

PPC-5150A-G41/PPC-5170A-G41/ PPC-5190A-G41

15"~19" Quad Core Industrial Panel PC with One PCI/PCIe Slot

**Quad Core
+ DDR3**



Key Features

- 15"~19" robust panel PC with touchscreen
- Heavy-duty design with anti-rust chassis with aluminum IP65 compliant front panel
- Powered by high performance Intel® Core™2 Extreme/Quad/Duo and Celeron® processor supports up to 1333 MHz FSB with Intel® G41 chipset
- System memory supports dual-channel DDR3 DIMM up to 4 GB
- Offers one expansion slot for PCI/PCIe1 add-on cards
- Dual gigabit Ethernet
- Versatile mounting solution: panel/wall/rack/stand mounting
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery



Easily Upgrade to the Quad Core CPU without Additional Mechanism Rebuilding Costs

1. Upgradeable CPU Performance

Easy upgrade options from existing platforms featuring Intel® 945G 65nm dual core processor to Intel® 65nm/45nm quad core extreme performance platforms, meeting the needs of a wide range of intensive applications, and without the need to modify your system mechanism.



**Based on Original
Mechanical Design**

2008 Dual Core 2010 Quad Core

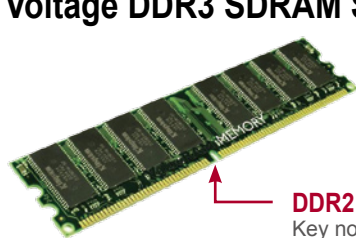
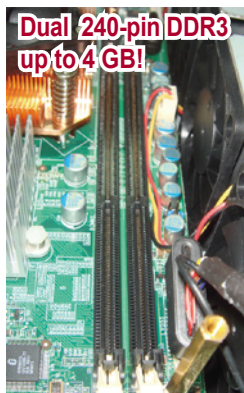
Transition to New Generation

	PPC-51xxA-945	PPC-51xxA-G41
Upgrade Functions		
Chipset	Intel®945G	Intel®G41
CPU FSB	1066MHz 65nm	1333MHz 45nm/65nm
Graphic	Intel® Graphics Media Accelerator 950	Intel® Graphics Media Accelerator X4500
Memory	2 x 240-pin dual-channel DDR2 400/533/667MHz up to 4GB	2 x 240-pin dual-channel DDR3 1333/1066MHz up to 4GB
Based on Same Mechanism		
Expansion Slot	Either one PCIe1 or one PCI	
System Dimensions (WxHxD) (mm)	15" : 410 x 309 x 110.5 17" : 452 x 356 x 115 19" : 483 x 399 x 115.2	

Intel® G41 Embedded CPU Support List

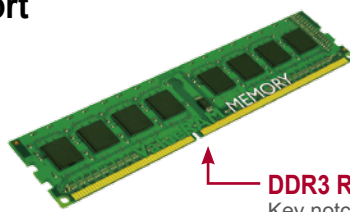
Brand Name	CPU No.	Clock speed	FSB	L2 cache
Core 2 Quad	Q9400(Default)	2.66G	1333	6M
	E8400	3.0G	1066	6M
Core 2 Duo	E7400	2.8G		3M
	E6500	2.93G	1066	2M
Pentium D Dual Core	E5300	2.6G	800	2M
	E6400	2.13G	1066	2M
Core 2 Duo	E4300	1.8G	800	2M
	E2160	1.8G	800	1M
Pentium D Dual Core	E3400	2.4G	800	512K
	E1500(Default)	2.2G	512K	
Celeron Dual Core	440	2.00G	800	512K

2. Effective and Low Voltage DDR3 SDRAM Support



DDR2 RAM

Key notch position for DDR2 RAM



DDR3 RAM

Key notch position for DDR3 RAM

Memory Type	DDR SDRAM	DDR2 SDRAM	DDR3 SDRAM
Prefecth	2-bit	4-bit	8-bit
Transfer Rate	DDR-200 ~ DDR-400	DDR2-400 ~ DDR2-800	DDR3-800 ~ DDR3-1600
Core Voltage	2.5 V	1.8 V	1.5 V

Touch Enabled Second Display

The PPC touch driver supports secondary display touch function. Just connect the VGA and RS-232 cable to the second monitor (AFOLUX monitor), doing calibration and you will get the dual touch experience and improve work efficiency.



