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Kaohsiung	886-7-229-3600	Toll Free	1800-88-1809	Breda	31-76-5233-100		
		Kuala Lumpur	60-3-7725-4188				
		Penang	60-4-537-9188	UK			
				Reading	44-0118-929-4540		
		Indonesia		Poland			
		Jakarta	62-21-769-0525	Warsaw	48-22-33-23-740 / 41	1	
		Thailand		Russia			
		Bangkok	66-2-248-3140	Toll Free	8-800-550-01-50		
				Moscow	7-495-232-1692		
		India					
		Toll Free	1-800-425-5070				
		Bangalore	91-80-2545-0206				
		Australia					
		Toll Free	1300-308-531				
		Melbourne	61-3-9797-0100				
		Sydney	61-2-9476-9300				





Multi-functional Panel PC **Fanless Panel PC** 

ADVANTECH





**Enabling an Intelligent Planet** 

#### www.advantech.com

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## **Advantech Panel PC Platform** Speed up Your Quote-to-Cash Cycle

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## **About Advantech**

#### Advantech, Enabling an Intelligent Planet

Founded in 1983, Advantech is a leader in providing trusted innovative embedded and automation products and solutions. Advantech offers comprehensive system integration, hardware, software, customer-centric design services, and global logistics support; all backed by industry-leading front and back office e-business solutions. We cooperate closely with our partners to help provide complete solutions for a wide array of applications across a diverse range of industries. Advantech has always been an innovator in the development and manufacture of high-quality, high-performance computing platforms, and our mission is to empower these innovations by offering trustworthy products and services that enable an intelligent planet. With Advantech, there is no limit to the applications and innovations our products make possible.



#### Advantech Global Services

Advantech has over 12 regional hotlines and offices throughout 91 cities, in 20 countries, with nearly 6,000 employees to provide efficient, professional services for customer care, product selection, technical support, and order handling. Through our call centers and online stores, customers worldwide enjoy the convenience of Advantech's multi-service channels to reduce business turnaround time. Together with the four customer service centers in Taiwan, China, Europe and the United States, our global service network offers an extensive spectrum of services that includes warehousing, logistics, peripheral certification, sourcing & purchasing, and RMA & value-added services, and technical support & training.



### **Panel PC Introduction**

Advantech Panel PCs open up new opportunities by integrating computers with industries and applications; they bring computing to places and applications never imagined before. Their slim profiles, comprehensive functionality, high brightness LCDs, and user-friendly touchscreens make them the ideal solution for operator panels, information terminals, ecommerce terminals and human-machine interfaces. Producing high-quality industrial products is Advantech's specialty. Our Panel PCs are built to survive unforgiving environments, such as factory automation facilities, production control points, warehouses and distribution centers, transportation control centers, stations, airports and even refrigerated environments. As an ISO-9001 and ISO-14000 certified organization, Advantech abides by strict quality control standards applied to design, production and shipment. Panel PCs are subject to extensive testing prior to product release including EMI, EMC, temperature and vibration testing, and exposure to dust and liquids.





#### **Multi-function Panel PC**

- High computing power
- Multiple I/O
- AC power-in
- PCI/PCIe Expansion

#### Fanless Panel PC

- Slim
- Fanless
- Low power consumption
- Wide range DC-input
- PCI/PCIe expansion

#### Installation Accessories

• Multiple standard mounting options

- - - -

- Desktop stand
- Arm
- Wall mount
- Panel mount

## **Key Features of Panel PCs**

Panel PCs offer customers unique features for specific application needs. Customers can choose CPU, operating system, LCD, touchscreen and sunlight readable features. All the best standard and customized solutions are available for their applications.





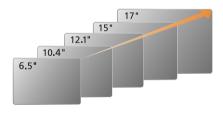
3rd Gen Intel® Core™ i
Intel® Atom™ D2550

#### Most updated platform

PPCs focus on new CPU technology so that the customer can take advantage of better CPU computing / graphic performance and even lower power consumption. With the most updated platform, customer can get the best cost effective products.

#### Full Range LCD

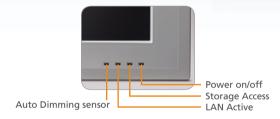
Advantech panel PCs provide a wide range of panel size options from 6.5 to 17 TFT LCD , and also 15.6/18.5/21.5 in widescreen format.





#### Auto Dimming

Ambient light may change throughout the day. With an auto-dimming function, the backlight is adjusted automatically by sensing environmental light level. Not only making operating them more comfortable, but also saving more power.



#### **LED** Indicators

Most customers embed PPCs and it's important to identify the system status from the front bezel LED. It displays the power on / off status, storage being accessed and Ethernet transfer status. With the user friendly LED indicator, you can easily check if any issues occur on your systems.

#### **IP65 Front Panel**

With advanced mechanical design, we provide the an IP65 grade dustproof and waterproof front bezel. It protects the PPC in harsh environments and keeps it operating.



**IP65** Compliant

Spill & Dust Resistant



#### SUSIAccess support

With SUSIAccess, providing customers with remote devices monitoring, switch machines, desktop connection, system recovery and system protection features and so on that help customers to multiple clients through a single console for remote device management. The services are also designed to be cloud-based. It provides on-demand software services so SIs can download & upgrade applications when they need.

### **Key Features of Panel PCs**





#### **Excellent Extensibility Expansion**

To use in different scenarios, PPCs provide multiple options on miniPCle, PCI and PClex1 standard expansions cards. Through this flexible design, customers can add on field bus cards to communicate with their own devices.

#### Dual 2.5" HDD with RAID Support

The Dual HDD design provides Intel RAID 0/1 to ensure data protection and help customers easily recover from a crashed system.





#### Isolation

To enhance system reliability, isolation prevents irregular power and avoids system crashes caused by voltage spikes from devices connected through RS-232/422/485.

## **Key Benefits for Your Systems**







## With an optimized and modular design, its never been easier to meet customer's varied requirements. CTOS provides a great value added service to save customer's time and money on system configuration.

#### Fully supported customization services

Although 'off-the-shelf' PPCs provide an excellent array of features, customers' needs are unlimited. With our quick and efficient R&D capabilities we provide a customization service from mechanical modification, software image distribution, I/O adjustment and so on. The benefit to customers is that they get more unique products to fulfill different applications.





#### **Cost-effective**

The PPC focuses on the machine builder and industrial process monitoring market. By adopting the most up-to-date technology and optimized mechanical design PPCs provide you with the best combination of cost versus performance products to fit your integration needs. However, system reliability is never sacrificed and a PPC is always your bet choice.



### **Monitoring & Process Control**

Machine automation is a system that tracks and adjusts resource usage as needed. Automated monitoring and process control in production cycles improves efficiency and productivity. Predictive process control involves the ability to monitor and control a continuous material process in real time. This allows the conditions of the process to be quickly and responsively adjusted, and avoids the delays associated with monitoring the final product. A hierarchy of LANs has also emerged, ranging from general to the more specialized, and from Ethernet to FDDI systems, each with its own specific usage. The data handled is more than just a control data, it also includes a variety of operational and processing data, seeking to establish comprehensive systems that embrace both data systems and control systems. It will be necessary to interconnect a variety of support systems (engineering support, operational support, diagnostic support, maintenance support, software development support, etc.) so as to form a data and control system capable of optimizing manufacturing throughout the plant. Client-server configurations are now being used for the functions.

### Why Panel PC's?

Panel PC's compact design and multi I/O have expanded possibilities for control of devices by offering a central control platform. Panel PCs are used in monitoring system conditions and administration. Process monitoring, process control, automation, real-time operator interface and display, on-line analysis and networking are all parts of their functionality.

#### 1. User-friendly interface

The user-friendly touchscreen has an improved interface, and enables the operator to remotely control each device.

#### 2. High reliability and maintainability

Industrial grade Panel PC's provide high levels of reliability, ease of continuous operation and maintenance.

#### 3. Flexible system configuration

Panel PC's for monitoring & process control can interconnect with business computer systems, plant controllers, design systems, and a variety of other systems. The full set of network functions and multi-I/O can be flexibly configured.

# 

### **Computerized Operating Systems**

Panel PCs can be used in any system that needs an operating interface for information input, display monitoring or preview, data storage and and retrieval; as well as network connectivity to a LAN or WAN via wired or wireless connection. Panel PC interfaces act as operating centers for systems. Multifunction products such as all-in-one printer/fax/copier/scanners are getting more complicated and versatile, requiring a PC-like appliance to control the system more efficiently; this is a key role for a Panel PC. Operators can input commands and preview content through a Panel PC. Revisions can be made before formal printing and copies can be permanently stored on servers through an Ethernet connection.

### Why Panel PC's?

#### 1. Flexible installation

Panel PC's offer various installation options (wall-mount, panel-mount, rail-mount, swing-arm, stand, etc.) to meet any customer requirement.

#### 2. Intuitive operation with touchscreen

Compared with keyboards & mice, touchscreens are a more convenient operating interface. With different environments or requirements, Panel PC's offer different technologies like: Resistive, Capacitive or SAW (Surface Acoustic Wave) touchscreens.

#### 3. Various I/O and expansion ports

Panel PC's provide various I/O ports like USB, parallel port, COM port and PCI/ISA slot. Customers can easily integrate Panel PC's with other devices.

