**ICP DAS**

2

1

Compact PAC



XP-8041

XP-8141-Atom

XP-8341

XP-8341-Atom

XP-8741

XP-8741-Atom

## ▣ Features

- LX800, 500 MHz CPU or Atom Z520, 1.33 GHz CPU
- Windows Embedded Standard 2009
- SQL Server 2005 Express Edition
- Audio with Microphone-In and Earphone-Out
- VGA Port Output
- Support eLogger HMI
- Redundant Power Inputs
- Operating Temperature: -25 ~ +75°C

CE  FC  RoHS

## ◼ Introduction

XP-8x41-Atom series is the new generation Windows Embedded Standard 2009 based PACs of XP-8x41. It is equipped with an Intel Atom Z520 Series CPU at 1.33GHz, while XP-8x41 is equipped with a LX800 CPU at 500 MHz. They provide a variety of connectivity options (VGA, USB, Ethernet, RS-232/485) and 0/1/3/7 I/O slots for high performance parallel I/O modules (high profile I-8K Series) and serial I/O modules (high profile I-87K series). The benefits of running Windows Embedded Standard 2009 include

- Enhanced Write Filter (EWF): Protects disk against improper disk write operations.
- Same Win32 API: Makes developing applications just like Windows XP Professional developers do.

This makes almost every PC-based program can be easily ported to XPAC-Atom and effectively reduces the system development efforts and shortens the time to market.

For software copy protection, programmers can design software based on the 64-bit hardware serial number for making software copy protected.

## ◼ Windows Embedded Standard 2009



Microsoft **Windows Embedded Standard 2009**

Windows Embedded Standard 2009 has the same Win32 API as Windows XP Professional. Most popular applications on desktop can be easily ported to Windows Embedded Standard 2009. It's also compatible with rich Windows IDEs, such as Visual studio, Delphi, Borland C++ Builder. These points effectively reduce the efforts of developments and shorten the time to market.

The key features are

- ◆ Full Win32 API
- ◆ Remote Desktop Protocol 5.1
- ◆ Silverlight 4.0
- ◆ Enhanced Write Filter
- ◆ MS SQL Server 2008 R2 Express
- ◆ Microsoft .NET Framework 3.5

