

UNO-2484G

Intel® Core™ i7/i5/i3/Celeron
Regular-Size Modular Box Platform
(MBP) with 4 x GbE, 1 x mPCIe, HDMI, DP

NEW



Introduction

Advantech's new generation UNO-2000 series of Embedded Automation Computers are fanless and highly ruggedized with embedded OS. New UNO-2000 series are modular designs which provide flexible and time-to-market support in variety of applications. The series also includes iDOOR technology which supports automation feature-extensions such as multiple I/O peripherals, Industrial Fieldbus, and smart I/O Communication. New UNO-2000 series including pocket, small, and regular-size form-factors for smart factory applications such as Equipment Connectivity (EC), Process Visualization (PV), Environment Management (EM), and Dispatch Management (DM) solutions.

Specifications

General

- Certification** CE, FCC, UL, CCC, BSMI
- Dimensions (W x D x H)** 200 x 140 x 40 (7.8" x 5.6" x 1.6") for single stack
UNO-2484G version
200 x 140 x 70 (7.8" x 5.6" x 2.8") for double stack
UNO-2484G version
- Form Factor** Regular Size with stackable design
- Enclosure** Aluminum Housing
- Mounting** Stand, Wall, VESA (Optional), DIN-rail (Optional)
- Weight (Net)** Single stack: 1.4kg (3.09lbs)
Double stack: 1.8kg (3.97lbs)
- Power Requirement** 10 - 36 V_{DC}
- Power Consumption** 55W (Typical), 95.2W (Max)
- OS Support** Microsoft® Windows 7, 10, Advantech Linux (UNO-2484G-6 series)
Microsoft® Windows 10, Advantech Linux (UNO-2484G-7 series)

System Hardware

- BIOS** AMI EFI64 Mbit
- Watchdog Timer** Programmable 255 levels timer interval, from 1 to 255 sec
- Hardware Security** TPM2.0
- Processor** 6th Gen Intel Core i7-6600U, 2.6GHz
i5-6300U, 2.4GHz
i3-6100U, 2.3GHz
7th Gen Intel Core i7-7600U, 2.8GHz
i5-7300U, 2.6GHz
i3-7100U, 2.4GHz
Celeron 3965U, 2.0 GHz
- Memory** i7/i5/i3 model: Built-in 8GB DDR4 2133 MHz (support up to 16G)
Celeron model: Built-in 4GB DDR4 3200 MHz (support up to 16G)
- Graphics Engine** Intel® HD Graphics 620
- Ethernet** LAN A: Intel i219-IT GbE, 802.1Qav, IEEE1588/802.1AS, 802
LAN B-D: Intel i210-IT GbE, 802.1Qav, IEEE1588/802.1AS, 802
- LED Indicators** LEDs for Power, HDD, LAN (Active, Status), RTC Battery low
- Storage** One mSATA (slot shared with mPCIe slot)
Two drive bay for SATA 2.5" SSD/HDD (Support RAID 0/1)

Features

- Intel® Core™ i7/i5/i3/Celeron Processor with 8GB DDR4 built-in memory
- 4 x GbE, 4 x USB 3.0, 1 x HDMI, 1 x DP, 4 x RS232/422/485
- Stackable 2nd layer for up to 4 iDoor extension or customize for domain applications
- Compact fanless design
- Ruggedized by zero cable and lockable I/O design
- Dedicated TPM2.0 microcontroller designed for hardware security
- Diverse system I/O and isolated digital I/O by iDoor technology
- Supports Fieldbus protocol by iDoor technology
- 3G/GPRS/GPRS/Wi-Fi communication by iDoor technology
- Supports 30+ iDOOR combination with four main categories

Expansion

- 1 x full-size mPCIe slot for single stack version (only support wireless iDOOR)
- 4 x full-size mPCIe slots for double stack version (1 slot for wireless iDOOR, 3 slots for all iDOOR modules)