### Fanless Panel PC Selection Guide





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#### **Selection Guide**

Мос	del Name		Fanless Panel Computer	
		PPC-L62T	PPC-3100	PPC-L128T
CPU Board		PCM-8205	PCM-8206	PCM-8201
Processor		Intel Atom N455 (1.66 GHz)	Intel Atom Dual core D2550 (1.86 GHz)	Intel Atom N270 1.6 GHz
Memory	Size	512 MB ~ 2 GB DDR3 SDRAM	Maximum 4GB DDR3 1066	DDR2 533 Up to 2 GB
Module Type		204-pin SODIMM x 1	204-pin SODIMM x 1	200-pin SODIMM x1
2nd Ca	che Memory	512 KB	1MB	512 KB
SS	SD/Type	Supports one CFast socket	Support 1 x internal mSATA	Supports one CompactFlash Type II, socket
	Size/Type	6.5" TFT LCD, LED Backlight	10.4" TFT LCD, LED backlight	12.1" Color TFT LCD
	Max. Resolution	640 x 480	800 × 600	1024 x 768
	Max. Colors	262 K	262 k	262 K
	Pixel Pitch (mm)	0.207 × 0.207	0.264 × 0.264	0.240 x 0.240
Display	Brightness (cd/m <sup>2</sup> )	700	400	450/600
	Viewing Angle	160°/140°	160°/140°	160°/160°
	Brightness Control	Yes	Yes	Yes
	Simultaneous Mode	Yes	Yes	Yes
	Backlight MTBF	50,000 hrs	30,000 hrs	50,000 hours
VGA	Chipset	Intel N455 + Intel ICH8M	Intel D2550 Integrated	Intel 945GSE + Intel ICH7M
HC	DD/Type	Optional 1 x 2.5" drive bay	1 x 2.5" internal SATA drive bay	1 x 2.5" internal SATA drive bay
	DVD+/- RW Drive Option	-	-	Optional
I/C	) Ports	2 x COM ports, 2 x GbE LAN, 4 x USB, Audio line out	4 x Serial ports: 3 x RS-232, 1x RS-232/422/485 (Adjustable through BIOS) 4 x USB ports 1 x Line-out, 1 x MIC-in 1 x DB15 VGA 1 x DB9 GPIO port (8 pin programable)	3 Serial Ports: RS-232 x 2, RS-232/422/485 x 1; 1 GPIO port 1 VGA Port; PS/2 Mouse and Keyboard, Line-in/ Line-out/ Mic-in Built-in 1W x 2 speakers, USB 2.0 ports x 4
Bus I	Expansion	1 x miniPCle	1 x miniPCle	Optional 1 x expansion slot for PCI/PCIe card 1 x MINI PCIe slot
Netw	vork (LAN)	2 x 10/100/1000 Mbps (RJ-45)	2 x 10/100/1000 Mbps (RJ-45)	2 x 10/100/1000 Mbps (RJ-45)
Power	Input Voltage	15 ~ 24 V <sub>DC</sub>	12~30 V <sub>DC</sub>	12 ~ 24 V <sub>DC</sub>
	Technology	Resistive	Resistive	Resistive
	Light Transmission	81%	81%	80%
Touchscreen	OS Support	Windows CE, XPE, XP, WIN 7	Windows XPE, WES7, WEC7	Windows XPE/XP Pro, Vista, WES7, CD6.0
	Durability (Touches)	36 million	36 million	35 million
Watch	ndog Timer	255 Level	255 Level	255 Level
Working	Temperature	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	0-45°C (32-113°F)
Front Pa	nel Protection	IP65 compliant	IP65 Ccompliant	IP65 compliant
Cer	tification	CE. FCC Class B, BSMI, CCC, UL	CE. FCC Class B, UL, BSMI, CCC	CE. FCC Class B, UL, BSMI, CCC, CB, VCCI
Dimensio	ns (W x H x D)	202 x 148 x 49 mm (7.9" x 5.82" x 1.92")	275 x 220 x 68 mm (10.83" x 8.74" x 2.68")	340.5 x 269.3 x 70.5 mm (13.41" x 10.6 x 2.78")
V	Veight	1.5 kg (3.3lb)	3.0 kg (6.6lb)	3.63 kg (7.98 lb)
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	Fanless Panel Computer	
PPC-3120	PPC-L157T	PPC-L158T
PCM-8206	PCM-8201	PCM-8204
Intel Atom Dual core D2550 (1.86 GHz)	Intel Atom N270 1.6 GHz	Intel Atom Dual core D525 1.8G
Maximum 4GB DDR3 1066	DDR2 533 Up to 2 GB	DDR3 800 MHz up to 4 GB (2 GB each socket)
204-pin SODIMM x 1	200-pin SODIMM x1	204-pin SODIMM x 2
1MB	512 KB	1 MB
Support 1 x internal mSATA	Supports one CompactFlash Type II, socket	Supports one CFast Type II, socket
12.1" Color TFT LCD, LED backlight	15" Color TFT LCD	15" Color TFT LCD, LED backlight
1024 x 768	1024 × 768	1024 × 768
262 K	262 K	262 K
0.240 × 0.240	0.297 x 0.297	0.297 x 0.297
600	350	350
160°/160°	160°/130°	160°/130°
Yes	Yes	Yes
Yes	Yes	Yes
50,000 hours	50,000 hours	50,000 hours
Intel D2550 Integrated	Intel 945GSE + Intel ICH7M	Intel D525 + Intel ICH8M
1 x 2.5" internal SATA drive bay	1 x 2.5" internal SATA drive bay	1 x 2.5" internal SATA drive bay
-	Optional	Optional
4 x Serial ports: 3 x RS-232, 1x RS-232/422/485 (Adjustable through BIOS) 4 x USB ports 1 x Line-out, 1x MIC-in 1 x DB15 VGA 1 x DB9 GPIO port (8 pin programable)	3 Serial Ports: RS-232 x 2, RS-232/422/485 x 1; 1 GPIO port 1 VGA Port ; PS/2 Mouse and Keyboard, Line-in/Line-out/ Mic-in, Built-in 1W x 2 speakers, USB 2.0 ports x 4	4 x COM ports: 2 x RS-232, 1 x RS-232/422/485, 1 x RS232/ GPIO (8 channels, TTL level) 4 x USB 2.0 ports Mic in/ Line out, 1W speaker - 2 x Gigabit Ethernet ports 1 x D-SUB VGA port 1 x PS/2 mouse and 1 x keyboard interface
Optional 1 x expansion slot for PCI/PCIe card 1 x miniPCIe slot	Optional 1 x expansion slot for PCI/PCIe card 1 x MINI PCIe slot	1 x expansion slot for PCI/PCIe card 1 x MINI PCIe slot
2 x 10/100/1000 Mbps (RJ-45)	2 x 10/100/1000 Mbps (RJ-45)	2 x 10/100/1000 Mbps (RJ-45)
12 ~ 30 V <sub>DC</sub>	12 ~ 24 $V_{\text{DC}},$ 15 ~ 24 $V_{\text{DC}}$ with battery pack	AC Model: 100W 100 ~ 250 V <sub>AC</sub> /50 ~ 60 Hz DC Model: 90W 15 ~ 24 V <sub>DC</sub>
Resistive	Resistive	Resistive
80%	80%	80%
Windows XPE, WES7, WEC7	Windows XPE/XP Pro, Vista, WES7	Windows XPE/XP Pro, Vista, WES7, CE6.0
35 million	35 million	35 million
255 Level	255 Level	255 Level
0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32-122°F); 0 ~ 35°C with battery	0 ~ 50°C (32-122°F); 0 ~ 35°C with battery
IP65 compliant	IP65 compliant	IP65 compliant
CE. FCC Class B, UL, BSMI, CCC	CE. FCC Class B, UL, BSMI, CCC, CB, VCCI	CE. FCC Class B, UL, BSMI, CCC, CB, VCCI
325 x 253.8 x 58.4 mm (12.79" x 10" x 2.3")	396.5 x 317.6 x 74.8 mm (15.6" x 12.5" x 2.95")	396.5 x 317.6 x 74.8 mm (15.6" x 12.5" x 2.95")
3.0 kg (6.6lb)	6 kg (13.2 lb)	6 kg (13.2 lb)
20	22	24

### Multi-functional Panel PC Selection Guide







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#### **Selection Guide**

			Multi-functional Panel Computer		
Moc	del Name	PPC-125T	PPC-157T	PPC-6150	
CP	U Board	PCM-8200	PCM-8200	MIO-5290 PCM-8207	
Processor		Socket 478 Supports Intel Core 2 Duo processor up to 2.16 GHz	Supports Socket 478 based Core 2 Duo up to 2.16 GHz	3rd Gen Core i CPU Celeron 847E 1.1 GHz Celeron 1020E 2.2 GHz Core i3-3120ME 2.4 GHz Core i5-3610ME 2.7 GHz	
Memory	Size	512 MB ~ 4 GB DDR2 SDRAM	Supports up to 4 GB of 667 MHz DDR2 system memory	DDR3 (1600 MHz) / DDRL (1333 MHz), supports up to 8 GB	
	Module Type	200-pin SODIMM x 2	SODIMM (socket x 2)	1 x 204-pin SODIMM	
L2 Cache Memory Storage/Type		On-die 512 KB ~ 4 M Supports 1 x internal CompactFlash Type II socket, 2.5" SATA HDD drive	On-die 512 KB ~ 4 M Supports 1 x internal CompactFlash Type II socket, 2.5" SATA HDD drive	2MB/3MB 1 x 2.5" SATA bay Either one - Second 2.5" SATA bay (Intel RAID supported, optional) - Slim type 8X or above DVD +/- RW (optional)	
	Size/Type	12.1"	15" Color TFT LCD	15" TFT LCD (LED Backlight)	
	Max. Resolution	1024 x 768	1024 x 768	1024 × 768	
	Max. Colors	262 K	262K	262K	
	Pixel Pitch (mm)	0.240 x 0.240	0.297 x 0.297	0.297 × 0.297	
Display	Brightness (cd/m <sup>2</sup> )	450	350	350	
Display	Viewing Angle	80°(left), 80°(right), 80°(up), 80°(down)	80°(left), 80°(right), 70°(up), 60°(down)	80°(left), 80°(right), 70°(up), 70°(down)	
	Brightness Control	Yes	Yes	Yes	
	Simultaneous Mode	Yes	Yes	Yes	
	Backlight MTBF	50,000 hrs	50,000 hrs	50,000 hrs	
VGA	Chipset	945GME	945GME	Intel 3rd Gen Core i CPU+QM77	
CD-ROM	I/Combo Drive	Optional extenal module for 1 x slim type optical drive (optional SATA optical drive)	Optional 1 x Slim type optical drive bay (optional SATA optional drive)	Optional 1 x Slim type optical drive bay (optional SATA optional drive)	
	DVD+/- RW Drive Option	Yes	Yes	Yes	
1/0	O Ports	4 x COM ports (3 x RS-232, 1 x RS-232/422/485) 6 x USB V2.0 ports, 1 x PS/2 mouse & K/B, Mic-in/Line-in/ Line-out, 1 W speakers, 2 x Gigabit Ethernet ports, 1 D-SUB VGA port	4 x COM ports (3 x RS-232, 1 x RS-232/422/485), 4 x USB 2.0 ports, 1 x PS/2 mouse and keyboard interface, MIC in/Line in/Line out port, 1W speaker, 2 x Gigabit Ethernet ports, 1 x D-SUB VGA port	4 x COM ports, 1 x isolated RS-232/422/485, 3 x RS232, 1 x GPIO/RS-232 (8 channels, TTL level); by pin header 3 x USB3.0 + 2 x USB2.0 ports 2 x Gigabit Ethernet, 1 x D-SUB VGA port 1 x HDMI, 1 x Line-out, 1 x Mic-in, 2 x 1W speaker	
Bus I	Expansion	1 x PCI-e Expansion Slot or 1 x PCI slot (Both are available as options) 1 x Mini PCI Socket, 1 x Mini PCI-e socket	1 x PCI-e Expansion Slot (PCI is available as option) 1 x Mini PCI Socket 1 x Mini PCI-e socket	Either: - one PCI + one PCIe x1 (standard) - one x PCIe x 4 (in the accessory box) - two PCIe x 1 (optional) - two PCI (optional)	
Netw	vork (LAN)	2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported	2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported	2 x Gigabit Gigabit Ethernet connectors, Intel AMT supported (GbE1: Intel 82579LM, GbE2: Intel 82583V)	
	Output Rating	150 W	150 W	150W	
Power	Input Voltage	AC Model: 150 W Input voltage: 100 ~ 240 V <sub>AC</sub> , 50 ~ 60 Hz, 2 ~ 4 A	100 ~ 240 V <sub>AC</sub> , 50 ~ 60 Hz, 2 ~ 4 A	100 ~ 240 V <sub>AC</sub> , 50/60Hz, 4 ~ 2 A	
	Technology	Resistive	Resistive	Resistive	
	Light Transmission	80% (Resistive)	80% (Resistive)	80% (Resistive)	
Touchscreen	OS Support	Windows XPE/XP Pro, Vista	Window XP/XPE/Vista	Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit	
	Durability (Touches)	35 million (Resistive)	35 million (Resistive)	35 million (Resistive)	
	ndog Timer	255 level	255 level	255 level	
Working	Temperature	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	
Front Pa	nel Protection	IP65 compliant	IP65 compliant	IP65 compliant	
Cer	rtification	CE, FCC, BSMI, CCC, UL, CB	BSMI, CE, FCC Class B, CCC	CE, FCC, BSMI, CCC, UL	
Dimensio	ns (W x H x D)	376 x 285.55 x 100.95 mm (14.80" x 11.24" x 3.97")	420 x 223.3 x 130.5 mm (16.54" x 12.72" x 5.12")	395.5 x 316.8 x 105.5 mm (15.6" x 12.5" x 4.15")	
	Veight	5.8 kg (12.77 lb)	6 kg (13.22lb)	6.5 Kg (14.32lb)	
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NEW



