# Advantech Embedded Automation PC

Modular Box Platform for Digitalization in the Industrial IoT



Introduction
 Features & Functions
 Intelligent Software
 Selection Guide







www.advantech.com

# **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.

UNO-2271G	70 mm		
100 mm		105 mm	
UNO-2372G		1	140 m
150 mm	UNO-	2484G	
200 m	100		

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

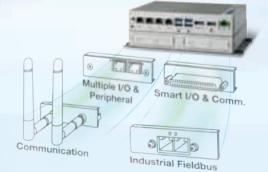
Over 50s Screen Objects

## 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 an standard web browser. WebAccess/SCADA enables central database development, remote monitoring, and an IoT control architecture.







### **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 multifunction 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.

**Dual Swappable SSD/HDD** 

Dual storage supports RAID 0/1 and

external removable drive design

data switching.

makes for easier maintenance for



# Wide Range PWR Input 10~36V

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



# Rubber Stopper Design

with Captive Screw Modular box uses captive screw

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



### iDoor Expansion with 100+ Combinations

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

### Cable-less Design

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

### **Friendly Assembly Design**

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



### Lockable I/O Design

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

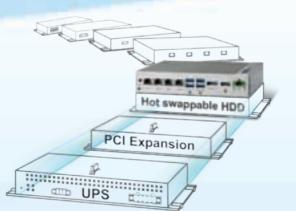


### **Versatile Mounting**

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	- Martine -		
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/mPCle, 1x SATA	1x mSATA/mPCIe, 2x SATA
Expansion	1 x Full-Size mPCle Slot, PCle 2.0	1 x mPCle/mSATA, 1 x Full-size mPCle slot, (supports SIM card)	1 x mPCle/mSATA Up to 4 mPCle 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)
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-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
CANopen, PROFIBUS, PROFINET, EtherCAT, EtherNet/IP, POWERLINK, Sercos III	RS-232, RS-422/485, Digital/Analog I/O, I/O Link	WiFi/Bluetooth, Zigbee, RFID/NFC, GSM/GPRS/3G and 4G LTE	NVRAM, USB, TPM, CFast, GigaLAN, PoE, VGA/DVI, DP, HDMI, Audio, PCIe adapter card
PCM-26D2CA     PCM-26R2EC     PCM-26R2PN     PCM-26R2S3	PCM-27D24DI     PCM-24D2R2     PCM-24D2R4     PCM-24D4R4	• PCM-24S34G • PCM-24S2WF • PCM-24S33G	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 86-512-5	777-5666 <b>Ta</b>	wan Taipei 886-2-2792-78	18 Nethe	rlands Eindhoven 31-40-267-7000	Poland Wa	rsaw 300-2426-8080	USA   Milpitas, CA 1-408-519-389
Vorldwid	de Offices						
Greater C	China	Asia		Europe		Americas	
China		Japan		Germany		North America	
Toll Free Beijing Shanghai Shenzhen	800-810-0345 86-10-6298-4346 86-21-3632-1616 86-755-8212-4222	Toll Free Tokyo Osaka Nagoya	0800-500-1055 81-3-6802-1021 81-6-6267-1887 81-52-856-9657	Toll Free Munich Düsseldorf	00800-2426-8080/81 49-89-12599-0 49-2103-97-855-0	Toll Free Cincinnati Milpitas Irvine	1-888-576-9668 1-513-742-8895 1-408-519-3898 1-949-420-2500
Chengdu Hong Kong	86-28-8545-0198 852-2720-5118	<i>Korea</i> Toll Free	080-363-9494	France Paris	33-1-4119-4666	Ottawa	1-815-434-8731
<i>Taiwan</i> Toll Free	0800-777-111	Seoul	82-2-3663-9494	<b>Italy</b> Milano	39-02-9544-961	Brazil Toll Free São Paulo	0800-770-5355 55-11-5592-5355
Neihu Xindian	886-2-2792-7818 886-2-2218-4567	Singapore Singapore	65-6442-1000	Benelux & Nordics Breda	31-76-523-3100	Mexico	
Taichung Kaohsiung	886-4-2329-0371 886-7-229-3600	Malaysia Kuala Lumpur Penang	60-3-7725-4188 60-4-537-9188	<i>UK</i> Newcastle	44-0-191-262-4844	Toll Free Mexico City	1-800-467-2415 52-55-6275-2727
		Thailand	00 + 001 0100	London	44-0-191-202-4044		
Middle E	ast and Africa	Bangkok India	66-2-248-3140	<b>Poland</b> Warsaw	48-22-31-51-100		
131 dei	012-2410321	Bangalore Pune	91-80-2545-0206 91-20-3948-2075	<b>Russia</b> Moscow	8-800-555-01-50		
		<i>Indonesia</i> Jakarta	62-21-751-1939	St. Petersburg Czech Republi	8-800-555-81-20		
		Australia	02-21-751-1559	Ústí nad Orlicí	420-465-521-020		
		Toll Free Melbourne	1300-308-531 61-3-9797-0100	<i>Ireland</i> Oranmore	353-91-792444		





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