Advantech
Fanless Box PCs

Open and Robust Computing Power for Industrial Automation Applications

- ✓ Facility Management
- ✓ Environmental Monitoring
- ✓ Building Automation
- ✓ Machine Automation
- ✓ Intelligent Transportation
- ✓ Production Automation
- ✓ Power & Energy

ADVANTECH

*e*Automation

Designed for Versatility, Built to Empower

Advantech's UNO-series of Fanless Box PCs have been well proven through worldwide usage in versatile industrial applications, empowering system performance and reliability.

Power SCADA
UNO-3282

Machine Automation
UNO-3074

Factory Automation
UNO-1170

Facility Management
UNO-2182

Building Automation
UNO-1150E

Access Control
UNO-1019
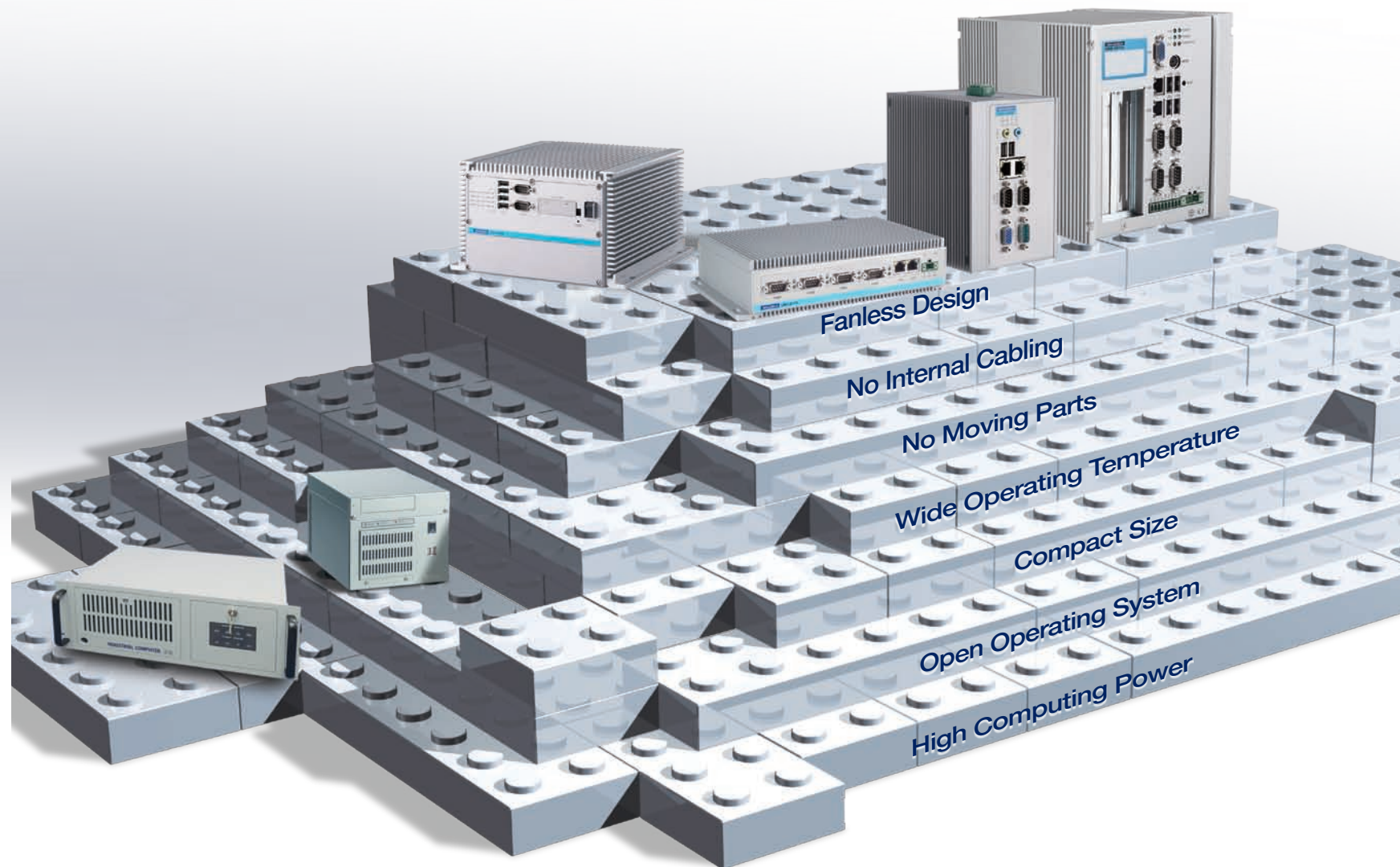
Infrastructure
UNO-2050E

Intelligent Transportation
UNO-2176

Environmental Monitoring
UNO-2170

Advantech Fanless Box PCs,
More than an IPC

Open, Robust, and Fanless Computing Power

Advantech's Fanless Box PCs are designed to fulfill the needs of mission-critical automation applications. Their embedded design, industrial automation features and advanced computer technology deliver robustness, reliability and flexibility to satisfy customers who are looking for a rugged & compact computing platform with an industrial design and built-in I/O for diverse automation applications.

Fanless Design
No Internal Cabling
No Moving Parts
Wide Operating Temperature
Compact Size
Open Operating System
High Computing Power

Advantech's Fanless Box PC Product Lines

UNO-1000 Series
DIN-rail Fanless Box PCs -
DIN-rail Mounted Fanless PCs to Expand the Power of Control Systems

Advantech's UNO-1000 Series are compact and DIN-rail mounted fanless industrial PCs. They feature a RISC-based processor with a wide operating temperature (up to 70° C), and are suitable as communication controllers or in protocol converter applications in mission-critical environments.

UNO-1100 Series
DIN-rail, Powerful Fanless Box PCs -
Powerful and Compact DIN-rail PCs Inside Control Cabinet

Advantech's UNO-1100 Series are compact and DIN-rail mounted fanless industrial PCs. They feature an x86-based processor with wide operating temperature (up to 60° C). These are suitable for SCADA RTU, warehouse, and environment monitoring applications.

UNO-2000 Series
Compact Fanless Box PCs -
Compact, Application-Ready Platforms to Fulfill Diverse Applications

Advantech's UNO-2000 series are fanless industrial PCs with DIN-rail and wallmount options. They feature an AMD GX2-400 processor, dual LANs, and RS-232/422/485, and more. This series is highly suitable for gateway, and data server applications.

UNO-2100 Series
High Performance Fanless Box PCs with PC/104+ Expansion -
Scalable, Low Power Consuming Platforms to Deliver
High-performance Computing and Communications

Advantech's UNO-2100 series are fanless wallmounted industrial PCs with PC/104+ expansion. They feature a wide computing power range (from Celeron M 1GHz to Core 2 Duo 1.5GHz), and their PC/104+ expansion capability allows users to add any 3rd party I/O module for wide range of applications.

UNO-3000 Series
High Performance Fanless Box PCs with PCI Expansion -
Front Accessible, High Performance Platforms Featuring 2 or 4 PCI-slot Expansions

Advantech's UNO-3000 series are fanless wallmounted front access industrial PCs with PCI-bus expansion. They feature wide computing power ranging from Celeron M 1GHz to Pentium M 1.8GHz. Their PCI-bus expansion capability allows users to add any 3rd party I/O module for a wide range of applications.

