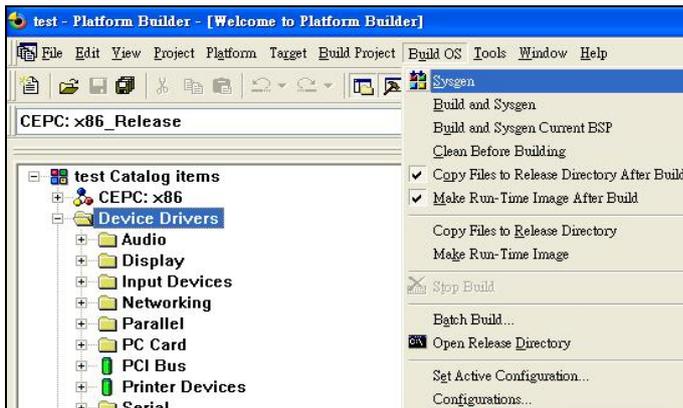


WinCE 5.0_6.0 x86_ARM_MIPSII Driver V3.4.2 README

A-6. After adding PenMount driver device to OSDesign, a “PenMount ... TouchScreen” subproject will appear in your OSDesign View.



A-7. Start building WinCE5.0 image.



A-8. The process will be finished without any error.

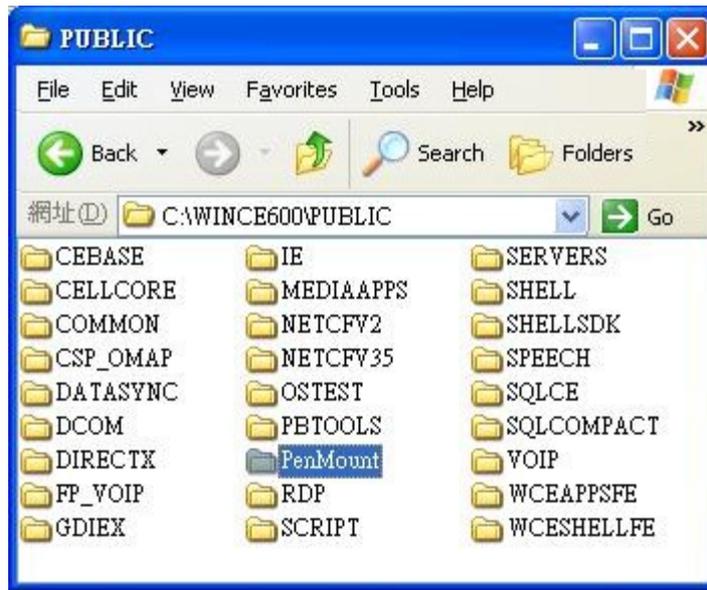


WinCE 5.0_6.0 x86_ARM_MIPSII Driver V3.4.2 README

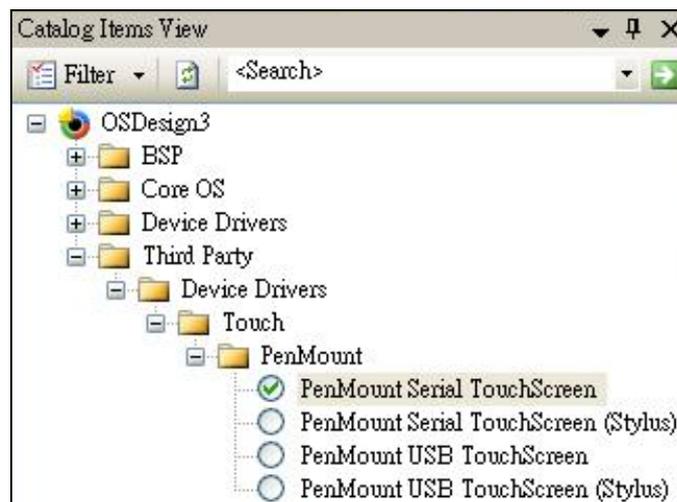
B. The procedures to setup the driver device in Windows Embedded CE 6.0 Platform Builder :

B-1. Please decompress the file “PenMount WinCE5.0_6.0 x86_ARM7_MIPSII Driver V3.4.zip”.

A “PenMount” directory will appear, please copy the whole directory into Windows Embedded CE 6.0 public directory. For example, if the Windows Embedded CE 6.0 root is C:\WINCE600, please put PenMount directory in C:\WINCE600\PUBLIC.



