

UNO-2272G

Intel® Atom™/Celeron® Palm-Size
Automation Computer with 1 x GbE,
2 x mPCIe, VGA/HDMI

NEW



Features

- Intel® Atom™ N2800/J1900 processors with 2GB DDR3/DDR3L memory
- 1 x GbE, 3 x USB 2.0/3.0, 1 x COM, 1 x VGA or HDMI, audio
- Compact with fanless design
- Rubber stopper design with captive screws
- Diverse system I/O and isolated digital I/O by iDoor technology
- Supports Fieldbus protocol by iDoor technology
- 3G/GPS/GPRS/Wi-Fi communication by iDoor technology
- Supports MRAM by iDoor technology



Introduction

Advantech's UNO-2000 series of Embedded Automation Computers are fanless, with a highly ruggedized embedded operating system (Linux-Embedded). The series also includes iDoor technology which supports automation feature extensions such as industry fieldbus communication, Wi-Fi/3G, Digital I/O, including palm, small, and regular-size form-factors with indicated market segments in terms of entry, value, and performance product positioning. Both entry and value Embedded Automation Computers feature specific functions and they are suitable for data gateway, concentrator and data server applications. The performance model can shorten your development time and offer multiple networking interfaces to fulfill a diverse range of requirements.

Specifications

General

- Certification** CE, FCC, UL, CCC, BSMI
- Dimensions (W x D x H)** 157 x 88 x 50 mm (6.2" x 3.5" x 2.0")
- Form Factor** Palm Size
- Enclosure** Aluminum Housing
- Mounting** Stand, Wall, VESA (Optional), DIN-rail (Optional)
- Weight (Net)** 0.8 kg (1.76 lbs)
- Power Requirement** 24V_{DC} ± 20%
- Power Consumption** 14W (Typical), 45.3W (Max)
- OS Support** Microsoft® Windows 7, Windows 10, Advantech Linux

System Hardware

- BIOS** AMI EFI64 Mbit
- Watchdog Timer** Programmable 256 levels timer interval, from 1 to 255 sec
- Processor** Intel Celeron Quad Core J1900 2.0 GHz
- System Chip** Intel Atom SoC integrated
- Memory** Built-in 2GB DDR3L 1333 MHz, up to 8GB
- Graphics Engine** Intel® HD Graphics
- Ethernet** Intel i210 GbE, 802.10av, IEEE1588/802.1AS, 803.3az
- LED Indicators** LEDs for Power, HDD, LAN ((Active, Status)
- Storage** 1 x half-size mSATA
Supports HDD/SSD by project
- Expansion** 2 x Full-size mPCIe slot

I/O Interfaces

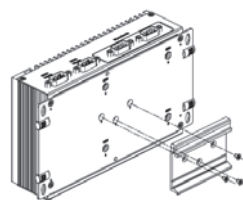
- Serial Ports** 1 x RS-232 (RS-422/485 by BIOS option), DB9, 50 ~ 115.2kbps
- LAN Ports** 1 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet
- USB Ports** 2 x USB 2.0 and 1 x USB 3.0
- Displays** 1 x HDMI, supports 1920 x 1080 @ 60Hz
- Audio** Line-Out
- Power Connector** 1 x 2 Pins, Terminal Block

Environment

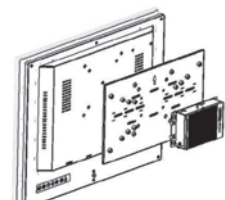
- Operating Temperature** -10 ~ 55°C (14 ~ 131) @ 5 ~ 85% RH with 0.7 m/s airflow
- Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11 ms
- Vibration Protection** Operating, IEC 60068-2-64, 2 Grms, random, 5 ~ 500 Hz, 1hr/axis (mSATA)
- Ingress Protection** IP40

Installation Scenario

DIN-rail Mount Illustration



VESA Mount Illustration



Technical drawing of the ADVANTECH UNO-2272G showing front, top, and side views with dimensions.

Front View Dimensions:

- Overall width: 157
- Width of main body: 132
- Width of mounting flange: 144
- Height of main body: 78
- Height of mounting flange: 88
- Mounting hole diameter: $\varnothing 10.5$
- Mounting hole offset from edge: R2.7
- Mounting hole offset from center: R2

Top View Dimensions:

- Overall width: 49.8
- Width of main body: 47.3
- Width of mounting flange: 1.5

Side View Dimensions:

- Height of main body: 54.6
- Height of mounting flange: 61.1
- Height of mounting flange: 67.6

Diagram illustrating the front panel of the Raspberry Pi 4 Model B, showing various ports and their connections:

- Reset Button**: Located at the top left.
- USB 3.0 Port**: Located at the top center.
- Power Connector**: Located at the top right.
- Line-out**: Located on the left side.
- HDMI**: Located in the center.
- RJ45 LAN**: Located on the right side.
- Power LED**: Located on the right side.
- ANT**: Located on the left side.
- PWR**: Located on the right side.
- COM (P0-500/400/300/200/100/0)**: Located in the center.
- USB 2.0**: Located on the right side.
- HDD LED**: Located on the right side.
- Chassis Grounding**: Located on the right side.
- Reserved Antenna**: Located on the left side.
- Power Button**: Located at the bottom left.
- Reserved Antenna**: Located at the bottom right.

The diagram shows the top view of the iDoor expansion slot. It is a rectangular slot with a hinged lid. The lid is labeled "Expansion IO" and has two circular cutouts. The slot is labeled "iDoor Expansion Slot". To the left of the slot is a "USB 2.0 Port" and to the right is a "Rubber Stopper".

- **UN0-2272G-J2AE** Intel Celeron J1900 2.0GHz, 2GB, 1xLANs, 2xmPCIe

- **PCM-2300MR-BE** MR4A16B, MRAM, 2 MByte, mPCIe
- **PCM-23U1DG-BE** Internal locked USB Slot for USB Dongle
- **PCM-24D2R2-BE** 2-Port Isolated RS-232 mPCIe, DB9
- **PCM-24D2R4-BE** Isolated RS-422/485, DB9 x 2, (USB type)
- **PCM-24D4R2-BE** 4-Port Non-Isolated RS-232 mPCIe, DB37
- **PCM-24D4R4-BE** Non-Isolated RS-422/485, DB37 x 1 (USB Type)
- **PCM-24R1TP-BE** Intel I225, 2.5Gb/s, IEEE 1588, TSN, RJ45*1
- **PCM-24R2GL-AE** 2-Port Gigabit Ethernet, mPCIe, RJ45
- **PCM-24S2WF-BE** WiFi 802.11 ac/a/b/g/n 2T2R w/Bluetooth 4.1
- **PCM-24S34G-CE** EG-25G LTE/HSPA+/GPRS, mPCIe, Ant
- **PCM-27D24DI-AE** 24-Channel Isolated Digital I/O w/ counter mPCIe, DB37

- **96PSA-A60W24T2-3** 60WC to DC UNO series power adapter (Industrial Grade)
- **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

- **20703WE7PS0000** WES7P x64MUI v4.18 B008 image
- **2070014984** WES7P X86 MUI V4.16 B004 image
- **20703WX9ES0015** Img W10 LTSC x64 V6.04 B048 UNO-2272G-JxAE Entry
- **2070014939** WEC7J MUI V4.02 B088 image