Primary Device: PPC



VGA cable



RS-232 cable

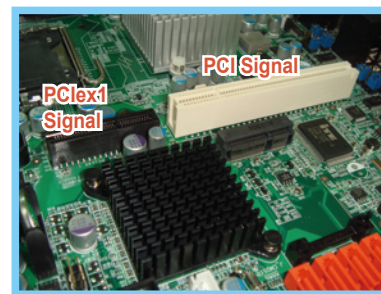
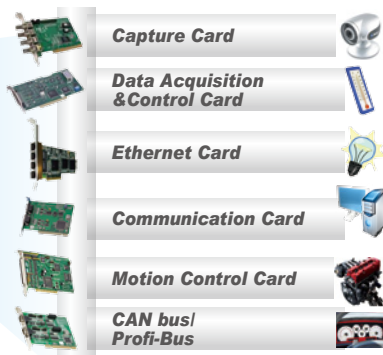
Independent Touch Function



Applications:



PCI/PCle Expansion Capability



Built-in AC/DC Power Supply

Power supply built-in without external Power adapter to save space!

DC 48 V Input



DC 24 V Input



DC 48-V Input



**PPC-51xxA-G41
with ACE-A622A**



Input Range	Voltage	90~264 VAC
	Frequency	47~63 Hz
Output Voltage		220 W
Temperature	Operating	0°C~50°C
	Storage	-20°C~80°C
Efficiency		80%

**PPC-51xxAD-G41
With ACE-4520C**



Input Range	Voltage	24 VDC(18~36 VDC)
	Output Voltage	200 W
Temperature	Operating	0°C~50°C
	Storage	-20°C~80°C
Efficiency		78%

User Friendly Design



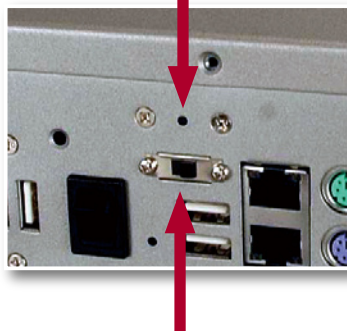
4. CMOS Reset Button

The CMOS reset button forces the BIOS to be reset to its default values for the following reasons:

- Fast BIOS updating
- Hard device conflicts or disrupts system operation

1. User-accessible CF

PPC has a CF slot on the bottom panel that makes installing and replacing CF cards easy.



Restoring default system settings!



2. Securing Your CF Card

PPC has a CF slot on the bottom panel. A security door on the PPC protects the CF card from being stolen in public places.



3. Lockable Power Cord

Power plug lock keeps power cable securely in place.

5. Selectable AT/ATX Mode Switch

Easily select the AT or ATX power mode with an easily accessed switch.

Production Line



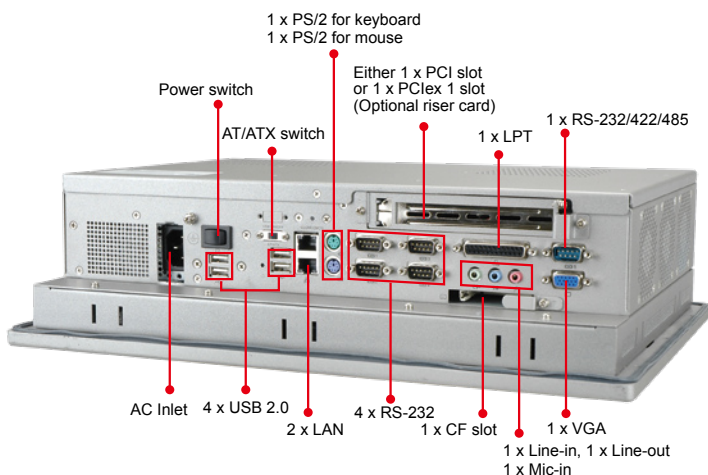
AT power mode allows multiple panel PCs automatically start when the central power unit is connected.

