XP–8X4X-Atom CE6 OS Release Note, Version 1.0.0.2 [Apr., 09, 2012]

OS Key Features:

Features	Supported	Description
OS Language	Yes	Windows CE 6.0 Multi-language Edition ● English ● German ● Russian ● French ● Spanish ● Japanese ● Italian ● Simplified Chinese ● Traditional Chinese ● Korean ● Portuguese
.NET Compact Framework 3.5	Yes	
SQL CE 3.5	Yes	SQL CE 3.5 (3.5.5386.0)
FTP Server	Yes	
HTTP Server	Yes	
Telnet	Yes	
Printer	Yes\(PCL 6)	Support for HP Laser Jet printers with USB and Ethernet interfaces
Touch Panel	Yes	Support for touch panels using RS-232 and USB interfaces
Multiport Serial Communication Module	Yes	A maximum of 28 external COM ports can be added to an XP-8x4x-Atom-CE6. (e.g., 7 modules * 4 ports per module = 28 ports) 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)

OS and BIOS compatibility

BIOS version / OS version	R1.00.E0	R1.00.E1
OS 1.0.0.1 and later	*Not working*	**OK**
OS 1.0.0.0	OK	OK

* See page 3 for details of how to determine the current version of the BIOS on your controller

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How to determine the BIOS version

1. Power on the XP-8000-Atom-CE6 and press the "Pause Break" key on your PC keyboard to suspend the boot process.
2. Identity the version as shown below:
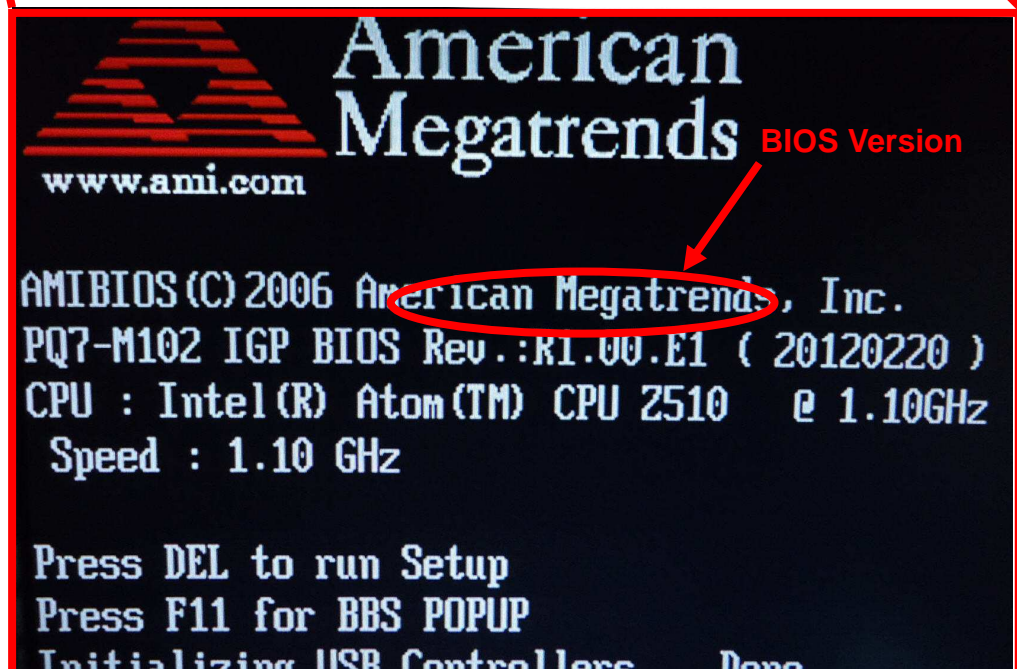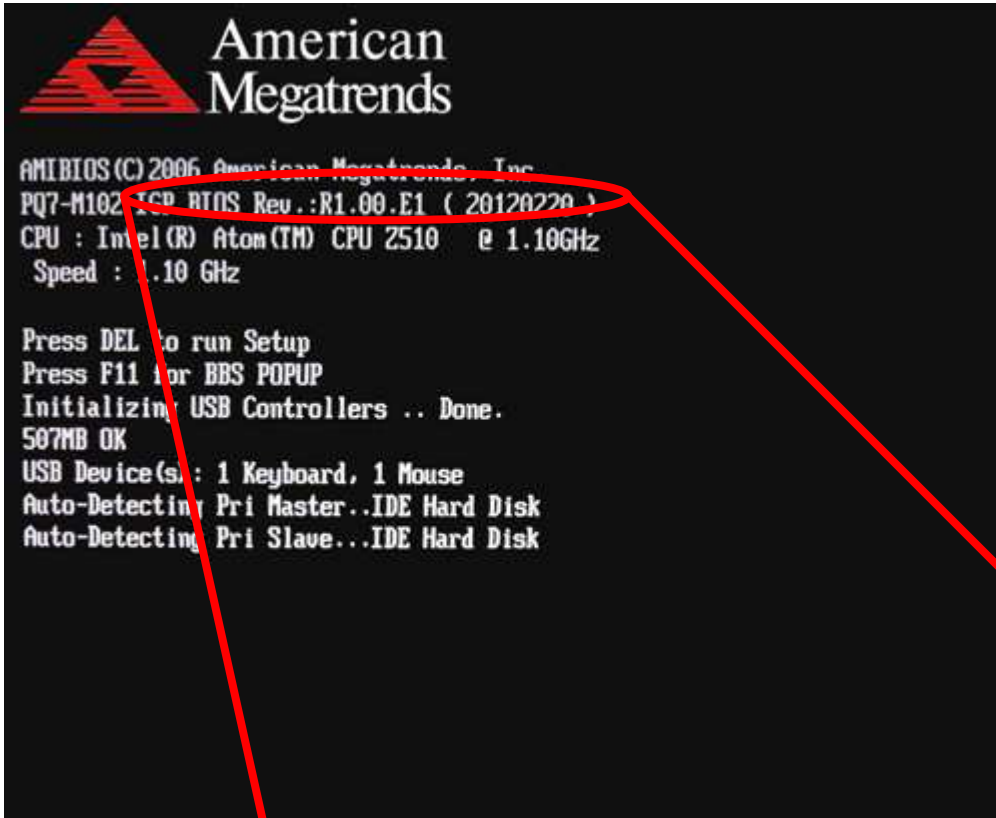
OS Version 1.2.0.0 Release Notes

