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 memory
- · 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 enhancement
- 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 SizeEnclosure Aluminum Housing

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

Weight (Net)
 Power Requirement
 1.0kg (2.2lbs)
 10 - 36V_{DC}

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

■ **OS Support** Microsoft® Windows 7, Windows 10, Advantech Linux

System Hardware

■ BIOS AMI UEFI64 Mbit

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

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

Hardware Security

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

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

• Storage 1 x mSATA shared with mPCle slot

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

USB Ports
 Displays
 1 x USB 3.0, 3 x USB 2.0 Compliant
 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

Environment

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

• Storage Temperature $-40 \sim 85^{\circ}\text{C} \ (-40 \sim 185^{\circ}\text{F})$

Relative Humidity
Shock Protection
Vibration Protection

10 ~ 95% RH @ 40°C, non-condensing
Operating, IEC 60068-2-27, 50G, half sine, 11ms
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)

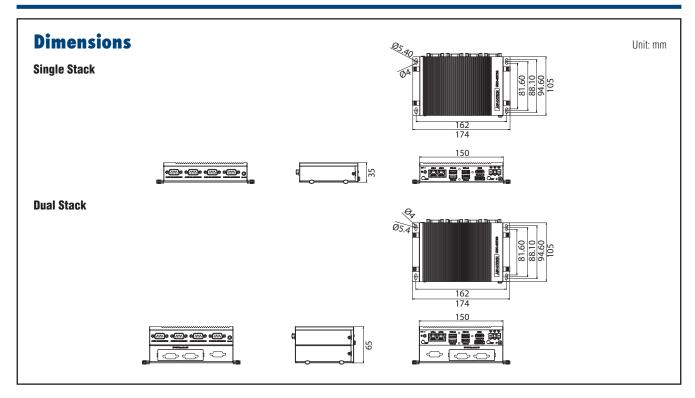
 UNO-2372G-E022AE Intel Atom E3845 1.91GHz, 4GB, 2 x GbE, 2 x mPCle, HDMI/DP (Dual Stack for iDOOR expansion)

 UNO-2372G-J021AE Intel Celeron J1900 2.0GHz, 4GB, 2 x GbE, 2 x mPCle, HDMI/DP (Single Stack)

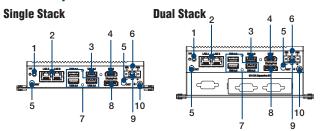
• UNO-2372G-J022AE Intel Celeron J1900 2.0GHz, 4GB, 2 x GbE, 2 x mPCle, HDMI/DP (Dual Stack for iDOOR expansion)

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Industrial IoT Gateways



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

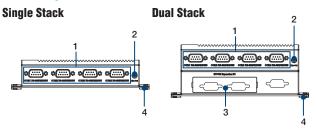
iDoor Modules

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-EKAE)

- 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-2372G-EKAE
- 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 UNO-2372G second stack expansion module
- 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