General Ticketing Machine (GTM)

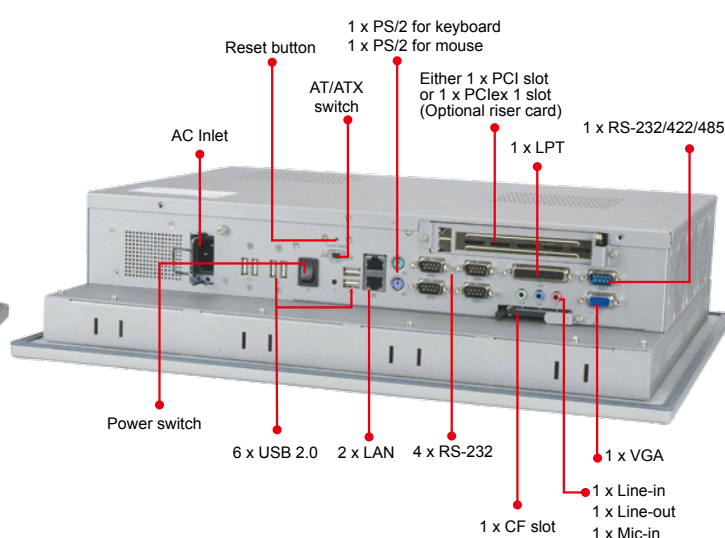


The ATX power mode allows the panel PCs to be turned on/off remotely via network.

I/O Interface



PPC-5150A-G41/PPC-5170A-G41



PPC-5190A-G41

Specifications

Model		PPC-5150A-G41	PPC-5170A-G41	PPC-5190A-G41
Display	LCD Size	15"	17"	19"
	Max Resolution	1024(W) x 768(H)	1280(W) x 1024(H)	1280(W) x 1024(H)
	Brightness (cd/m ²)	350	380	450
	Contrast Ratio	700:1	1000 : 1	1000:1
	LCD Color	16.2M	16.7M	16.7M
	Pixel Pitch (mm)	0.297(H) x 0.297(V)	0.264(H) x 0.264(V)	0.294(H) x 0.294(V)
	Viewing Angle (V-H)	125°/140°	160°/170°	160°/170°
	Backlight MTBF (hrs)	50,000	50,000	50,000
Motherboard	SBC Model	POS-G41-R10		
	CPU	LGA 775 Intel® Core™ 2 Extreme/Quad/Duo, Celeron with a 1333/1066/800MHz FSB support		
	Chipset	Intel® G41 + Intel® ICH7		
	RAM	Supports two 800/1066MHz DDRIII DIMM (4GB Max.)		
I/O Ports and Switches		4 x RS232 COM port	4 x RS232 COM port	4 x RS232 COM port
		1 x RS-232/422/485 port	1 x RS-232/422/485 port	1 x RS-232/422/485 port
		2 x RJ-45 for LAN port	2 x RJ-45 for LAN port	2 x RJ-45 for LAN port
		4 x USB 2.0	4 x USB 2.0	6 x USB 2.0
		1 x VGA Port	1 x VGA port	1 x VGA port
		1 x Audio (Line-in, Line-out, MIC-in)	1 x Audio (Line-in, Line-out, MIC-in)	1 x Audio (Line-in, Line-out, MIC-in)
		1 x LPT	1 x LPT	1 x LPT
		1 x PS/2 (KB/MS)	1 x PS/2 (KB/MS)	1 x PS/2 (KB/MS)
		1 x Power switch	1 x Power switch	1 x Power switch
		1 x AT / ATX switch	1 x AT / ATX switch	1 x AT / ATX switch
Driver Bay	HDD Driver Bay	1 x 2.5 SATA/IDE HDD bay with anti-shock		
	SSD	CF type II		
	CD-ROM Driver Bay	Slim type CD-ROM bay		
Extension Slot		Either 1 x PCI slot or 1 x PCIe x 1 slot (Optional riser card) 1 x PCIe Mini card		
Physical	Construction Front Panel	Aluminum		
	Construction Chasis	Heavy-duty steel		
	Mounting Front Panel Color	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm Silver (Pantone 8001C)		
	Dimensions (WxHxD) (mm)	410 x 309 x 110.5	452 x 356 x 115	483 x 399 x 115.2
	Net Gross Weight	7 kg / 11 kg	8 Kg / 12 Kg	12.6 Kg / 18.2 Kg
	Operation Temperature (°C)	-10°C ~ 50°C	-10°C ~ 50°C	-10°C ~ 50°C
	Environment Storage Temperature (°C)	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz, 1.5G acceleration peak to peak		
	Shock	10G acceleration part to part (11ms)		
Touch Screen		Resistive type 5-wire with RS-232 interface		
Power Supply	AC Input	AC Input ATX power supply - P/N: ACE-A622A-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.8A		
	DC Input	DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3A@12A, 5V@12A, 12V@15.4A, -12V@0.5A		