The latest version of the OS fixes an issue when the interrupt retrigger function caused an error in the I-8K module and another issue that caused the registry to be restored to the factory default settings. Note that OS version 1.2.0.0 requires BIOS version R1.00.E1 or later. The BIOS version can be determined from the display during the initial boot up, as described on page 3.

New Feature

- The file system for the on board disk has been changed to FAT32 so that the full 8GB of disk.

Bug Fixes.

- Closed the interrupt retrigger function before the OS booting phase to avoid affecting the operation of I-8K modules with interrupt functions.
- Fixed an issue that sometimes caused the system to detect the wrong rotary switch ID during the OS booting phase which meant that the system registry settings where restore to the factory default value.

Toolkit Changes

All previous SDK packages have been unified and a new SDK has been created, known as the PACSDK.

The PACSDK.dll applies to C programs for the XPAC series replaces the previous SDK, XPACSDK_CE.dll. The PACNET.dll applies to .Net CF programs (C#, VB) for both the XPAC and WinPAC series replaces the previous SDKs, XPACNET.dll and WinPACNET.dll. For more details, refer to Appendix C, "What's New in PACSDK" in the PAC API user manual, which can be found at:

http://ftp.icpdas.com/pub/cd/xpac-atom-ce6/document/sdk/pac_standard_api_manual_1.1.0.pdf

- **PACSDK DLL Version 4.2.3.7   [May 21, 2013]**
  - ◆ Fixed an issue with the Pure_ReadModuleSafePowerOnValueDO function that occurred with when DO modules 16 channels.

