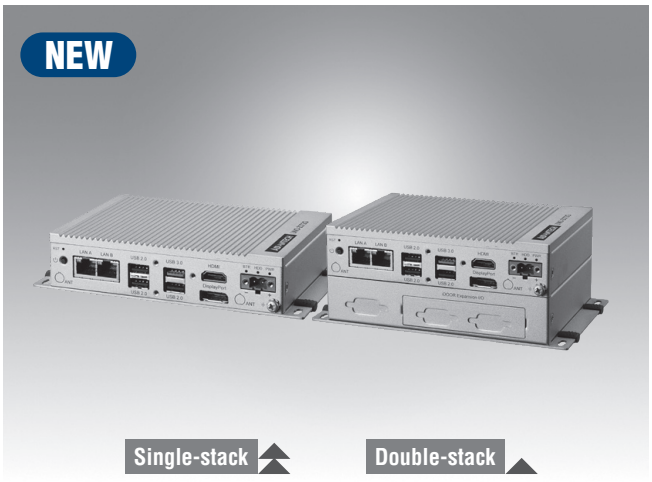
UNO-2372G

Small-size Modular Embedded Box PC with Intel® Atom™ E3845/Celeron® J1900/J3455



Features

- Intel Atom® E3845, Celeron® J1900/J3455 quad-core processor with 4G DDR3L memory
- Compact, robust, fanless and cable-free system with high stability
- Modular design with optional SSD/ NVME/ Wi-Fi/Bluetooth/cellular scalability
- Microsoft Azure IoT Edge and Amazon AWS IoT Greengrass certified

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

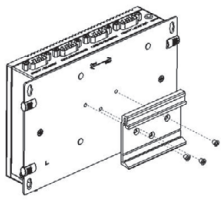
System Hardware	Processor	Intel® Atom Quad Core E3845 1.91GHz	Intel® Celeron® Quad Core J1900, 2GHz	Intel® Celeron® Quad Core J3455 1.5 GHz (max. turbo 2.3 GHz)
	Memory	Built-in 4GB DDR3L 1333MHz (Up to 8GB)		Built-in 4 GB DDR3L, 1866 MHz (Up to 8 GB)
	Graphics Engine	Intel HD Graphics		Intel HD Graphics 500
	Ethernet	Intel® i210/ Realtek i8119i GbE, 802.1Qav, 802.1AS, 802.3az		
	Hardware Security	TPM2.0 (Optional)		
	Storage	1 x mSATA shared with mPCIe socket 1 x 2.5" SATA HDD drive bay (Max. height 9.5 mm)		
	Expansion	2 x Full size mPCIe slots		
	Bios	AMI UEFI (64 Mbit)		
	Watchdog Timer	Programmable timer with 255 intervals (1 ~ 255 sec)		
	LED Indicators	Power, RTC battery, LAN (active, status), and HDD		
I/O Interfaces	Serial Ports	4 x RS-232/422/485, DB9, 50 ~ 115.2kbps		
	LAN Ports	2 x RJ45, 10/100/1000 Mbps IEEE 802.1u 1000BASE-T Fast Ethernet		
	USB Ports	1 x USB 3.0, 3 x USB 2.0		4 x USB 3.0
	Displays	1 x HDMI 1.4 (1920x1080@60Hz) 1 x DP 1.1 (2560x1600@60Hz)		1 x HDMI 1.4b (3840 x 2160 @30 Hz) 1 x DP 1.2 (3840 x 2160 @60 Hz)
	Power Connector	1 x 2-Pin, Terminal Block		
Gerneral	Certification	CE, FCC, UL, CCC, BSMI		
	Dimensions (W x D x H)	Single stack: 150 x 105 x 35mm Double Stack: 150 x 105 x 65mm		
	Form Factor	Small Size		
	Enclosure	Aluminum Housing		
	Mounting	Stand, wall, VESA (optional), DIN rail (optional)		
	Weight(Net)	Single-stack model: 0.8 kg (1.8 lb) Double-stack model: 1.0 kg (2.2 lb)		
	Power Requirement	10 ~ 36 V_{DC}		
	Power Consumption	30W (Typical), 42W (Max)		18.36W (typical)
	OS support	Microsoft® Windows 7, Windows 10, Advantech Linux (Ubuntu 18.04/20.04)		Microsoft® Windows 10, Advantech Linux (Ubuntu 18.04/20.04)
Environment	Operating Temperature	-20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow		
	Storage Temparature	- 40 ~ 85 °C/-40 ~ 185 °F		
	Relative Humidity	10 ~ 95% RH @ 40°C, non-condensing		
	Shock Protection	Operating, IEC 60068-2-27, 50G, half sine, 11ms		
	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	IP40		

All product specifications are subject to change without notice.