Options

Part Number	Description
19Z00-000112-RS	IDE CD-ROM Installation Kit (W/O IDE cable)
41019-0393C0-00-RS	IDE HDD Bracket
32200-000037-RS	25cm HDD IDE Cable

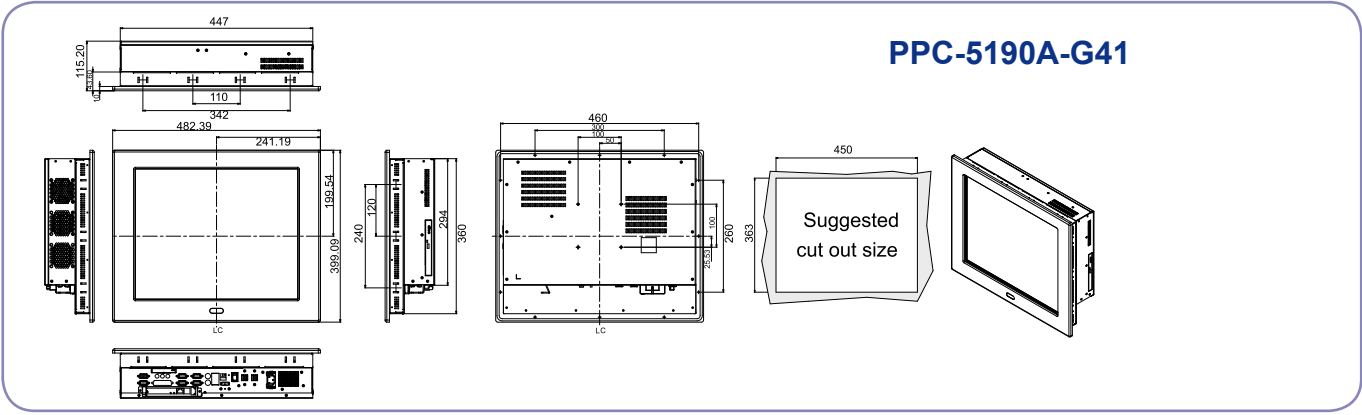
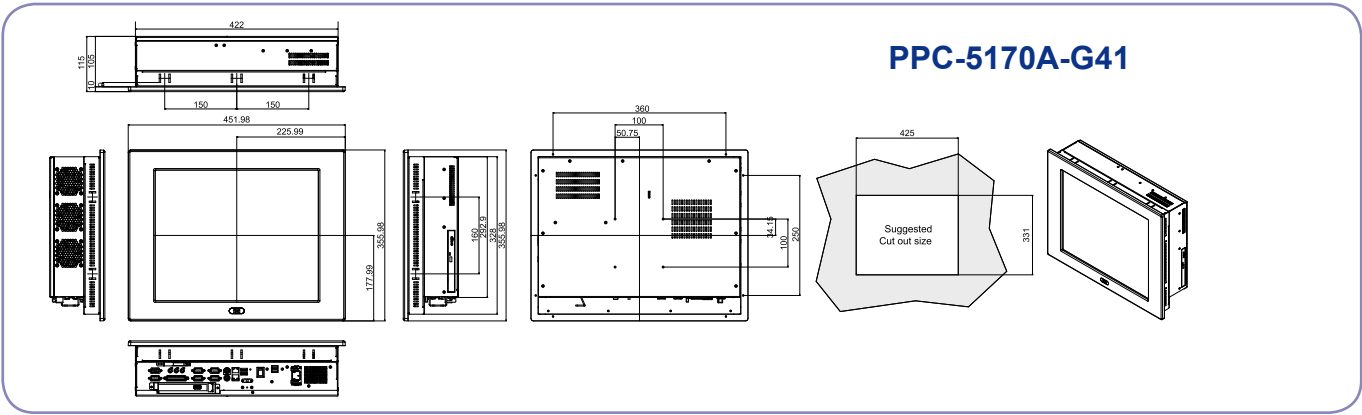
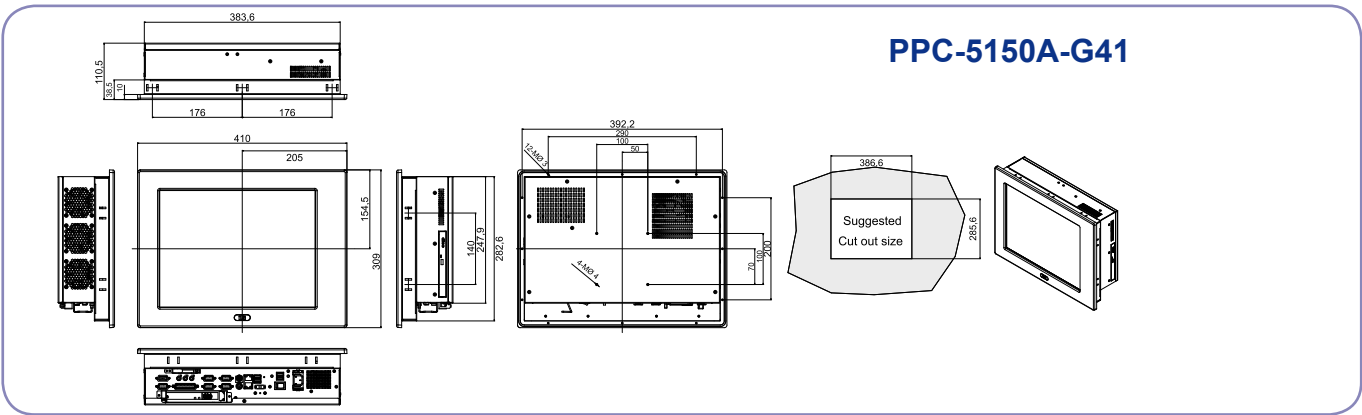
Packing List

