UNO-1172A/AE

Intel® Atom™ D510 DIN-rail PCs with 3 x LAN, 2 x COM, VGA, Mini PCIe, PC/104+

UNO-1172A   **UNO-1172AE**

Features

- Onboard Intel Atom D510 1.66 GHz processor
- Onboard 1 MB battery-backup SRAM
- Onboard system & I/O LED indicators
- 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
- Supports Boot from LAN function
- Fanless design with no internal cabling
- Isolation between chassis and power ground

Introduction

UNO-1172A/AE are Intel Atom DIN-rail PCs with innovative system diagnostic features. The system diagnosis and remote power control through digital input lines enable users to control and monitor system status remotely. They also provide alarm notices including over temperature, over voltage, battery power fail, power status on both system onboard LED and digital output. Three Gigabit Ethernet interfaces with teaming function support allow users to uplink two ports with data transmit fault tolerance and downlink one port to field devices. Their compact size, small foot print, front accessible I/Os allow convenient wiring and easy installation in field cabinets as well.

Specifications

General

- **Certification** — CE, FCC Class A, UL, CCC
- **Dimension (W x H x D)** — UNO-1172A: 85.5 x 152 x 139 mm (3.4" x 6.0" x 5.5")
  UNO-1172AE: 111 x 152 x 139 mm (4.4" x 6.0" 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** — UNO-1172A: 1.6 kg
  UNO-1172AE: 2.0 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
- **PC/104 Slot** — 2 x PC/104+ slot, supports 3.3 V & +5 V (Only for UNO-1172AE, one PC/104+ with HDD)
- **Mini PCI** — 1 x Mini PCI (UNO-1172AE)
- **Display** — DB15 VGA connector, 1600 x 1200 @ 85 Hz
- **Audio** — 5.1 channel HD Audio, Mic in, Line in, Line out
- **Watchdog Timer** — Programmable 7-tier event handler, from 1 to 255 seconds for each tier
- **Mini PCIe** — 1 x Mini PCIe

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, 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 ~ 65°C (14~ 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-1172A-A33E** — Intel Atom D510 1.66 GHz, 2 GB RAM DIN-rail PC
- **UNO-1172AE-A33E** — Intel Atom D510 1.66 GHz, 2 GB RAM DIN-rail PC w/ PC/104+

Accessories

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

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