APAX-6572

Intel® Atom™ D510 1.66 GHz, 2 GB RAM Controller with 3 x LAN, 2 x COM, VGA

Features

- Intel Atom D510 1.66 GHz CPU
- Onboard 2 GB DDR2 DRAM
- Backup system with two controllers (master and slave) to ensure continuous I/O control
- Expands I/O by connecting with APAX-5000 I/O modules
- Supports Windows WES2009 and Windows CE
- Provides C/C++ and .NET library for I/O control and communication
- Supports real-time control tasks under Windows CE through ProConOS
- 2 x RS-232/422/485 (automatic flow control)
- 3 x 10/100/1000 Mbps LAN, 4 x USB 2.0

RoHS COMPLIANT 2002/95/EC   CE FCC

Introduction

The APAX-6572 is a high performance controller with an Intel Atom D510 CPU. By installing Windows WES2009 or Windows CE operating system, it becomes an application ready platform. It is an ideal open control platform which can be combined with APAX I/O modules, and features flexible I/O expansion, real-time I/O control, and powerful computing and networking capability through various interfaces.

Specifications

General

- **Certification** — CE, FCC Class A
- **Cooling System** — Fanless
- **Mounting** — DIN-rail, Wall mount (panel mount)
- **Dimensions (W x H x D)** — 222 x 155 x 140 mm
- **Enclosure** — Aluminum + SECC, ABS + PC (I/O)
- **Weight** — 2.6 kg (APAX-6572)
- **Power Consumption** — 35 W @ 24 V_{DC} (APAX-6572, Typical, Without I/O modules)
- **Power Requirement** — 10 ~ 36 V_{DC} (e.g +24 V @ 1 A) (Min. 24 W), AT

System Hardware

- **CPU** — Intel Atom D510 1.66 GHz
- **Memory** — 2 GB DDR2 DRAM (onboard)
- **Battery Backup SRAM** — 1 MB
- **Watchdog Timer** — Programmable 7-tier event handler, from 1 ~ 255 seconds for each tier
- **LED Indicators** — Power, CF, LAN (Active, Status), Serial (Tx, Rx)
- **Display** — VGA (DB15 connector), up to 1600 x 1200 @ 85Hz
- **Audio** — Line in, Line out, Mic in
- **Storage** — 1 x internal Type I/II CompactFlash card slot

Software

- **Operating System** — Windows WES2009, Windows CE
- **Control Software** — C/C++ and .NET library with utility KW MultiProg (development), ProConOS (kernel)
- **Remote Management** — Built-in Advantech DiagAnywhere agent Modbus/ASCII master/slave mode KW MultiProg (development), ProConOS (kernel)

I/O Expansion

- **Accompanied I/O slots** — 4 x APAX/PCI combo slots
- **Connected I/O Modules** — 32 (max.)*
- **Digital Signals** — 768 (max.)
- **Analog Signals** — 192 (max.)

Communication

- **Serial Ports** — 2 x RS-232/422/485 (supports automatic RS-485 data flow control)
- **Serial Baud Rate** — 50 ~ 115.2 kbps
- **LAN Ports** — 3 x RJ-45 Ports, 10/100/1000 Mbps
- **USB Ports** — 4 x USB 2.0

Environment

- **Operating Temperature** — -10 ~ 50°C (when mounted vertically)
- **Storage Temperature** — -40 ~ 70°C
- **Operating Humidity** — 20 ~ 95% (non-condensing)
- **Storage Humidity** — 0 ~ 95% (non-condensing)
- **Vibration Protection** — 2 Grms @ 5 ~ 500 Hz (Random, operating, 1hr/axis) (Conforms to IEC 60068-2-64)

Ordering Information

- **APAX-6572** — Intel Atom D510 1.66 GHz, 2 GB RAM Controller
- **PWR-244** — Panel Mount Power Supply

PAC softlogic option (for CTOS only)

- **SQF-P10S2-8G-ETE** — Suggested CF 8G CF NR, DMA (-40 ~ 85°C)
- **2070012262** — WinCE image with KW support for APAX-6572
- **2010000007** — License Agreement for KW ProConOS Embedded

PC-base controller option (for CTOS only)

- **SQF-P10S2-16G-ETE** — Suggested CF 16G CF NR, DMA (-40 ~ 85°C)
- **2070012263** — WES2009 MUI for APAX-6572

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

All product specifications are subject to change without notice   Last updated : 19-Mar-2014