	Multi-functional Panel Computer	
PPC-177T	PPC-179T	PPC-6170
PCM-8200	PCM-8203	MIO-5290 PCM-8207
Supports Socket 478 based Core 2 Duo up to 2.16 GHz	LGA775 Socket-based Intel Core 2 Duo Processor up to 3.0 GHz	3rd Gen Core i CPU Celeron 847E 1.1 GHz Celeron 1020E 2.2 GHz Core i3-3120ME 2.4 GHz Core i5-3610ME 2.7 GHz
Supports up to 4 GB of 667 MHz DDR2 system memory	Supports up to 4 GB of 1333 MHz DDR3 system memory	DDR3 (1600 MHz) / DDRL (1333 MHz), supports up to 8 GB
SODIMM (socket x 2)	240-pin DIMM x 2	1 x 204-pin SODIMM
On-die 512 KB ~ 4 M	On-die 512 KB ~ 4 M	2MB/3MB
Supports 1 x internal CompactFlash Type II socket, 2.5" SATA HDD drive	Supports 1 x internal CFast Type II socket, 1 2.5" SATA HDD drive	1 x 2.5" SATA bay Either one - Second 2.5" SATA bay (Intel RAID supported, optional) - Slim type 8X or above DVD +/- RW (optional)
17" Color TFT LCD	17" TFT LCD	17" TFT LCD (LED Backlight)
1280 x 1024	1280 x 1024	1280 x 1024
16.7M	16.7 M	262K
0.264 x 0.264	0.264 x 0.264	0.264 × 0.264
380	380	350
80°(left), 80°(right), 80°(up), 80°(down)	80°(left), 80°(right), 80°(up), 80°(down)	85°(left), 85°(right), 80°(up), 80°(down)
Yes	Yes	Yes
Yes	Yes	Yes
50,000 hrs	50,000 hrs	50,000 hrs
945GME	Intel Q45	Intel 3rd Gen Core i CPU+QM77
Optional 1 x Slim type optical drive bay (optional SATA optional drive)	Optional SATA slim type optical drive	Optional 1 x Slim type optical drive bay (optional SATA optional drive)
Yes	Yes	YES
4 x COM ports (3 x RS-232, 1 x RS-232/422/485) 4 x USB 2.0 ports, 1 x PS/2 mouse and keyboard interface, Mic-in/Line-in/Line-out port, 1 W speakers, 2 x Gigabit Ethernet ports, 1 x D-SUB VGA port	3 x serial ports: 2 x RS-232, 1 x RS-232/422/485, 6 x USB2.0 ports, Mic-in, Line-in, Line-out, 1 x D-SUB VGA port, 2 x Gigabit Ethernet ports	4 x COM ports, 1 x isolated RS-232/422/485, 3 x RS232, 1 x GPIO/RS-232 (8 channels, TTL level) by pin header, 3 x USB3.0 + 2 x USB2.0 ports, 2 x Gigabit Ethernet, 1 x D-SUB VGA port, 1 x HDM 1 x Line-out, 1 x Mic-in, 2 x 1W speaker
1 x PCI-e Expansion Slot (PCI is available as option) 1 x Mini PCI Socket 1 x Mini PCI-e socket	1 x PCI + 1 x PCI-E through riser, 1 x Mini PCIe	Either: - one PCI + one PCIe x1 (standard) - one x PCIe x 4 (in the accessory box) - two PCIe x 1 (optional) - two PCI (optional)
2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported	2 x 10/100/1000 Mbps Ethernet	2 x Gigabit Gigabit Ethernet connectors, Intel AMT supported (GbE1: Intel 82579LM, GbE2: Intel 82583
150 W	220 W	150W
100 ~ 240 V <sub>AC</sub> , 50 ~ 60 Hz, 2 ~ 4 A	100 ~ 240 V <sub>AC</sub> @ 50 ~ 60 Hz	100 ~ 240 V <sub>AC</sub> , 50/60Hz, 4 ~ 2 A
Resistive	Resistive	Resistive
80% (Resistive)	80% (Resistive)	80% (Resistive)
Windows XPE/XP Pro, Vista, WES7	Windows XPE/XP Pro, Vista, WES7	Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 32 & 64 bit
35 million (Resistive)	35 million (Resistive)	35 million (Resistive)
255 level	62 level, 1 ~ 62 seconds	255 level
0 ~ 50°C (32 ~ 122°F)	0 ~ 45°C (32 ~ 113°F)	0 ~ 50°C (32 ~ 122°F)
IP65 compliant	IP65 compliant	IP65 compliant
BSMI, CE, FCC Class B, CCC	BSMI, VCCI, UL, CE, FCC, Class B, CCC	CE, FCC, BSMI, CCC, UL
442 x 362 x 111.5 mm (17.4" x 14.25" x 4.39")	446 x 382 x 149.3 mm (17.56" x 15.04" x 5.88")	442.0 x 362.0 x 113.5 mm (17.4" x 14.25" x 4.47")
· · · · · · · · · · · · · · · · · · ·	11.0 kg (27.94 lb)	7.5Kg (16.52lb)
7.6 kg (16.74 lb)		

## **PPC-L62T**

#### 6.5" Fanless Panel PC with Intel® Atom™ N455 Processor



### Features - 6.5" TFT VGA LCD (LED Backlight)

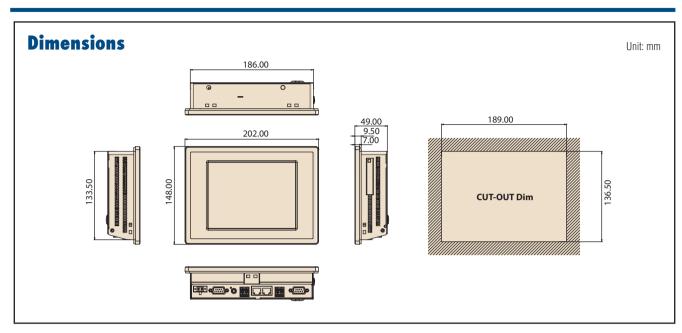
- Intel<sup>®</sup> Atom<sup>™</sup> N455 CPU on board
- System memory up to 2GB DDR3 SDRAM
- One CFast socket
- Fanless design and compact size
- Aluminum front bezel
- Dual Gigabit LAN support
- Adjust RS-232/422/485 through BIOS
- Automatic data flow control over RS-485

#### Introduction

The PPC-L62T is a 6.5" industrial-grade Panel PC for compact applications for machine builders. The PPC-L62T is highly reliable because of its fanless design. The IP65 compliant alumimum front bezel provides excellent protection especially in harsh environments (water and dust). The Dual Gigabit LAN provides reliable communication between mechine and control unit and the teaming function enhances fault tolerance and load balancing. PPC-L62T supports the most popular operating systems, such as Microsoft Windows XP, XP Embedded and Windows CE 6.0.

	CPU	Intel Atom N455 1.66GHz Single Core CPU on board
	Memory	SO-DIMM x 1, DDR3 667, Max 2GB
	2nd Cache Memory	512 KB
	Chipset	Intel ICH8M
	SSD	CFast*1
Processor system	HDD	1 x 2.5" external SATA HDD module (Optional)
FIDEESSOI SYSTEIII	I/O Ports	2 x Serial ports: RS-232x1;RS-232/422/485 x1; 4 x USB; 1 x Line-out
	Bus Expansion	1x MINI PCIe
	Network (LAN)	2 x 10/100/1000Mbps Ethernet
	Watchdog Timer	255 timer levels; setup by software
	Dimensions (W x H x D)	202 x 148 x 49 mm (7.9" x 5.82" x 1.92")
	Weight	1.5 kg ( 3.30 lb)
OS Support	OS Support	Win XPE, Win XP Pro, WES7 32 bit, Win CE 6.0
Power Supply	Input Voltage	15-24VDC
	Display Type	6.5" TFT LCD (LED Backlight)
	Max. Resolution	640 x 480
	Colors	262K
	Dot Size (mm)	0.207 x 0.207
LCD Display	Viewing Angle	80 (left), 80 (right), 70 (up), 70 (down)
	Luminance	700
	Brightness Control	Yes (by BIOS)
	Operating Temperature	-30 ~ 85°C (-22 ~ 185°F)
	Backlight Lifetime	50, 000 hrs
	Touch Type	Analog Resistive 5 wires
	Resolution	2048 x 2048
Touchscreen	Light Transmission	81%
TOUCHSCIECH	Controller	RS232 interface
	Software Driver Supports	Windows 7, XP, CE
	Durability (Touches)	36 millions

#### PPC-L62T



#### **Specifications**

	Operating Temperature	0 ~ 50°C (32 ~ 122°F)
	Storage Temperature	-20 ~ 60°C (-4 ~ 140°F)
	Relative Humidity	10 ~ 95% @ 40°C (non-condensing)
Environment	Shock	Operating 10 G peak acceleration (11 ms duration), follow IEC 60068-2-27
EIIVII UIIIIIIEIIL	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follow IEC 60068-2-64
	EMC	BSMI, CE, FCC Class B
	Safety	CB, CCC, BSMI, UL
	Front Panel Protection	IP65 compliant

#### **Ordering Information**

 Part No.
 Description

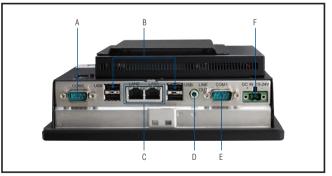
 PPC-L62T-R80-AXE
 Fanless Atom N455 PPC w/6.5" LCD+Res T/S+2LAN

 PPC-L62T-080-AXE
 Fanless Atom N455 PPC w/6.5" LCD+2LAN (w/o T/S)

#### Accessories

Part No.	Description
PS-DC19-L157E	19 V <sub>DC</sub> power adapter module for PPC-L128/ PPC-L157T
1700001524	POWER Cord 3P UL 10A 125V 180cm
170203183C	POWER Code 3P Europe (WS-010+083)183cm
1700008921	POWER CORD 3P/3P POWER SUPPLY 1.8M PSE
PPC-L62T-HDD-EXPE	HDD kit for PPC-L62T
PPC-L62T-WLANE	Wireless LAN Module for PPC-L62T
2070011145	Image WES09 PPC-L62T V4.0 24 multi-languages with SUSI Access
PPC-ARM-A03	PPC ARM VESA Standard
PPC-174T-WL-MTE	Wall mount kit for PPC series
2070011174	Image CE60 Pro PPC-L62T V1.0 ENG
2070011418	Image CE6.0 Pro PPC-L62T V1.0 (JPN) with SUSI Access
2070011441	Image CE 6.0 Pro PPC-L62T V1.0 (Traditional Chinese) with SUSI Access
2070011675	Image WES7E PPC-L62T V5.1.4 (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access

#### I/O Appearance



A. Serial Port(RS-232/422/485) B. USB 2.0 x 4 C. 10/100/1000 Ethernet x 2

D. Audio Line-out E. Serial Port(RS-232) F. DC inlet

#### 10.4" Fanless Panel PC with Intel® Atom™ D2550 Processor



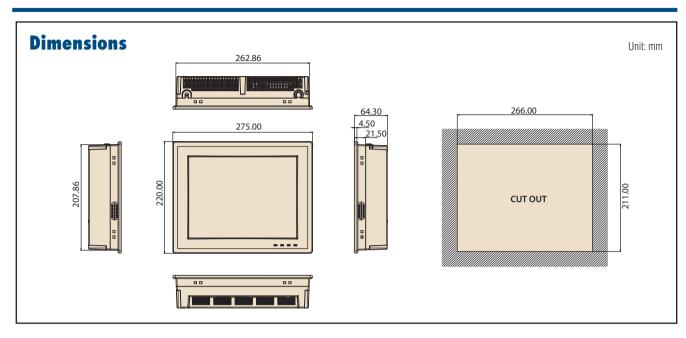
#### **Features**

- 10.4" TFT SVGA LED Panel with resistive touchscreen
- Embedded Intel<sup>®</sup> Atom<sup>™</sup> processor D2550 1.86 GHz
- System memory up to 4 GB DDR3 1066 SDRAM
- Supports one internal SATA 2.5" HDD and 1 x mSATA socket
- Fanless design and low power consumption
- Automatic data flow control over RS-485
- Adjust RS-232/422/485 through BIOS
- COM1/COM2 pin9 RI/5V/12V adjustable through BIOS
- LED backlight Auto dimming

#### Introduction

PPC-3100 is a new 10.4" Panel PC equipped with an Intel Atom processor D2550. Meeting high demands of harsh environments, the fanless design makes PPC-3100 more reliable in different kinds of applications for the machine building industry. In addition, the dual GbE LAN, 4 x serial ports, 4 x USB ports, and GPI0 connector make it easier to connect to devices and be integrated into specific solutions. With a user friendly design it comes with an LED indicator on the front panel for power on/off, storage access, and LAN active status.

