

# UNO-2173A/AF

Intel® Atom™ Automation  
Computer with 2 x LAN,  
3 x COM, Mini-PCle

NEW



## Introduction

UNO-2173A and UNO-2173AF are Embedded Automation Computers equipped with Intel® Atom™ 1.6 GHz CPUs, Gigabit Ethernet ports, rich I/O, and 1 x Mini PCIe socket. They also feature WLAN, 3G expansion and compatibility with Windows 7 and Moblin (Mobile Linux distributed by Intel). Both products have Energy Star certification, IP40 anti-dust ingress protection and wide operating temperatures (-20 ~ 70° C), providing high performance and high versatility with low power consumption. The UNO-2173A and UNO-2173AF are economic new computing platforms for manufacturing executing systems, facility automation, in-vehicle, and industrial thin client applications.

## Specifications

### General

- **Certifications** Energy Star, CE, FCC class A, UL, CCC
- **Dimensions (W x D x H)** 255 x 152 x 59 mm (10" x 6.0" x 2.3")
- **Enclosure** Aluminum +SECC
- **Mounting** Wallmount, DIN-rail, VESA
- **Industrial Grounding** Isolation between chassis and power ground
- **Power Consumption** 15 W (Typical)
- **Power Requirements** 9 ~ 36 V<sub>DC</sub> (e.g. +24 V @ 1.5 A) (Min. 36 W), ATX
- **Weight** 2.5 kg
- **OS Support** WES Windows XP Embedded, Windows XP, Windows 7, Windows CE 5.0 & 6.0, Linux, Moblin, 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 1.6 GHz (N270)
- **Memory** 1 GB, 2 GB DDR2 SDRAM built-in
- **Indicators** LEDs for Power, CF, LAN (Active, Status), Serial (Tx, Rx)
- **Keyboard/Mouse** 1 x PS/2
- **Storage** CF: 1 x front-accessible type I/II CompactFlash® slot  
HDD: 1 x built-in 2.5" SATA HDD/SSD bracket  
DB15 VGA connector, 1600 x 1200 @ 85 Hz  
LVDS with backlight control ( UNO-2173AF only)
- **Display** Programmable 256 levels timer interval, from 1 to 255 sec
- **Watchdog Timer**
- **Expansion Slot** 1 x Mini-PCle

### I/O Interface

- **Serial Ports** UNO-2173A: 2 x RS-232  
UNO-2173AF: 2 x RS-232, 1 x RS-422/485
- **Serial Port Speed** 50 ~ 115.2 kbps
- **LAN** 2 x 10/100/1000 Base-T RJ-45 port (Built-in boot ROM in flash BIOS) ( One LAN port in UNO-2173A)
- **USB Ports** 4 x USB 2.0 ( 2 ports on UNO-2173A only)
- **Audio** 5.1 channel HD audio (UNO-2173AF only)

## Features

- Onboard Intel® Atom™ N270 1.6 GHz processor
- 2 x 10/100/1000 Base-T RJ-45 port
- 4 x USB 2.0 ports
- Windows® CE 5.0 & 6.0, Windows XP Embedded, and Linux ready solution
- Onboard system status LED indicators
- Front-accessible CF slot
- Supports Boot from LAN function
- 1 x Mini-PCle slot for WLAN card
- Fanless design with no internal cabling
- Isolation between chassis and power ground
- Supports wide operating temperatures from -20° C to 70° C
- IP40 ingress protection
- Windows 7 and Moblin supported

### Environment

- **Humidity** 95% @ 40° C (non-condensing)
- **Operating Temperature** IEC 60068-2-2 with 100% CPU/ I/O loading  
-20 ~ 70° C (-4 ~ 158° F)
- **Ingress Protection** IP40
- **Shock Protection** IEC 68 2-27
- **Vibration Protection** CompactFlash: 50 G @ wall mount, half sine, 11 ms  
HDD: 20 G @ wall mount, half sine, 11 ms  
IEC 68 2-64 (Random 1 Oct./min, 1hr/axis.)  
CompactFlash: 5 Grms @ 5 ~ 500 Hz,  
HDD: 1 Grms @ 5 ~ 500 Hz

### Reserved Functions

- **Battery Backup SRAM\*** 1MB
  - **Printer Port\*** 1 x printer port pin head
  - **USB\*** 1x internal pin head
- \*Note: This function is optional for project request

## Ordering Information

- **UNO-2173A-A12E** Atom 1.6 GHz, 1 GB RAM, Automation Computer w/ front I/O
- **UNO-2173A-A13E** Atom 1.6 GHz, 2 GB RAM, Automation Computer w/ front I/O
- **UNO-2173AF-A12E** Atom 1.6 GHz, 1 GB RAM, Automation Computer
- **UNO-2173AF-A13E** Atom 1.6 GHz, 2 GB RAM, Automation Computer

### Accessories

- **UNO-FPM21-AE** UNO-2000 series VESA mount kit
- **968EMW0021** PCIe mini-card for WLAN
- **1960032715N040** Rear panel of UNO-2173A for Antenna
- **1960032715N020** Rear panel of UNO-2173AF for Antenna
- **1700001854** SMA/I-PEX cable 11CM
- **1750003222** 5dBi Dipole Antenna
- **PCLS-DIAGAW10** Advantech Remote Monitoring & Diagnosis Utility

19  
Embedded Controllers

20  
PC-based Controllers

21  
PAC

22  
Motion Control

23  
RS-485 I/O

24  
Ethernet I/O

25  
Building Automation

26  
Self-service Terminals

27  
eHome Platforms