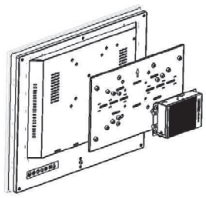
Last updated: 1-Feb-2023

Installation Scenario

DIN-rail Mount Illustration



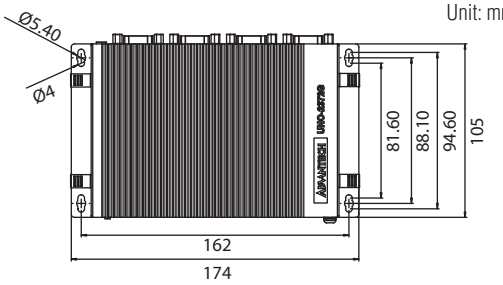
VESA Mount Illustration

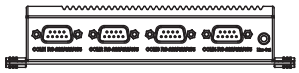


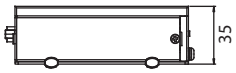
Dimensions

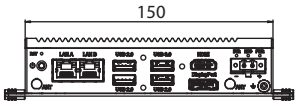
Unit: mm

Single Stack

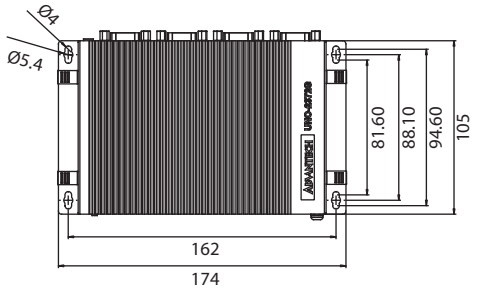


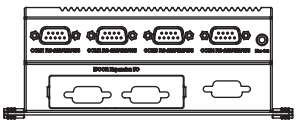


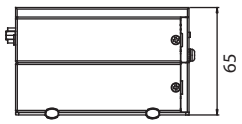


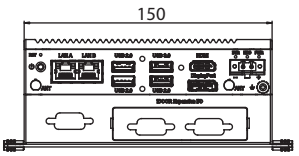


Double stack



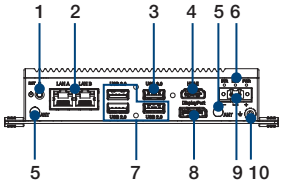






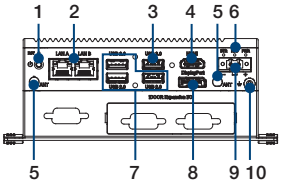
Front I/O View

Single Stack



1. Power Button
2. RJ45 LAN
3. USB
4. HDMI
5. Reserved Antenna

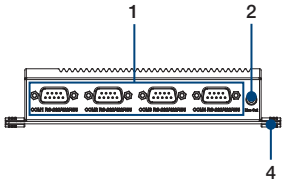
Double stack



6. BTR, HDD & PWR LED Lights
7. USB
8. DisplayPort
9. Power Connector
10. Chassis Grounding

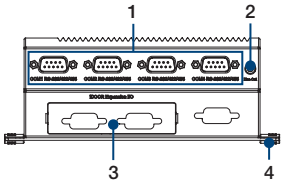
Rear I/O View

Single Stack



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

Double stack



3. iDoor Expansion Slot
4. Rubber Stopper

Ordering Information

Ordering Part Number		CPU	iDoor	LAN IC	TPM 2.0	Audio	USB	COM	LAN	Manufacturing site
Single Stack	UNO-2372G-E021BE	Intel® Atom E3845	X	Realtek i8119i	X	Line Out	4	4	2	Taiwan
	UNO-2372G-J021BE	Intel® Celeron J1900								China
	UNO-2372G-J121AE	Intel® Celeron J3455		Intel® i210	Yes					China
	UNO-2372G-J121AU									Taiwan
Double Stack	UNO-2372G-E022BE	Intel® Atom E3845	2	Realtek i8119i	X					Taiwan
	UNO-2372G-J022BE	Intel® Celeron J1900								China
	UNO-2372G-J122AE	Intel® Celeron J3455		Intel® i210	Yes					China