- **PACNET DLL version 2.1.0.5 [May. 21, 2013]**
  - ◆ Fixed an issue with the GetErrorMessage function that returned an error message.

OS Version 1.1.0.0 [Feb, 21, 2013]

The issue related to detecting CF card after booting has been solved and support has been added for version 2.20 of the I-8144iW hardware. Note that the version 1.1.0.0 of the OS requires BIOS version: R1.00.E1. The BIOS version can be determined from the display during the initial boot up, as descried on page 3.

New Feature

- Support has been added for version 2.20 of the I-8144iW hardware.

Bug Fixes

- In the previous version, the CF card sometimes wouldn't be detected after booting. This issue has been solved in the latest version of the OS.

Toolkit Changes

All previous SDK packages have been unified and a new SDK has been created, known as the PACSDK.
The PACSDK.dll is linked to C programs for the XPAC series and replaces the previous SDK, XPACSDK_CE.dll. The PACNET.dll is used for .Net CF programs (C#, VB) for both the XPAC and WinPAC series and replaces the previous SDKs, XPACNET.dll and WinPACNET.dll.
For more details, refer to Appendix C, "What's New in PACSDK" in the PAC API user manual, which can be found at:
http://ftp.icpdas.com/pub/cd/xpac-atom-ce6/document/sdk/pac_standard_api_manual_1.1.0.pdf

- **PACSDK DLL Version 4.2.3.5   [Feb.18, 2013]**
    - Fixed an issue where calling the pub_GetSerialNumber function caused the Hardware WDT to malfunction.
    - Fixed an issue with the pac_WriteAO_MF, pac_WriteModulePowerOnValueAO_MF and pac_WriteModuleSafeValueAO_MF functions when reading or writing data in single channel AO modules.
    - Added the pac_ReadAO_MF, pac_ReadModulePowerOnValueAO_MF and pac_ReadModuleSafeValueAO_MF functions.
    - Fixed an issue where calling the pac_ReadDIO function to read data caused an error to occur on 8-channel DI modules.
    - Updated the pac_GetModuleName function to support 87K series modules,

XW512F, XW315W, XW511, XW110i and XW608.

■ **PACNET DLL version 2.1.0.4 [Feb. 21, 2012]**

◆ Added the ReadAO_MF, ReadModulePowerOnValueAO_MF and pac_ReadModuleSafeValueAO_MF functions.

OS Version 1.0.0.2 [Aug, 10, 2012]

This version of the OS now includes support for the backplane timer, network sharing folders for a PC client read/write files and PPPoE dial-up connections, and fixed the issue related to the display of certain Simplified Chinese characters. Also fixed is an issue where the number of ports that the Multi-Serial port driver attempted to open didn't match the number of ports that were supported by the hardware. The issue of network setting not being saved has also been fixed. Note that the version 1.0.0.2 of the OS requires BIOS version: R1.00.E1. The BIOS version can be determined from the display during the initial boot up, as descried on page 3.

New Features

- Added a backplane timer that provides a higher accuracy and a smaller deviation.
- Added support for PPPoE connections. Connections to the Internet or LAN can now be made via the PPPoE dial-up function. For more details regarding PPPoE dial-up settings, refer to page 7.
- Added support for network sharing folders. Network sharing folders can now be set in the XPAC Utility, meaning that the PC can now read/write files from/to network sharing folders. For more details regarding network sharing folder settings, refer to page 11.

Bug Fixes

- In the pervious version, there was an issue where the number of ports that the Multi-Serial port driver attempted to open didn't match the number of ports supported by the hardware. For example, if a device containing two Multi-Serial ports (e.g. I-8112iW and I-8142iW) was inserted, the OS would show that there were four ports. This issue has been fixed in the latest version of the OS.
- The registry value "priority256" for COM1 and COM2 has been added.
- In the previous version, if your network settings weren't set using the XPAC Utility, they couldn't be saved and would be lost after rebooting. This issue has been fixed in the latest version of the OS.
- Canceled the "Allow connection with desktop computer when device is attached" pop-up item in the "PC-Connection" function to prevent the message window from interrupting with the user.
- In the previous version, there was an issue when displaying certain Simplified Chinese characters. This issue has now been fixed in the latest version of the OS.