UNO-3200 Series
High Performance Fanless Box PCs with PCIe/PCI Expansion -
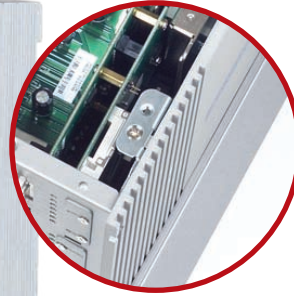Powerful and Reliable Computing Engines to Meet Critical Demanding Applications

Advantech's UNO-3200 series are designed to provide computing power and high-speed I/O expansion for demanding applications such as machine controller with vision / 3D simulation, embedded server etc. UNO-3200 series offer Core 2 Duo computing and DVI to handle vision processing and graphics display . Its next-generation PCI Express slot provides easy integration with vision boards. Also, users can install two SATA hard drives inside for needs of mass storage in vision-associated applications.
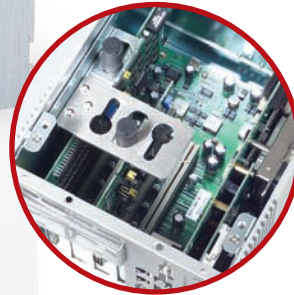
Robust Industrial Design

Advantech Fanless Box PCs are designed for the harsh working environments of factory floors. Their embedded design without moving parts and industrial-grade features makes these PCs the best choice for automation applications.
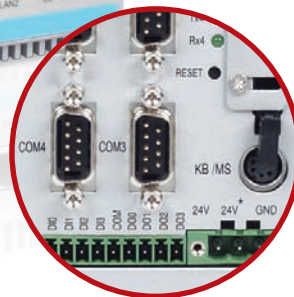
Fanless Design

The UNO-series are robust computers without rotating parts, such as a CPU fan, system fan, power supply fan or HDD. This concept significantly increases reliability, extends MTTR, and extremely reduces maintenance efforts. Therefore, you don't need to worry about a CPU cooler or HDD failure issue anymore, even in dusty environments.

No Internal Cabling

Unlike general Box PC designs where cables are used for wiring between connectors and CPU boards, connectors on the UNO-series are soldered directly on the PCB. Therefore, there is no internal cabling inside the chassis. This makes them much more reliable than general Box PCs in harsh environments.

Industrial-grade Power

Fanless Box PCs are designed to accept wide PC power input (ex. 9~36V$_{DC}$) in factory floors. In addition, they also feature power reversal protection that prevents system damage when power inputs are reversed.

Industrial Proven Design

High Tolerance to Vibration and Shock

Advantech's Fanless Box PCs are designed with high tolerance to shock (up to 50G) and vibration (up to 2G) for harsh environments, such as vehicle, transportation and fleet applications.

Tailor-made Thermal Design for Onboard CPU and RAM

To optimize thermal performance, every Fanless Box PC is equipped with a tailor-made thermal design to serve its onboard CPU and RAM, and goes through a complete thermal test procedure in order to guarantee best quality for users' critical applications.
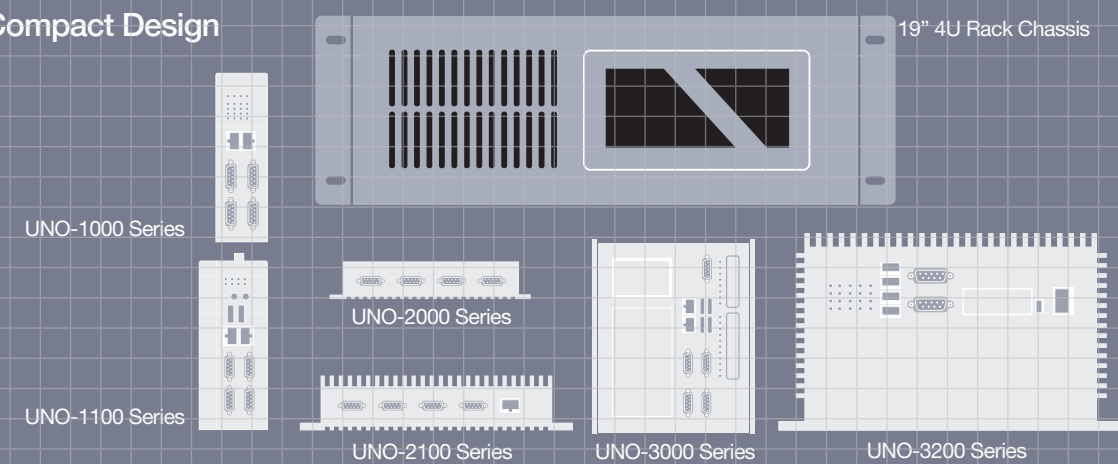
Battery-backup Memory

To keep critical data alive when system power is lost, each Fanless Box PC is equipped with onboard battery-backup memory. Onboard battery supplies power to keep memory operating all the time. In addition, battery-backup memory can also act as temporary data buffer that helps reduce CF's access times dramatically.

Wide Operating Temperature Range

Advantech Fanless Box PCs support a wide operating temperature through selecting low-voltage CPU's, industrial-grade components, as well as sophisticated thermal design (up to 70° C) operating temperature that meets critical industrial-grade applications.
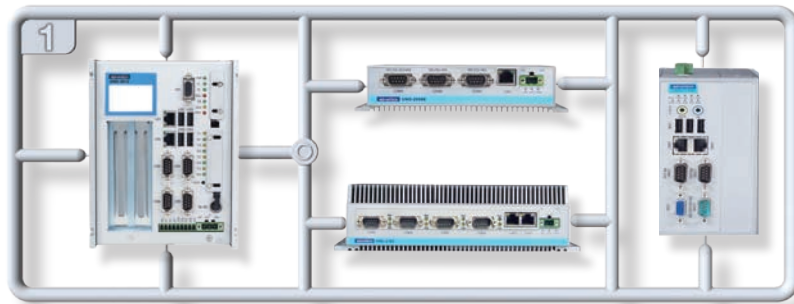
Compact Design

19" 4U Rack Chassis

UNO-1000 Series

UNO-2000 Series

UNO-1100 Series

UNO-2100 Series
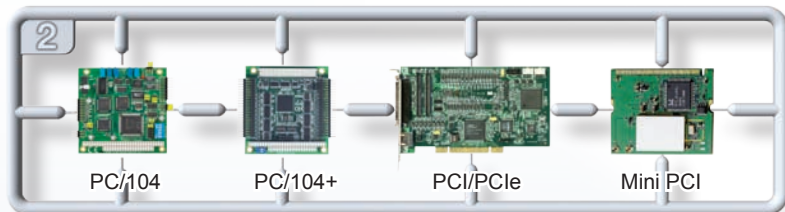
UNO-3000 Series

UNO-3200 Series

Building Blocks for Your System

Advantech's Configure-To-Order Services (CTOS) allow you to configure application-ready systems through a web-based configuration tool in a few steps. In UNO-series CTOS Services, you can choose I/O boards, select storage devices in different sizes and appropriate operation systems in seconds without worrying about compatibility issues or assembly efforts. Please contact your local sales representative for details.
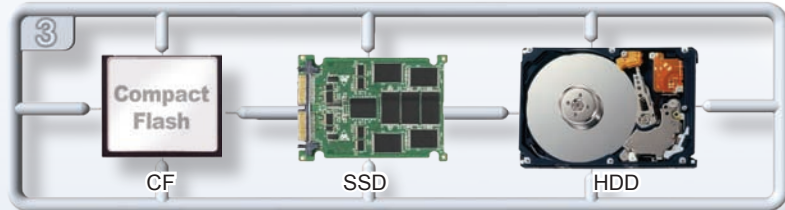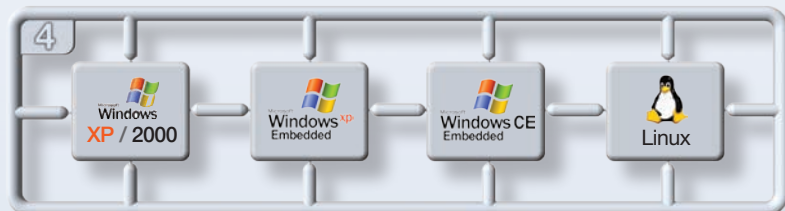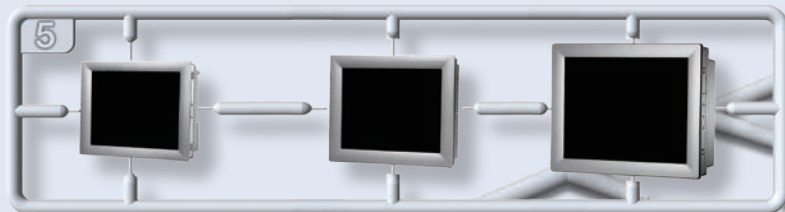
Fanless Box PC