	CPU	Intel Atom D2550 1.86 GHz 10W Dual Core CPU on board
	Nemory	SODIMM x 1, DDR3 1066, Max 4 GB, 2 GB DDR3 pre-installed
	nd Cache Memory	1 MB
C	Chipset	Intel NM10
S	Storage	mSATA*1
Н	IDD	1 x 2.5" SATA HDD Bay (Internal)
Processor System I/	'O Ports	4 x Serial ports: 3 x RS-232, 1x RS-232/422/485 (Adjustable through BIOS) 4 x USB 2.0 ports 1 x Line-out, 1x MIC-in 1 x DB15 VGA 1 x DB9 GPI0 port (8 pin programable)
В	Bus Expansion	1x MINI PCIe
N	letwork (LAN)	2 x 10/100/1000 Mbps Ethernet
S	Speaker	2 x 1W speakers
W	Vatchdog Timer	255 timer levels; setup by software
D	)imensions (W x H x D)	275 x 220 x 64.3 mm (10.83" x 8.74" x 2.53")
N	Veight	2.5 kg (5.51 lb)
	IS Support	Win XPE, Win XP Pro, WES7 32 bit, Win CE 7.0
	nput Voltage	DC 12 ~ 30 V
	)isplay Type	10.4" TFT LCD (LED Backlight)
	Max. Resolution	800 x 600
	Colors	262K
	Oot Size (mm)	0.264 x 0.264
	/iewing Angle	80 (left), 80 (right), 70 (up), 70 (down)
	uminance(cd/m2)	400
	Brightness Control	Yes
	)perating Temperature	-20 ~ 70°C (-4 ~ 158°F)
	Backlight Lifetime	30, 000 hrs (typical)
	ouch Type	Analog Resistive 5-wire
	Resolution	2048 x 2048
	ight Transmission	81+/-3%
C	Controller	RS-232 interface
S		Windows 7 VD CE
	Software Driver Support Durability (Touches)	Windows 7, XP, CE 36 million



#### **Specifications**

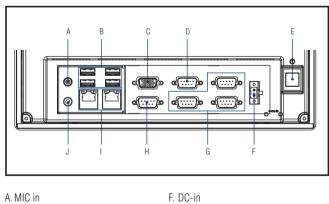
		Operating Temperature	0 ~ 50°C (32 ~ 122°F)
		Storage Temperature	-20 ~ 60°C (-4 ~ 140°F)
		Relative Humidity	10 ~ 95% @ 40°C (non-condensing)
	Environment	Shock	Operating 10 G peak acceleration (11 ms duration), follow IEC 60068-2-27
	EIIVII OTIITIETIL	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follow IEC 60068-2-64
		EMC	BSMI, CE, FCC Class B
		Safety	CB, CCC, BSMI, UL
		Front Panel Protection	IP65 compliant

#### **Ordering Information**

Part No.	Description
PPC-3100-R2GAE	Atom D2550 Fanless Panel PC with 10.4" SVGA LED backlight, 2 GB DDR3 pre-installed
PPC-3100-R4GAE	Atom D2550 Fanless Panel PC with 10.4" SVGA LED backlight, 4 GB DDR3 pre-installed
PPC-3100-X2GAE	Atom D2550 Fanless Panel PC with 10.4" SVGA LED backlight, w/o touch, 2 GB DDR3 pre-installed
PS-DC19-L157E	19V power adapter module
1700001524	Power cord 3P UL 10A 125V 1.8m
170203183C	Power cord 3P Europe (WS-010+083)183cm
1700008921	Power cord 3P/3P Power supply 1.8M PSE
* PPC-174T-WL-MTE	Wall mount kit for PPC series
* PPC-ARM-A03	PPC ARM VESA Standard
PPC-3100-VESAE	PPC-3100 VESA bracket
PPC-3100-WLANE	PCIe Half Mini Card WLAN module for PPC-3100 series
2070011747	Image XPE WES2009 PPC-3100 V4.3.1 24 multi-languages with SUSI Access
2070011748	Image WES7E PPC-3100 V5.1.3.1 (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access

\* if you order Wall mount kit or ARM, please also order PPC-3100-VESAE at the same time.

#### I/0



/
B. 4 x USB
C.VGA
D.RS-232/422/485
E. Power S/W

F. DC-in G.3 x RS-232 H.GPIO I. 2 x GbE J. LINE out Fanless Panel PC Datasheet

## **PPC-L128T**

#### 12.1" Fanless Panel PC with Intel® Atom™ N270 Processor



#### **Features**

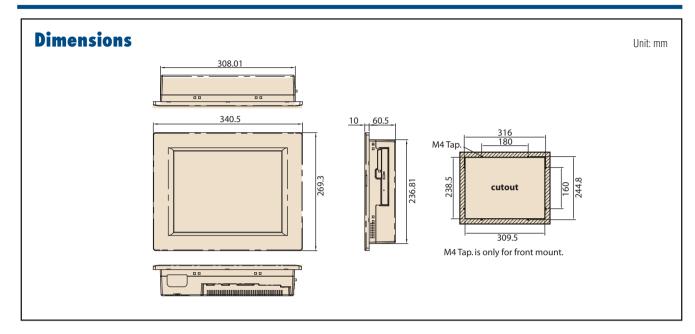
- 12.1" TFT XGA LCD with optional resistive touchscreen
- Embedded Intel<sup>®</sup> Atom<sup>™</sup> processor N270 1.6 GHz
- Supports up to 2 GB DDR2 SDRAM
- Supports one internal SATA 2.5" HDD
- Support 4 USB 2.0 ports, Dual Gigabit Ethernet
- Optional PCI/PCIe x 1 expansion kit
- Fanless and ultra-low power consumption
- Automatic data flow control over RS-485 (COM2)

#### Introduction

The PPC-L128T is 12.1" Fanless panel PC that delivers high performance while consuming low power. The PPC-L128T operates with low noise and provides display resolutions up to 1024 x 768 (XGA) pixels. The PPC-L128T is equipped with dual Gigabit Ethernet connectors supporting either failover or LAN tearning. Advantech's customization services and optional accessories including wireless modules, battery packs, and SATA optical devices, allowing system integrators to design tailor-made solutions for a host of industrial applications. And PPC-L128T optionally supports a sunlight readable display, making it suitable for outdoor use.

Petilitanions			
	CPU	Intel Atom Processor N270 1.6 GHz	
	CPU Front Side Bus	533 MHz	
	Chipset	Intel 945GSE + Intel ICH7M	
	Secondary Cache	512 KB L2 Cache	
	Memory	200-pin DDR2 533 SODIMM x1 Up to 2 GB	
	DVD+/-RW	Optional (989KL128T00E)	
	SSD	Supports one CompactFlash Type II, socket	
	HDD	One internal SATA interface- 2.5" Type	
Deserves Constant	Network (LAN)	2 x 10/100/1000 Mbps (RJ-45)	
Processor System	Fully Integrated I/O and Speakers	3 Serial Ports: RS-232 x 2, RS-232/422/485 x 1; 1 1 VGA Port ; PS/2 Mouse and Keyboard Line-in/ Line-out/ Mic-in Built-in 1W x 2 speakers, USB 2.0 ports x 4	GPIO port
	Bus Expansion	1 x expansion slot for PCI/PCIe card	
		1 x MINI PCIe slot	
	Front Panel Protection	IP65 compliant	
	Weight	3.63 kg (7.98 lb)	
	Dimensions (W x H x D)	340.5 x 269.3 x 70.5 mm (13.41" x 10.6 x 2.78")	
OS Support		Win XPE, Win XP Pro, WES7 32 bit, CE 6.0 for R81	l only
Power Supply		12 ~ 24 V <sub>DC</sub>	
		PPC-L128T-R80 series	PPC-L128T-R81 series
	Display Type	12.1" Color TFT LCD	12.1" Color TFT LCD (LED backlight)
	Max. Resolution	1024 x 768	1024 x 768
	Colors	262 K	262 K
	Pixel Pitch (mm)	0.240 x 0.240	0.240 x 0.240
LCD Display	Viewing Angle	160°/160°	160°/160°
	Luminance (cd/m <sup>2</sup> )	450	600
	Brightness Control	N/A	Yes (by BIOS)
	Backlight Lifetime	50,000 hours	50,000 hours
	Туре	Analog Resistive 5 wires (ELO)	Analog Resistive 5 wires (AMT), Anti-Corrosive type
	Resolution	2048 x 2048	2048 x 2048
Touchscreen (optional)	Light Transmission	80 %	80 %
	Controller	USB Interface	RS232 Interface (COM4)
	Durability (Touches)	35 million	35 million
	Operating Temperature	0-45°C (32-113°F)	oo minon
	Relative Humidity	10 ~ 95 % @ 40°C, non-condensing	
	Shock	Operating 10 G peak acceleration (11 ms duration),	follows IEC 60068-2-27
Environmental Specifications	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms.	
	EMC	CE, FCC Class B, BSMI	
	Safety	CE CB, UL, BSMI, CCC , VCCI	
	Daroty		

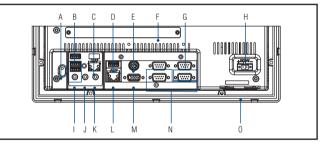
#### PPC-L128T



#### **Ordering Information**

Part NO	Description
PPC-L128T-081-XE	Intel Atom processor N270 1.6 GHz Fanless panel PC with 12.1" TFT LCD (LED backlight)
PPC-L128T-R81-XE	PPC-L128T-081-XE with resistive touchscreen (LED backlight)
PPC-L128T-080-XE	Intel Atom processor N270 1.6 GHz fanless panel PC with 12.1" TFT LCD
PPC-L128T-R80-XE	PPC-L128T-080-XE with resistive touchscreen
PPC-L128T-R80-WXE	PPC-L128T-080-XE with resistive touchscreen (White)
PPC-L128T-RXPE0E	PPC-L128T w1G Memory/ Windows XPE XPE on 160G HDD
PPC-ARM-A03	VESA Stand ARM for PPC series
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-L126 STAND	Stand desktop stand for PPC-L126T/PPC-L127T
PPC-L128-EXPE	PCI/PCIe expansion kit for PPC-L128
PS-DC19-L157E	19V DC power adapter module for PPC-L128/PPC-L157
1700001524	Power cord 3P UL 10A 125V 1.8M
170203183C	POWER Code 3P Europe (WS-010+083)183cm
1700008921	POWER CORD 3P/3P POWER SUPPLY 1.8M PSE
989KL128T00E	Slim type DVD-RW Module for PPC-L128
989KL128T02E	Wireless LAN module for PPC-L128T
2070008770	XPE WES2009 PPC-L128T V4.0 24 multi-languages with SUSI Access (R80)
2070010364	CE 6.0 Pro PPC-L128T V1.3 (ENG) with SUSI Access (R81)
2070010549	XPE WES2009 PPC-L128T V4.0 24 multi-languages with SUSI Access (R81)
2070010816	WES7P SP1 x86 PPC-L128T V5.1 (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access (R81)
2070010817	WES7E SP1 x86 PPC-L128T V5.1 (ENG) with SUSI Access (R81)

