

# PPC-6191C

## 19" Configurable Panel PC Chassis for Selectable Mini-ITX Motherboards



### Features

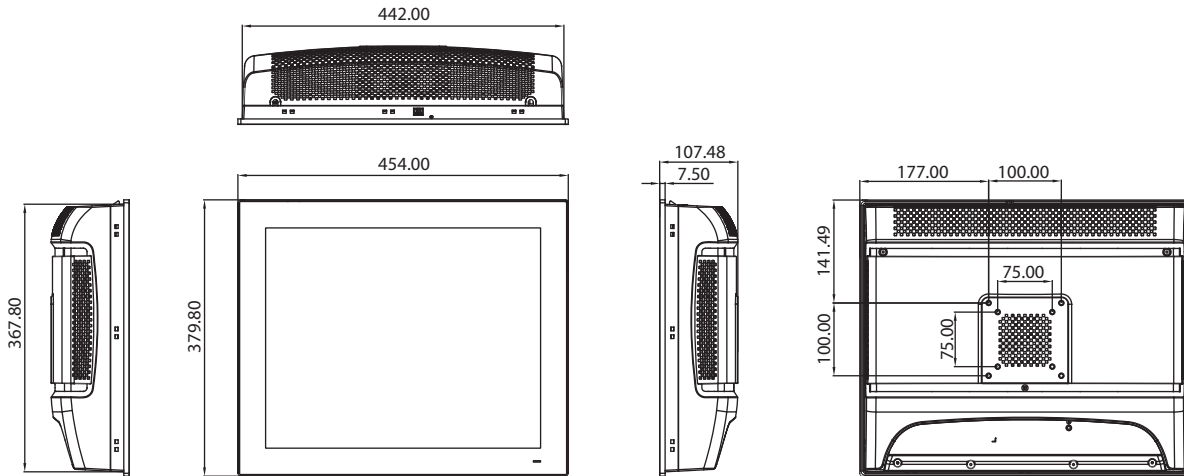
- 19" true-flat panel PC with resistive touch
- Supports certified mini-ITX motherboards (up to 65W TDP processor)
- PCI or PCIe expansion slots
- Front-facing power status LED indicators
- IP66-rated front panel

### Specifications

<b>Model</b>	<b>PPC-6191C-RTAE</b>	
<b>Supported Motherboard</b>	PPC-MB series	
<b>Chassis</b>	Storage	1 x 2.5" SATA HDD bay/2 x 2.5" SATA HDD bay (optional)
	I/O	4 x Reserved ports (DB9) 2 x WLAN antenna holes
		1 x AC inlet 1 x Power switch Reserved opening: According to the PPC-MB series motherboard specifications
	Expansion	1 x PCIe x4 or 2 x PCI (in the accessory box) 2 x PCIe x1 (optional) 1 x PCIe x1 + 1 x PCI (optional) 2 x PCIe x8 (optional, only for PPC-MB-6x0) 1 x PCIe x16 (optional, only for PPC-MB-6x0)
	Speaker	2 x 1 W
	Fan	2 x 12V; 60 x 60 x 15 mm (2.36 x 2.36 x 0.59 in)
<b>Physical Characteristics</b>	Dimensions (W x H x D)	454 x 379.8 x 107.5 mm (17.9 x 15 x 4.2 in)
	Weight	5.8 kg (12.8 lb)
<b>OS Support</b>	OS Support	According to motherboard specifications
<b>Power Consumption</b>	Input Voltage	100 ~ 240 V <sub>AC</sub> , 250W
	Power Consumption	128W with PPC-MB-8260 165W with PPC-MB-610 140W with PPC-MB-620
<b>LCD Display</b>	Display Type	19" TFT LED panel
	Max. Resolution	1280 x 1024
	Viewing Angle	85 (left), 85 (right), 80 (up), 80 (down)
	Luminance (cd/m <sup>2</sup> )	350
	Contrast Ratio	1000
<b>Touchscreen</b>	Backlight Lifetime	50,000 hr
	Touch Type	5-wire analog resistive, with optional projected capacitive touch
	Light Transmission	80+/-5%
	Controller	USB interface
<b>Environment</b>	Durability	35 million touches
	Operating Temperature	0 ~ 50 °C (32 ~ 122 °F) (With 35W CPU) 0 ~ 45 °C (32 ~ 113 °F) (With 65W CPU) *** please refer to the PPC-MB series CPU list
		Storage Temperature
	Relative Humidity	95% @ 40 °C (non-condensing)
	Shock	Operating: 10 G peak acceleration (11 ms duration), IEC 60068-2-27 compliant
	Vibration	Operating: Random vibration test 5 ~ 500 Hz, 2 Grms @ with SSD, IEC 60068-2-64 compliant
	EMC	CE, FCC, Class A, UKCA, VCCI
	Safety	CB, CCC, UL, UKCA
Front Panel Protection	IP66 compliant	