I/O Module

PC/104   PC/104+   PCI/PCIe   Mini PCI

Storage Device

Compact Flash

CF   SSD   HDD

Embedded OS

Windows XP / 2000   Windows XP Embedded   Windows CE Embedded   Linux
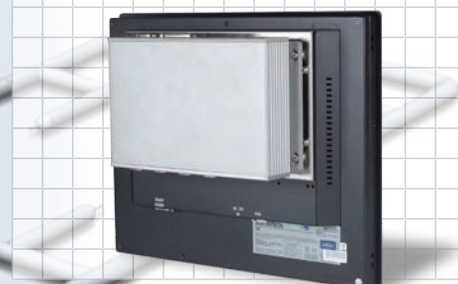
LCD Display

UNO-1100 + Mini PCI Modules

UNO-2000 + PC/104 Modules

UNO-2100 + PC/104+ Modules

UNO-3000 + PCI Cards

UNO-2000 + FPM Modules

Operating System and Utilities

DiagAnywhere
Remote Management Software

Control / Server

Inernet / Intranet

(via VPN)

Remote Management and Control – Advantech's DiagAnywhere Utility

Advantech's "DiagAnywhere" remote management software allows users to achieve remote maintenance tasks of up to 16 Fanless Box PCs on a single display over internet. Its features include remote monitoring and control, remote screen snapshots and recording, and file uploading / downloading, all of which combine to help users eliminate on-site maintenance efforts.

Embedded Operating System Support

In addition to Windows 2000/XP, Windows XP Embedded, Windows CE and Embedded Linux are supported to meet needs of real-time & compact-sized OS.

Windows XP Embedded   Windows CE Embedded   Linux

Multi-Language Support

Windows XP Embedded OS supports Multilingual User Interface (MUI) up to 10 languages including English, Traditional / Simplified Chinese, Japanese, Spanish, German, Russian, French, Italian and Korean. For Windows CE, we support 5 languages including English, Traditional / Simplified Chinese, Japanese and Korean.

Secure Intellectual Properties

The UNO-series' Windows Embedded OS provides EWF (Enhanced Writer Filter) and FBWF to protect the image from virus attacks and accidental system corruption. Anti-piracy functions are also provided to prohibit the possibility of user information being compromised.
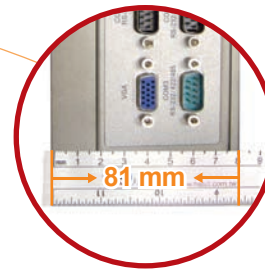
UNO-1100 Series Introduction & Features
DIN-rail, Powerful Fanless Box PCs

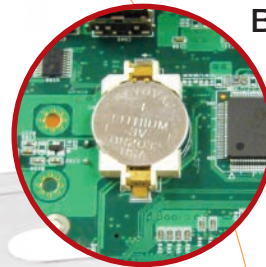60°C   DIN-Rail   Battery SRAM

- Fanless, No Internal Cabling and Moving Parts for Harsh Environments
- DIN-rail, Front I/O Design in Compact Size for Control Cabinets
- Battery-backup SRAM Saves Process Data in the Event of a Power Failure
- Dual Ethernet, PC-104, PC/104+, and Mini PCI Expansion
- Wide Operating Temperature up to 60° C and Wide Power Input Range

Designed for Control Cabinets
UNO-1100 series features compact size, DIN-rail mount and front-accessible I/O that make installation within a control cabinet very easy.
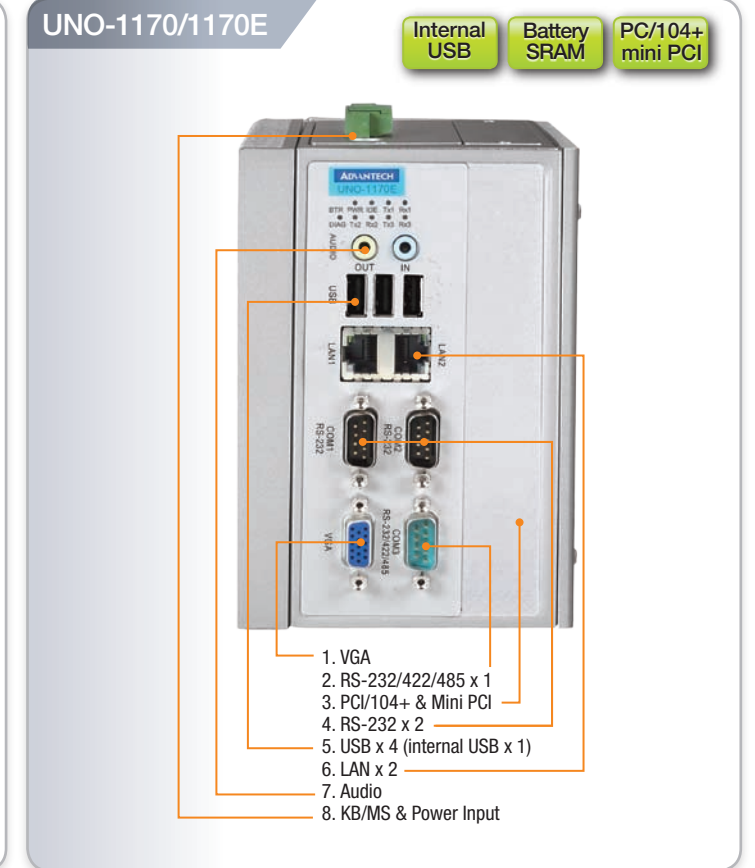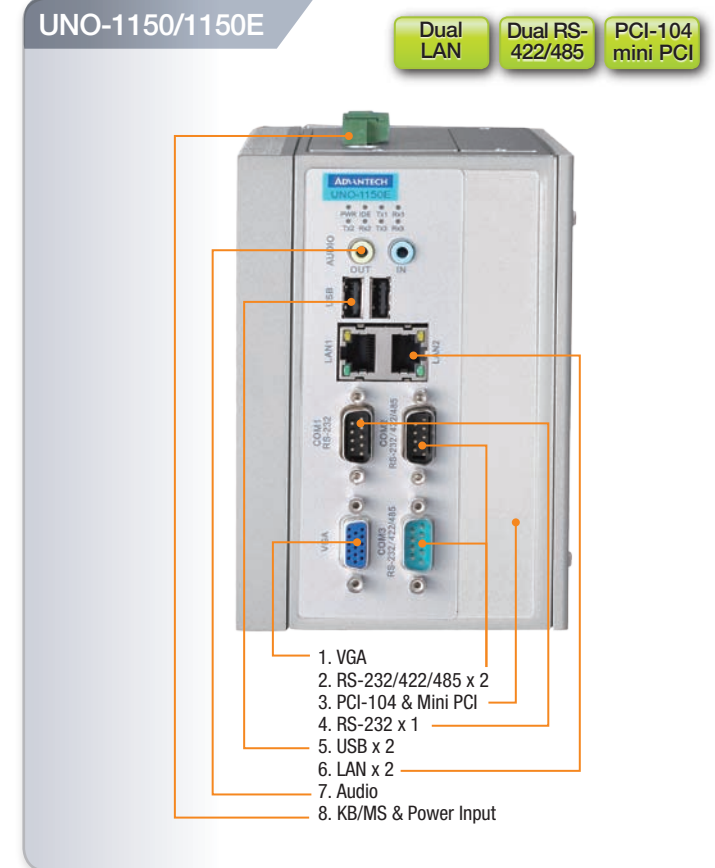
81 mm

Battery-backup SRAM
The onboard battery-backup SRAM saves runtime process data in the event of a power failure. In addition, the SRAM can act as a data buffer that helps reduce CF access time and extend product lifetime.