#### I/O Appearance



- A. Main power switch B. USB 2.0 x 3
- C. Ethernet jack
- D. USB 2.0

- E. PS/2 mouse and keyboard F. PCI/PCIe expansion slot cover G. GPIO port
- H. DC inlet

- I. Line-in jack J. Line-out jack K. Mic-in jack L. Ethernet jack

- M. VGA port
- N. Serial ports O. Battery door cover

#### 12.1" Fanless Panel PC with Intel<sup>®</sup> Atom<sup>™</sup> D2550 Processor



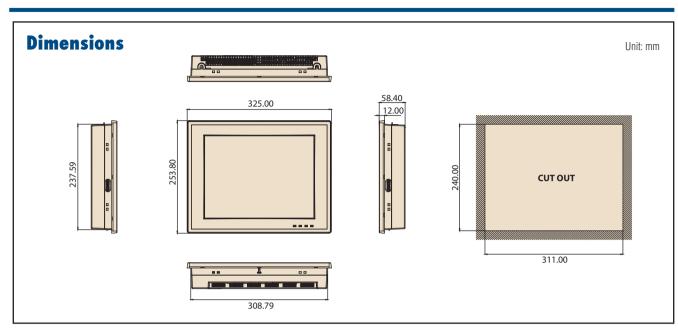
#### **Features**

- 12.1" TFT XGA LED Panel with resistive touchscreen
- Embedded Intel<sup>®</sup> Atom<sup>™</sup> processor D2550 1.86 GHz
- System memory up to 4 GB DDR3 1066 SDRAM
- Supports one internal SATA 2.5" HDD and 1 x mSATA socket
- Optional PCI/PCIe x1 expansion kit
- Fanless design and low power consumption
- Automatic data flow control over RS-485
- Adjust RS-232/422/485 through BIOS
- COM1/COM2 pin9 RI/5V/12V adjustable through BIOS
- LED backlight Auto dimming

### ${\rm SUSI}\widehat{{\rm Access}} \boxtimes {\rm Introduction} \oplus {\rm C} \in {\rm C} \oplus {\rm Is}$

The PPC-3120 is a new 12.1" Panel PC equipped with an Intel Atom processor D2550. Meeting high demands of harsh environments, the fanless design makes PPC-3120 more reliable in different kinds of applications for the machine building industry. In addition, the dual GbE LAN, 4 x serial ports, 4 x USB ports, and GPI0 connector make it easier to connect to devices and be integrated into specific solutions. With a user friendly design it comes with an LED indicator on the front panel for power on/off, storage access, and LAN active status.

	CPU	Intel Atom D2550 1.86 GHz 10W Dual Core CPU on board
	Memory	SODIMM x 1, DDR3 1066, Max 4 GB
	2nd Cache Memory	1 MB
	Chipset	Intel NM10
	Storage	mSATA*1
	HDD	1 x 2.5" SATA HDD Bay (Internal)
Processor System	I/O Ports	4 x Serial ports: 3 x RS-232, 1x RS-232/422/485 (Adjustable through BIOS) 4 x USB 2.0 ports 1 x Line-out, 1x MIC-in 1 x DB15 VGA 1 x DB9 GPI0 port (8 pin programable)
	Bus Expansion	1x MINI PCI-e (Standard), 1 x PCI / 1 x PCI-e through riser (Optional)
	Network (LAN)	2 x 10/100/1000 Mbps Ethernet
	Speaker	2 x 1W speakers
	Watchdog Timer	255 timer levels; setup by software
	Dimensions (W x H x D)	325 x 253.8 x 58.4 mm (12.79" x 10" x 2.3")
	Weight	3.3 kg (7.27 lb)
OS Support	OS Support	Win XPE, Win XP Pro, WES7 32 bit, Win CE 7.0
Power Supply	Input Voltage	DC 12 ~ 30 V
	Display Type	12.1" TFT LCD (LED Backlight)
	Max. Resolution	1024 x 768
	Colors	262K
	Dot Size (mm)	0.24 x 0.24
LCD Display	Viewing Angle	80 (left), 80 (right), 80 (up), 80 (down)
	Luminance (cd/m <sup>2</sup> )	600
	Brightness Control	Yes
	Operating Temperature	-30 ~ 80°C (-22 ~ 176°F)
	Backlight Lifetime	50,000 hrs (typical)
	Touch Type	Analog Resistive 5-wire
	Resolution	2048 x 2048
Touchscreen	Light Transmission	81+/-3%
100010010011	Controller	RS-232 interface
	Software Driver Support	Windows 7, XP, CE
	Durability (Touches)	36 million



#### **Specifications**

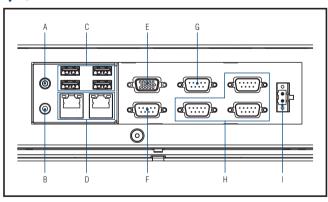
	Operating Temperature	0 ~ 50°C (32 ~ 122°F)	
	Storage Temperature	-20 ~ 60°C (-4 ~ 140°F)	
	Relative Humidity	10 ~ 95% @ 40°C (non-condensing)	
Envi	Environment	Shock	Operating 10 G peak acceleration (11 ms duration), follow IEC 60068-2-27
Environment	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follow IEC 60068-2-64	
	EMC	BSMI, CE, FCC Class B	
	Safety	CB, CCC, BSMI, UL	
	Front Panel Protection	IP65 compliant	

#### **Ordering Information**

Part No.	Description
PPC-3120-R2GAE	Atom D2550 Fanless Panel PC with 12.1" XGA LED backlight, 2 GB DDR3 pre-installed
PPC-3120-R4GAE	Atom D2550 Fanless Panel PC with 12.1" XGA LED backlight, 4 GB DDR3 pre-installed
PPC-3120-X2GAE	Atom D2550 Fanless Panel PC with 12.1" XGA LED backlight, w/o touch, 2 GB DDR3 pre-installed
PS-DC19-L157E	19V power adapter module
1700001524	Power cord 3P UL 10A 125V 1.8m
170203183C	Power cord 3P Europe (WS-010+083)183cm
1700008921	Power cord 3P/3P Power supply 1.8M PSE
* PPC-174T-WL-MTE	Wall mount kit for PPC series
* PPC-ARM-A03	PPC ARM VESA Standard
* PPC-3100-STANDE	Desktop Stand for PPC-3100 series
PPC-3100-VESAE	PPC-3100 VESA bracket module
PPC-3100-WLANE	PCIe Half Mini Card WLAN module for PPC-3100 series
PPC-3120-EXPE	Add-on box for PCI or PCIe expansion (include PCI / PCIe riser card)

 $^{\ast}$  if you order Wall mount kit / ARM / Desktop stand, please also order PPC-3100-VESAE at the same time.

#### I/0



A. MIC in B. Line Out

- B. Line Out C. USB 2.0 x 4
- D. 10/100/1000 Mbps Ethernet x 2
- E. VGA Port

F. DIO Port G.RS-232/422/485 x 1 H.RS-232 x 3 I. DC Inlet

## **PPC-L157T**

#### 15" Fanless Panel PC with Intel® Atom™ N270 Processor



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#### Introduction

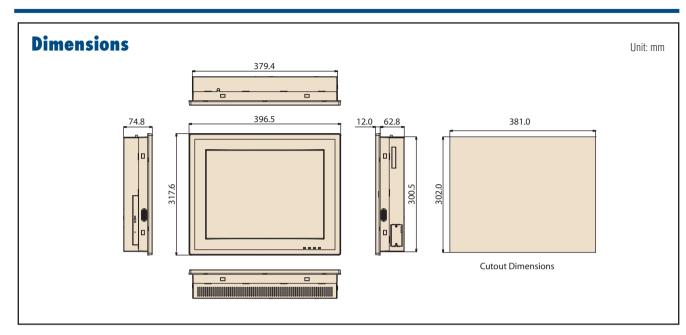
#### **Features**

- 15" TFT XGA LCD with optional resistive touchscreen
- Embedded Intel® Atom™ processor N270 1.6 GHz
- System memory up to 2 GB DDR2 SDRAM
- Supports one internal SATA 2.5" HDD
- Supports six USB 2.0 ports (4 external/ 2 internal), Dual Gigabit Ethernet
- Optional PCI/PCIe x 1 expansion kit
- Fanless and ultra-low power consumption
- Optional smart battery module
- Automatic data flow control over RS-485 (COM2)

The PPC-L157T is a 15" Fanless panel PC that delivers high performance while consuming low power. The PPC-L157T operates with low noise and provides display resolutions up to 1024 x 768 (XGA) pixels. The PPC-L157T is equipped with dual Gigabit Ethernet connectors supporting either failover or LAN teaming. Advantech's customization services and optional accessories including wireless modules, battery packs, and SATA optical devices, allow system integrators to design tailor-made solutions to a host of industrial applications.

-			
	CPU	Intel Atom Processor N270 1.6 GHz	
	CPU Front Side Bus	533 MHz	
	Chipset	Intel 945GSE + Intel ICH7M	
	Secondary Cache	512 KB L2 Cache	
	Memory	200-pin DDR2 533 MHz SODIMM x1 Up to 2 GB	, Compatible with 667 MHz
	DVD+/-RW	989KL15702E	
	SSD	Supports one CompactFlash Type II, socket	
	HDD	One internal SATA interface- 2.5" Type	
Deserves an Constant	Network (LAN)	2 x 10/100/1000 Mbps (RJ-45)	
Processor System		3 Serial Ports: RS-232 x 2, RS-232/422/485 x 1;	1 GPIO port
	Fully Integrated I/O and	1 VGA Port ; PS/2 Mouse and Keyboard	· · · · · · · · · · · · · · · · · · ·
	Speakers	Line-in/ Line-out/ Mic-in	
		Built-in 1W x 2 speakers, USB 2.0 ports x 4	
		1 x expansion slot for PCI/PCIe card	
	Bus Expansion	1 x MINI PCIe slot	
	Front Panel Protection	IP65 compliant	
	Weight	6 kg (13.2 lb)	
	Dimensions (W x H x D)	396.5 x 317.6 x 74.8 (15.6" x 12.5" x 2.95")	
OS Support		Win XPE / Win XP Pro / WES7 32 bit / Windows	7 32bit
Power Supply		12 -24 Vdc, 15-24 VDC with battery pack	
	Display Type	15" Color TFT LCD (CCFL backlight for R80, LED	backlight for R81)
	Max. Resolution	1024 x 768	
	Colors	262 K	
LCD Display	Pixel Pitch (mm)	0.297 x 0.297	
1 3	Viewing Angle	160°/130°	
	Luminance (cd/m <sup>2</sup> )	350	
	Backlight Lifetime	50,000 hours	
	Туре	Analog Resistive 5 wires (ELO) (for R80)	Analog Resistive 5 wires (AMT), Anti-Corrosive type (for R81)
	Resolution	2048 x 2048	2048 x 2048
Touchscreen (optional)	Light Transmission	80 %	80 %
	Controller	USB Interface	RS232 Interface (COM4)
	Durability (Touches)	35 million	35 million
	Operating Temperature	0-50°C (32-122°F); 0-35°C with battery pack	
	Relative Humidity	10 ~ 95 % @ 40°C, non-condensing	
Environmental Specifications	Shock	Operating 10 G peak acceleration (11 ms duration	n), follows IEC 60068-2-27
	Vibration	Operating Random Vibration Test 5~500Hz, 1Grm	
	EMC	CE, FCC Class B, BSMI	,
	Safety	CE CB, UL, BSMI, CCC , VCCI	
	/	,, ,	