***Below Part Number had been announced end of life**

Ordering Part Number		CPU	iDoor	LAN IC	TPM 2.0	Audio	USB	COM	LAN	Manufacturing site
Single Stack	UNO-2372G-E021AE	Intel® Atom E3845	X	Intel® i210	Yes	Line Out	4	4	2	Taiwan
	UNO-2372G-J021AE	Intel® Celeron J1900								China
Double Stack	UNO-2372G-E022AE	Intel® Atom E3845	2							Taiwan
	UNO-2372G-J022AE	Intel® Celeron J1900								China

iDoor Modules

Supported by "Double Stack" models. Applied on "Single stack" models with 2nd stack extension kit as well

- **PCM-24D2R2-BE** 2-port isolated RS-232 mPCIe, DB9
- **PCM-24D2R4-BE** 2-port isolated RS-422/485 mPCIe, DB9
- **PCM-24D4R2-BE** 4-port non-isolated RS-232 mPCIe, DB37
- **PCM-24D4R4-BE** 4-port non-isolated RS-422/485 mPCIe, DB37
- **PCM-27D24DI-AE** 24-channel isolated digital I/O with counter mPCIe, DB37
- **PCM-24R1TP-BE** 1-Port Gigabit Ethernet, Intel® i225, mPCIe, RJ45
- **PCM-24S2WF-CE** WiFi 802.11 ac/a/b/g/n 2T2R w/Bluetooth 4.1
- **PCM-24R2GL-AE** 2-port Gigabit Ethernet, mPCIe, RJ45
- **C-PCM-24S24G-4AV-1** MultiTECH iDOOR, LTE Cat 4 (AT&T/Verizon), antenna

Please contact Advantech for all compatible iDoor lists

Optional Accessories

Operating system

- **96PSA-A60W24T2-3** A/D 100 ~ 240V 60W 24V C14 cord end terminal power adapter
- **1702002600** Power cable, US plug, 1.8 m (industrial grade)
- **1702002605** Power cable, EU plug, 1.8 m (industrial grade)
- **1702031801** Power cable, UK plug, 1.8 m (industrial grade)
- **1700000596** Power cable, China/Australia plug, 1.8 m (industrial grade)
- **UNO-2000G-DMKAE** UNO-2000 DIN-rail kit
- **UNO-2000G-VMKAE** UNO-2000 VESA mount kit
- **UNO-2000-LKAE** Cable locking kit, 10 units per pack
- **UNO-REPWR-AE** Remote power and reset control kit for UNO (only support on UNO-2372G-J1xxAE)
- **UNO-2372G-VEGA330** UNO-2372G 1st stack bottom plate for VEGA-330

UNO-2372G-E0

- **20704WE7PS0004** WS7P X64 MUI V4.19 B040 image
- **20703WX9ES0025** WIN10 2019 LTSC v6.05 B016 image
- **20704WX1ES0002** WIN10 2021 LTSC V6.08 B015 image
- **20703LEB1S0113** Image AdvLinuxTu V2.1.3 (Ubuntu 18.04)
- **20704U20DS0005** Image AdvLinuxTu V3.2.2(Ubuntu 20.04)

UNO-2372G-J0

- **20703WC70S0035** WEC7 MUI V4.02 B117 image
- **20704WE7PS0003** WS7P X64 MUI V4.19 B039 image
- **20703WX9ES0025** WIN10 2019 LTSC v6.05 B016 image
- **20704WX1ES0004** WIN10 2021 LTSC V6.08 B015 image
- **20703LEB1S0113** Image AdvLinuxTu V2.1.3 (Ubuntu 18.04)
- **20704U20DS0005** Image AdvLinuxTu V3.2.2(Ubuntu 20.04)

UNO-2372G-J1

- **20703WX9ES0030** Img W10 2019 LTSC V6.05 B028
- **20703LEB1S0113** Image AdvLinuxTu V2.1.3 (Ubuntu 18.04)
- **20704U20DS0005** Image AdvLinuxTu V3.2.2(Ubuntu 20.04)

Stackable Extension Kits

UNO-2372G-EKBE

Second stack module for supporting iDoor technology 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