

UNO-1170A/AE

Intel® Atom™ N270 DIN-rail
PCs with 2 x LAN, 3 x COM,
4 x USB, PC/104+



Features

- Onboard Intel Atom N270 1.6 GHz processor
- Onboard 512 KB battery-backup SRAM
- Onboard system & I/O LED indicators
- 2 x RS-232 and 1 x RS-232/422/485 ports with automatic flow control
- 2 x 10/100Base-T RJ-45 ports
- 3 x external USB and 1 x internal USB for dongle and flash drive
- PC/104+ expansion slots option
- DIN-rail design for easy installation in field cabinet
- Windows® CE 6.0, Windows WES 2009, and Linux ready solution
- Supports boot from LAN function
- Fanless design with no internal cabling
- Isolation between chassis and power ground

Introduction

The UNO-1170A/AE are DIN-rail PCs that provide several serial communication ports and Ethernet interfaces. With their compact size, small footprint, and front accessibility, the UNO-1170A/AE are convenient for wiring and easy to install in field cabinets. With rich OS and driver supports, such as Windows WES 2009, WinCE 6.0, and even embedded Linux, the UNO-1170A/AE are application-ready platforms that provide versatile functionality.

Specifications

General

- **Certification** CE, FCC Class A, UL, CCC
- **Dimensions (W x H x D)** UNO-1170A: 85.5 x 152 x 139 mm (3.4" x 6.0" x 5.5")
UNO-1170AE: 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
- **Weight** UNO-1170A: 1.6 kg
UNO-1170AE: 2.0 kg
- **OS Support** Windows WES 2009, Windows XP, Windows 7, Windows CE 5.0/6.0, Linux, QNX
- **System Design** Fanless with no internal cabling
- **Remote Management** Built-in Advantech DiagAnywhere agent on Windows CE / WES 2009

System Hardware

- **CPU** Intel Atom N270 1.6 GHz
- **Memory** 1 GB DDR2 SDRAM Built-in
- **Battery Backup SRAM** 512 KB
- **Indicators** LEDs for Power, IDE, LAN (Active, Status), Serial (Tx, Rx), Alarm for battery backup SRAM and diagnosis (programmable)
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** 1 x PC/104+ slot, supports up to 2 x PC/104+ cards (3.3V & 5V)
(Only for UNO-1170AE, one PC/104+ left while using HDD)
- **Mini PCI** 1 x Mini PCI (UNO-1170AE)
- **Display** DB15 VGA connector, 1600 x 1200 @ 85 Hz
- **Audio** Line in, Line out
- **Watchdog Timer** Programmable 256 level timer interval, from 1 to 255 sec

I/O Interface

- **Serial Ports** 2 x RS-232, 1 x RS-232/422/485 with DB9 connectors, automatic RS-485 data flow control
1 x pin header RS-232
- **Serial Port Speed** RS-232: 50 ~ 115.2 kbps
RS-422/485: 50 ~ 921.6 kbps (Max)
- **LAN** 2 x 10/100Base-T RJ-45 ports (Built-in boot ROM in flash BIOS)
- **USB** 4 x USB, EHCI, Rev. 2.0 compliant (1 is for USB dongle inside chassis)

Environment

- **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)
- **Ingress Protection** IP40
- **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 (UNO-1170AE)
- **Vibration Protection** IEC 60068-2-64 (Random 1 Oct./min, 1hr/axis.)
CompactFlash®: 2 Grms @ 5 ~ 500 Hz,
HDD: 1 Grms @ 5 ~ 500 Hz (UNO-1170AE)

Ordering Information

- **UNO-1170A-A12E** Intel Atom N270 1.6 GHz, 1 GB RAM DIN-rail PC
- **UNO-1170AE-A12E** Intel Atom N270 1.6 GHz, 1 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