Toolkit Changes

- ■ **XPAC SDK DLL Version 2.0.1.2**   [Aug.10, 2012]
  - ◆ Fixed the issue where calls to the uart_Close function instructing the COM port to close caused a memory error.

- ■ **XPAC Utility Version 1.1.0.3**   [Aug.10, 2012]
  - ◆ Added the "File Server Settings" page, which can be used to configure the network sharing folders.
  - ◆ Added the "General2" page, which be used to modify the name of the USB drive/disk.
  - ◆ Added a function that allows Multi-Serial Port names MSA1, MSA2…MSD8 to be modified to COM6, COM7…COM34. For more details regarding these settings, refer to page 15.
  - ◆ Added the "Backplane Compatibility" page, which can be used to modify the XPAC COM port sequence (COM1~COM5) to match the WinPAC COM port sequence (COM0~COM4).
- ■ **XPAC Web Utility version 1.0.0.0**   [Aug.10, 2012]
  - ◆ The XPAC Web Utility is the web edition of the XPAC Utility for users to configure the XPAC remotly by using a standard web browser on PC. The operation of the XPAC Web Utility is now almost the same as the XPAC Utility. For more details, refer to page 17.

OS Version 1.0.0.1 [April, 21, 2012]

This release changes the procedure for restoring the registry to the factory default settings, reduces the average daily deviation, fixes the issue where the USB ports may not work after boot up, and adds support for interrupt events triggered by a falling edge signal from the backplane. OS 1.0.0.1 requires BIOS version R1.00.E. You can determine the BIOS version by checking the boot screen displayed during initial boot up, as description on page 3.

Change

■ In the previous version, restoring the registry to the default factory settings was achieved by simply module which made it too easy to reset the module accidentally setting the rotary switch to the 1 position and powering on the XP-8000-Atom-CE6. To prevent this, you are now requires to manually confirm the action.

Improvements

■ Reduced the average daily deviation to between +2 and +3 seconds.
■ Added support for interrupt events triggered by a falling edge signal from the backplane.

Bug fixes

■ Fixed the issue where the USB ports may not work after boot up.
Note that OS 1.0.0.1 requires BIOS version R1.00.E1. See page 3 for details of how to determine the BIOS version.

Toolkit Changes

■ **XPAC Utility version 1.0.3.5**   [Mar.9, 2012]
When the user restores the default registry settings, the user language is also set to the default settings (English).

■ **AutoInit.exe version 1.1.0.0**   [Apr. 9, 2012]
When the XP-8000-Atom-CE6 module is booted up with the rotary switch set to

the 1 position, AutoInit.exe displays a dialog box listing the remaining steps in the procedure for restoring the default registry settings.

■ **XPAC SDK DLL version 2.0.1.1**　　[Apr.2, 2012]

1. Added a set of functions with name ending in Ext such as uart_WriteExt, uart_ReadExt, uart_SendExt, uart_RecvExt and uart_SendCmdExt. These functions are similar to uart_Write, art_Read, uart_Send, uart_Recv and uart_SendCmd, but add buffer length parameter for specifying the length of data to avoid buffer overflow problems.

2. Fixed a bug in uart_Send, uart_Recv, uart_SendCmd, uart_SetTimeOut, uart_BinRecv, uart_BinSend, uart_BinSendCmd and pac_GetBPTimerTimeTick_ms.

3. Added support for detecting I-7000 modules in the pac_ModuleExists function.

4. Added reserved memory segment to let the OS be able to save system information.

OS Version 1.0.0.0 [March, 18, 2011]

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