#### PPC-L157T

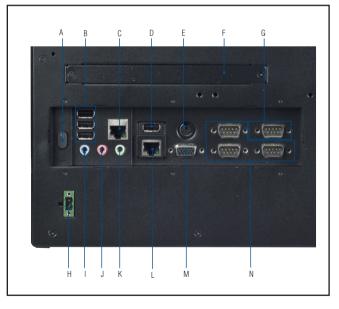


#### **Ordering Information**

Part NO	Description
PPC-L157T-080-XE	Intel Atom processor N270 1.6 GHz fanless panel PC with 15" TFT LCD
PPC-L157T-R80-XE	PPC-L157T-080-XE with resistive touchscreen
PPC-L157T-RXPEOE	PPC-L157T with 1G memory/Windows XPE on 160G HDD
PPC-ARM-A03	VESA Stand ARM for PPC series
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-L157-STANDE	Stand desktop stand for PPC-L157T
PPC-L157-EXPE	PCI/PCIe expansion kit for PPC-L157
PS-DC19-L157E	19V DC power adapter module for PPC-L128/PPC-L157
1760001580	Battery PACK 11.1V 4.4AH 3S2P (only for PPC-L157T-R81-XE)
1700001524	Power cord 3P UL 10A 125V 1.8M
989KL15700E	Wireless Module for PPC-L157T Series
989KL15702E	Slim type DVD-RW Module for PPC-L157T Series
PPC-L157T-R81-XE	Intel Atom processor N270 1.6 GHz fanless panel PC with 15" TFT LCD and AMT Anti-Corrosive touchscreen (LED backlight)
2070009824	XPE WES2009 for PPC-L157T V4.0 24MUI (for R80)
2070011575	XPE WES2009 V4.0, 24 multi-languages with SUSI Access (for R81)



#### I/O Appearance



- A. Main power switch
  B. USB 2.0 x 3
  C. Ethernet jack
  D. USB 2.0
  D. USB 2.0

- E. PS/2 mouse and keyboard F. PCI/PCI-E expansion slot cover G. GPIO port

- H. DC inlet I. Line-in jack J. Line-out jack
- K. Mic-in jack
- L. Ethernet jack M. VGA port
- N. Serial ports

## **PPC-L158T**

#### **15" Fanless Panel PC with** Intel<sup>®</sup> Atom<sup>™</sup> Dual-Core Processor



#### SUSIÂCCESS Mindows 😔 C E FC 🔘

#### Introduction

#### **Features**

- 15" TFT XGA LCD with optional resistive touchscreen
- Embedded Intel® Atom™ processor, dual-core D525 1.8G
- System memory up to 2 x DDR3 800 MHz SODIMMs
- Supports one internal SATA 2.5" HDD
- Supports One Mini PCIe socket, Dual Gigabit Ethernet
- Either PCI/PCIe x 1 expansion kit
- Fanless and ultra-low power consumption
- One RS-232/422/485; (supporting Auto-flow control, BIOS-selectable)
- One RS-232/ GPIO (8 channels, TTL level); (by swapping pin header)

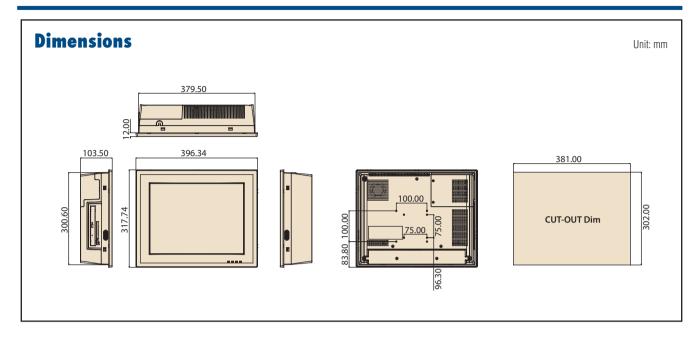
The PPC-L158T is a 15" Fanless panel PC that delivers high performance while consuming low power. The PPC-L158T operates with low noise and provides display resolutions up to 1024 x 768 (XGA) pixels. The PPC-L158T is equipped with dual Gigabit Ethernet connectors, 8-channel GPIO function and either one PCI or one PCIe expansion slot. Advantech's customization services and optional accessories including wireless modules and SATA optical devices, allow system integrators to design tailor-made solutions for a host of industrial applications.

#### **Specifications**

	•	
	CPU	Intel Atom processor, dual-core D525 1.8G
	Chipset	D525 + ICH8M
	Secondary Cache	1MB L2 cache
	Memory	2 x DDR3 800 MHz SODIMMs (up to 2GB each socket), compatible with 1066/1333 MHz (does not support ECC and REG)
	DVD-RW Drive	Optional (989K017702E)
	SSD	Supports one CFastTM Type I, II socket
	HDD	One internal SATA interface- 2.5" Type
	Network (LAN)	2 x 10/100/1000 Mbps (RJ-45)
Processor System	Fully Integrated I/O and Speakers	4 x COM ports: 2 x RS-232, 1 x RS-232/422/485, 1 x RS232/ GPIO (8 channels, TTL level)* 4 x USB 2.0 ports Mic in/ Line out, 1W speaker - 2 x Gigabit Ethernet ports 1 x D-SUB VGA port 1 x PS/2 mouse and 1 x keyboard interface
		1 x Parallel port (by an additional cable in the accessory box) * RS-232/422/485 - selected in BIOS and supporting RS-232/GPIO by swapping pinheader, Auto-flow control
	Bus Expansion	1 x expansion slot for PCI/PCIe card 1 x MINI PCIe slot
	Front Panel Protection	IP65 compliant
	Weight	6 kg (13.2 lb)
	Dimensions (W x H x D)	396.5 x 317.6 x 103.5 mm (15.6" x 12.5 x 4.08")
OS Support		Win XPE / Win XP Pro / WES7 32 bit / Windows 7 32 & 64 bit / CE6.0
	DC Input Voltage	15 ~ 24 V <sub>DC</sub>
Power Supply	AC Output Rating	85 W (max.)
	Input Voltage	100 ~ 240 V <sub>AC</sub> , 50 ~ 60 Hz, 1 ~ 2 A
	Display Type	15" Color TFT LCD
	Max. Resolution	1024 x 768
	Colors	262 K
LCD Display	Pixel Pitch (mm)	0.297 x 0.297
LOD DISplay	Viewing Angle	160°/140°
	Luminance (cd/m <sup>2</sup> )	350
	Brightness Control	Yes
	Backlight Lifetime	50,000 hours
	Туре	Analog Resistive 5-wire (AMT) Anti-Corrective type
	Resolution	2048 x 2048
Touchscreen (optional)	Light Transmission	80 %
( I )	Controller	RS-232 interface
	Durability (Touches)	35 million
	Operating Temperature	0-50°C (32-122°F)
	Relative Humidity	10 ~ 95 % @ 40°C, non-condensing
Environmental	Shock	Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27
Specifications	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follows IEC 60068-2-64
	EMC	CE, FCC Class B, BSMI
	Safety	CE CB, UL, BSMI, CCC , VCCI

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#### PPC-L158T

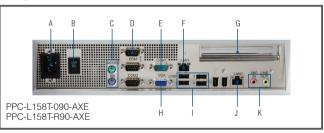


#### **Ordering Information**

Part NO	Description
PPC-L158T-090-AXE	Intel Atom processor, Dual Core processor D525 1.8G fanless panel PC with 15" TFT LCD (with 85W PSU inside)
PPC-L158T-R90-AXE	PPC-L158T-090-XE with resistive touchscreen (with 85W PSU inside)
PPC-L158T-090-DXE	Intel Atom Dual Core processor D525 1.8G fanless panel PC with 15" TFT LCD (DC Input Model)
PPC-L158T-R90-DXE	PPC-L158T-090-XE with resistive touchscreen (DC Input Model)
PPC-ARM-A03	VESA Stand ARM for PPC series
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-155T STAND	Stand kit for PPC-L158T/157/177/ series
PS-DC19-L157E	19V DC power adapter module for PPC-L128/PPC-L157
1700001524	Power cord 3P UL 10A 125V 1.8M (for adapter)
989K017700E	Optical disc drive kit for PPC-L158T/157/177 (W/O ODD)
989K017702E	DVD-RW (SATA) module for PPC-L158T/157/177
2070010541	Image XPE WES2009 PPC-L158 V4.0 24 MUI
2070011078	Image CE 6.0 Pro PPC-L158 V1.0 ENG
PPC-L158T-WLANE	Wireless Module for PPC-L158T Series
2070011241	Image WES7E SP1 32 bit PPC-L158T V5.1 English version
2070011242	Image WES7P SP1 32 bit PPC-L158T V5.1, 36 multi- language

#### I/O Appearance

#### **AC Input Model**



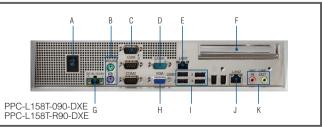
A: AC Inlet

- B: Power Switch
- C: PS2 Mouse x 1 / Keyboard x1
- D: RS-232 x 2, RS-232/422/485 x 1
- E: RS-232 x 1 (or GPIO x 1 by cable swapping)

F: 10/100/1000 Mbps Ethernet x 1 G: PCI Slot x 1 (or PCIe Slot x 1) H: VGA Port I: USB 2.0 x 4 J: 10/100/1000 Mbps Ethernet x 1

K: Line out/Mic in

#### **DC Input Model**



- A: Power Switch
- B: PS2 Mouse x 1 / Keyboard x 1
- C: RS-232 x 1 (or GPIO x 1 by cable swapping)
- D: RS-232 x 2, RS-232/422/485 x 1
- E: 10/100/1000 Mbps Ethernet x 1
- F: PCI Slot x 1 (or PCIe Slot x 1)
- G: DC inlet H: VGA Port
- I: USB 2.0 x 4
- J: 10/100/1000 Mbps Ethernet x 1
- K: Line out/Mic in

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## **PPC-125T**

### 12" Panel PC with Intel<sup>®</sup> Core<sup>TM</sup>2 Duo Processor



#### 

#### Introduction

#### Features

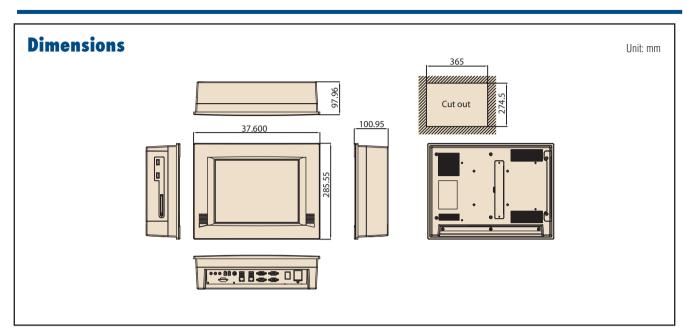
- 12.1" TFT XGA (1024 x 768) LCD Panel
- Intel<sup>®</sup> Core<sup>™</sup>2 Duo processor up to 2.16 GHz
- System memory up to 4 GB (DDR2 200-pin SODIMM socket x 2)
- 1 x PCI slot or 1 x PCIe slot (both optional)
- One Mini PCIe slot
- Built-in CF card interface (IDE interface for OS booting)
- Two Gigabit Ethernet ports, support LAN teaming
- One RS-232/422/485; (supporting Auto-flow control, selecting by BIOS)

The PPC-125T is an Intel Core 2 Duo based Panel PC with 12.1" color TFT LCD. It features multimedia devices, various connectors, and can be installed in virtually any application. In addition, its user-friendly interface makes it a great host for information appliances. Four serial COM supports auto-flow control PPC-125T advanced networking capabilities, and provides a great solution for versatile applications.

