UNO-2484G

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



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
- 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 30+ iDOOR combination with four main categories

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 128 Mbit SPI

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

sec

Hardware Security TPM2.0 (Optional)

■ **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 2133 MHz

(support up to 16G)

■ **Graphics Engine** Intel® HD Graphics 520/620

Ethernet 4 x RJ45, 10/100/1000 Mbps

LEDs for Power, HDD, LAN (Active status), RTC Battery

low

Storage One mSATA (slot shared with mPCle slot)

Two drive bay for SATA 2.5" SSD/HDD (Support RAID

0/1)

Expansion
 1 x full-size mPCle slot for single stack version (only

support wireless iDOOR)

4 x full-size mPCle 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, 50-115.2 kbps speed

LAN Ports 4 x RJ45, 10/100/1000 Mbps 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)

Audio Line-o

• Power Connector 1 x 2 Pins, Terminal Block

Environment

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

airflow

Storage Temperature $-40 \sim 85$ °C ($-40 \sim 185$ °F)

Relative Humidity
Shock Protection
Vibration Protection

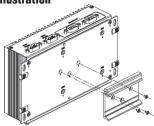
10 ~ 95% RH @ 40°C, non-condensing
Operating, IEC 60068-2-27, 50G, half sine, 11 ms
Operating, IEC 60068-2-64, 3 Grms, random,

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

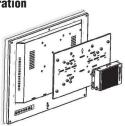
Ingress Protection IP40

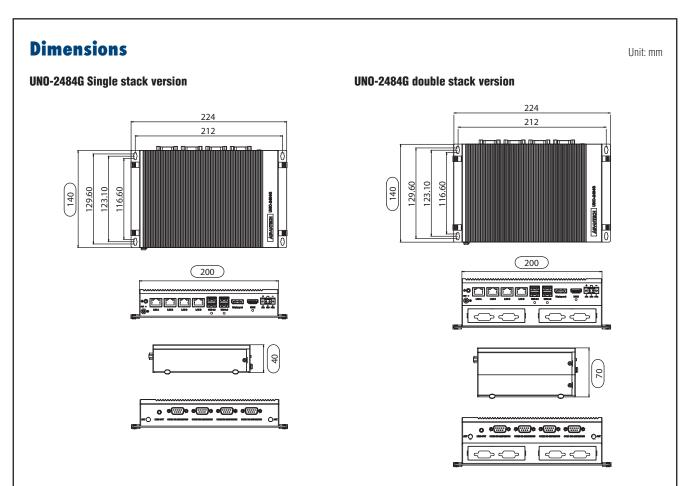
Installation Scenario



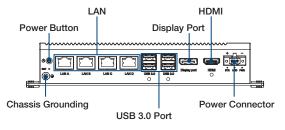


VESA Mount Illustration

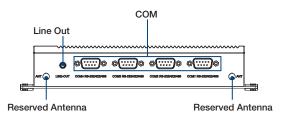




Front I/O View



Rear I/O Veiw



Ordering Information

Ordering Pa	rt Number	CPU Generation	СРИ	LAN B-D IC	TPM2.0	mPCle slot	iDoor	Audio	USB	СОМ	LAN	Remark
	UNO-2484G-7731BE		i7-7600U									
	UNO-2484G-7531BE	Gen 7	i5-7300U									
	UNO-2484G-7331BE	Gen /	i3-7100U									-
Single Stack	UNO-2484G-7C21BE		Celeron 3965U	Realtek i8119i	Χ	1	X	Line Out	4	4	4	
	UNO-2484G-6731BE		i7-6600U									
	UNO-2484G-6531BE	Gen 6	i5-6300U									US Region
	UNO-2484G-6331BE		i3-6100U									

iDoor Modules

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

■ PCM-24S2WF-CE 802.11 a/b/g/n 2T2R w/ Bluetooth4.0, Half-size mPCle,

2-port SMA

PCM-24R2GL-AE
 PCM-24D2R2-BE
 2-Port Gigabit Ethernet, mPCle, RJ45
 2-Port Isolated RS-232 mPCle, DB9

■ PCM-24D4R4-BE 4-Port Non-Isolated RS-422/485 mPCle, DB37

■ PCM-24R1TP-BE 1-Port Gigabit Ethernet, mPCle, RJ45

• PCM-27D24DI-AE 24-Channel Isolated Digital I/O w/ counter mPCle,

DB37

Please contact Advantech for all compatible iDoor lists

Optional Accessories

96PSA-A150W24T2-4 Power Adapter 150W
 96PSA-A120W24T2-4 Power Adapter 120W

• 1702002600 Power Cable US Plug 1.8 M (Industrial Grade)

UNO-REPWR-AE Remote power & reset kit

1702002605
 1702031801-11
 1700000596-11
 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-2000G-VMKAE
 UNO-2000G-DMKAE
 UNO-2484G DIN RAIL Kit

• **UNO-2000-LKAE** Cable lockable kit 10 units/per pack

• UNO-2484G-VEGA330 UNO-2484G 1st stack bottom plate for VEGA-330

Operating System

UNO-2484G-6 series:

20704WE7PS0002
 20704WX1HS0002
 20704WX1VS0002
 20703LEB1S0113
 20704U20DS0005
 WS7P X64 MUI V4.19 B038 image
 WIN10 LTSC V6.08 for i7 version (High End)
 WIN10 LTSC V6.08 for i5/i3 version (Value)
 Image AdvLinuxTu V2.1.3 (Ubuntu 18.04)
 Image AdvLinuxTu V3.2.2 (Ubuntu 20.04)

UNO-2484G-7 series:

20704WX1HS0003
 20704WX1VS0003
 20703LEB1S0113
 20704U20DS0005
 WIN10 LTSC V6.08 for i7 version (High End) WIN10 LTSC V6.08 for i5/i3 version (Value) Image AdvLinuxTu V2.1.3(Ubuntu 18.04) Image AdvLinuxTu V3.2.2(Ubuntu 20.04)

Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries. Please contact Advantech for certificate compliance.

Stackable Extension Kits

UNO-2484G-EKBE

Second stack module for supporting iDoor (3 x mPCle slot) on UNO-2484G-xx31AE

UNO-2484G-S2AE

Second stack module for supporting iDoor technology on UNO-2484G-xx31AE





Specifications

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

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				
IINO-2484G-FKBF	LINO-2484G 2nd stack expansion module for 4 iDoor				

Ordering Information

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

UNO-2484G-PCIEAE

Second stack module for supporting 1 PCle x4 card on UNO-2484G-xx31AE





Side View



Specifications

General	
Ports	1 xPClex4 slot for half-length PCle 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 PClex4 expansion module