## Dimensions

Unit: mm



**Panel Cutout Dimensions: 444 x 370 mm (17.48 x 14.56 in)**

## Ordering Information

M/B Part Number	Chassis Part Number	Cooler Part Number
PPC-MB-8260B / PPC-MB-610B	PPC-6191C-RTAE	1960053207N001
PPC-MB-620A/ PPC-MB-620B	PPC-6191C-RTAE	1970005354T001

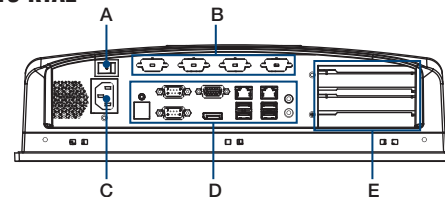
Note 1. The motherboard, chassis, and cooler should be ordered together to ensure easy configuration.  
 Note 2. The chassis is equipped with AC power supply and riser cards.

## Optional Accessories

Part Number	Description
PPC-WLAN-D1	M.2, WiFi6 +BT5.2, 2T2R, w/Antenna, Mini PCIe adapter (only for PPC-MB-8260)
PPC-WLAN-D2	M.2, WiFi6 +BT5.2, 2T2R, w/Antenna (only for PPC-MB-6x0)
1702002605	Power cable (EU) 90D 220 ~ 250V/6A, 1.8 M
1702002600	Power cable (US) 180D 125V/10A, 1.83 M
1702031801	Power cable (UK), 1.8 M
96CB-POWER-B-1.8MA	Power cable (China), 1.8 M
9893BE0200E	Riser card with 2 x PCIe x1 slots
9893BE03000	Riser card with 1 x PCIe x1 and 1 x PCI slots
9893BE17000	Riser card with 2 x PCIe x8 slots (only for PPC-MB-6x0)
98R36151C20	Riser card with 1 x PCIe x16 slots (only for PPC-MB-6x0)
PPC-ARM-A03	ARM VESA Standard for PPC series
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-Stand-A1E	Stand for PPC series
1700027838-01	Cable for two internal USB for PPC-MB-XXXX with I/O BKT
98R36151C10	the second 2.5"SATA HDD (only one riser card slots available)
98R3P612100	TPM2.0 module for PPC-MB-610

## I/O View

### PPC-6191C-RTAE



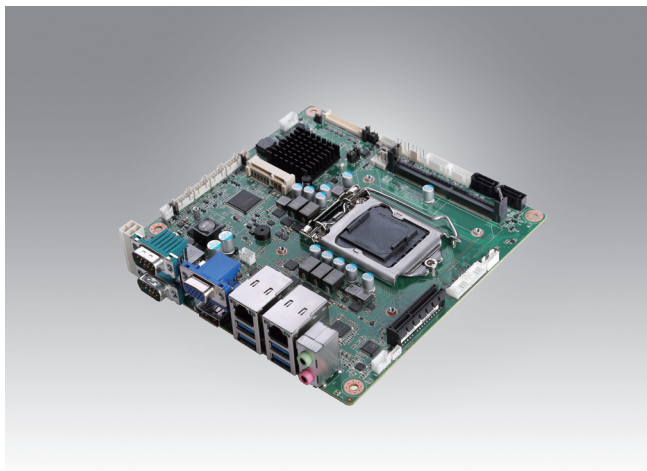
- A. Power switch
- B. Reserved ports
- C. AC inlet
- D. PPC-MB-XXXX I/O port
- E. Expansion x 2

Note 1: The max. dimension of expansion cards supported is 205 x 107 x 40 mm.  
 Note 2: If the two slots are to be used simultaneously, the max. dimension supported is 205 x 107 x 20 mm for each PCI or PCIe expansion card.  
 Note 3: The max. power consumption of PCIe expansion card supported is 75W.  
 Note 4: If use dual HDD kits, only one riser card slots available.

Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries.  
 Please contact Advantech for certificate compliance.

# M/B offering for PPC-61X1C-RTAE

## PPC-MB-8260xx



### Features

- Supports Intel® 6th & 7th Gen Core™ i processor (LGA1151) with Intel H110 chipset
- One 260-pin SO-DIMM up to 16GB DDR4 2133 MHz SDRAM
- Supports Dual display of DP/VGA/LVDS
- Supports 1 F/S miniPCIe or mSATA, 4 USB 3.0 and 2 USB 2.0
- Supports 1 PCIe x4(Gen3)
- Supports 2 SATA 6 Gb/s Ports
- Supports 4 RS-232, 1 RS-232/422/485
- Supports 1 GPIO(8 channels)

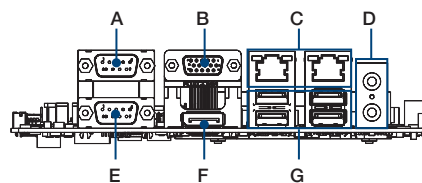
### Specifications

CPU	CPU	KBL	i7-7700	i5-7500	i3-7101E	/	/
		SKL	i7-6700TE	i5-6500TE	i3-6100TE	Pentium G4400TE	Celeron G3900TE
	Core NO.	Quad Core		Quad Core	Dual Core	Dual Core	Dual Core
		MAX Speed	KBL	3.6GHz (up to 4.2GHz)	3.4GHz (up to 3.8GHz)	3.9GHz	/
	SKL		2.4GHz (up to 3.4GHz)	2.3GHz (up to 3.3GHz)	2.7GHz	2.4GHz	2.3GHz
	L3 Cache	KBL	8M	6M	4M	/	/
SKL				3M	3M	2M	
TDP	KBL	65W	65W	54W	/	/	
	SKL	35W	35W	35W	35W	35W	
Chipset		H110					
Memory		1 x 260-pin SODIMM DDR4, 2133 MHz, up to 16 GB (non-ECC)					
Network (LAN)		2 x 10/100/1000 Mbps Ethernet (Intel I211-AT/I210AT A ver. or Realtek 8119i B ver.)					
Rear I/O		1 x RS232/422/485, 1 x RS232, 1 x DP1.2, 1 x VGA, 4 x USB3.0, 1 x Line-out, 1 x Mic-in					
Internal Connector		3 x RS232, 1 x GPIO (8 channels), 1 x speaker, 1 x LED, 2 x USB 2.0, 1 x LVDS, 1 x touch control, 2 x SATA					
Watchdog Timer		255 timer intervals, configurable using software					
Expansion		1 x full-size mSATA or mini PCIe and 1 x PCIe x4 slot for riser card					
Dimensions (W x H)		170 x 170 mm (6.69 x 6.69")					
OS Support		Microsoft® Windows 7 (32/64-bit), Windows 8.1, Windows 10 IOT LTSC(64-bit), (**KBL CPU only support windows 10 64bit)					

### Ordering Information

Part Number	Description
PPC-MB-8260B	6/7th core i M/B, H110, assembled in China
PPC-MB-8260BU	6/7th core i M/B, H110, assembled in Taiwan

### I/O view



- A. RS232
- B. VGA
- C. 2 x Gigabit Ethernet
- D. Line-out/Mic-in
- E. RS232/422/485
- F. Display Port
- G. USB 3.0

