APAX-5520CE
PC-based Controller with XScale® CPU

NEW

Features

- Onboard XScale® PXA270 520 MHz processor
- 64 MB SDRAM on board, 32 MB Flash
- Expands I/O by connecting with APAX-5000 I/O modules
- Windows CE .NET ready platform
- 1 x VGA port for display and 1 x USB ports
- 1 x CompactFlash slot for data logging
- 1 x 10/100 Mbps LAN and 1 x RS-485 ports
- Provides C/C++ and .NET class libraries for I/O control and communication

RoHS COMPLIANT 2002/95/EC CE FCC

Introduction

APAX-5520CE is a very compact and cost effective controller with XScale PXA270 CPU. The built-in Windows CE operating system makes APAX-5520CE a ready application platform to shorten development time. Connecting with other APAX-5000 I/O modules, APAX-5520CE can become a standalone control system. By C/C++ and .NET libraries for the I/O modules, developers can build their applications under the Windows development environment in a short amount of time.

Specifications

System Hardware

- **CPU** XScale PXA270 520 MHz
- **Memory** Flash 32M bytes, SDRAM 64M bytes
- **Battery Backup Memory** 256 KB file system, 256 KB direct access
- **Real-time Clock** Yes
- **Watchdog Timer** Yes
- **VGA** DB15 connector
- **USB Ports** 1 x USB 1.1
- **Storage** 1 x Type II CompactFlash card slot (internal)
- **Connected I/O Modules** 32 (max.)*
- **Digital Signals** 2048 (max.)
- **Analog Signals** 512 (max.)

Communication (Ethernet)

- **LAN Ports** 1 x RJ-45 Port, 10/100 Mbps
- **Offer Modbus/TCP Server and Client API for programmer**

Communication (Serial)

- **Medium** 1 x Isolated RS-485 (2-wire)
- **Maximum Nodes** 32 (in RS-485 daisy-chain network)
- **Offer Modbus/RTU Master and Slave API for programmer**
- **Isolation Protection** 2500 V_{DC}

Software

- **Operating System** Windows CE .NET
- **Control Software** C/C++ and .NET library with utility

General

- **Certifications** CE, FCC class A
- **Dimensions (W x H x D)** 30 x 139 x 100 mm
- **Enclosure** ABS+PC
- **Weight** 210 g
- **Power Consumption** 4.5 W @ 24 V_{DC} (typical)

Environment

- **Operating Temperature** -10 ~ 55 ° C (when mounted vertically)
- **Storage Temperature** -40 ~ 70° C
- **Relative Humidity** 5 ~ 95% (non-condensing)
- **Shock Protection** 20 G @ wallmount, half sine, 11 ms (Confirms to IEC 60068-2-27)
- **Vibration Protection** 1 Grms @ 5 ~ 500 Hz (Random, operating, 1 hr/axis) 2 G @ 5 ~ 500 Hz (Sine, non-operating, 1 hr/axis) (Confirms to IEC 60068-2-64 and IEC 60068-2-6)

Ordering Information

- **APAX-5520CE** PC-based Controller with XScale CPU, WinCE
- **APAX-5002** 2-slot Backplane Module
- **APAX-5343E** Power Supply for APAX Expansion Module

*: APAX DI/O modules can use ID number 0 ~ 31, while AI/O modules and counter modules can only use ID numbers 0 ~ 15

ADVANTECH PC-based Controllers & I/O Modules