Item	P/N	Q'ty
User's Manual CD-ROM		1
SATA CD-ROM Cable	32803-000300-100-RS	1
Power Cord	32000-000002-RS	1
Panel Mount Kit	19Z00-000024-RS	1
Wall Mount Kit	41020-016102-00-RS	1
Touch Pen		1

IQ Mounting Options

Item	PPC-5150A	PPC-5170A	PPC-5190A
Panel Mount Kit	PK-170M	PK-170M	PK-190M
Wall Mount Kit	WK-190MS-R10		
Rack Mount Kit	RK-150MS-R10	RK-170MS-R10	RK-190MS-R10
Stand	STAND-210-R11		
ARM	ARM-31-RS		

Dimensions (Unit: mm)



Ordering Information

15" PPC	AC Input	PPC-5150A-G41-E15/R/1G-R10	15" 350 cd/m² XGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card
		PPC-5150A-G41-Q94/R/1G-R10	15" 350cd/m² XGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card
	18~36 V DC input	PPC-5150AD-G41-E15/R/1G-R10	15" 350 cd/m² XGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-4520C, touch screen, w/o riser card
		PPC-5150AD-G41-Q94/R/1G-R10	15" 350 cd/m² XGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz, 1GB DDR3 RAM, silver color, PSU ACE-4520C, touch screen, w/o riser card
17" PPC	AC Input	PPC-5170A-G41-E15/R/1G-R10	17" 380 cd/m² SXGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card
		PPC-5170A-G41-Q94/R/1G-R10	17" 380 cd/m² SXGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card
	18~36 V DC input	PPC-5170AD-G41-E15/R/1G-R10	17" 380 cd/m² SXGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-4520C, touch screen, w/o riser card
		PPC-5170AD-G41-Q94/R/1G-R10	17" 380 cd/m² SXGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz, 1GB DDR3 RAM, silver color, PSU ACE-4520C, touch screen, w/o riser card
19" PPC	AC Input	PPC-5190A-G41-E15/R/1G-R10	19" 450 cd/m² SXGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card
		PPC-5190A-G41-Q94/R/1G-R10	19" 450 cd/m² SXGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card
	18~36 V DC input	PPC-5190AD-G41-E15/R/1G-R10	19" 450 cd/m² SXGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-4520C, touch screen, w/o riser card
		PPC-5190AD-G41-Q94/R/1G-R10	19" 450 cd/m² SXGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz, 1GB DDR3 RAM, silver color, PSU ACE-4520C, touch screen, w/o riser card
Riser Card	PCIR-01H-R10	1-Slot PCI riser card	
	PCIER-101H-R10	1-Slot PCIe x 1 riser card	

