在 Windows XP Embedded 中使用 I/O 卡

本文將介紹如何在 Microsoft Windows XP Embedded 系統中加入泓格的 I/O 卡驅動程式,使該卡可以正確的運作。

單機安裝驅動程式

第一種方式,如同一般的 Windows XP 系統一樣,待 Windows XP Embedded 建置完成且正常啓動之後,直接在該系統上執行泓格提供的安裝程式即可。泓格所提供的 Windows 2000 驅動程式完全相容於 Windows XP 以及 Windows XP Embedded 系統。

多機安裝驅動程式

第二種方式,則是預先將相關的驅動程式做成元件並加入 Windows XP Embedded 中,使其建置 OS image 時就已包含了該驅動程式。此種作法適合大量系統之建置。本文接著就來介紹元件的製作流程

- 1. 安裝板卡的驅動程式,重新開機後測試板卡是否可正常運作。 此步驟是用來確認您將要加入 XPe (XP Embedded)中的驅動程式是可以正確工作的版本。
- 2. 開啓 "Microsoft Component Designer"程式。由選單 "File / Import..." 匯入 inf 安 裝資訊檔。



接著會出現" Choose File for Import"對話窗。
 將路徑切換至驅動程式所安裝的目錄(例:C:\DAQPro\PIO-DIO_Win2K\Driver),
 選取" 檔案類型(T)"為" Setup Information Files (*.inf)",
 點選所需的安裝資訊檔(例: PIODIO.inf)後按下"開啓(0)"。

4. 於" INF Processing Options" 對話窗中,選取"Automatic"後按" OK"。

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5. 於" Import File" 對話窗中,按" Start"。

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 8. 接著將上述新增加的 Repository 重新命名,在其"Name"欄位做修改(例: PIO-DIO Series DI/DO Cards Repository)。並於"Source Path"欄位中指定其檔案來源(例: C:\DAQPro\PIO-DIO_Win2K\Driver)。註: 建議將 s1d 與所需檔案放在相同磁碟機上。



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13.展開 component 點選" Files"項目,我們可以看到先前(步驟 2 ~ 6)匯入的 INF 及其相關檔案(例: PIODIO.INF及PIO.sys)。接著按 mouse 右鍵,依序點選" Files / Add / File" 來加入其它所需的檔案。

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- 15.依前述步驟 13 ~ 14,再加入所需之 DLL 檔案(例: PIODIO.DLL),位置設為" %11%"(等於 Windows\System32 目錄)。 🖃 🚞 PIODIO.sld* Name 🔺 Path 😑 🗀 Windows XP Embedded Clien 📘 PIO.sys %10%\System32\Drivers %17% 🖮 🚞 Components 📄 PIODIO.INF %12% 🖨 🌍 PIO-D168 Digital I/O Ca 📄 Napwnt.sys %11% 📄 PIODIO.dll 🔁 Group Memberships 📄 Files 🎒 Registry Data - 🞯 Component or Group 🐗 Build Order Depende 📃 Resources 16.在"Registry Data"項目上按 mouse 右鍵,依序點選"Add / Registry Branch"來加入 Napwnt.sys 的註冊資訊。(Note: PnP driver 會在系統 PnP 階段時載入,不需先註冊。) 🖃 🚞 PIODIO.sld* Registry Path 🛛 🔺 😑 🗀 Windows XP Embedded Clien 😑 🗀 Components 😑 🧠 PIO-D168 Digital I/O Ca 🝓 Group Memberships 📄 Files Registry Data Add Registry <u>D</u>ata 🐗 Component or 🎒 Build Order D Registry Branch Paste
 - 17.在"Add Component Registry Branch" 對話窗中,點選"HKEY_LOCAL_MACHINE"下的 "SYSTEM\CurrentControlSet\Services\Napwnt"項目。然後按"OK"鍵離開。

Resources

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22.在"Add Component Group Memberships"對話窗中,點選剛才建立的 Package(例: PIO-DIO Series DI/DO Cards Package),然後按"OK"完成。

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- 23.重覆步驟 11 ~ 22,依序為**每一個 component** 加入 **Repository**, **Group Memberships**, **Files** 及 **Registry data** 等資訊。其中 Files 以及 Registry data項目,可以用"**複製**"及"**貼上** "的方式來簡化操作。
- 24. 按功能表"File / Save" 來儲存此元件資訊。
- 25. 按功能表" Tools / Component Database Manager"。

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26.在"Database"頁次中,按"Import..."。

Database connection Target Designer and Component Desig function correctly	ner must connect to a component database server to
Database server location:	
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Import	
Import an SLD file into the component	database.

27.在"Import SLD"對話窗中選取先前 Component Designer 所製作的元件資訊檔(SLD file, 例:PIODIO.sld),勾選"Copy repository files to repository root"欄位,然後按 "Import" 匯入。

Public P4\Repositories\
P4/Repositories/
by repository files to repository root



32.於" Components" 列表中,選取所需的硬體元件(例: PIO-D144 Digital I/O Card),按 mouse 右鍵點選" Add" 。

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33.將其它所需的硬體元件(例: PIO-D168 Digital I/O Card, PIO-D24/D56 Digital I/O Card, PIO-D64/D48 Digital I/O Card, PIO-D96 Digital I/O Card及PIO-DIO Series Digital I/O Card)依上述步驟 32 ——加入。

