APAX-5580

Intel® Core™ i7/i3/Celeron DIN-Rail IPC w/ 2 x GbE, 2 x mPCIe, VGA

NEW

Features

- 4th Generation Intel® Core™ i7/i3/Celeron Processors up to 1.7 GHz with 4GB/8GB DDR3L Memory
- 2 x GbE, 4 x USB 2.0/3.0, 1 x RS-232 /422/485, 1 x VGA, Audio
- Dual power input and UPS support
- Compact with Fanless Design
- Supports Fieldbus Protocol by iDoor Technology
- 3G/GPS/GPRS/Wi-Fi Communication by mPCIe
- Chassis Grounding Protection
- LAN Redundancy (Teaming)
- Fault-Protected RS-485 Transceivers With Extended Common-Mode Range
- One button system recovery
- 10 year lifetime RTC battery

SUSI Access | RoHS COMPLIANT 2002/95/EC | CE FCC

Introduction

Advantech's APAX-5580 is a powerful DIN-Rail PC Controller with an Intel Core i7/i3/Celeron CPU. It is the ideal open control platform to be combined with APAX I/O modules, and features flexible I/O expansion, real-time I/O control, network capability through various interfaces, and support dual power input and UPS module for robust power system. It also has a built-in the standard mini PCI express interface for wireless communication and Advantech's iDoor technology. The APAX-5580 is the best solution for data gateway, concentrator and data server applications, its seamless integration with I/O can save your costs and fulfill a diverse range of automation projects.

Specifications

General

- **Certification** — CE, FCC
- **Dimensions (W x D x H)** — 128 x 106 x 110 mm
- **Form Factor** — Regular Size
- **Enclosure** — Aluminum Housing
- **Mounting** — DIN-Rail
- **Weight (Net)** — 1.8 kg (4.0 lbs)
- **Power Requirement** — $24\ V_{DC} \pm 20\%$
- **Power Consumption** — 28 W (Typical), 72 W(Max)
- **OS Support** — Microsoft® Windows 7/8, Linux Kernel 3.X

System Hardware

- **BIOS** — AMI UEFI 128Mbit Flash BIOS
- **Watchdog Timer** — Programmable 256 levels timer interval, from 1 to 255 sec
- **Processor** — Intel® Core™ i7-4650U ULT 1.7GHz Haswell Dual Core, 4MB L2
  Intel® Core™ i3-4010U ULT 1.7GHz Haswell Dual Core, 3MB L2
  Intel® Celeron 2980U ULT 1.6GHz Haswell Dual Core, 2MB L2
- **System Chip** — Integrated Intel 8 Series Chipset
- **Memory** — On-board 4GB (8GB optional)
- **Graphics Engine** — Intel® HD Graphics 5000/4400
- **Ethernet** — Intel® i210-IT GbE, 802.1Qav, IEEE1588/802.1AS, 802.3az
  Intel® i218-LM GbE, Intel® AMT, IEEE1588/802.1AS, 802.3az
- **LED Indicators** — LEDs for Power, battery, LAN (Active, Status), Tx/Rx and HDD
- **Storage** — 1 x mSATA, 1 x SD, 1 x SD (for OS backup)
- **Expansion** — 1 x Full-size mPCIe slot, 1 x Half-size mPCIe slot, mPCIe 2.0

I/O Interfaces

- **Serial Ports** — 1 x RS-232/422/485, DB9, 50~115.2kbps
- **LAN Ports** — 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000Base-T Fast Ethernet
- **USB Ports** — 4 x USB Ports (2 x USB 2.0, 2 x USB 3.0 compliant)
  1 x internal USB
- **Display** — 1 x VGA, supports 1920 X 1080 @ 60 Hz 24 bpp
- **Audio** — Line-Out
- **Power Connector** — Dual power input and UPS support
- **Grounding Protection** — Chassis Grounding

Environment

- **Operating Temperature** — - 10 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow
- **Storage Temperature** — - 40 ~ 85°C (-40 ~ 185°F)
- **Relative Humidity** — 10 ~ 95% RH @ 40°C, non-condensing
- **Shock Protection** — Operating, IEC 60068-2-27, 50G, half sine, 11ms
- **Vibration Protection** — Operating, IEC 60068-2-64, 2Grms, random, 5 ~ 500Hz, 1hr/axis (mSATA)

Ordering Information

- **APAX-5580-4C3AE** — Intel Celeron 1.6 GHz with 4 GB memory, no external expansion slot
- **APAX-5580-433AE** — Intel Core i3 1.7 GHz with 4 GB memory, no external expansion slot
- **APAX-5580-473AE** — Intel Core i7 1.7 GHz with 4 GB memory, no external expansion slot

Accessories

- **APAX-5430** — APAX Battery Module
- **APAX-5343** — AC to DC APAX Power Supply
- **APAX-5402-E2A1AE** — 2 expansion slots with APAX Bus and PCI express
- **APAX-5402-E2A0AE** — 2 expansion slots with PCI express only
- **SQF-SMSM4-XG-S8E** — SQFlash 820 series mSATA MLC 16/32/64/128G (-40~85°C)

Application Software

SUSI Access	Version : V3.0 or above An innovative remote device management software, allowing efficient remote monitoring, quick recovery & backup, and real-time remote configuration, to create a more intelligent and interconnected embedded computing solution.
WebAccess	Version : V7.1 or above WebAccess, as the core of Advantech's IoT solution, is full web browser-based software package for HMI and SCADA software. All HMI and SCADA software features including: Animated Graphics Displays, Real-time Data, Control, Trends, Alarms and Logs, are available in a standard web browser. WebAccess is built around the latest internet technologies. With its open architecture, vertical domain applications can easily be integrated.

All product specifications are subject to change without notice

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