Flexible Expansion
UNO-1100E series equips expansion interfaces for mini PCI, PCI-104 or PC/104+ modules. It helps users easily integrate wireless connections and Fieldbus I/O modules together in a single package.

UNO-1150/1150E
Dual LAN | Dual RS-422/485 | PCI-104 mini PCI

1. VGA
2. RS-232/422/485 x 2
3. PCI-104 & Mini PCI
4. RS-232 x 1
5. USB x 2
6. LAN x 2
7. Audio
8. KB/MS & Power Input

UNO-1170/1170E
Internal USB | Battery SRAM | PC/104+ mini PCI

1. VGA
2. RS-232/422/485 x 1
3. PCI/104+ & Mini PCI
4. RS-232 x 2
5. USB x 4 (internal USB x 1)
6. LAN x 2
7. Audio
8. KB/MS & Power Input

UNO-1100 Series Selection Guide

Model Name	UNO-1150	UNO-1150E	UNO-1170	UNO-1170E
CPU	GX2-400 MHz		Celeron M 1.0 GHz, Pentium M 1.4	
Onboard RAM	256 MB DDR SDRAM		512 MB/1 GB DDR SDRAM	
Battery-backup SRAM	-		512 KB	
Audio / VGA	Yes			
Serial Port	1 x RS-232, 2 x RS-232/422/485		2 x RS-232, 1 x RS-232/422/485	
Ethernet Port	2 x 10/100Base-T			
USB Port	2	2	4 (One Internal)	4 (One Internal)
I/O Expansion	-	PCI-104 / Mini PCI	-	PC/104+ / Mini PCI
Storage Expansion	CF	CF / SATA HDD	CF	CF / SATA HDD
Power Input Range	9~36 V_{DC}			
Operating Temperature	-10 ~60° C (14 ~ 140° F)			
Operating System	Windows XP Embedded, Windows CE 6.0, Windows 2000/XP, Linux			
Dimensions (W x D x H)	81 x 155 x 140 mm (3.4" x 6.1" x 5.6")	110 x 155 x 140 mm (4.4" x 6.1" x 5.6")	81 x 155 x 140 mm (3.4" x 6.1" x 5.6")	110 x 155 x 140 mm (4.4" x 6.1" x 5.6")

Ordering Information

UNO-1150-G20E	GX2 400 MHz, 256 MB RAM Fanless Box PC
UNO-1150E-G20E	GX2 400 MHz, 256 MB, Fanless Box PC w/PCI-104
UNO-1170-C11E	Celeron M 1 GHz, 512 MB RAM Fanless Box PC
UNO-1170E-C11E	Celeron M 1 GHz, 512 MB, Fanless Box PC w/PC/104+
UNO-1170-P12E	Pentium M 1.4 GHz, 1 GB RAM Fanless Box PC
UNO-1170E-P12E	Pentium M 1.4 GHz, 1 GB, Fanless Box PC w/PC/104+
UNO-FPM11-AE	UNO-1100 Series VESA Mount Kit
UNO-ANT10-AE	UNO-1100 Series 802.11 b/g WLAN Antenna Kit (Antenna & Mini PCI Module Not Included)
PCLS-DIAGAW10	DiagAnywhere Remote Management and Control Utility

UNO-2000 Series Introduction & Features
Compact Fanless Box PCs

- Compact and Small Footprint with DIN-rail / Wallmount Support
- Industrial Onboard RS-232/422/485, CAN Bus and Isolation I/O
- Wide Power Input Range up to 48V$_{DC}$ with Reverse Protection
- Low Power Consumption

55°C Low Power Rich I/O

Compact Design
UNO-2000 series is designed compact (7.5" x 4.2" x 1.4"), saving space in working areas. Moreover, its DIN-rail and wallmount design provides easy installation.

Diverse Onboard I/O
From isolated digital I/O lines, RS-232/422/485 to CAN bus. It's an ideal solution for gateway, protocol converter and data server applications.

UNO-2050E — AMD GX2 Fanless Box PC with Isolated Digital I/O

Dual LAN | Quad Serial | 16 DI/O

1. KB / MS
2. VGA
3. RS-232 x 2
4. Isolated DI/O x 16
5. Isolated RS-232/422/485 x 2
6. LAN x 2

UNO-2052E — AMD GX2 Fanless Box PC with Isolated CAN bus

Dual CAN | LAN | Serial

1. VGA
2. RS-232 x 1
3. USB x 1
4. LAN x 1
5. Isolated CANBus x 2

UNO-2053E — AMD GX2 Fanless Box PC with Dual LAN

Dual LAN | PCMCIA | Audio

1. KB / MS
2. VGA
3. RS-232 x 2
4. USB x 2
5. PCMCIA
6. Audio
7. LAN x 2

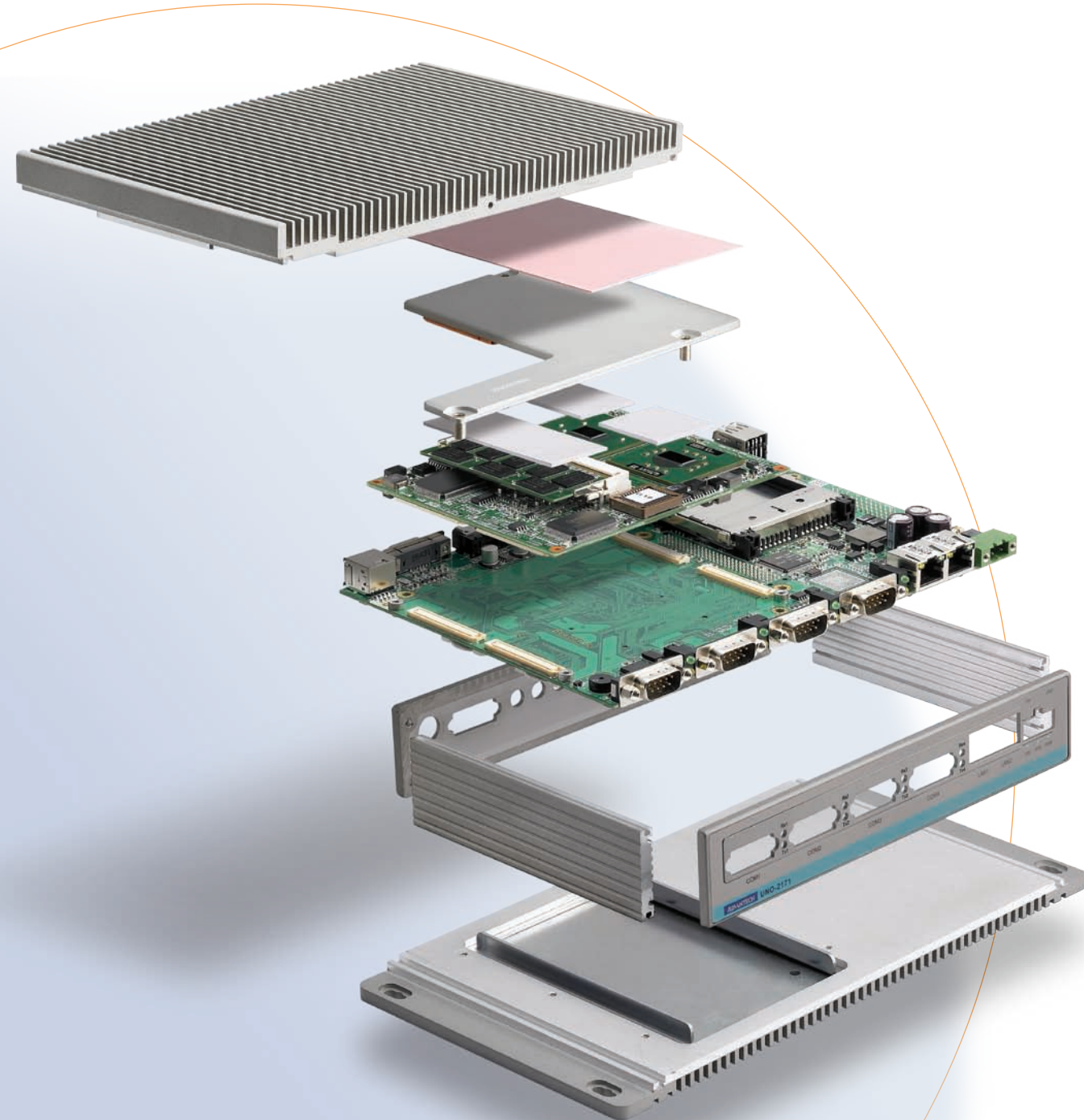## UNO-2059E — AMD GX2 Fanless Box PC with RS-232/422/485

