XP–8X4X CE6 OS Release Notes

Version 1.3.4.0   [May 8, 2012]

Key Features

Features	Supported	Description
OS Language	Yes	Windows CE 6.0 Multi-language edition ● English ● French ● German ● Italian ● Japanese ● Korean ● Russian ● Spanish ● Simplified Chinese ● Traditional Chinese
.NET Compact Framework 3.5	Yes	
SQL CE 3.5	Yes	SQL CE 3.5 (3.5.8080.0)
FTP Server	Yes	
HTTP Server	Yes	
Telnet	Yes	
Printer	Yes (PCL 6)	For HP Laser Jet printers using a USB interface and an Ethernet connection (over the network neighborhood)
Touch Panel	Yes	Supports the RS-232 and USB interfaces
Multi-Serial Module	Yes	i-8112iW (RS-232 *2) i-8114W (RS-232 *4) i-8114iW (RS-232 *4) i-8142iW (RS-485 *2) i-8144iW (RS-485 *4) The maximum number of ports can be extended to 28 (I.e., 7 slots * 4 ports per module = max. of 28 ports)

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Abstract

This release changes the procedure for restoring the registry to the factory default settings, reduces the average daily deviation, fixes the InduSoft performance in earlier OS versions, and allows the user to rename multiple Serial ports and the USB disk.

Change

- In the previous version, restoring the registry to the default factory settings was achieved by simply adjusting the module, which made it too easy to accidentally reset the module if the rotary switch was moved to the 1 position by mistake and the XP-8000-Atom-CE6 was powered on. To prevent this possibility, you are now required to manually confirm the restoration action. See page 5 for a detailed description of the procedure for restoring the default registry settings.

Improvements

- Reduced the average daily deviation of the system time from the RTC time to 1 second.

New Features

- Ability to modify multiple serial port names. The user can modify MSA1, MSA2, MSA3, etc to COM6, COM7, COM8, etc.
- Ability to modify the USB disk name. The default USB disk name is "Hard disk". The USB disk name can be modified to any valid name.

Bugs Fixed

- Fixed the issue where InduSoft performance was slower in previous OS versions.

XPAC SDK DLL Version 2.0.1.1 　[Apr. 2, 2012]

Bug Fixed

- Fixed a bug in the uart_Send, uart_Recv, uart_SendCmd, uart_SetTimeOut, uart_BinRecv, uart_BinSend, uart_BinSendCmd and pac_GetBPTimerTimeTick_ms functions.

New

- Added support for detecting I-7000 modules in the pac_ModuleExists function.
- Added a reserved memory segment so that the OS is able to save the system information. See page 6 for a detailed description.
- Added a set of functions with the name ending in Ext, such as uart_WriteExt, uart_ReadExt, uart_SendExt, uart_RecvExt and uart_SendCmdExt. These functions are similar to uart_Write, uart_Read, uart_Send, uart_Recv and uart_SendCmd, but include a buffer length parameter that can be need for specifying the length of the data in order to prevent buffer overflow problems.

XPAC utility Version 1.1.0.2 　[Mar. 14, 2012]

New
- Added the ability to modify multiple Serial port names
- When the user restores the default registry settings, the user language is also set to the default settings (English).
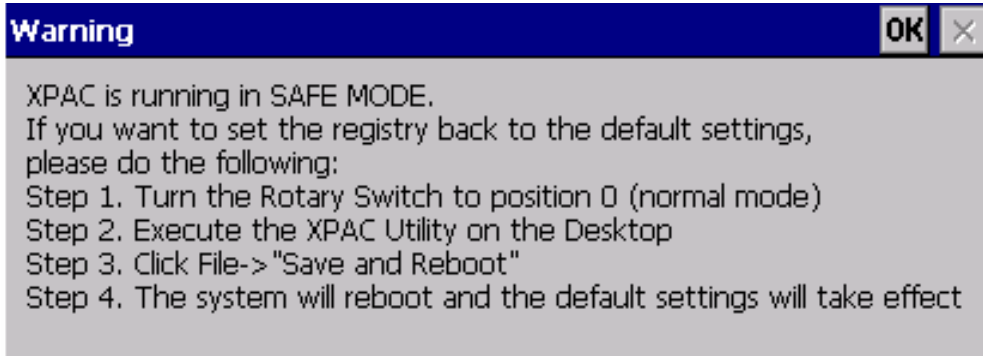
How to restore the registry to the factory default settings

Step 1: Power off the XP-8X4X-Atom-CE6 module.

Step 2: Turn the rotary switch to the "1" position.

Step 3: Power on the XP-8X4X-Atom-CE6 module.

Step 4: Either follow the instructions given in the pop-up dialog box, or continue to step 5.

Step 5: Turn the rotary switch to the "0" position (Normal mode).

Step 6: Launch the XPAC Utility, than click "Save and Reboot" from the "File" menu to reboot the controller.

After the XP-8X4X-Atom-CE6 finishes rebooting, the registry will be restored to the factory default settings.

XPAC SDK version 2.0.1.1 memory protected area

The EEPROM architecture is as follows:
- 0 ~ 0x1FFF (8 KB) for users
- 0x2000 ~ 0x3FFF (8 KB) is reserved for the system

The size of the SRAM input range is only 0 ~ 0x6FFFF (448KB). Another 64KB of SRAM is reserved for the system.

Some important system information needs to be retained, so half of the EEPROM and one segment of the SRAM memory space required is reserved for this purpose.

The EEPROM and SRAM API functions for XPACSDK V1.3.4.0 or later will protect the reserved section, and will prevent access by users.

OS and SDK Compatibility

	SDK Version 2.0.1.1 or later	SDK Version 2.0.1.0 or earlier
OS: 1.3.4.0 or later	Yes	Not fully functional
OS: 1.3.3.0 or earlier	Yes	Yes

"Not fully functional" denotes that some of the OS functions may not work correctly or as excepted.

Note:
If an older program is coded to write data to the 0x2000 ~ 0x3FFF address of the EEPROM, or to the last segment of the SRAM using the SDK version 2.0.1.0 or earlier, the program may fail to write the data to the EEPROM or the SRAM using the SDK version 2.0.1.1 or later.
There are two ways to fix the problem
1. Modify the program so that the data is writhen to the 0~0x1FFF address of the EEPROM or the 0 ~ 0x6FFFF address of the SRAM.
2. Don't use the SDK version 2.0.1.1 or later.