	CPU	Supports mSocket 478 based Core 2 Duo up to 2.16 GHz	
	CPU FSB	533/667 MHz	
	Chipset	945GME + ICH7M	
	Disk Drive Housing	Room for 1 x 2.5" SATA HDD	
	Dimensions (W x H x D)	376 x 285.55 x 100.95 mm (14.80" x 11.24" x 3.97")	
	Front Panel Protection	IP65 compliant	
	Weight	5.6 kg (12.33 lb)	
	HDD	SATA HDD interface (2.5" HDD bay)	
Processor System	DVD+/-RW Drive	Optional external module with SATA DVD-RW Drive	
	Memory	Socket x 2, supports up to 4 GB DDR2 SDRAM 200pin SODIMM	
	Network (LAN)	2 x Gigabit Ethernet ports, support both wake on LAN and boot from LAN functions.	
		- 4 x COM ports: 3 x RS-232, 1 x RS-232/422/485	
		- 6 x USB 2.0 ports	
	I/O Ports	- 1 x PS/2 mouse and keyboard interface	
	1,01010	- MIC in / Line in / Line out port, 1 W speakers	
		- 2 x Gigabit Ethernet ports	
		- 1 x D-SUB VGA port	
	Bus Expansion	PCI riser card & PCIe riser card are available as options, 1 x Mini PCI socket, 1 x Mini PCIe socket	
OS Support	OS Support	Win XPE, Win XP Pro, WES7 with 32 bit, WES7 with 64 bit (only for T7400 CPU)	
	Operating Temperature	0~50°C (32~122°F)	
	Relative Humidity	10 ~ 95% @ 40°C non-condensing	
Environmental Specifications	Shock	Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27	
· · · · · · · · · · · · · · · · · · ·	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follow IEC 60068-2-64	
	EMC	BSMI, CE, FCC Class B, CCC	
	Safety	CB, CE, UL	
	Output Rating	150 W (max.)	
Power Supply AC Model	Input Voltage	100 ~ 240 V <sub>AC</sub> , 50 ~ 60 Hz, 2 ~ 4 A	
	Output Voltage	+3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vsb @ 1.5 A, -12 V @ 0.3 A	
	Display Type	Color TFT LCD	
	Size (Diagonal)	12.1"	
	Max. Resolution	1024 x 768	
	Max. Colors or Grayscales	262 K	
LCD Display	Pixel Pitch (mm)	0.240 × 0.240	
200 5100103	Luminance (cd/m2)	450	
	Contrast Ratio	700:1	
	Viewing Angle	80°(left), 80°(right), 80°(up), 80°(down)	
	Operating Temperature	-30 ~ +70°C	
	LCD MTBF	50,000 hrs	
Touchscreen (optional)	Туре	5-wire Analog Resistive (USB interface)	

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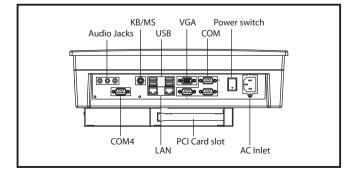
#### PPC-125T



#### **Ordering Information**

Part No.	Description
PPC-125T-BAREE	12.1" Core 2 Duo Panel PC without T/S
PPC-125T-BARE-TE	12.1" Core 2 Duo Panel PC with Resi. T/S
PPC-125-STANDE	Stand kit for PPC-125 series
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-ARM-A03	PPC ARM VESA Standard
989K012500E	PCI-e riser card with rear add-on box with 1 x Slim SATA ODD bay
989K012502E	DVD-RW Drive Module for PPC-125 with 1 x PCI-e slot
989K012503E	PCI riser card with rear add-on box with 1 x SIim SATA ODD bay
1702002605	POWER CABLE 90D 220V EUROPEAN 250V/6A 1.8M
1702002600	Power Cable UL/CSA (USA) 180D 125V10A 1.83M
2070006629	XPE FP2007 PPC-125T V3.01 (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access
2070006569	Image XPE FP2007 PPC-125T V3.01 ENG
2070011330	IMG XPE WES09 PPC-125T V4.0 24 multi-languages with SUSI Access

#### I/O Appearance



#### **Feature Details**

#### Protection

To meet the requirements of a public environment, the front panel PPC-125T complies with the IP65 protection standard. Furthermore, the watchdog timer and power management features make the system secure and stable. The onboard hardware monitoring feature provides an automatic protection function, which prevents the CPU from becoming overheated.

#### Expansion

To extend functionality, the PPC-125T is designed with either one expansion slot for PCI card or PCIe card and six USB 2.0 (Univeral Serial Bus) ports. With these expansion capabilities, the PPC-125T not only functions as an HMI, but also as a computing center on which to build your applications.

## **PPC-157T**

#### 15" Panel PC with Intel® Core™2 Duo Processor



#### Features

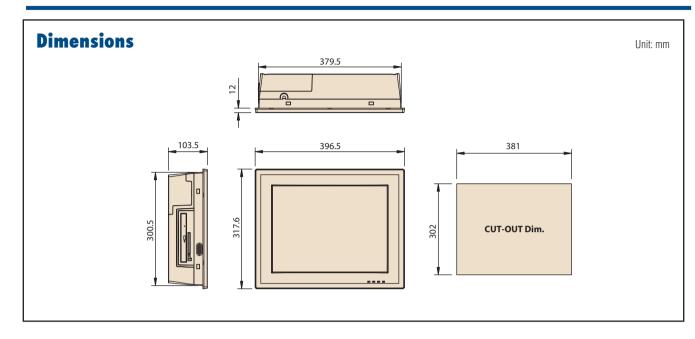
- Intel<sup>®</sup> Core<sup>™</sup>2 Duo processor up to 2.16 GHz
- System memory up to 4 GB 667 MHz DDR2 SODIMM socket x 2
- One PCIe Expansion Slot (PCI is available as an option)
- One Mini PCI socket, One Mini PCIe socket
- Built-in CF card interface (IDE interface for OS booting)
- Dual Gigabit Ethernet ports supporting LAN teaming
- One RS-232/ GPIO (8 channels, TTL level); (by swapping pin header)
- One RS-232/422/485; (supporting Auto-flow control, selecting by BIOS)

#### Introduction

The PPC-157T is an Intel Core 2 Duo based Panel PC with 15" color TFT LCD. It features multimedia devices, various connectors, and can be installed in virtually any application. In addition, its user-friendly interface makes it a great host for information appliances. Four serial ports and two Gigabit Ethernet ports give the PPC-157T advanced networking capabilities, and provide a great solution for versatile applications.

		CPU	Supports mSocket 478 based Core 2 Duo up to 2.16 GH	Ηz		
		CPU FSB	533/667 MHz			
		Chipset	945GME + ICH7M			
		Disk Drive Housing	Room for 1 x 2.5" SATA HDD			
		Dimensions (W x H x D)	396.5 x 317.6 x 103.5 mm (15.6" x 12.5 x 4.08")			
		Weight	6 kg (13.22lb)			
		Front Panel Protection	IP65 compliant			
		HDD	SATA HDD interface (2.5" HDD bay)			
Processor Syste		DVD+/-RW Drive	Optional SATA 8X or above DVD+/-RW Drive, Optional optical drive bay			
FIDLESSUI SYSLE	111	Memory	Supports up to 4 GB of 667 MHz DDR2 SODIMM system memory (socket x 2)			
		Network (LAN)	2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN			
		,	- 4 x COM ports: 2 x RS-232, 1 x RS-232/422/485,	- 2 x Gigabit Ethernet ports		
		I/O Ports	1 x RS-232/ GPIO (8 channels, TTL level)*	- 1 x D-SUB VGA port		
		I/U POILS	- 4 x USB 2.0 ports	- 1 x PS/2 mouse and keyboard interface		
			- Mic in/ Line out / Line in, 1W speaker			
			* RS-232/422/485 - selecting by BIOS and supporting /	Auto-flow control,		
			RS-232/GPIO - by swapping pin header			
		Bus Expansion	1 x PCI-e Expansion Slot (PCI is available as an option			
OS Support		OS support	Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 7	7 32 & 64 bit (64 bit only for T7400)		
		Operating Temperature	0 ~ 50°C (32 ~ 122°F)			
		Relative Humidity	10 ~ 95% @ 40°C non-condensing			
Environmental S	Specifications	Shock	Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27			
	promoations	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follows IEC 60068-2-64			
		EMC	BSMI, CE, FCC Class B, CCC			
		Safety	CB, CE, UL			
		Output Rating	150 W (max.)			
Power Supply	AC Model	Input Voltage	100 ~ 240 V <sub>AC</sub> , 50 ~ 60 Hz, 2 ~ 4 A			
		Output Voltage	+3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vsb @ 1.5 A, -12 V @ 0.3 A			
		Display Type	Color TFT LCD			
		Size (Diagonal)	15"			
		Max. Resolution	1024 x 768			
LCD Display		Max. Colors or Grayscales	262K			
		Pixel Pitch (mm)	0.297 x 0.297			
		Luminance (cd/m <sup>2</sup> )	350			
		Contrast Ratio	400:1			
		Viewing Angle	80°(left), 80°(right), 70°(up), 60°(down)			
		LCD MTBF	50,000 hrs			
Touchscreen (optional) Type		Туре	5-wire Analog Resistive (USB interface)			

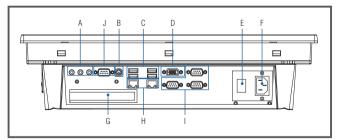
#### **PPC-157T**



#### **Ordering Information**

Part No.	Description
PPC-157T-BAREE	15" C2D Based PPC without T/S
PPC-157T-BARE-TE	15" C2D Based PPC with Resistive T/S
PPC-155T STAND	Stand kit for PPC-155/157/175/177 series
PPC-ARM-A03	PPC ARM VESA Standard
PPC-174T-WL-MTE	Wall mount kit for PPC series
1702002605	Power cord 90D 220V EUROPEAN 250V/6A, 1.8M
1702002600	Power cord UL/CSA (USA) 180D 125V/10A 1.83M
989K017700E	Optical disc drive kit for PPC-157/177 (W/O ODD)
989K017702E	DVD-RW (SATA) module for PPC-157/177
989K070601E	PCI riser card for PPC-157/177
PPC-L158T-WLANE	802.11 b/g/n RT5390 1T1R Full Size Mini PCIe for PPC-L158/157/177 Series
2070011562	XPE WES2009 V4.3, 24 multi-language with SUSI Access

#### I/O Appearance



A: Line in/Line out/Mic in B: PS2 Mouse & Keyboard C: USB 2.0 x 4 D: VGA Port E: Power Switch F: AC Inlet G: PCI Slot x 1 H: 10/100/1000 Base-T Ethernet x 2 I: RS-232 x 3 (including RS232/422/485 x 1, COM2) J: RS-232/GPI0 (by swapping pin header)

#### **Feature Details**

#### Protection

To meet the requirements of a public environment, the front panel PPC-157T complies with the IP65 protection standard. Furthermore, the watchdog timer and power management features make the system secure and stable. The onboard hardware monitoring feature provides an automatic protection function, which prevents the CPU from becoming overheated.