Quad Serial | PCMCIA | LAN

1. LAN x 1
2. RS-232/485 x 2
3. RS-232/422/485 x 1
4. RS-232/422/485 x 1
5. PCMCIA
6. VGA
7. KB / MS
8. USB x 2

UNO-2100 Series Introduction & Features
High Performance Fanless Box PCs with PC/104+

- Wide Computing Power from Celeron M to Core 2 Duo CPU
- Dual DVI/VGA Display, Dual Gigabit Ethernet and eSATA
- Battery-backup SRAM Saves Process Data in the Event of a Power Failure
- PC/104, PCI-104 and PC/104+ Expansion
- Wide Operating Temperature up to 65° C and Wide Power Input Range

65°C | PC/104+ | Core 2 Duo

UNO-2170 — Intel Celeron M Fanless Box PC with PC/104 Expansion

Dual LAN | Quad Serial | Battery SRAM

1. LAN x 2
2. RS-232/422/485 x 2
3. RS-232 x 2
4. KB / MS
5. VGA
6. Printer
7. PCMCIA
8. USB x 2

UNO-2171 — Intel Pentium M Fanless Box PC with PC/104+ Expansion

Audio | Quad Serial | Battery SRAM

1. LAN x 2
2. RS-232/422/485 x 2
3. RS-232 x 2
4. KB / MS
5. VGA
6. Audio
7. PCMCIA
8. USB x 2

UNO-2172/2182 — Intel Core 2 Duo Fanless Box PC with PCI-104 Expansion

Dual GbE | DVI-I | Battery SRAM

1. GigaLAN x 2
2. RS-232/422/485 x 2
3. RS-232 x 2
4. DVI-I
5. SATA 1.0
6. Audio
7. PCMCIA
8. USB x 2

UNO-2176 — Intel Pentium M Fanless Box PC with Isolated Digital I/O

Dual LAN | 6 Serial | 16 DI/O

1. LAN x 2
2. Iso. RS-232/422/485 x 2
3. RS-232 x 2
4. USB x 2
5. VGA
6. KB / MS
7. Isolated RS-232/422/485 x 2
8. Isolated DI/O x 16

UNO-2000 Series Selection Guide

Model Name	UNO-2050E	UNO-2052E	UNO-2053E	UNO-2059E
CPU	AMD Geode GX533 (400MHz)			
Onboard RAM	256 MB DDR SDRAM			
VGA/Mouse/Keyboard	Yes			
Audio	-	-	Yes	-
Serial Port	2 x RS-232 2 x Isolated RS-232/422/485	2 x CAN 1 x RS-232	2 x RS-232	2 x RS-232/485 2 x RS-232/422/485
Ethernet Port	2 x 10/100Base-T	1 x 10/100Base-T	2 x 10/100Base-T	1 x 10/100Base-T
USB Port	-	1	2	2
PC Card Slot	-	-	1	1
Onboard I/O	8-ch isolated DI 8-ch isolated DO	-	-	-
Watchdog Timer	Yes			
CompactFlash Slot	1 x internal			
2.5" HDD Expansion	IDE (optional)			
Operating System	Windows XP Embedded, Windows CE 5.0 / 6.0, Windows 2000/XP, Linux			
Mounting	DIN-rail / Wall / VESA			
Anti-vibration	2G with CF; 1G with HDD			
Anti-shock	50G with CF @ Wallmount; 20G with CF @ DIN-rail			
Power Input Range	9 ~ 36 VDC			10 ~ 48 VDC
Operating Temperature	-10 ~ 55° C @ 5 ~ 85% RH			
Power Consumption (Typical)	15 W			
Power Requirement	Min. 24 W, +24 V @ 1 A power input			
Dimensions (W x D x H)	188.8 x 106.5 x 35.5 mm (7.5" x 4.2" x 1.4")			

Ordering Information

UNO-2050E-IDA0E	GX2 400M, 256MB RAM UNO-2050E
UNO-2052E-IDA0E	GX2 400M, 256MB RAM UNO-2052E
UNO-2053E-IDA0E	GX2 400M, 256MB RAM UNO-2053E
UNO-2059E-IDA0E	GX2 400M, 256MB RAM UNO-2059E
UNO-HD20-AE	UNO-2000 HDD Expansion Kit
UNO-FPM21-AE	UNO-2000 Series VESA Mount Kit
PCLS-DIAGAW10	DiagAnywhere Remote Management and Control Utility

