Advantech Configurable Panel PCs

Compatible with diverse mini-ITX motherboards for a wide range of industrial applications



Configurable Panel PC Introduction

One major disadvantage of traditional panel PCs is the lack of flexible configuration, which limits customers to the system options chosen by the manufacturer. To address this problem, Advantech developed the industry's first configurable panel PC that allows system integrators to select any mini-ITX motherboard (MB) for installation by Advantech engineers.

For Certified Motherboards

(Listed in the Selection Table)



Choose a Certified MB

Choose a certified mini-ITX MB according to functionality, CPU, I/O, and price.



Select a Chassis

Find a corresponding chassis and CPU cooler according to the selected MB.



Configure the System

Configure the MB, chassis, CPU, and other components.



Assemble with CTOS

Assemble and test the configuration with Advantech's CTOS in just 7 days.

For Non-Certified Motherboards

In addition to providing a list of pre-certified motherboards that can be installed in just 7 days, Advantech can conduct essential validations of compatibility, reliability, and EMC to certify any off-the shelf motherboard within 30 days.

Only 30 Days for Validation



Compatibility Testing

Advantech's Design Quality Assurance team conducts stress tests to verify functionalities, compatibility, and I/O.



Reliability Testing

Advantech verifies operational temperature and thermal profile, and conducts shock and vibration tests.



EMC Testing

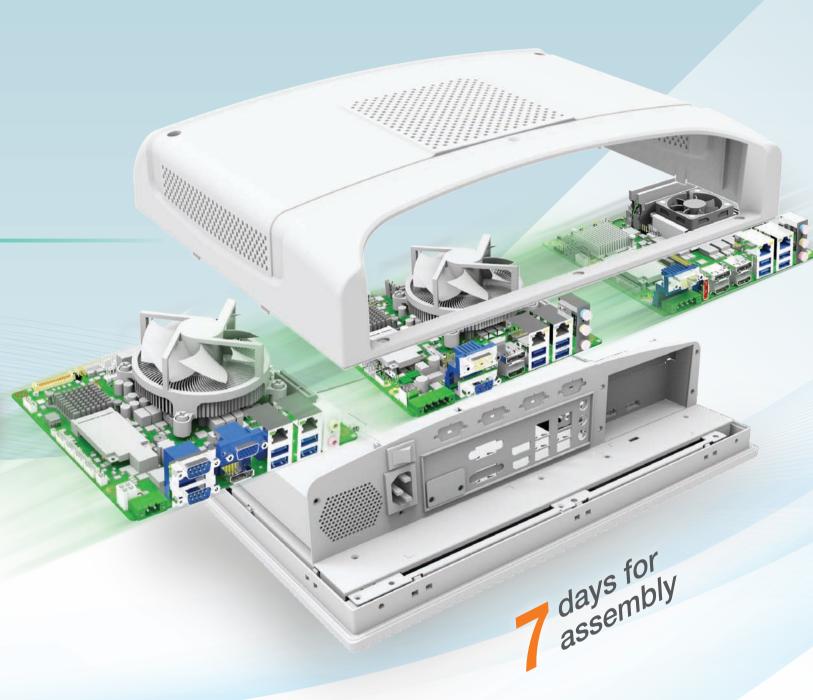
Pre-scan tests for EMI and EMC are conducted in certified laboratories.





Certified MB

MB is certified and added to the Selection Table.



Easy On-Site Maintenance

Because of the high cost of maintaining global after-sales services, system integrators require panel PCs that can be repaired and upgraded in the field directly. With its innovative modular design and fewer assembly screws, Advantech's PPC-6000C series allows technicians to conveniently conduct maintenance and servicing on-site.







System components, such as the PSU, MB, fan, and riser card, can be installed and removed independently.



Easy In-Field Replacement

Defective parts can be easily replaced on-site in the field, eliminating the downtime and cost of sending the system to an RMA center.

Fewer Screws

The simple modular design and few screws required streamline system assembly.

Features

The PPC-6000C series of panel PCs not only allows customers to configure the system according to their needs, but also features various industrial functionalities to support a wide range of applications.





15"/17"/19" true-flat PPC with resistive touch control

The true-flat resistive touch display panel is elegant in appearance and easy to clean.



Daughter board interface for diverse MB

Proprietary daughter board ensures 100% compatibility between various mini-ITX MBs and panels.



PCI/PCIe x4 expansion slots

PCI/PCIe x4 slots support flexible expansion and increased functionality for diverse applications.



IP65-compliant

Innovative design features front panel with IP65 certification for dust and water protection.



Front LEDs indicate power status

Front-facing LED indicators allow users to easily check the system power status.



Supports certified mini-ITX motherboards

Compatible with various certified mini-ITX MB to support a wide range of application scenarios.