I/O Interfaces

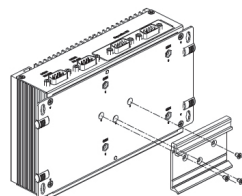
- Serial Ports** 4 x RS 232/422/485
- LAN Ports** 4 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet
- USB Ports** 4 x USB3.0
- Displays** 1 x HDMI, 1 x DP
HDMI 1.4 (4096x2304@24Hz)
HDMI 1.4 (1920x1080@60Hz)
DP 1.2 (4096x2304@60Hz)
DP 1.2 (1920x1080@60Hz)
Line-out
- Audio** 1 x 2 Pins, Terminal Block

Environment

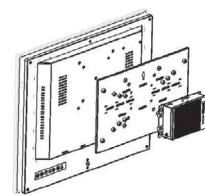
- Operating Temperature** -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7 m/s airflow
- Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11 ms
- Vibration Protection** Operating, IEC 60068-2-64, 3 Grms, random, 5 ~ 500 Hz, 1hr/axis (mSATA)
- Ingress Protection** IP40

Installation Scenario

DIN-rail Mount Illustration



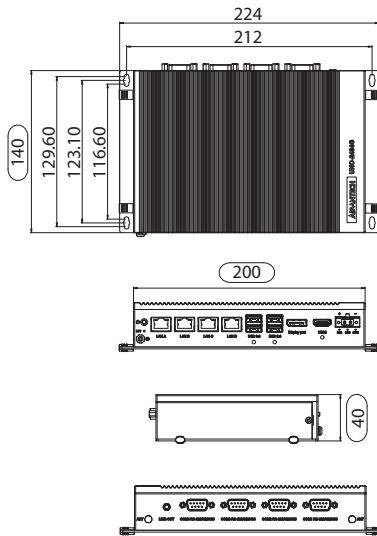
VESA Mount Illustration



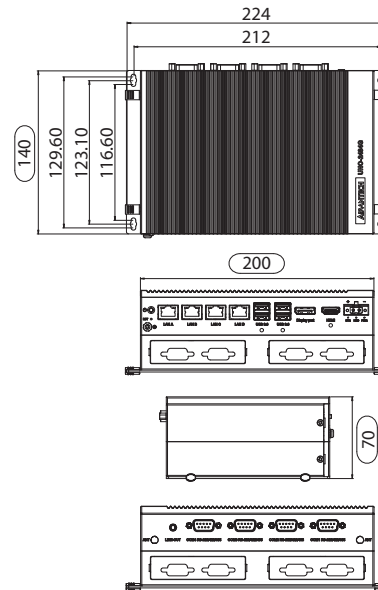
Dimensions

Unit: mm

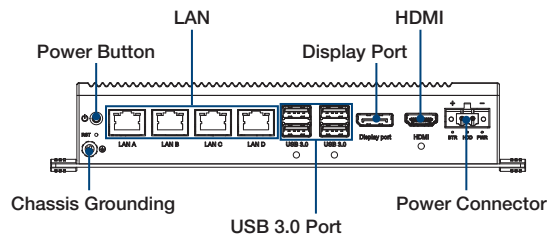
UNO-2484G Single stack version



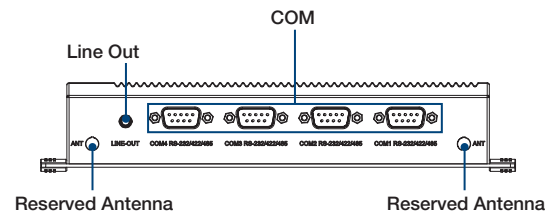
UNO-2484G double stack version



Front I/O View



Rear I/O View



Ordering Information

	Ordering Part Number	CPU generation	CPU	mPCIe slot	iDoor	USB	COM	LAN
Single Stack	UNO-2484G-7731AE	7 Gen.	i7-7600U	1	x	4	4	4
	UNO-2484G-7531AE		i5-7300U					
	UNO-2484G-7331AE		i3-7100U					
	UNO-2484G-7C21AE		Celeron 3965U					
	UNO-2484G-6731AE		i7-6600U					
Double Stack	UNO-2484G-6531AE	6 Gen.	i5-6300U	4	v	4	4	4
	UNO-2484G-6331AE		i3-6100U					
	UNO-2484G-7732AE		i7-7600U					
	UNO-2484G-7532AE	i5-7300U						
	UNO-2484G-7332AE	i3-7100U						
	UNO-2484G-6732AE	i7-6600U						
	UNO-2484G-6532AE	6 Gen.	i5-6300U	4	v	4	4	4
	UNO-2484G-6332AE		i3-6100U					
	UNO-2484G-6332AE		i3-6100U					