UNO-HD20-AE
UNO-2000 Series
HDD Expansion Kit

UNO-DIN21-AE
UNO-2100 Series
DIN-rail Kit

UNO-FPM21-AE
UNO-2000 Series
VESA Mount Kit

UNO-PCM22-AE
2 x PC/104 Expansion Kit
for UNO-2100 Series

UNO-2100 Series Selection Guide

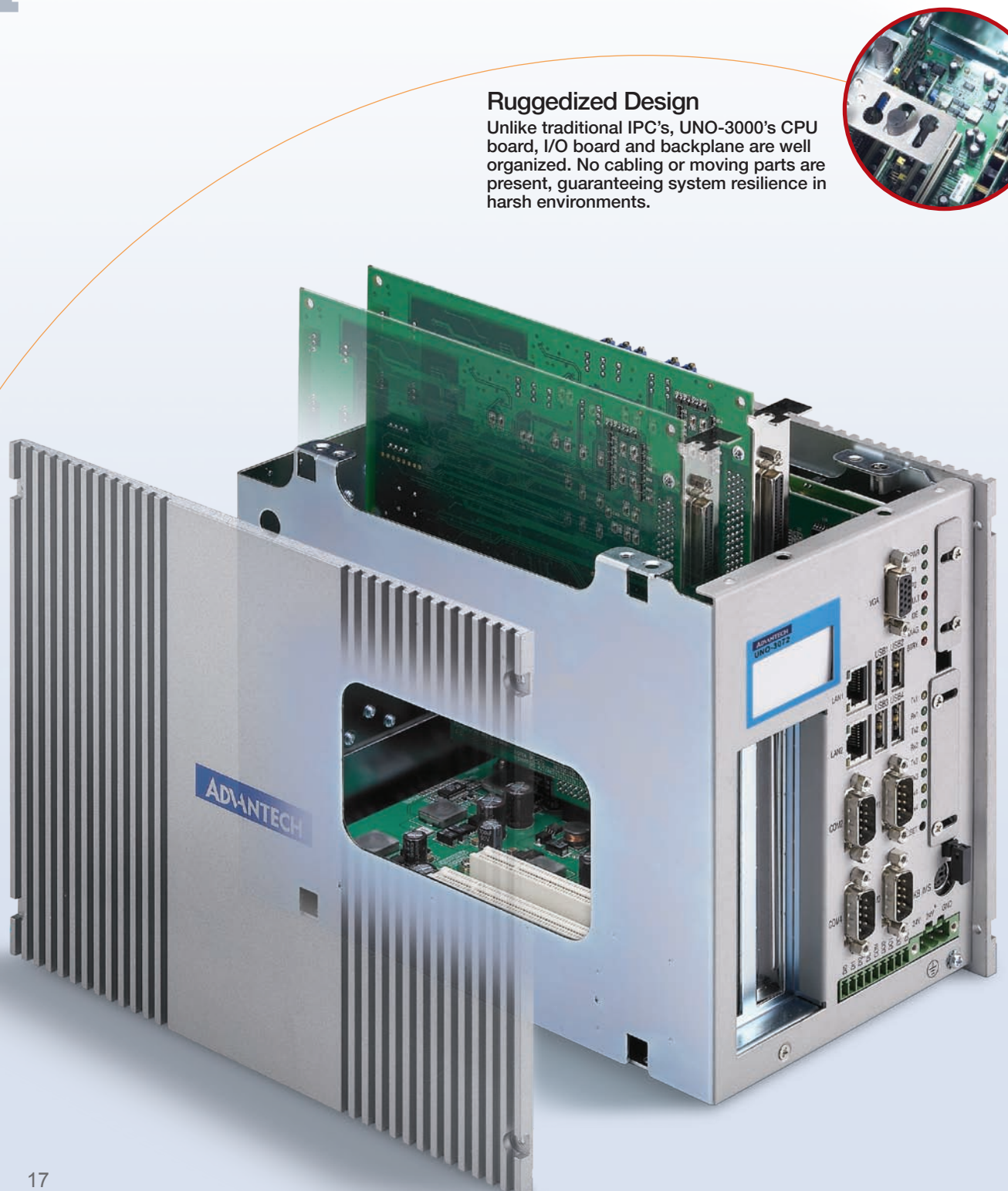| Model	UNO-2170	UNO-2171	UNO-2172	UNO-2176	UNO-2182
CPU	Celeron M 600MHz, Celeron M 1GHz	Celeron M 1.0 GHz, Pentium M 1.4GHz	Celeron M 1.5 GHz, Pentium M 1.6 GHz	Celeron M 1.0 GHz, Pentium M 1.4 GHz	Core 2 Duo 1.5 GHz
Onboard RAM	256MB/512MB DDR SDRAM	512 MB/1 GB DDR SDRAM	1GB DDR2 SDRAM	512 MB DDR DRAM	1 GB DDR2 SDRAM
Battery-Backup SRAM	512 KB				
VGA/Mouse/Keyboard	Yes	Yes	DVI-I	Yes	DVI-I
Audio	-	Yes	Yes	-	Yes
Serial Port	2 x RS-232 2 x RS-232/422/485	2 × RS-232, 2 x RS-232/422/485	2 × RS-232, 2 x RS-232/422/485	2 × RS-232, 4 x Isolated RS-232/422/485	2 × RS-232, 2 x RS-232/422/485
Ethernet Port	2 x 10/100Base-T	2 x 10/100Base-T	2 x 10/100/1000 Base-T	2 x 10/100Base-T	2 x 10/100/1000 Base-T
USB Port	2	2	2	2	2
PC Card Slot	1	1	1	-	1
Printer Port	1	-			
PC/104 Expansion	PC/104	PC/104+	PCI -104	PC/104	PCI-104
Onboard I/O	-	-	-	8-ch Isolated DI 8-ch Isolated DO	-
Watchdog Timer	Yes				
CompactFlash Slot	1 x internal	2 x internal	1 x internal	1 x internal	1 x internal
2.5" HDD Expansion	SATA	IDE / SATA	SATA	IDE / SATA	SATA
Operating System	Windows XP Embedded, Windows CE 5.0 / 6.0, Windows 2000/XP, Linux				
Mounting	DIN-rail / Wall / VESA				
Anti-vibration	2G with CF; 0.5G with HDD	2G with CF; 1G with HDD			
Anti-shock	50G with CF; 20G with HDD				
Power Input Range	9 ~ 36 VDC	10 ~ 53 VDC	9 ~ 36 VDC	9 ~ 36 VDC	9 ~ 36 VDC
Operating Temperature	-20 ~ 50° C @ 5 ~ 85% RH	-20 ~ 65° C @ 5 ~ 85% RH	-20 ~ 50° C @ 5 ~ 85% RH	-20 ~ 65° C @ 5 ~ 85% RH	-20~ 60° C @ 5 ~ 85% RH
Power Consumption (Typical)	24 W	24 W	45W	24 W	35 W
Power Requirement	Min. 48 W, +24 V @ 2 A power input				
Dimensions (W x D x H)	255 x 152 x 50 mm (10" x 6.0" x 2.0")	255 x 152 x 59 mm (10" x 6.0" x 2.3")	255 x 152 x 69 mm (10" x 6.0" x 2.7")	255 x 152 x 59 mm (10" x 6.0" x 2.3")	255 x 152 x 69 mm (10" x 6.0" x 2.7")

Ordering Information

UNO-2170-C00BE	C-M 600M, 256MB RAM UNO-2170
UNO-2170-C11BE	C-M 1G, 512MB RAM UNO-2170
UNO-2171-C11BE	C-M 1G, 512MB RAM UNO-2171
UNO-2171-P12BE	P-M 1.4G, 1GB RAM UNO-2171
UNO-2172-C22E	C-M 1.5G, 1GB RAM UNO-2172
UNO-2172-P22E	P-M 1.6G, 1GB RAM UNO-2172
UNO-2176-C11BE	C-M 1G, 512MB RAM UNO-2176
UNO-2176-P11BE	P-M 1.4G, 512MB RAM UNO-2176
UNO-2182-D12E	Core 2 Duo 1.5G, 1GB RAM UNO-2182
UNO-PCM21-AE	2 x PC/104 Expansion Kit for UNO-2170
UNO-PCM22-AE	2 x PC/104 Expansion Kit for UNO-2171/2172/2176/2182
UNO-FPM21-AE	UNO-2000 Series VESA Mount Kit
UNO-DIN21-AE	UNO-2100 Series DIN-rail Kit
PCLS-DIAGAW10	DiagAnywhere Remote Management and Control Utility

UNO-3000 Series Introduction & Features
Wallmount Fanless Box PCs with PCI
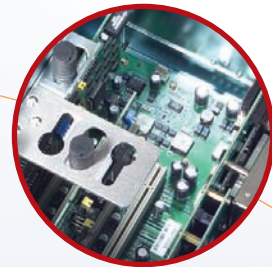
Dual Power | 60°C | PCI

- Wide Computing Power from Celeron M 1GHz to Pentium M 1.8GHz CPU
- Front I/O Design for Easy Cabling and Maintenance
- Dual Power Inputs Secure Operation in the Event of a Power Failure
- Battery-backup SRAM Saves Process Data
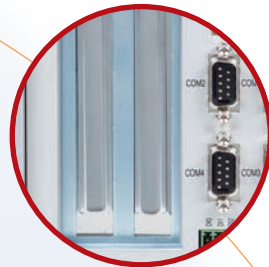- PCI Expansion with Card Retainer

Ruggedized Design
Unlike traditional IPC's, UNO-3000's CPU board, I/O board and backplane are well organized. No cabling or moving parts are present, guaranteeing system resilience in harsh environments.

