UNO-1172AH

Class I, Division 2 Certified Intel® Atom™ D510 DIN-rail PC with 3 x LAN, 2 x COM, VGA, Mini PCIe

NEW

Features

- UL listed for Hazardous Locations: Class I, Division 2
- Onboard Intel Atom D510 1.66 GHz
- Onboard 1 MB battery-backup SRAM
- System diagnosis through led and digital output, remote power control through digital input
- 2 x RS-232/422/485 ports with automatic flow control
- 3 x 10/100/1000Base-T RJ-45 ports with teaming function support
- 4 x external USB
- PC/104+ expansion slots option
- 1 x Mini PCIe slot for WLAN card and Fieldbus card
- Windows 7, Windows CE, XP Embedded and Linux support
- Fanless design with no internal cabling
- Isolation between chassis and power ground

Introduction

In hazardous locations, devices are under potential danger from flammable gases, combustible dust, or ignitable fibers, creating the potential for fire and explosions. The UNO-1172AH is designed to be safely operated in these locations and are UL listed for Hazardous Locations with Class I, Division 2, groups A, B, C, D & T5 certification. The UNO-1172AH is an Intel Atom DIN-rail PC which features an innovative system diagnosis feature for automation applications. It provides alarms for over temperature, over voltage, battery power fail, power status on both system onboard LED and Digital output. It also includes remote power control through digital input. These system diagnosis features enable control and monitoring of system status remotely. Three Gigabit Ethernet interfaces with teaming function support allow users to uplink two ports with data transmission fault tolerance and downlink one port to field device.

Specifications

General

- **Certification** — CE, FCC Class A, UL, CCC
- **Hazardous Locations** — US: ANSI/ISA 12.12.01-2007 cUL: CSA 22.2 No. 213 M1987, Class I, Division 2, Groups A,B,C,D, Hazardous Location, Temperature code: T5, Ambient Temperature Range: $-10°C \leq T_{amb} \leq 60°C$
- **Dimensions (W x H x D)** — UNO-1172AH: 85 x 152 x 139 mm (3.4" x 6"x 5.5")
- **Enclosure** — Aluminum + SECC
- **Mounting** — DIN-rail, Wallmount
- **Power Consumption** — 24 W (Typical)
- **Power Requirement** — 10 ~ 36 V_{DC} (e.g +24 V @ 2 A) (Min. 48 W), AT/ATX power mode by Jumper selection and BIOS AT simulation (support system reboot automatically after power recovery)
- **Weight** — 1.6 kg
- **OS Support** — WES Windows XP Embedded, Windows XP & Windows 7, Windows CE 5.0/6.0, Linux, QNX
- **System Design** — Fanless design with no internal cabling
- **Remote Management** — Built-in Advantech DiagAnywhere agent on Windows CE / XPe

System Hardware

- **CPU** — Intel Atom D510 1.66 GHz
- **Memory** — 2 GB DDR2 SDRAM built-in
- **Battery Backup SRAM** — 1 MB
- **Indicators** — System:LEDs for Power, CF, LAN (Active, Status), Serial (Tx, Rx), Diagnosis /Alarm: over system temperature, over voltage, alarm for battery backup SRAM, alarm for RTC battery,Programmable(while disable Serial Tx&Rx), Buzzer for Diagnosis (programmable)
- **Keyboard/Mouse** — 1 x PS/2
- **Storage** — SSD: 1 x internal type I/II CompactFlash slot HDD: one 2.5" SATA HDD bracket
- **Display** — DB15 VGA connector, 1600 x 1200 @ 85 Hz
- **Audio** — 5.1 channel HD Audio, Mic in, Line in, Line out
- **Watchdog Timer** — Programmable 256 levels timer interval, from 1 to 255 sec
- **Mini PCIe** — 1 x PCI express mini card slot

I/O Interface

- **Serial Ports** — 2 x RS-232/422/485 with DB9 connectors, automatic RS-485 data flow control / 2 x RS-232 (Optional, pin header)
- **Serial Port Speed** — RS-232: 50 ~ 115.2 kbps / RS-422/485: 50 ~ 115.2 kbps (Max)
- **LAN** — 3 x 10/100/1000Base-T RJ-45 ports (supports Wake on LAN and built-in boot ROM)
- **USB** — 4 x USB, EHCI, Rev. 2.0 compliant
- **Digital Input** — 2-ch. wet/dry contact, 70 V_{DC} over-voltage protection, 0 ~ 50 V_{DC} input range and Interrupt handling
- **Digital Output** — 6-ch DO
  - 200 mA max/channel sink current
  - Keep output status after system hot reset
  - 5 ~ 40 V_{DC} output range and 10 kHz speed
- **System Diagnoses** — Remote monitoring: over system temperature, over voltage, battery power fail, power status / Remote control: Power On/Off, Reset

Environment

- **Ingress Protection** — IP40
- **Operating Temperature** — (IEC 60068-2-2, 100% CPU/ I/O loading) -10 ~ 60°C (14 ~ 140°F)
- **Storage Temperature** — -20 ~ 80°C (-4 ~ 176°F)
- **Operating Humidity** — 20 ~ 95% (non-condensing)
- **Storage Humidity** — 0 ~ 95% (non-condensing)
- **Shock Protection** — IEC 60068- 2-27 / CompactFlash: 50 G @ wall mount, half sine, 11 ms / HDD: 20 G @ wall mount, half sine, 11 ms
- **Vibration Protection** — IEC 60068- 2-64 (Random 1 Oct./min, 1hr/axis.) / CompactFlash: 2 Grms @ 5 ~ 500 Hz, / HDD: 1 Grms @ 5 ~ 500 Hz

Ordering Information

- **UNO-1172AH-A33E** — CID2 Intel Atom D510 1.66 GHz, 2 GB RAM DIN-rail PC

Accessories

- **UNO-FPM11-BE** — UNO-1100 Series VESA Mount Kit
- **PCLS-DIAGAW10** — Advantech Remote Monitoring & Diagnosis Utility

Windows Embedded / RoHS COMPLIANT 2002/95/EC / CE / FCC / CCC / cULus LISTED 4GJY I.T.E. FOR USE IN HAZARDOUS LOCATIONS / cULus LISTED 23BJ I.T.E.

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