iDoor Modules

- PCM-24S2WF-BE 802.11 a/b/g/n 2T2R w/ Bluetooth4.0, Half-size mPCIe, 2-port SMA
- PCM-24S23G-AE 6-band HSPA Cellular Module, GPS, SIM holder, SMAx2
- PCM-24R2GL-AE 2-Port Gigabit Ethernet, mPCIe, RJ45
- PCM-24D2R2-BE 2-Port Isolated RS-232 mPCIe, DB9
- PCM-24D4R4-BE 4-Port Non-Isolated RS-422/485 mPCIe, DB37
- PCM-24R1TP-AE 1-Port Gigabit Ethernet, Intel® 82574L, mPCIe, RJ45
- PCM-27D24DI-AE 24-Channel Isolated Digital I/O w/ counter mPCIe, DB37

Contact Advantech for all compatible iDoor lists

Optional Accessories

- 96PSA-A150W24T2 Power Adapter 150W
- 96PSA-A120W24T2 Power Adapter 120W
- 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)
- 170000596 Power Cable China/Australia Plug 1.8 M (Industrial Grade)
- UNO-2000G-VMKAE UNO-2000 VESA Mount Kit
- UNO-2000G-DMKAE UNO-2484G DIN RAIL Kit
- UNO-2000-LKAE Cable lockable kit 10 units/per pack

Operating System

- UNO-2484G-6 series:
 - 20703WE7PS0036 WS7P X64 MUI V4.18 B033 Image
 - 20703WX9HS0001 WIN10 LTSC V6.04 for i7 version
 - 20703WX9VS0001 WIN10 LTSC V6.04 for i5/i3 version
- UNO-2484G-7 series:
 - 20703WX9HS0000 WIN10 LTSC V6.04 for i7 version
 - 20703WX9VS0000 WIN10 LTSC V6.04 for i5/i3 version

Extended Module

UNO-2484G-EKBE

2nd stack expansion module for support 4 x iDOOR (3 mPCIe slot) on UNO-2484G-xx31AE



Specifications

General	
Ports	4 x iDOOR (3 x mPCIe only)
Dimensions	200 x 140 x 40 mm
Weight	400g
Environment	
Operating Temperature	-20 ~ 60 °C

Ordering Information

P/N	Description
UNO-2484G-EKBE	UNO-2484G 2nd stack expansion module for 4 iDoor

UNO-2484G-S2AE

2nd stack expansion module for support 2 external swappable HDD/SSD Storage on UNO-2484G-xx31AE



Specifications

General	
Ports	2 x external swappable HDD/SSD Storage
Dimensions	200 x 140 x 40 mm
Weight	400g
Environment	
Operating Temperature	-20 ~ 60 °C

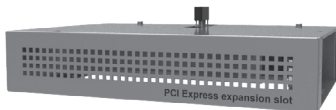
Ordering Information

P/N	Description
UNO-2484G-S2AE	UNO-2484G external swappable HDD extension kit

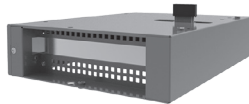
UNO-2484G-PCIEAE

2nd stack expansion module for support 1 PCIe4 card

Front view



Side View



Specifications

General	
Ports	1 x PCIe4 slot for half-length PCIe card (W167 x H111 mm)
Dimensions	200 x 140 x 40 mm
Weight	400g
Power consumption	15W (Max)
Environment	
Operating Temperature	0 ~ 50 °C (Depends on expansion card)

Ordering Information

P/N	Description
UNO-2484G-PCIEAE	UNO-2484G second stack PCIe4 expansion module