Front Accessible Design
To help wiring and setup, all I/O lines are located on front panel in UNO-3000 series. In addition, you also only need to remove the upper cover for storage device and PCI board installation.
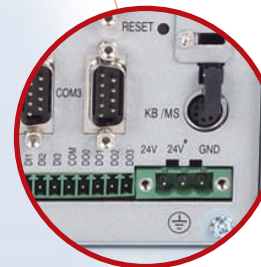
Anti-Shock / Vibration Design
To meet anti-shock / vibration requirements in harsh environments, damping rubber is equipped on the HDD disk bay. Also, we provide rubber cylinders to ensure a tight connection between PCI boards with backplane.
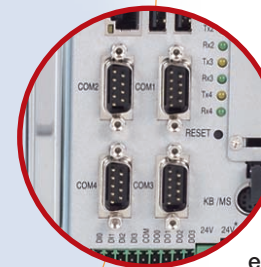
Dual Power Inputs
UNO-3000 supports dual power inputs at 9 ~ 36VDC. Once primary power fails, it automatically switches to secondary power assuring continuous operation.
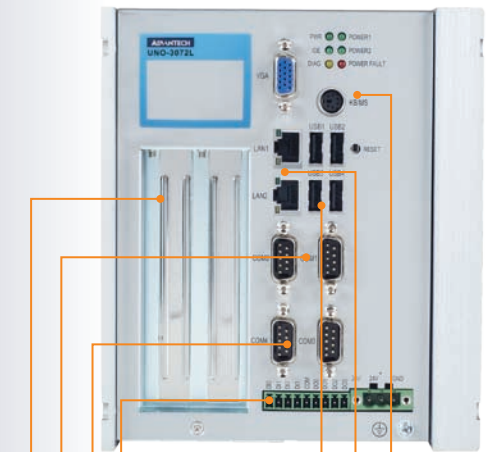
Rich Onboard I/O and Indicators
In Machine Automation applications, onboard I/Os and indicators are required for fast alarm handling and status monitoring. In UNO-3000 series, rich serial and direct I/Os are equipped.
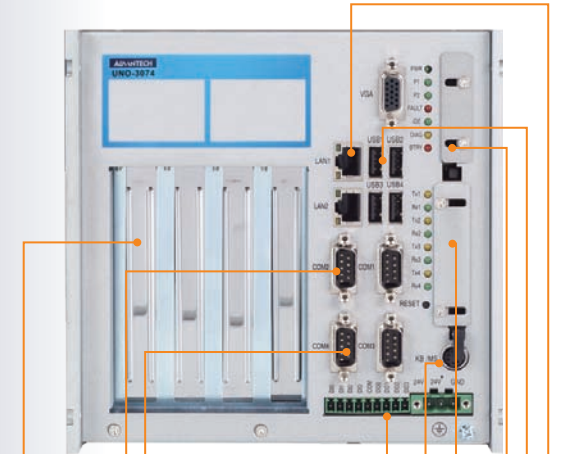
UNO-3072L

2 PCI | Quad Serial | 2 LAN | 4 USB

1. USB x 4
2. LAN x 2
3. KB / MS
4. Isolated DI/O x 8
5. RS-232/422/485 x 2
6. RS-232 x 2
7. PCI x 2

UNO-3072/3074

4 PCI | PCMCIA | 8 DI/O | Dual CF

1. KB / MS
2. PCMCIA
3. External CF
4. USB x 4
5. LAN x 2
6. Isolated DI/O x 8
7. RS-232/422/485 x 2
8. RS-232 x 2
9. PCI x 2 or 4

ADVANTECH
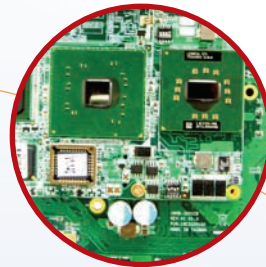
UNO-3200 Series Introduction & Features
High Performance Fanless Box PCs with PCIe / PCI

Core 2 Duo

Battery SRAM

PCIe/PCI

- Superior Thermal Design Maintains System Temperature even during Full CPU & I/O Load
- Dual DVI/VGA Display, Dual Teaming-Capable Gigabit Ethernet
- Battery-backup SRAM Saves Process Data in the Event of Power Failure
- Dual SATA HDDs with RAID 0 / 1 Support and Dual CF Slots
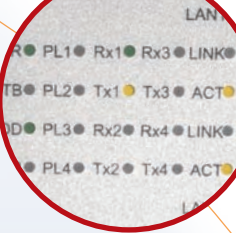- PCI / PCIe Expansion with Card Retainer

Ruggedized Design
Unlike traditional IPC's, UNO-3000's CPU board, I/O board and backplane are well organized. No cabling or moving parts are present, guaranteeing system resilience in harsh environments.
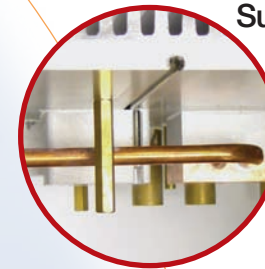
LED Indicators for System & I/O Status
There are 16 LED system indicators and 4 programmable LEDs in front panel. They are designed to help users to get system profile at glance and trigger user-defined alarm messages via programmable LEDs

Superior Thermal Design
UNO-3200 series's superior thermal design combines industrial-grade heat sinks and heat pipes to efficiently manage the system temperature. This makes the system reliable and stable during operation in full CPU power and I/O loads.
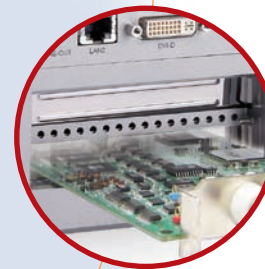
Data Storage Backup
With dual CF slots and dual SSD/HDD inside UNO-3200 series, users are able to store OS / AP in one device and data in the other one. With additional RAID board or optional onboard RAID function, data can be completely backup through RAID 1 mirror function.
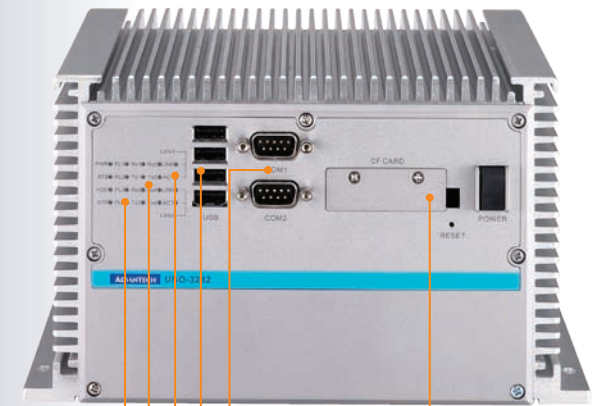
PCI Express / PCI Expansion
Next-generation PCI Express allows users to install high-speed I/O & control boards. UNO-3200 series offer both PCI/PCIe or two PCI slots as well as optional dual PCIe slots by project request.
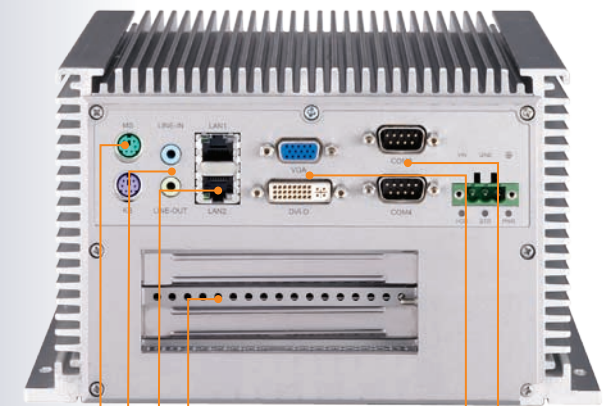
UNO-3282/3272 Front