# PPC-MB-610x



## Features

- Supports Intel® 8th & 9th Gen Core™ i processor (LGA1151) with Intel Q370 chipset
- Two 260-pin SO-DIMM up to 32GB DDR4 2666 MHz SDRAM
- Supports triple display of DP/VGA/LVDS
- Supports PCIe x16 (Gen 3), 1 M.2 M key & 1 M.2 E key, 6 x USB 3.1
- Supports 2 x SATA 3.0 (Raid 0, 1)
- Supports TPM 2.0 (optional)
- Supports 4 RS-232, 1 RS-232/422/485
- Supports 1 GPIO(8 channels)

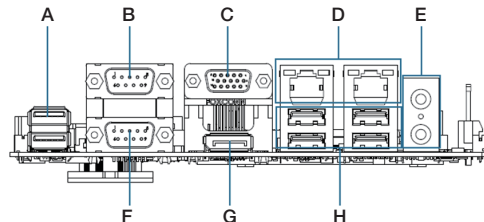
## Specifications

	CPU	i7-8700/ i7-8700T	i5-8500/ i5-8500T	i3-8100/ i3-8100T	Pentium G5400/G5400T	Celeron G4900/ G4900T	i7-9700E/ i7-9700TE	i5-9500E/ i5-9500TE	i3-9100E/ i3-9100TE
<b>CPU</b>	<b>Core NO.</b>	6/6	6/6	4/4	2/2	2/2	8/8	6/6	4/4
	<b>Max Speed</b>	3.2 GHz (up to 4.6GHz)/ 2.4 GHz (up to 4.0GHz)	3.0 GHz (up to 4.1GHz)/ 2.1 GHz (up to 3.5GHz)	3.6/3.1 GHz	3.7 / 3.1 GHz	3.1 / 2.9 GHz	2.6GHz (up to 4.4GHz)/ 1.8 GHz (up to 3.8GHz)	3.0GHz (up to 4.2GHz)/ 2.2 GHz (up to 3.6GHz)	3.1GHz (up to 3.7GHz)/ 2.2 GHz (up to 3.2GHz)/
	<b>L3 Cache</b>	12 / 12 MB	9 / 9 MB	6 / 6 MB	4 / 4 MB	2 / 2 MB	12 / 12 MB	9 / 9 MB	6 / 6 MB
	<b>TDP</b>	65 / 35 W	65 / 35 W	65 / 35 W	54 / 35 W	54 / 35 W	65 / 35 W	65 / 35 W	65 / 35 W
<b>Chipset</b>	Q370								
<b>Memory</b>	2 x 260-pin SODIMM DDR4 , 2666 MHz , up to 32 GB ( non-ECC )								
<b>Network (LAN)</b>	2 x 10/100/1000 Mbps Ethernet [Intel I219LM (support AMT 12.0 only for i7 & i5); Intel I211-AT/I210AT A ver. or I225LM(2.5GbE) B ver. ]								
<b>Rear I/O</b>	1 x RS232/422/485 , 1 x RS232 , 1x DP1.2 , 1 x VGA , 6 x USB3.1 , 1 x Line-out , 1 x Mic-in								
<b>Internal Connector</b>	3 x RS232 , 1 x GPIO ( 8 channels ) , 1 x speaker , 1 x LED , 2 x USB 2.0 , 1 x LVDS , 1 x touch control , 2 x SATA 3.0 ( support RAID 0,1 ) , 1 x TPM2.0								
<b>Watchdog Timer</b>	255 timer intervals , configurable using software								
<b>Expansion</b>	1 x M.2 slot(2280 M key) for storage; 1 x M.2 slot (2230) for wireless 1 x PCIe16 slot for riser card								
<b>Dimensions (W x H)</b>	170 mm x 170 mm (6.69" x 6.69")								
<b>OS Support</b>	Microsoft® Win 10 IOT LTSC(64-bit), Linux								

## Ordering Information

Part Number	Description
PPC-MB-610B	8/9th core i M/B, Q370, assembled in China
PPC-MB-610BU	8/9th core i M/B, Q370, assembled in Taiwan

## I/O view



- |                         |                    |
|-------------------------|--------------------|
| A. USB3.1               | E. Line-out/Mic-in |
| B. RS232                | F. RS232/422/485   |
| C. VGA                  | G. Display Port    |
| D. 2 x Gigabit Ethernet | H. USB 3.1         |