# UNO-2372G

## **Intel Atom/Celeron Small-Size Modular** Box Platform with 2 GbE, 4 USB, 4 COM, 2 mPCle, HDMI, DP



#### **Features**

- Intel Atom E3845/Celeron® J1900 Quad-Core processors with 4G DDR3L
- Robust and cableless design with high stability
- 2 x GbE, 4 x USB, 4 x RS-232/422/485, 1 x HDMI, 1 x DP
- Modular design with flexibility to extend second stack for function
- Compact size with fanless design
- Rubber stopper design for stand mount and optional kit for DIN-rail mount, and VESA mount
- Optional 3G/GPS/GPRS/Wi-Fi communication

#### Introduction

Advantech's new generation UNO-2000 series of Embedded Automation Computers are a highly ruggedized fanless and modular design. The incredible modularity of UNO-2372G offers numerous performance and cost-saving advantages, including elimination of unnecessary features and expenses, accelerated production and delivery, rapid deployment and integration, reduced system downtime and maintenance costs, and support for future upgrades and expansion. The UNO-2372G's modular design features optimized I/O and an optional second expansion stack that support Advantech's iDoor technology. This allows the platform functionalities to be easily extended and customized with the integration of various iDoor modules, including industrial Fieldbus, wireless communication, I/O and peripheral module, to provide purpose-built, future-proof solutions that satisfy specific application requirements.

## **Specifications**

#### General

Certification CE, FCC, UL, CCC, BSMI

**Dimensions (W x D x H)** 150 x 105 x 35mm (5.8" x 4.2" x 1.4")

Form Factor Small Size Enclosure Aluminum Housing

Stand, Wall, VESA (Optional), DIN-rail (Optional) Mounting

Weight (Net) 1.0kg (2.2lbs) Power Requirement 10 - 36V<sub>DC</sub>

30W (Typical), 42W (Max) **Power Consumption** 

 OS Support Microsoft® Windows 7. Windows 10. Advantech Linux

#### **System Hardware**

BIOS AMI UEFI64 Mbit

Programmable 255 levels timer interval, from 1 to 255 Watchdog Timer

TPM2.0 (UNO-2372G-J Series)

Hardware Security

Intel® Atom Quad Core E3845 1.91GHz / Processor Intel® Celeron® Quad Core J1900, 2GHz Built-in 4GB DDR3L 1333MHz (Up to 8GB) Memory

 Graphics Engine Intel HD Graphics

Ethernet Intel® i210-IT GbE, 802.1Qav, 802.1AS, 802.3az LED Indicators LEDs for Power, RTC battery, LAN (Active, Status) and

1 x mSATA shared with mPCle slot Storage

1 x drive bay for SATA 2.5" HDD (Compatible with

9.5mm height HDD)

Expansion 2 x Full size mPCle slots

#### I/O Interfaces

Serial Ports 4 x RS232/422/485, DB9, 50 ~ 115.2kbps LAN Ports 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet

USB Ports 1 x USB 3.0, 3 x USB 2.0 Compliant Displays 1 x DisplayPort 1.2, supports 2560 x 1440p 1 x HDMI v1.4, supports 1920 x 1080p @60Hz

 Power Connector 1 x 2 Pins. Terminal Block

All product specifications are subject to change without notice.

#### **Environment**

• Operating Temperature  $-20 \sim 60^{\circ}\text{C} (-4 \sim 140^{\circ}\text{F}) @ 5 \sim 85\% \text{ RH with } 0.7\text{m/s}$ airflow

**Storage Temperature** 

- 40 ~ 85°C ( -40 ~ 185°F) 10 ~ 95% RH @ 40°C, non-condensing Operating, IEC 60068-2-27, 50G, half sine, 11ms Relative Humidity **Shock Protection** Vibration Protection Operating, IEC 60068-2-64, 2Grms, random, 5 ~

500Hz, 1hr/axis (mSATA)

Operating, IEC 60068-2-64, 0.75Grms, random,

5 ~ 500Hz, 1hr/axis (HDD)

Ingress Protection

### Installation Scenario

#### **DIN-rail Mount Illustration**



#### **VESA Mount Illustration**



## **Ordering Information**

UNO-2372G-E021AE

Intel Atom E3845 1.91GHz, 4GB, 2 x GbE, 2 x mPCle, HDMI/DP (Single Stack)