Status LEDs | Dual CF | Battery SRAM

1. External CF
2. RS-232 x 2
3. USB x 4
4. LAN 1~2 LINK/ACT LEDs
5. COM 1~4 Tx / Rx LEDs
6. Programmable LED x 4

UNO-3282/3272 Rear

Dual GbE | DVI-D VGA | PCIe / PCI

1. PCIe/PCI or PCI x 2
2. GigaLAN x 2
3. Audio
4. KB/MS
5. DVI-D/VGA
6. RS-232/422/485 x 2

UNO-3000 Product Selection Guide

Name	UNO-3072L	UNO-3072	UNO-3074	UNO-3272	UNO-3282
CPU	Celeron M 1.0 GHz, Celeron M 1.5 GHz	Pentium M 1.4 GHz	Pentium M 1.8 GHz	Celeron M 440 1.86 GHz	Core 2 Duo L7400 1.5 GHz
Onboard RAM	512 MB/ 1 GB DDR SDRAM	1 GB DDR SDRAM		1 GB DDR2 SDRAM	
Battery-Backup RAM	-	512KB		-	512KB
VGA/Mouse/Keyboard	VGA			VGA + DVI-D	
Audio	-	-	-	Yes	
Serial Port	2 x RS-232, 2 x RS-232/422/485				
Ethernet Port	2 x 10/100Base-T			2 x 10/100/1000Base-T	
USB Port	4			4	5 (1x internal)
PC Card Slot	-	1	1	-	
PCIe/PCI Expansion	2 x PCI		4 x PCI	2 x PCI	2 x PCI or PCIe/PCI
Onboard I/O	4-ch isolated DI, 4-ch isolated DO			-	
Watchdog Timer	Yes				
CompactFlash Slot	1 x internal	1 x internal, 1 x external		1 x external	1 x internal, 1 x external
2.5" HDD Expansion	IDE / SATA	IDE / SATA		2 x SATA	
Operating System	Windows XP Embedded, Windows CE 5.0, Windows 2000/XP, Linux			Windows XP Embedded, Windows 2000/XP/Vista, Linux	
Mounting	Wall/Panel/Stand			Wall/Stand	
Anti-vibration	2G with CF; 1G with HDD				
Anti-shock	50G with CF; 20G with HDD				
Power Input Range	9 ~ 36 V$_{DC}$				
Operating Temperature	-20 ~ 60° C	-20 ~ 55° C		-10 ~ 50° C	-20 ~ 60° C
Power Consumption (Typical)	24 W (Typical, no PCI cards)			100 W	
Power Requirement	Min. 48 W, +24 V @ 2 A power input	Min. 96 W, +24 V @ 4 A power input		120 W +24 V @ 5 A power input	
Dimensions (W x D x H)	140 x 237 x 179 mm (5.5" x 9.3" x 7.0")[a] 153 x 237 x 179 mm (6.0" x 9.3" x 7.0")[b]	140 x 237 x 179 mm (5.5" x 9.3" x 7.0")	193 x 237 x 179 mm (7.6" x 9.3" x 7.0")	200 x 240 x 130 mm (7.9" x 9.4" x 5.0")	

a. UNO-3072L-C11BE ; b. UNO-3072L-C22BE

Ordering Information

UNO-3072L-C11BE	C-M 1G, 512MB RAM UNO-3072L
UNO-3072L-C22BE	C-M 1.5G, 1GB RAM UNO-3072L
UNO-3072-P12BE	P-M 1.4G, 1GB RAM UNO-3072
UNO-3074-P32BE	P-M 1.8G, 1GB RAM UNO-3074
UNO-3272-C32E	C-M 1.86GHz, 1GB RAM UNO-3272
UNO-3282-D12E	Core 2 Duo 1.5GHz, 1GB RAM UNO-3282
UNO-WM72-AE	Wallmount Kit for UNO-3072L-C11E/3072-P11E
UNO-PM70-AE	UNO-3000 Series Panel-mount Kit and UNO-3074-P32E Wallmount Kit
UNO-SM70-AE	UNO-3000 Series Stand-mount Kit
PCLS-DIAGAW10	DiagAnywhere Remote Management and Control Utility

Desktop   **Panel**   **Wallmount**

UNO-1000 Series Introduction & Features
DIN-rail Fanless Box PCs

- Low-voltage XScale PXA255 200 MHz CPU
- Wide Operating Temperature up to 70° C
- Wide DC Power Input from 10 to 30V$_{DC}$
- Compact Size with DIN-rail Mounting
- 32MB Flash Memory with Built-in Windows CE OS

UNO-1019 is a DIN-rail Fanless Box PC, designed to handle communication gateway and protocol converter applications on the factory floor. Built rugged, its extra-low power consumption RISC-based architecture supports operating temperatures up to 70° C. Furthermore, its compact size with DIN-rail mounting makes it easily to be installed inside control cabinet. With built-in flash memory and Windows CE OS, UNO-1019 is ready to go, right out of the box.
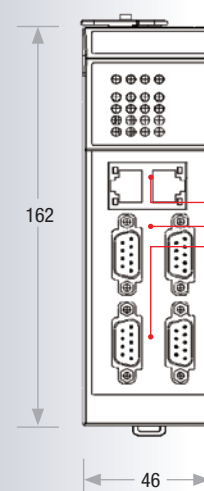

Dual LAN   **Quad Serial**   **Quad DI/O**   **CF**

Specifications:

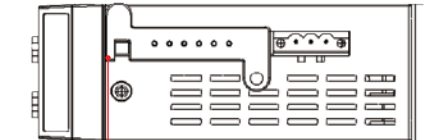|	
CPU	Intel XScale PXA255 200MHz
Memory	64MB SDRAM
Storage	Onboard 32 MB Flash Memory
OS	Windows CE .NET 5.0 (Pre-installed on flash)
Serial Ports	2 x RS-232, 2 x RS-232/422/485
Ethernet Ports	2 x 10/100Base-T
Dimensions	46 x 162 x 126 mm (1.8" x 6.4" x 5")
Power input	10 ~ 30 V$_{DC}$, AT

Ordering Information:

UNO-1019ACE-A2E — Marvell XScale PXA255, 64MB RAM UNO-1019

PCLS-DIAGAW10 — DiagAnywhere Remote Management and Control Utility
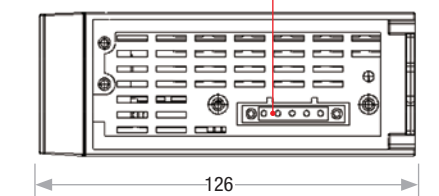

Front Panel   Top Panel

1. External CF
2. LAN x 2
3. RS-232 x 2
4. RS-232/422/485 x 2
5. Isolated DI/O x 4

Bottom Panel

162

46   126

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