B-2. Open your OSDesign project in Microsoft Visual Studio 2005. PenMount driver devices can be found in [Third Party] > [Device Drivers] > [Touch] > [PenMount] in Catalog Items View. There are four components that PenMount supports :



WinCE 5.0_6.0 x86_ARM_MIPSII Driver V3.4.2 README

“PenMount Serial TouchScreen”& “PenMount Serial TouchScreen (Stylus)”:

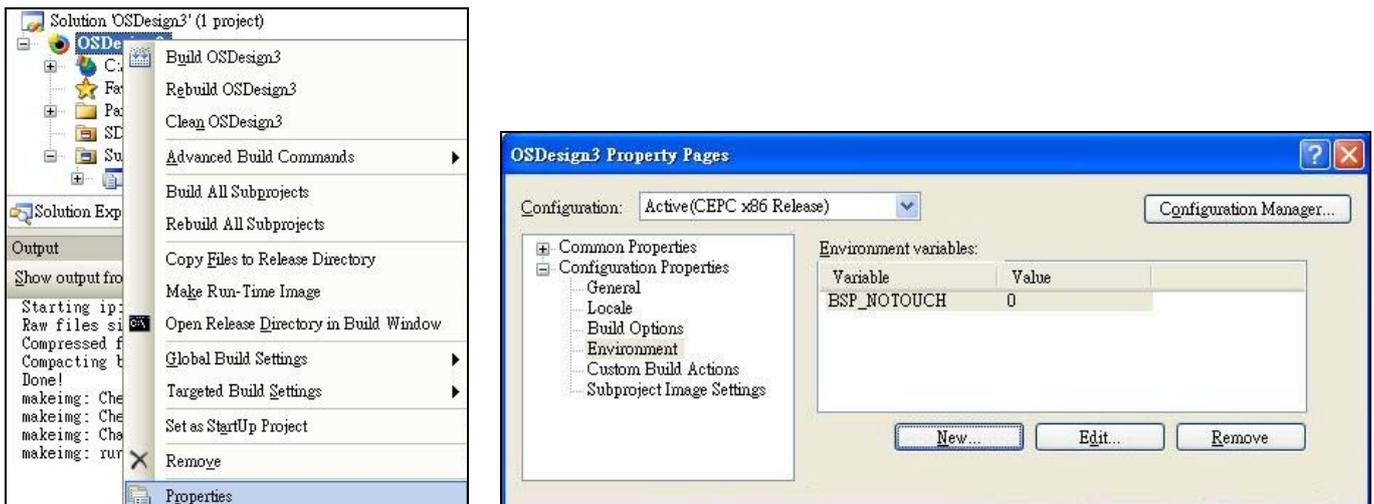
The components are for PenMount serial interface. Please follow the instructions in section C and change the values in \$(_WINCEROOT)\PUBLIC\PenMount\FILES\PenMount.reg.

“PenMount USB TouchScreen”& “PenMount USB TouchScreen (Stylus)”:

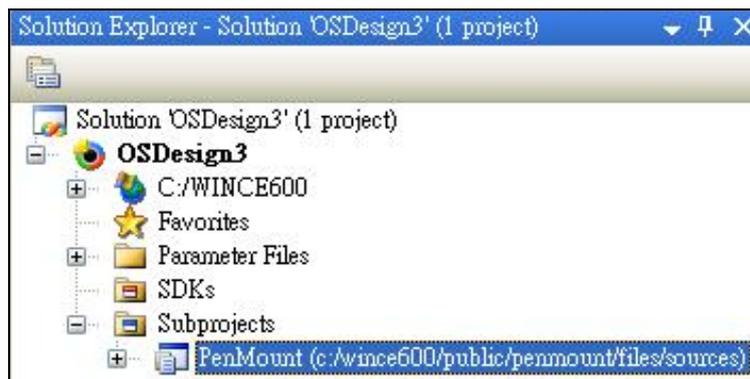
The components are for PenMount USB interface. PenMount USB driver device can automatically determine the controller type, so there is no need to change any settings in PenMount.reg.

Please check the driver device according to which interface PenMount controller uses.

The driver’s name with “Stylus” must work with Microsoft stylus calibration. Please click mouse’s right button on the OSDesign project and input “BSP_NOTOUCH=0” in [Properties] > [Configuration Properties] > [Environment] to add Microsoft stylus calibration in your WinCE 6.0 system image.

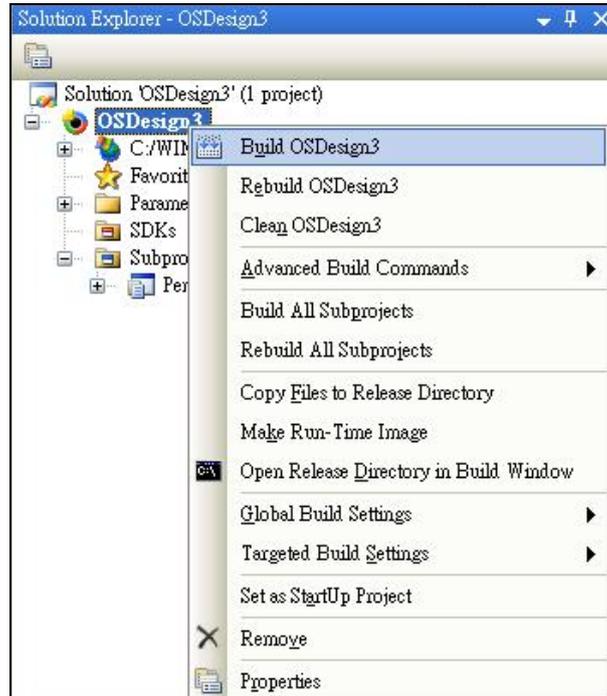


B-3. After adding PenMount driver device, a “PenMount (c:/wince600/...)” subproject will appear in your OSDesign project.

