

# APAX-5520KW

Micro PAC with XScale CPU

NEW



RoHS  
COMPLIANT  
2002/95/EC

CE FCC

## Features

- Onboard XScale® PXA270 520 MHz processor
- 64 MB SDRAM on board, 32 MB Flash
- Control ability for APAX-5000 I/O modules
- Combines with APAX-5570XPE/5571XPE to deliver dual CPU functionality
- IEC-61131-3 programming languages
- 1 x CompactFlash slot for data storage
- 2 x 10/100 Mbps LAN and 1 x RS-485

## Introduction

APAX-5520KW can operate in two different ways. APAX-5520KW can be inserted on the backplane, and control I/O modules which are stacked together. In this way, the APAX-5520KW performs as standalone controller since it can run process program by itself. The second way is to combine APAX-5520KW and APAX-5570XPE/5571XPE to form dual CPU architecture. Installing APAX-5520KW on the expansion slot of APAX-5570XPE/5571XPE or on the expansion backplane, the CPU of APAX-5520KW can concentrate on the I/O control process. Since there is no other tasks bothering CPU of APAX-5520KW, its control ability can deliver the best performance, providing the real-time execution. The CPU of the APAX-5570XPE/5571XPE controller can execute other tasks such as HMI/SCADA, recipe, database, communication with other system, data logging, etc. This architecture can deliver more reliability to system when HMI software makes XP Embedded system hang on the the APAX-5570XPE/5571XPE controller, since APAX-5520KW will still continuously execute its task. APAX-5520KW with industrial standard IEC 61131-3 programming tool, Multiprog KW software and stable ProConOS, makes engineers develop their applications in shortest time and save their time-to-market.

## Specifications

### Control System

- **CPU** XScale PXA270 520 MHz
- **Memory** Flash 32M bytes, SDRAM 64M bytes
- **Battery Backup Memory** 512 KB
- **Operating System** Windows CE.NET
- **Real-time Clock** Yes
- **Watchdog Timer** Yes
- **Control Software** KW Multiprog (development tool)  
ProConOS (control kernel)
- **VGA** DB15 connector
- **USB Ports** 1 x USB 1.1
- **Storage** 1 x Type II CompactFlash card slot (internal)

### Communication (Ethernet)

- **LAN** 2 x RJ-45 Port, 10/100 Mbps
- **Protocol** Modbus/TCP Server and Client

### Communication (Serial)

- **Medium** RS-485 (2-wire)
- **Maximum Nodes** 32 (in RS-485 daisy-chain network)
- **Protocol** Modbus/RTU Master and Slave

### General

- **Dimensions (W x H x D)** 30 x 139 x 100 mm
- **Weight** 210 g
- **Power Consumption** 4.5 W @ 24 V<sub>DC</sub> (typical)

### Environment

- **Operating Temperature** 0 ~ 60° C
- **Storage Temperature** -25 ~ 75° C
- **Relative Humidity** 5 ~ 95% (non-condensing)

## Ordering Information

- **APAX-5520KW** Micro PAC with XScale CPU, KW
- **MProg-ADV46E** KW Multiprog Advanced v4.6 (64K bytes I/O)
- **MProg-BAS46E** KW Multiprog Basic v4.6 (128 bytes I/O)
- **APAX-5002** 2-slot Backplane Module
- **APAX-5343E** Power Supply for APAX Expansion Module