

UNO-3072LA

Intel® Atom™ N270 Automation
Computer with 2 x PCI, 2 x GbE, DVI



Features

- Onboard Intel Atom N270 1.6 GHz processor
- 2 x RS-232/422/485 ports with automatic flow control
- 2 x 10/100/1000Base-T RJ-45 ports with teaming function support
- 2 x PCI slots for versatile applications
- Windows® WES 2009, WES 7 ready solution and Embedded Linux
- Onboard system & I/O LED indicators
- Supports wake on LAN and boot from LAN function
- Supports audio Line-out function
- Fanless design with no internal cables
- Isolation between chassis and power ground
- AT/ATX power mode by jumper selection
- Front-accessible I/O design
- Wide operating temperature from -10 ~ 60°C
- One internal USB for dongle and flash drive

Introduction

The UNO-3072LA is an Atom-based Embedded Automation Computer with two PCI slots that provides excellent power consumption capabilities. The Gigabit LAN supports the teaming function with fault tolerance, link aggregation, and load balancing. Different from general industrial PCs, the UNO-3072LA is more compact and reliable with a fanless and cableless design. It is designed with an open platform which can fulfill any demanding requirement from the industrial field, and it is an ideal solution for industrial automation and control. The UNO-3072LA supports Windows XP Embedded OS, which offers a pre-configured image with optimized onboard device drivers. Windows XP Embedded delivers the power of Windows operating system in componentized form.

Specifications

General

- **Certification** CE, FCC class A, UL, CCC
- **Dimensions (W x H x D)** 140 x 238 x 177 mm (5.5" x 9.3" x 7.0")
- **Enclosure** Aluminum + SECC
- **Mounting** Wallmount, Stand, Panel
- **Industrial Grounding** Isolation between chassis and power ground
- **Power Consumption** 20 W (Typical)
- **Power Requirement** 9 ~ 36 V_{DC} (e.g. +24 V @ 2 A) (Min. 48W), ATX, AT/ATX power mode by Jumper selection and BIOS AT simulation (support system reboot automatically after power recovery)
- **Weight** 4.5 kg
- **OS Support** WES, Windows XP Embedded, Windows Vista/XP, Windows 7, Windows CE 6.0, Linux, QNX
- **System Design** Fanless with no internal cabling
- **Remote Management** Built-in Advantech DiagAnywhere agent on Windows CE/XPe

System Hardware

- **CPU** Intel Atom N270 1.6 GHz
- **Memory** 1 GB/2 GB DDRII SDRAM built-in
- **Expansion Slots** 2 x PCI V2.2 slots (Note: The heat dissipation from the PCI cards may affect thermal performance)
- **PCI Slot Power** 12 V @ 2A, -12V @ 0.5 A, +5 V @ 4 A, +3.3 V @ 4 A (total combined power consumption on the PCI slots should be less than 20W)
- **Indicators** LEDs for Power, Standby, HDD, Rx/Tx for COM ports (can be used as programmable LED)
- **Audio** AC 97, Line Out
- **Storage**
 - CF: 1 x internal type I/ II CompactFlash slot
 - HDD: 1 x external type I/ II CompactFlash slot
 - Built-in one 2.5" SATA HDD/SSD bracket
 - 1x external SATA 2.0
- **Display** Single DVI-I display (DVI-D + VGA independent)
- **Watchdog Timer** Programmable 256 level timer interval, from 1~255 sec

I/O Interface

- **Clock** Battery-backup RTC for time and date
- **LAN** 2 x 10/100/1000Base-T RJ-45 ports (Intel 82574L, supports Wake on LAN, Teaming, built-in boot ROM, and IEEE1588 hardware support)
- **Serial Ports** 2 x RS-232/422/485 with DB9 connectors, automatic RS-485 data flow control, 2 x RS-232 (optional)
- **Serial Speed** RS-232 Speed: 50 bps ~ 115.2 kbps, RS-422/485 Speed: 300 bps ~ 921.6 kbps (Max)
- **USB Ports** 5 x USB 2.0 (one internal), 2 x USB 2.0 pin header
- **Optional I/O** PS/2 KB/MS, 2 x COM-232, 2 x USB 2.0, LPT

Environment

- **Operating Temperature** (IEC 60068-2-2, 100% CPU/ I/O loading)
 - 10 ~ 60°C (14 ~ 140°F)
 - 20 ~ 70°C (-4 ~ 158°F) (Optional and no PCI card)
 - 40 ~ 80°C (-40 ~ 176°F)
- **Storage Temperature** 95% @ 40°C (non-condensing)
- **Humidity** IEC 60068-2-27
- **Shock Protection** CompactFlash: 50 G @ wall mount, half sine, 11 ms
HDD: 20 G @ wall mount, half sine, 11 ms
- **Vibration Protection** IIEC 60068-2-64 (Random 1 Oct./min, 1hr/axis.)
CompactFlash®: 2 Grms @ 5 ~ 500 Hz,
HDD: 1 Grms @ 5 ~ 500 Hz

Ordering Information

- **UNO-3072LA-A12E** Intel Atom N270 1.6 GHz, 1 GB RAM Automation Computer
- **UNO-3072LA-A13E** Intel Atom N270 1.6 GHz, 2 GB RAM Automation Computer

Accessories

- **PCLS-DIAGAW10** Advantech Remote Monitoring & Diagnosis Utility
- **9663308401E** USB x 2 for UNO-3000 Series
- **9663308402E** LPT x 1 for UNO-3000 Series
- **9663308403E** RS232 COM port x 2 and PS2 x 1 for UNO-3000 Series