

# Advantech Embedded Automation PC

Modular Box Platform for Digitalization in the Industrial IoT



- Introduction
- Features & Functions
- Intelligent Software
- Selection Guide



**ADVANTECH**

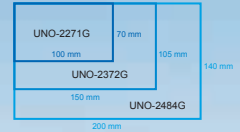
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# Connecting Machine and Process of Smart Fact

## Modular Box Platform Satisfies all Industrial Needs

In the Industrial 4.0 era, fanless and ruggedized properties are not the only criteria for Industrial Embedded Computers. Advantech's Industrial Embedded Computers offer flexible and expandable features and our new UNO-2000 series are based on a new modular form factor. Integrated with iDoor expansibility, the new UNO-2000 series is adapted for Embedded Automation applications. UNO-2271G is the world smallest embedded computer being the same size as a standard SSD, and the optimized performance of UNO-2484G is only 7.9" with TPM2.0 for Cyber Security. They both easily integrate with Advantech WebAccess which helps erase the gap between IT and OT.



The new UNO-2000 series also provide the time to market customized service, modularized design can perform it for vertical market. With modular design, customers can expand more functionality and create more possibilities in different markets and applications by more flexible and easier configuration way to step forward into Industry4.0 era.

## Bridging the Gap Between IT and OT

### WebAccess/HMI

WebAccess/HMI is a runtime software that includes various HMI control interface, visualizations, and applications. It supports more than 450 types of PLC & I/O protocols which helps solve the communication gap between OT & IT technologies.



Data  
Collection



No Limitation  
Internal Points



450  
Protocols



Supports 16  
communication  
links



Over 50s  
Screen Objects

### WebAccess/SCADA

WebAccess/SCADA is a 100% web browser-based HMI/SCADA software. All the features found in conventional HMI and SCADA software, including Animated Graphics Displays, Real-time Data, Control, Trends, and Alarms and Logs, are available in a standard web browser. WebAccess/SCADA enables central database development, remote monitoring, and an IoT control architecture.



# ory to Accelerates Industry 4.0



EtherNet/IP

EtherCAT

CANopen

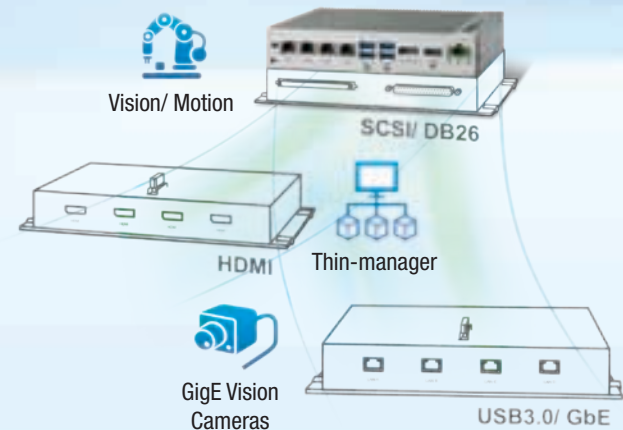
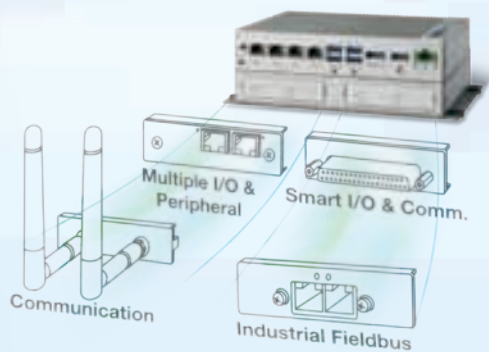
## Innovative Stack-up Design

- Easy configuration
- Fast customization
- Flexible expansion
- Abundant selection



## Universal UNO

- Rugged & performance housing design
- Easy configuration with extendable functionality
- Suitable for industrial edge intelligent gateways
- 1/2/4 iDOOR expansion interface with 30+ iDOOR multi-function module selections
- Industrial wide temperature capability



## New Innovative Design



### Modular Platform Design

Universal (general application):  
Domain (vertical application):  
Customized (by project base), UNO board to board connectors are suitable for all factory applications.



### Time-to-Market Customization

Easy to configure and modular design enable shorter assembly time and faster time-to-market.



### Wide Range PWR Input 10~36V

Wide range power input ensures normal operation in unstable power environments.



### Dual Swappable SSD/HDD

Dual storage supports RAID 0/1 and external removable drive design makes for easier maintenance for data switching.



