

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

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



## 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/PCIex1 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.

2008 Dual Core    2010 Quad Core

Transition to New Generation



Based on Original Mechanical Design

|                                | 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<br>17" : 452 x 356 x 115<br>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     |

# 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 <sup>2</sup> )  | 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)<br>1 x PCIe Mini card |   |                                       |                     |
| Physical               | Construction Front Panel   | Aluminum  |                                       |                     |
|                        | Construction Chassis   | 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<br>- P/N: ACE-A622A-RS<br>- 220W power supply<br>- Input: 90VAC~264VAC, 50/60Hz<br>- Output(max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.8A |                                       |                     |
|                        | DC Input   | DC Input ATX power supply<br>- P/N: ACE-4520C-RS<br>- 200W power supply<br>- Input: 24 VDC(18~36 VDC)<br>- 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

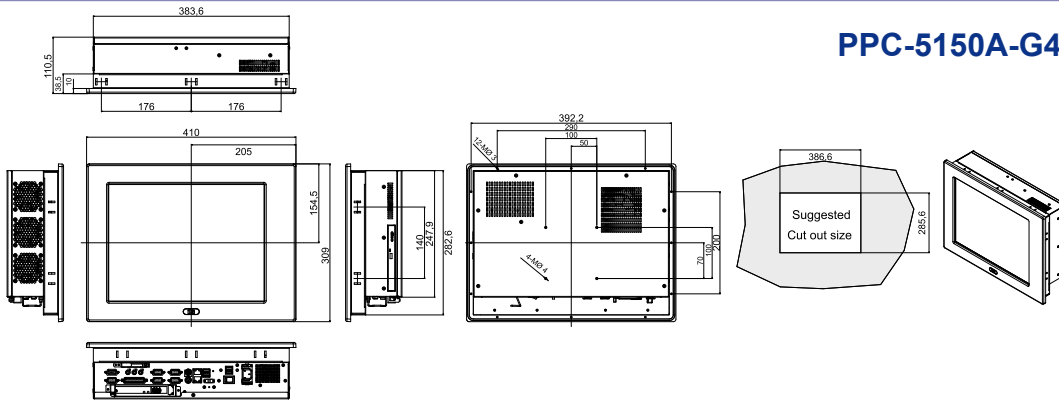
| Item                 | P/N                 | Q'ty |
|----------------------|---------------------|------|
| User's Manual CD-ROM |                     | 1    |
| SATA CD-ROM Cable    | 32803-000300-100-RS | 1    |
| Power Cord           | 32000-000002-RS     | 1    |
| Panel Mount Kit      | 19Z00-000024-RS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

## IQ Mounting Options

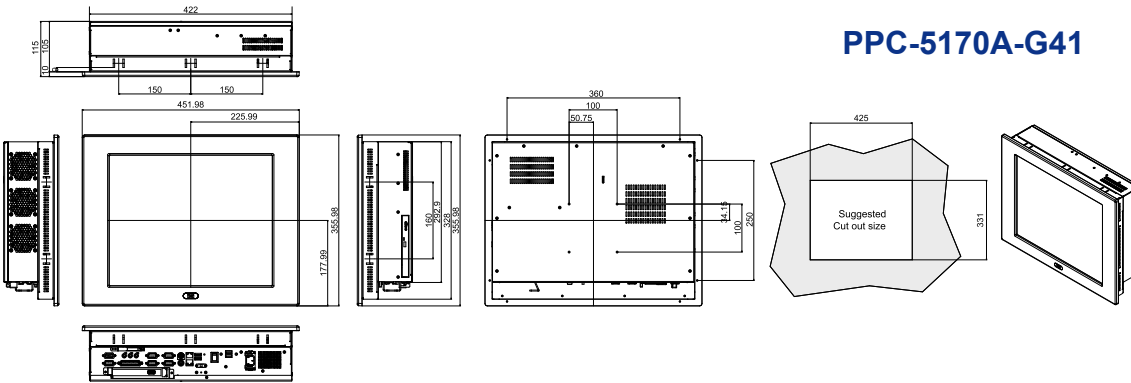
| Item            | PPC-5150A     | PPC-5170A    | PPC-5190A    |
|-----------------|---------------|--------------|--------------|
| Panel Mount Kit | PK-170M       | PK-170M      | PK-190M      |
| Wall Mount Kit  | WK-190MS-R10  |              |              |
| Rack Mount Kit  | RK-150MS-R10  | RK-170MS-R10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

# Dimensions (Unit: mm)

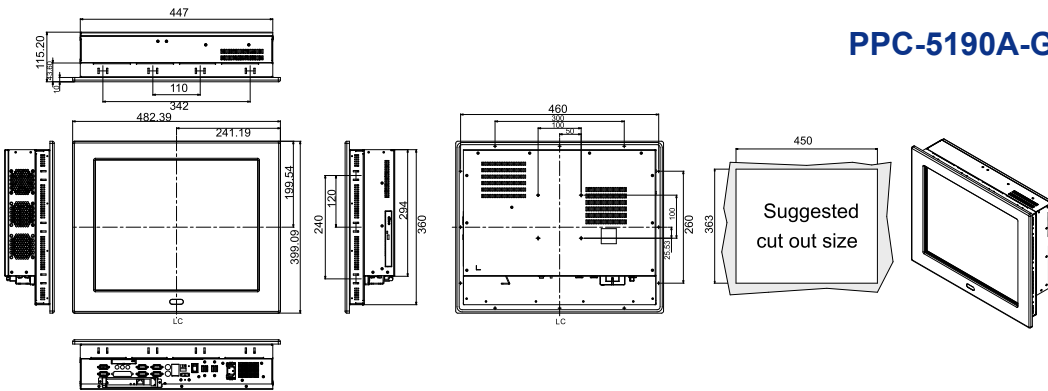
## PPC-5150A-G41



## PPC-5170A-G41



## PPC-5190A-G41



## Ordering Information

|            |                  |                             |   |
|------------|------------------|-----------------------------|---|
| 15" PPC    | AC Input         | PPC-5150A-G41-E15/R/1G-R10  | 15" 350 cd/m <sup>2</sup> 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/m <sup>2</sup> 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/m <sup>2</sup> 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/m <sup>2</sup> 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/m <sup>2</sup> 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/m <sup>2</sup> 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/m <sup>2</sup> 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/m <sup>2</sup> 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/m <sup>2</sup> 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/m <sup>2</sup> 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/m <sup>2</sup> 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/m <sup>2</sup> 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  |   |

PCIER-101H-R10



PCIe x4 slot with PCIe x1 signal riser card

PCIR-01H-R10



One Slot PCI riser card