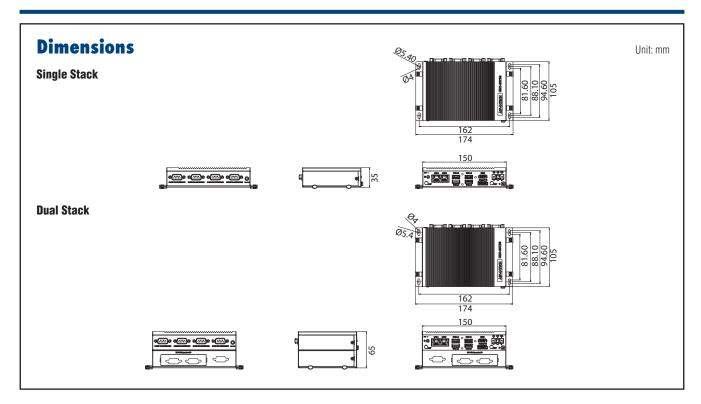
UNO-2372G-E022AE

Intel Atom E3845 1.91GHz, 4GB, 2 x GbE, 2 x mPCle, HDMI/DP (Dual Stack for iDOOR expansion) Intel Celeron J1900 2.0GHz, 4GB, 2 x GbE, 2 x mPCle,

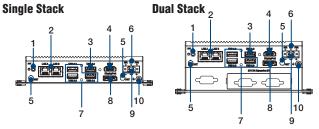
UNO-2372G-J021AE

HDMI/DP (Single Stack) Intel Celeron J1900 2.0GHz, 4GB, 2 x GbE, 2 x mPCle.

UNO-2372G-J022AE HDMI/DP (Dual Stack for iDOOR expansion)



#### Front I/O View



- 1. Power Button
- 2. RJ45 LAN
- 3. USB 3.0
- 4. HDMI
- 5. Reserved Antenna
- 6. BTR, HDD & PWR LED Lights
- 7. USB 2.0
- 8. DisplayPort
- 9. Power Connector
- 10. Chassis Grounding

## iDoor Modules

iDoor modules are supported by UNO-2372G-E022AE & UNO-2372G-J022AE. (UNO-2372G-E021AE & UNO-2372G-J021AE can also support iDoor modules by adding 2nd stack extension kit UNO-2372G-EKBE)

■ PCM-24D2R2-BE PCM-24D2R4-BE

PCM-24D4R2-BE

PCM-24D4R4-BE PCM-26D2CA-AE PCM-27D24DI-AE

PCM-24R1TP-AE PCM-24S2WF-RF PCM-24S33G-AE

2-Port Isolated RS-232 mPCle, DB9 2-Port Isolated RS-422/485 mPCle, DB9 4-Port Non-Isolated RS-232 mPCle, DB37

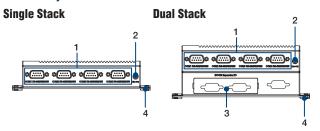
4-Port Non-Isolated RS-422/485 mPCle, DB37 2-Port Isolated CANBUS mPCle, CANopen, DB9

24-Channel Isolated Digital I/O w/ counter mPCle, DB37 1-Port Gigabit Ethernet, Intel® 82574L, mPCle, RJ45 WiFi 802.11 ac/a/b/g/n 2T2R w/Bluetooth 4.1

Wide-Temp 3.75G HSPA and GPS, 2-in-1, Full-size mPCle w/ Redundant SIM Card holder, 2-port SMA

Contact Advantech for more compatible iDoor solutions

#### Rear I/O View



- 1. RS-232/422/485
- 2. Line Out

- 3. iDoor Expansion Slot
- 4. Rubber Stopper

## **Optional Accessories**

- 96PSA-A60W24T2
- **1702002600**
- 1702002605
- 1702031801
- 1700000596
- UNO-2000G-DMKAE
- UNO-2000G-VMKAE
- UNO-2000-LKAE
- A/D 100-240V 60W 24V C14 Cord End Terminal Power Adapter Power Cable US Plug 1.8 M (Industrial Grade)
- Power Cable EU Plug 1.8 M (Industrial Grade) Power Cable UK Plug 1.8 M (Industrial Grade)
- Power Cable China/Australia Plug 1.8 M (Industrial Grade)
- UNO-2000 DIN Rail Kit UNO-2000 VESA Mount Kit
- Cable lockable kit 10 units/per pack

#### **Embedded OS**

#### UNO-2372G-E0xxAE

- 20703WE7PS0002 20703WX6ES0003
- WS7P X64 MUI V4.18 B007 image WIN10ENT 2016LTSB v6.02B016 image

#### UNO-2372G-JOXXAE

- 20703WX6ES0003 20703WC70S0034 20703WE7PS0019
- WIN10LTSB v6.02 B016 image WEC7 MUI V4.02 B116 image WS7P x64 MUI V4.19 B009 image

## **Extended Module**

## UNO-2372G-EKBE

2<sup>nd</sup> stack expansion module for support 2 x iDOOR on UNO-2372G-xx21AE



## **Specifications**

General	
Ports	2 x iDOOR (Chassis only)
Dimensions	150 x 155 x 35 mm
Weight	200g
Environment	
Operating Temperature	-20 ~ 60 °C

## **Ordering Information**

P/N	Description
UNO-2372G-EKBE	UNO-2372G 2nd stack expansion module