### iDoor Expansion with 100+ Combinations

More than 100+ combinations of iDoor technology enable UNO to fulfill every kind of vertical application scenario.



### Rubber Stopper Design with Captive Screw

Modular box uses captive screw design to prevent screw loss during assembly and rubber stoppers provide better system stability.



### Cable-less Design

Cable-less design for internal space saving, enhanced MTBF, reliability of signal transition, and cost efficiency for assembly.



### Lockable I/O Design

Full lockable I/O ensures the system works properly and safely in high vibration environments.



### Friendly Assembly Design

User friendly screw design make assembly easier for 2nd stack and iDoor modules.

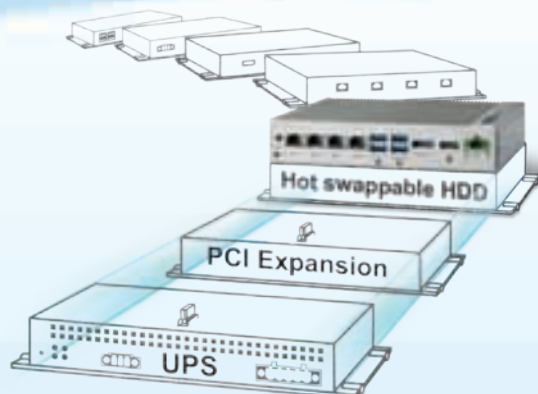


### Versatile Mounting

Variety of mounting methods -VESA, DIN rail, Pole, and Stand mount.

## Domain UNO

- Rugged & domain-focused housing design
- Specific industrial domain market application
- Motion/vision FPGA board extension with USB3.0/ GbE and software support
- 4 x HDMI multiple displays for dashboard & signage
- Din-Rail installation for cabinet applications





## Customized UNO




- Optimized & rugged performance housing design
- Brand-labeling & customized stack-up housing with specific functionalities (hot-swappable dual storage, unique specific-functions)
- Tool-less maintenance design
- Own built design with FREE dimensions released

# Selection Guide





## Modular Box Platform Series NEW

Model Name	UNO-2271G	UNO-2372G	UNO-2484G
<b>Optimized UNO</b>			
Form-Factor	Pocket-Size	Small-Size	Regular-Size
CPU	Intel® Atom™ E3815 1.46GHz Processor	Intel® Atom™ E3940 1.6GHz Quad Core	Intel® Core™ i7-6600U ULT 2.6GHz Dual Core Intel® Core™ i5-6300U ULT 2.4GHz Dual Core Intel® Core™ i3-6100U ULT 2.3GHz Dual Core
Onboard RAM	4G DDR3L RAM	4G DDR3L SDRAM	8G DDR4 SDRAM
Display	1 x HDMI, supports 1920 x 1080 @ 60Hz	HDMI/DP	HDMI/DP
Audio	-	-	LINE-OUT
Serial Ports	-	4 x RS-232/422/485	4 x RS-232/422/485
Ethernet Ports	2 x 10/100/1000Base-T	2 x 10/100/1000Base-T	4 x 10/100/1000Base-T
USB Ports	1 x USB 3.0	4 x USB 3.0	4 x USB3.0
Storage	On board 32G eMMC(Optional mSATA)	1x mSATA/mPCIe, 1x SATA	1x mSATA/mPCIe, 2x SATA
Expansion	1 x Full-Size mPCIe Slot, PCIe 2.0	1 x mPCIe/mSATA, 1 x Full-size mPCIe slot, (supports SIM card)	1 x mPCIe/mSATA Up to 4 mPCIe with 2nd layer
Dimension (W x D x H)	100 x 70 x 30 mm	150 x 105 x 35 mm	200 x 140 x 40 mm
Ordering Information	UNO-2271G-E21AE	UNO-2372G-E12AE	UNO-2484G-674AE (i7) UNO-2484G-654AE (i5) UNO-2484G-634AE (i3)
<b>Universal UNO (Optimized UNO with Expansion)</b>			
Expansion	1 x iDoor Expansion 1 x Small IO module (2 ports COM or 3 ports USB2.0)	2 x iDoor Expansion 1 x iDoor Expansion + 1 x Small IO module (2 ports COM or 3 ports USB2.0)	4 x iDoor Expansion 3 x iDoor Expansion + 1 x Small IO module (2 ports COM or 3 ports USB2.0)
Dimension (W x D x H)	100 x 70 x 60 mm	150 x 105 x 65 mm	200 x 140 x 70 mm
Ordering Information	UNO-2271G-E22AE (3 x USB2.0), Stand Mount UNO-2271G-E23AE (2 x COM), DIN RAIL Mount	UNO-2372G-E120AE	UNO-2484G-6740AE (i7) UNO-2484G-6540AE (i5) UNO-2484G-6340AE (i3)

