

Advantech Embedded Automation PC

Modular Box Platform for Digitalization in the Industrial IoT



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



ADVANTECH

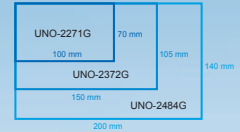
Enabling an Intelligent Planet

www.advantech.com

Connecting Machine and Process of Smart Factory

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



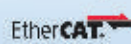
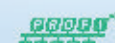
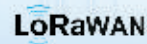
Supports 16 communication links



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.



Sensor

I/O

PLC

... to Accelerates Industry 4.0

PROFI
NET

PROFI
BUS

EtherNet/IP

EtherCAT

CANopen

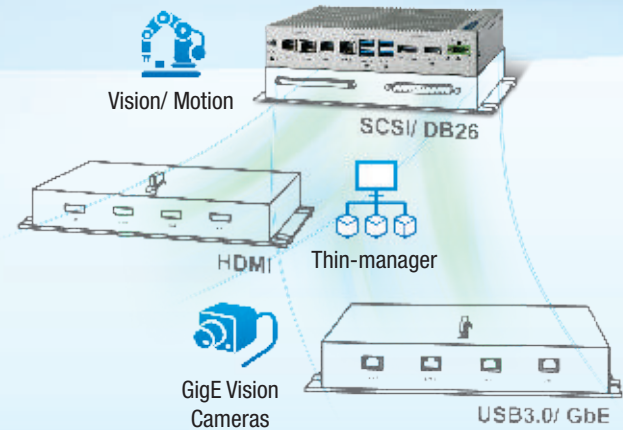
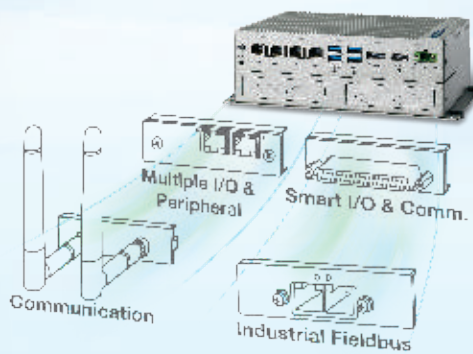
Innovative Stack-up Design

- 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.

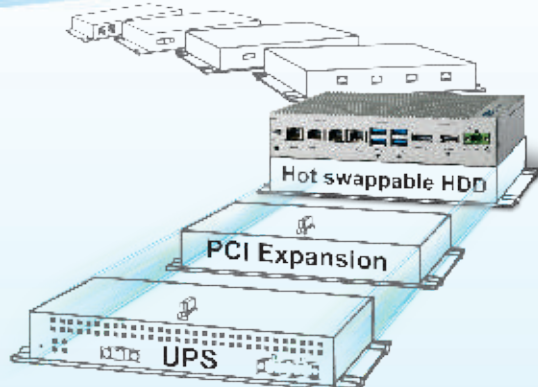


Versatile Mounting

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
Optimized UNO			
Form-Factor	Pocket-Size	Small-Size	Regular-Size
CPU	Intel® Atom™ E3815 1.46GHz Single Core Intel® Atom™ E3825 1.33GHz Dual Core	Intel® Atom™ E3845 1.91GHz Quad Core Intel® Celeron™ J1900 2GHz Quad Core	6th Gen Intel® Core™ i7-6600U, 2.6GHz i5-6300U, 2.4GHz i3-6100U, 2.3GHz
Onboard RAM	4G DDR3L RAM	4G DDR3L SDRAM	8G DDR4 SDRAM
Display	1 x HDMI, supports 1920 x 1080 @ 60Hz	1xDP supports 2560 x 1440@30Hz 1 x HDMI,supports 1920 x 1080@60Hz	1xHDMI, supports 1920x1080@60Hz 1xDP, supports 3840x2160@30Hz
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	1 x USB3.0 3 x USB2.0	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, 2 x Full-size mPCIe slot	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 (Single core) UNO-2271G-E021AE (Dual core)	UNO-2372G-E021AE UNO-2372G-J021AE	UNO-2484G-6731AE(i7) UNO-2484G-6531AE(i5) UNO-2484G-6331AE(i3)
Universal UNO (Optimized UNO with Expansion)			
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-2271G-E022AE(3xUSB2.0), Stand Mount UNO-2271G-E023AE(2xCOM), DIN RAIL Mount	UNO-2372G-E022AE UNO-2372G-J022AE	UNO-2484G-6732AE(i7) UNO-2484G-6532AE(i5) UNO-2484G-6332AE(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	Wireless Communication	Industrial I/O & Peripheral
 <p>CANopen, PROFIBUS, PROFINET, EtherCAT, EtherNet/IP, POWERLINK, Sercos III</p> <ul style="list-style-type: none"> PCM-26D2CA PCM-26R2EC PCM-26R2PN PCM-26R2S3 	 <p>WiFi/Bluetooth, Zigbee, RFID/NFC, GSM/GPRS/3G and 4G LTE</p> <ul style="list-style-type: none"> PCM-24S34G PCM-24S33G PCM-24S2WF 	 <p>NVRAM, USB, TPM, CFast, GigaLAN, PoE, VGA/DVI, DP, HDMI, Audio, PCIe adapter card</p> <ul style="list-style-type: none"> PCM-24R2PE PCM-24R1TP PCM-24U2U3 PCM-23C1CF

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

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1-408-519-3898

Worldwide Offices

Greater China

China
Toll Free 800-810-0345
Beijing 86-10-6298-4346
Shanghai 86-21-3632-1616
Shenzhen 86-755-8212-4222
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Taiwan
Toll Free 0800-777-111
Taipei & IoT Campus 886-2-2792-7818
Taichung 886-4-2329-0371
Kaohsiung 886-7-229-3600

Middle East and Africa

Israel 072-2410527

Asia

Japan
Toll Free 0800-500-1055
Tokyo 81-3-6802-1021
Osaka 81-6-6267-1887
Nagoya 81-0800-500-1055

Korea
Toll Free 080-363-9494
Seoul 82-2-3663-9494

Singapore
Singapore 65-6442-1000

Malaysia
Kuala Lumpur 60-3-7725-4188
Penang 60-4-537-9188

Thailand
Bangkok 66-02-2488306-9

India
Bangalore 91-80-2545-0206
Pune 91-94-2260-2349

Indonesia
Jakarta 62-21-751-1939

Australia
Toll Free 1300-308-531
Melbourne 61-3-9797-0100

Europe

Germany
Toll Free 00800-2426-8080/81
Munich 49-89-12599-0
Düsseldorf 49-2103-97-855-0

France
Paris 33-1-4119-4666

Italy
Milano 39-02-9544-961

Benelux & Nordics
Breda 31-76-523-3100

UK
Newcastle 44-0-191-262-4844
London 44-0-870-493-1433

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

Czech Republic
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Americas

North America
Toll Free 1-888-576-9668
Cincinnati 1-513-742-8895
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Ottawa 1-815-434-8731

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

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

More Information



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