## ▪ Specifications

| Models | XP-8041 | XP-8341 | XP-8741 | XP-8141-Atom | XP-8341-Atom | XP-8741-Atom |
|---|---|---|---|---|---|---|
| **System Software** | | | | | | |
| OS | Microsoft Windows Embedded Standard 2009 | | | | | |
| .Net Compact Framework | 3.5 | | | | | |
| Embedded Service | FTP Server, Internet Information Service 5.1, ASP (Java Script, VB Script), SQL Server 2005 Express | | | | | |
| SDK Provided | Dll for VC, VB, Delphi, BCB, Visual Studio .NET 2005/2008 | | | | | |
| Multilanguage Support | English, German, French, Spanish, Russian, Italian, Czech, Japanese, Korean, Simplified Chinese, Traditional Chinese | | | | | |
| **CPU Module** | | | | | | |
| CPU | LX800, 500 MHz | | | Atom Z520, 1.33 GHz | | |
| System Memory | 1 GB DDR SDRAM | | | 1 GB DDR2 SDRAM | | |
| Dual Battery Backup SRAM | 512 KB; data valid up to 5 years | | | | | |
| Flash | 4 GB | | | 16 GB | | |
| EEPROM | 16 KB | | | | | |
| CF Card | 8 GB (support up to 32 GB) | | | | | |
| RTC (Real Time Clock) | Provide second, minute, hour, date, day of week, month, year | | | | | |
| Programmable LED Indicator | - | | | 2 | | |
| 64-bit Hardware Serial Number | Yes, for Software Copy Protection | | | | | |
| Dual Watchdog Timers | Yes | | | | | |
| Rotary Switch | Yes (0 ~ 9) | | | | | |
| DIP Switch | - | Yes (8 bits) | | | | |
| Audio | - | | | Microphone-In and Earphone-Out | | |
| **VGA & Communication Ports** | | | | | | |
| VGA | Yes, (resolution: 1600 x 1200, 1024 x 768, 800 x 600 , 640 x 480) | | | | | |
| Ethernet (Giga bit) | RJ-45 x 2, 10/100/1000 Base-T (Auto-negotiating, Auto MDI/MDI-X, LED indicators) | | | | | |
| USB 2.0 | 2 | | | 4 | | |
| COM 1 | RS-232 (RxD, TxD and GND); non-isolated | Internal communication with the high profile I-87K series modules in slots | | | | |
| COM 2 | RS-232 (RxD, TxD and GND); non-isolated | | | | | |
| COM 3 | RS-485 (Data+, Data-) with internal self-tuner ASIC; 3000 $V_{DC}$ isolated | | | | | |
| COM 4 | RS-232/RS-485 (RxD, TxD, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); non-isolated | | | | | |
| COM 5 | RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI and GND); non-isolated | | | | | |
| **I/O Expansion Slots** | | | | | | |
| Slot Number | 0 | 3 | 7 | 1 | 3 | 7 |
| **Mechanical** | | | | | | |
| Dimensions (W x L x H) | 137 x 132 x 125 mm | 231 x 132 x 125 mm | 355 x 132 x 125 mm | 169 x 132 x 125 mm | 231 x 132  x 125 mm | 355 x 132 x 125 mm |
| Installation | DIN-Rail or Wall Mounting | | | | | |
| **Environmental** | | | | | | |
| Operating Temperature | -25 ~ +75°C | | | | | |
| Storage Temperature | -30 ~ +80°C | | | | | |
| Ambient Relative Humidity | 10 ~ 90% RH, non-condensing | | | | | |
| **Power** | | | | | | |
| Input Range | +10 ~ +30 $V_{DC}$ | | | | | |
| Isolation | 1 kV | | | | | |
| Redundant Power Inputs | Yes, with one power relay (1 A @ 24 $V_{DC}$) for alarm | | | | | |
| Capacity | 15 W | 35 W | 35 W | 25 W | 35 W | 35 W |
| Consumption | 14.4 W | 14.4 W | 16.8 W | 16.6 W | 16.8 W | 18 W |

## ▪ Ordering Information

| | |
|---|---|
| **XP-8041 CR** | Standard XP-8000 without I/O Slot (Multilingual Version of OS) (RoHS) |
| **XP-8341 CR** | Standard XP-8000 with 3 I/O Slots (Multilingual Version of OS) (RoHS) |
| **XP-8741 CR** | Standard XP-8000 with 7 I/O Slots (Multilingual Version of OS) (RoHS) |
| **XP-8141-Atom CR** | Standard XP-8000-Atom with 1 I/O Slot (Multilingual Version of OS) (RoHS) |
| **XP-8341-Atom CR** | Standard XP-8000-Atom with 3 I/O Slots (Multilingual Version of OS) (RoHS) |
| **XP-8741-Atom CR** | Standard XP-8000-Atom with 7 I/O Slots (Multilingual Version of OS) (RoHS) |
| **Note:** Call for customized XPAC-8000-Atom | |

## ▪ Accessories

| | |
|---|---|
| **DP-660** | 24 $V_{DC}$/2.5 A, 60 W and 5 $V_{DC}$/0.5 A, 2.5 W Power Supply with DIN-Rail Mounting |
| **DP-1200 CR** | 24 $V_{DC}$/5.0 A, 120 W Power Supply with DIN-Rail Mounting (RoHS) |
| **MDR-60-24 CR** | 24 $V_{DC}$/2.5 A, 60 W Power Supply with DIN-Rail Mounting (RoHS) |
| **NS-205 CR** | Unmanaged 5-port Industrial 10/100 Ethernet Switch with Plastic Case (RoHS) |
| **NS-208 CR** | Unmanaged 8-port Industrial 10/100 Ethernet Switch with Plastic Case (RoHS) |

**2**

**1**

Compact PAC