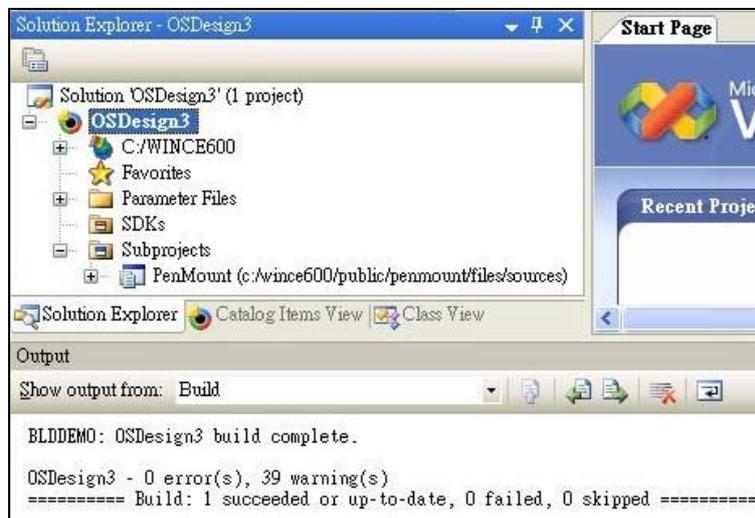


WinCE 5.0_6.0 x86_ARM_MIPSII Driver V3.4.2 README

B-4. Click the right button of the mouse on OSDesign project to start building WinCE6.0 image.



B-5. The process will be finished without any error.



WinCE 5.0_6.0 x86_ARM_MIPSII Driver V3.4.2 README

C. PenMount RS-232 interface configurations :

According to PenMount serial hardware settings in your system, please setup the registry settings correctly in PenMount.reg. The following is the default settings in PenMount.reg file.

```
[HKEY_LOCAL_MACHINE\Drivers\BuiltIn\PMSEr]
  "Dll"    = "PMSEr.dll"
  "Prefix" = "PMT"
  "Index"  = dword:2
  "Order"  = dword:3
  "Port"   = dword:1
IF PMT_STYLUS
  "Stylus" = dword:1
ENDIF

; "Protocol" = dword:1      ; PM9000
  "Protocol" = dword:3      ; PM6000
; "Protocol" = dword:5      ; PM PCI
; "Baudrate" = dword:2580   ; 9600
  "Baudrate" = dword:4B00   ; 19200
; "Baudrate" = dword:9600   ; 38400
```

C-1. COM Port :

Please setup the Port registry value at the COM port where PenMount connects with. For example, if PenMount connects with COM3, please setup the Port registry value for 3.

C-2. PenMount Controller Model :

Please setup the Model registry value for 1, 3 or 5, depending on which PenMount controller is used. The default value is 3 for PenMount 6000 controller.

C-3. Serial Baudrate :

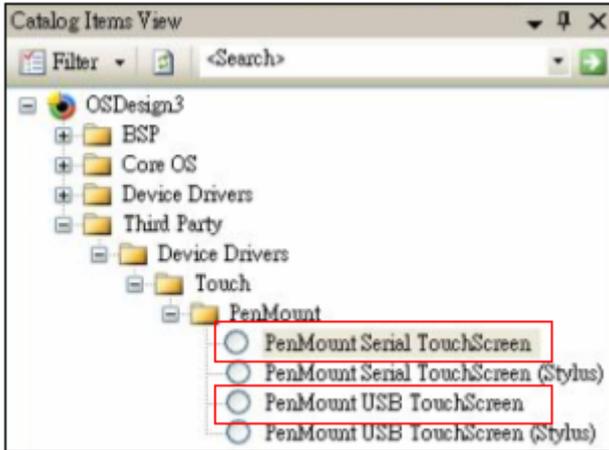
Please setup the BaudRate registry value for 2580, 4B00 or 9600, depending on which baudrate is used by PenMount controller. Please notice that these values base on hexadecimal, which are 9600, 19200 and 38400 in decimal format. The default value is 4B00, which is 19200 bps for PenMount 6000 controller.

Note : P2 controller baudrate is 38400 bps, PM6000 and PM9000 controller baudrate is 9600 or 19200 bps.

WinCE 5.0_6.0 x86_ARM_MIPSII Driver V3.4.2 README

D. Other configurations :

About calibration data save to EEPROM only support standard driver and default is enabled. The standard driver means you choose no mark stylus driver like bellow picture red mark.



If you set "DisableEEPROM" = dword:1 in the path for usb or serial of the PenMount.reg file that will disable calibration data save to EEPROM function.

Note. Save to EEPROM function also need firmware of controller support , now support PM6000 (firmware 6000.3.0.0 later), PM9000 (firmware E2.2 and C2.2 later) .

3. Application utility



- pm-draw : for customer draw on full screen.
- pm-tchcalib : provide 4 and 9 points calibrate method, 4 points for quickly calibration , 9 points for better adjust position.
- Right button : click the button to call right button function only for standard driver version.

Note: If you don't know how to discriminate the standard and stylus please go to section D.