UNO-1172AH

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

NEW

UNO-1172AH

Features

- UL listed for Hazardous Locations: Class I, Division 2
- Onboard Intel® Atom D510 1.67GHz
- Onboard 1 MB battery-backup SRAM
- System diagnosis through led and digital output, remote power control through digital input
- Two RS-232/422/485 ports with automatic flow control
- Three 10/100/1000 Base-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. UNO-1172AH are 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. They provide alarms for over temperature, over voltage, battery power fail, power status on both system onboard LED and Digital output. They also include 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 ≤ T_{amb} ≤ 60°C
Dimension (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	9 (Min.) ~ 36 (Max.) 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	UNO-1172AH: 1.6 KG
OS Support	WES Windows XP Embedded, Windows XP & Windows 7, Windows CE 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	Atom D510 1.67GHz
Memory	2GB 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, 1600x1200 @ 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	1x 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 2x 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 10/100/1000 Base-T RJ-45 ports (supports Wake on LAN, Teaming, built-in boot ROM, and IEEE1588 hardware support)
USB	4 x USB, EHCI, Rev. 2.0 compliant
Digital Output	8-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	Output: over system temperature, over voltage, battery power fail, power status Input: Power On/Off, Reset

Environment

Ingress Protection	IP40
Operating Temperature	(IEC 60068-2-2, 100% CPU/ I/O loading) -10 ~ 65°C (-4 ~ 149°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 Atom D510 1.67GHz, 2GB RAM DIN-rail PC

Accessories

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