Selection Guide







МВ	PPC-MB-8260AE	AIMB-275	AIMB-226







Chassis	PPC-6151C/6171C/6191C-RTAE	PPC-6151C/6171C/6191C-RMAE	PPC-6151C/6171C/6191C-RMAE
MB Features	1. 6th Gen Intel® Core™ i LGA 1151 processor 2. Cost effective 3. Dual PCI expansion slots	1. 6th Gen Intel® Core™ i LGA 1151 processor 2. Supports dual HDDs with RAID	2nd Gen AMD® R-Series quad/dual-core processor Supports 4 independent displays
Cooler	1960053207N001	1960053207N001	1960061914N001(M/B included)
CPU	6th Gen Intel® Core™ i LGA 1151 processor, up to 35W	6th Gen Intel® Core™ i LGA 1151 processor, up to 45W	2nd Gen AMD® R-Series™ quad/dual-core processor, up to 35W
Memory	1 x 260-pin SODIMM DDR4 2133MHz, up to 16 GB	2 x 260-pin SODIMM DDR4 2133MHz, up to 32 GB	2 x 204-pin SODIMM DDR3 2133MHz, up to 16 GB per SODIMM
Display Type	TFT LED LCD	TFT LED LCD	TFT LED LCD
Display Size	15"/17"/19"	15"/17"/19"	15"/17"/19"
Max. Resolution	1024 x 768 15" 1280 x 1024 17" & 19"	1024 x 768 15" 1280 x 1024 17" & 19"	1024 x 768 15" 1280 x 1024 17" & 19"
Max. Color	16.7M	16.7M	16.7M
Luminance (cd/m2)	400 nits 15" 350 nits 17" & 19"	400 nits 15" 350 nits 17" & 19"	400 nits 15" 350 nits 17" & 19"
Viewing Angle (H/V)	80(left),80(right),70(up),70(down) 15" 80(left),80(right),60(up),80(down) 17" 85(left),85(right),80(up),80(down) 19"	80(left),80(right),70(up),70(down) 15" 80(left),80(right),60(up),80(down) 17" 85(left),85(right),80(up),80(down) 19"	80(left),80(right),70(up),70(down) 15" 80(left),80(right),60(up),80(down) 17" 85(left),85(right),80(up),80(down) 19"
Backlight MTBF	50,000 hrs	50,000 hrs	50,000 hrs
Touchscreen	Analog 5-wire resistive	Analog 5-wire resistive	Analog 5-wire resistive
Network (LAN)	2 x GbE (Intel® I211)	2 x GbE (LAN1 i219LM, LAN2 i211AT)	2 x GbE (Realtek 8111G)
I/O Ports	1 x RS232/422/485, 1 x RS232, 1 x DP 1.2, 1 x VGA, 4 x USB 3.0, 1 x Line Out, 1 x Mic In, 3 x RS232 (via cable), 1 x GPIO (8 channels, via cable)	1 x RS-232, 1 x DP 1.2 (1 reserved for LCD panel) 1 x HDMI 2.0/1.2, 1 x VGA, 4 x USB 3.0 (1 reserved for touchscreen) 1 x Line Out, 1 x Mic In, 1 x Line In	1 x RS-232, 2 x DP 1.2 (1 reserved for LCD panel), 2 x HDMI (4 independent displays), 1 x eSATA, 2x USB 3.0, 2 x USB 2.0 (1 reserved for touchscreen), 1 x Line Out, 1 x Mic In, 1 x Line In, 1 x RS-232/422/485 (via cable), 3 x RS-232 (via cable)
HDD (optional)	1 x 2.5" SATA HDD	2 x 2.5" SATA HDD with RAID support	2 x 2.5" SATA HDD
Expansion Slots	1 x PCle x4,2 x PCl,2 x PCle x1, 1 x PCle x1+1 x PCl	1 x PCle x4 or PCl	1 x PCle x4 or PCl
Additional Expansion	1 x full-size mSATA or mini PCle	1 x M.2, 1 x full-size mSATA or mini PCle	1 x full-size mini PCle or mSATA, 1 x full-size mini PCle or SIM holder
Power Input (Voltage)	100 ~ 240 Vac	100 ~ 240 Vac	100 ~ 240 Vac
Ingress Protection	IP65-rated front panel	IP65-rated front panel	IP65-rated front panel
Mount Options	Panel/VESA mount	Panel/VESA mount	Panel/VESA mount
Operating Temperature	0 ~ 50 °C (32 ~ 122 °F)	0 ~ 50 °C (32 ~ 122 °F)	0 ~ 50 °C (32 ~ 122 °F)
Storage Temperature	-20 ~ 60 °C (-4 ~ 140 °F)	-20 ~ 60 °C (-4 ~ 140 °F)	-20 ~ 60 °C (-4 ~ 140 °F)
Dimensions	391.4x312.5x103.6mm(15.4"x12.3"x4.08")15" 437x357x106.6mm(17.2"x14.06"x4.2")17" 454x379.8x107.5 mm(17.9"x14.95"x4.23")19"	391.4x312.5x103.6mm(15.4"x12.3"x4.08")15" 437x357x106.6mm(17.2"x14.06"x4.2")17" 454x379.8x107.5 mm(17.9"x14.95"x4.23")19"	391.4x312.5x103.6mm(15.4"x12.3"x4.08")15" 437x357x106.6mm(17.2"x14.06"x4.2")17" 454x379.8x107.5 mm(17.9"x14.95"x4.23")19"
Weight	5.4 kg(11.9lb) 15" 6.4 kg(14.1lb) 17" 8 kg(17.6lb) 19"	5.4 kg(11.9lb) 15" 6.4 kg(14.1lb) 17" 8 kg(17.6lb) 19"	5.4 kg(11.9lb) 15" 6.4 kg(14.1lb) 17" 8 kg(17.6lb) 19"
Certification	CE, FCC Class A, UL, CB, CCC, BSMI	CE, FCC Class A, UL, CB, CCC	CE, FCC Class A, UL, CB, CCC
Operating System	WES7/Win 7 Pro/Win 8.1 (64 bit)/Win 10 IOT LTSB/Linux	WES7/Win 7 Pro/Win 8.1 (64 bit)/Win 10 IOT LTSB	WES7/Win 8

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