## Hot Selling Series

Model Name	UNO-2272G	UNO-2362G	UNO-2483G/ 2473G
			
CPU	Intel Celeron Processor J1900 2.0GHz	AMD G-series T40E 1.0GHz	Intel® Core™ i3-4010U ULT 1.7GHz, Intel® Core™ i7-4650U ULT 1.7GHz, Intel® Atom™ E3845 1.91GHz Intel® Celeron J1900 2.0GHz
Storage	1 x half-size mSATA (Additional SATA by optional)	1x mSATA, 1x SATA (Optional)	UNO-2483G: 2 x SATA, 1 x mSATA UNO-2473G: 1x SATA, 1 x mSATA
Ordering Information	UNO-2272G-J2AE	UNO-2362G-T2AE	UNO-2483G-434AE UNO-2483G-474AE UNO-2473G-E3AE UNO-2473G-J3AE

# Advantech iDoor Module

Industrial Fieldbus	Smart I/O & Comm.	Communication	Multiple I/O & Peripheral
 <p>CANopen, PROFIBUS, PROFINET, EtherCAT, EtherNet/IP, POWERLINK, Sercos III</p> <ul style="list-style-type: none"> <li>• PCM-26D2CA</li> <li>• PCM-26R2PN</li> <li>• PCM-26R2EC</li> <li>• PCM-26R2S3</li> </ul>	 <p>RS-232, RS-422/485, Digital/Analog I/O, I/O Link</p> <ul style="list-style-type: none"> <li>• PCM-27D24DI</li> <li>• PCM-24D2R4</li> <li>• PCM-24D2R2</li> <li>• PCM-24D4R4</li> </ul>	 <p>WiFi/Bluetooth, Zigbee, RFID/NFC, GSM/GPRS/3G and 4G LTE</p> <ul style="list-style-type: none"> <li>• PCM-24S34G</li> <li>• PCM-24S33G</li> <li>• PCM-24S2WF</li> </ul>	 <p>NVRAM, USB, TPM, CFast, GigaLAN, PoE, VGA/DVI, DP, HDMI, Audio, PCIe adapter card</p> <ul style="list-style-type: none"> <li>• PCM-24R2PE</li> <li>• PCM-24U2U3</li> <li>• PCM-24R1TP</li> <li>• PCM-23C1CF</li> </ul>

## Advantech Innovative Design Concept- Simple, Flexible, Reliable

As a leading provider of embedded automation PC solutions, Advantech is devoted to innovative product/service development. Being a pioneer in intelligent automation technology, Advantech's i-concept represents the very best in intelligent and intuitive design, user interaction, and cutting-edge technologies that open up a new era of industrial automation.



Intelligent iKey provides a simple soft-key interface for quickly configuring your automation panel. And, with our user-friendly software design, customized functions are easier to carry out.



A standardized modular Interface which offers flexible expansion to increase the number of applications and expand system functions through the variety of standardized modular I/Os.



A Reliable Long Distance Transmission Technology which transfers video signals and touch control over a single Ethernet cable which overcomes interference in harsh environments not only for data connections, but also for a cost effective multiple display solution.

### Regional Service & Customization Centers

**China** | Kunshan  
86-512-5777-5666

**Taiwan** | Taipei  
886-2-2792-7818

**Netherlands** | Eindhoven  
31-40-267-7000

**Poland** | Warsaw  
00800-2426-8080

**USA** | Milpitas, CA  
1-408-519-3898

### Worldwide Offices

#### Greater China

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Shenzhen 86-755-8212-4222  
Chengdu 86-28-8545-0198  
Hong Kong 852-2720-5118

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Israel 072-2410527

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St. Petersburg 8-800-555-81-20

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**Ireland**  
Oranmore 353-91-792444

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Milpitas 1-408-519-3898  
Irvine 1-949-420-2500  
Ottawa 1-815-434-8731

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Toll Free 0800-770-5355  
São Paulo 55-11-5592-5355

**Mexico**  
Toll Free 1-800-467-2415  
Mexico City 52-55-6275-2727

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