#### Expansion

To extend functionality, the PPC-157T is designed with one PCI-e expansion Slot (PCI is available as option) and Four USB 2.0 (Univeral Serial Bus) ports. With these expansion capabilities, the PPC-157T not only functions as an HMI, but also as a computing center on which to build your applications.

## 15" Panel PC with Intel® Core<sup>TM</sup> i3 / i5 / Celeron® Processor



#### Windows7 ÍManager SUSIÂccess 📾 🏘 🖬 de CEFC 📵 us

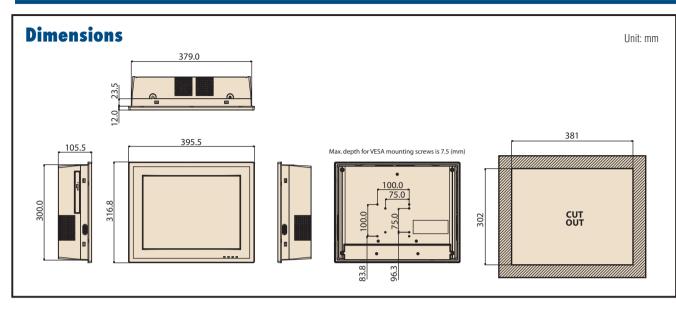
#### Introduction

#### **Features**

- Intel<sup>®</sup> Core<sup>™</sup> i3, i5, Celeron 847E and 1020E + Intel QM77 PCH
- 1X DDR3/DDR3L SODIMM support to 8 GB
- Multiple expansion slots including one PCIe x4, one PCI + one PCIe x1, two PCI (optional) and two PCIe x1 (optional)
- Optional second HDD, supports Intel RAID
- One isolated RS-232/422/485 port; (selectable in by BIOS)
- One GPIO/RS-232 (8 channels, TTL level); (by swapping pin header)
- Dual GbE, supports Intel AMT8.0
- Supports iManager, SUSIAccess and Embedded Software APIs

The PPC-6150 is a Panel PC with an Intel Core i3/i5 or Celeron processor, and a 15" color TFT LCD panel. It features extremely high computing power, modular design, excellent connectivity, and can support virtually any application. In addition, its user-friendly interface makes it a great host for information appliances. Two expansion slots, dual hard drives supporting Intel RAID, and one isolated RS-232/422/485 port make the PPC-6150 highly reliable, and provide a great solution for a wide range of applications.

	Intel	Core i5-3610ME	Core i3-3120ME	Celeron 847E	Celeron 1020E		
	Frequency	2.7 GHz	2.4 GHz	1.1 GHz	2.2 GHz		
	L3 Cache	4M	3M	2M	2M		
	Chipset	Intel QM77					
	Memory		DR3 (1600 MHz) / DDRL (13	333 MHz), supports up to 8	3 GB		
	Storage 1	1 x 2.5" SATA bay					
		Either one					
	Storage 2	- Second 2.5" SATA bay	(Intel RAID supported, option	nal)			
		- Slim type 8X or above DVD +/- RW (optional)					
	Network (LAN)	2 x Gigabit Gigabit Ethe	rnet connectors, Intel AMT su	pported (GbE1- Intel 8257	9LM, GbE2 – Intel 82583V)		
Processor System		- 4 x COM ports, 1 x iso	- 4 x COM ports, 1 x isolated RS-232/422/485, - 2 x Gigabit Ethernet				
		3 x RS232		- 1 x D-SUB VGA port			
	I/O ports	- 1 x GPIO/RS-232 (8 c	nannels, TTL level); by pin	- 1 x HDMI			
		header		- 1 x Line-out, 1 x Mic-	-in, 2 x 1W speaker		
		- 3 x USB3.0 + 2 x USB	2.0 ports				
	Expansion Slots	Either:					
		- one PCI + one PCIe x1	(standard)	- two PCle x 1 (optiona	l)		
		- one x PCle x 4 (in the	accessory box)	- two PCI (optional)			
	Additional Economica	1 x Full-size mini PCle (	Supports mSATA)				
	Additional Expansion	1 x half-size mini PCIe	,				
	FAN	Two 12V 60 x 60 x 13 (r	nm) with smart fan control, (7	70,000 hours continuous te	st @ 40° C)		
Physical Characteristics	Dimensions	395.5 x 316.8 x 105.5 (mm) (15.6" x 12.5" x 4.15")					
,	Weight	6.5 Kg (14.32lb)					
OS Support	OS Support	Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit					
	Output Rating	150 W (max.)					
	Input Voltage	100 - 240V <sub>AC</sub> , 50/60Hz,					
Power Supply		With Core i5-3610ME is	s 61W				
Power Supply		With Core i3-3120ME is 50W					
	Power Consumption						
	Power Consumption	With Core i3-3120ME is With Celeron 847E is 48					
		With Celeron 847E is 48 (Burn-in test 7.0 in Win	3W dows 7 32-bit)				
	Display Type	With Celeron 847E is 48 (Burn-in test 7.0 in Win 15" TFT LCD (LED Back	3W dows 7 32-bit)				
		With Celeron 847E is 48 (Burn-in test 7.0 in Win	3W dows 7 32-bit)				
	Display Type	With Celeron 847E is 48 (Burn-in test 7.0 in Win 15" TFT LCD (LED Back	3W dows 7 32-bit)				
	Display Type Max. Resolution	With Celeron 847E is 48 (Burn-in test 7.0 in Win 15" TFT LCD (LED Back 1024 x 768	3W dows 7 32-bit)				
LCD Display	Display Type Max. Resolution Colors	With Celeron 847E is 48 (Burn-in test 7.0 in Win 15" TFT LCD (LED Back 1024 x 768 262K 0.297 x 0.297	W dows 7 32-bit) light)				
	Display Type Max. Resolution Colors Dot Size (mm)	With Celeron 847E is 48 (Burn-in test 7.0 in Win 15" TFT LCD (LED Back 1024 x 768 262K	W dows 7 32-bit) light)				
	Display Type Max. Resolution Colors Dot Size (mm) Viewing Angle	With Celeron 847E is 48 (Burn-in test 7.0 in Win 15" TFT LCD (LED Back 1024 x 768 262K 0.297 x 0.297 80 (left), 80 (right), 70 (	W dows 7 32-bit) light)				
	Display Type Max. Resolution Colors Dot Size (mm) Viewing Angle Luminance(cd/m2)	With Celeron 847E is 48 (Burn-in test 7.0 in Win 15" TFT LCD (LED Back 1024 x 768 262K 0.297 x 0.297 80 (left), 80 (right), 70 ( 350	W dows 7 32-bit) light)				



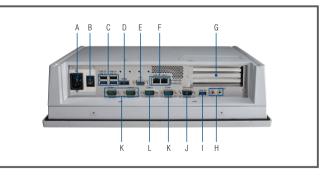
#### **Specifications (Cont.)**

	Touch Type	Analog Resistive 5-wire
	Resolution	2048 x 2048
Touchscreen	Light Transmission	81+/-3%
TOUCHSCIECH	Controller	RS-232 interface (COM5), USB interface is available as an option
	Software Driver Support	Windows 7, XP
	Durability (Touches)	36 million
	Operating Temperature	0 ~ 50°C (32 ~ 122°F)
	Storage Temperature	-20 ~ 60°C (-4 ~ 140°F)
	Relative Humidity	10 ~ 95% @ 40°C (non-condensing)
Environment	Shock	Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27
Environment	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follows IEC 60068-2-64
	EMC	BSMI, CE, FCC Class A
	Safety	CB, CCC, BSMI, UL
	Front Panel Protection	IP65 compliant

#### **Ordering Information**

Part No.	Description
PPC-6150-Ri5AE	Intel Core i5-3610ME (2.7G) Panel PC with 15" XGA LED backlight and 5-wire resistive T/S, w/o memory
PPC-6150-Ri3AE	Intel Core i3-3120ME (2.4G) Panel PC with 15" XGA LED backlight and 5-wire resistive T/S, w/o memory
PPC-6150-RC8AE	Intel Celeron 847E (1.1G) Panel PC with 15" XGA LED backlight and 5-wire resistive T/S, w/o memory
PPC-6150-WLANE PPC-6150-PCIE	WiFi Module with Intel 6205 support 802.11 abgn, 2T2R Riser card support two PCI slots for PPC-6150/PPC-6170
PPC-6150-PCIEE	Riser card support two PCIe x1 slots for PPC-6150/ PPC-6170
PPC-6150-HDDE	Kit to install the second 2.5" SATA HDD for PPC-6150/ PPC-6170, w/o HDD
PPC-6150-DVDE	Module with 8X SATA DVD-RW for PPC-6150/PPC-6170
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-ARM-A03	PPC ARM VESA Standard
PPC-155T STAND	Stand kit for PPC-6150/PPC-6170
1702002605	Power cord 90D 220V EUROPEAN 250V/6A, 1.8M
1702002600	Power cord UL/CSA(USA) 180D 125V/10A 1.83M
2070011757	WES 7 32-bit (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access
2070011758	WES 7 64-bit (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access
PPC-6150-RC10AE	Intel Celeron 1020E (2.2G) Panel PC with 15" XGA LED backlight and 5-wire resistive T/S, w/o memory

#### I/O Placement



A: AC Inlet B: Power Switch C: USB 3.0 x 2, USB 2.0 x 2 D: HDMI E: VGA F: Gigabit Ethernet x 2

G: 2 Expansion slots

H: Line out/ Mic in

I: USB 3.0 x 1 J: GPIO / RS-232 (by swapping pin header) K: RS-232 x 3

L: Isolated RS-232/422/485 (selecting by BIOS)



#### 17" Panel PC with Intel® Core™2 Duo Processor



#### Features

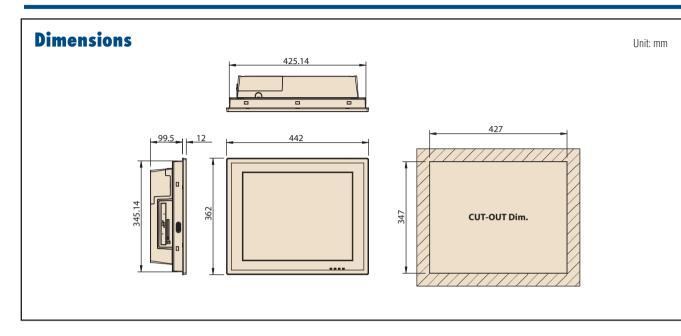
- Intel® Core™2 Duo processor up to 2.16 GHz
- System memory up to 4 GB 667 MHz DDR2 SODIMM socket x 2
- One PCIe Expansion Slot (PCI is available as an option)
- One Mini PCI socket, One Mini PCIe socket
- Built-in CF card interface (IDE interface for OS booting)
- Dual Gigabit Ethernet ports supports LAN teaming
- One RS-232/ GPIO (8 channels, TTL level); (by swapping pin header)
- One RS-232/422/485; (supporting Auto-flow control, selecting by BIOS)

#### Introduction

The PPC-177T is an Intel<sup>®</sup> Core 2 Duo based Panel PC with 17" color TFT LCD. It features multimedia devices, various connectors, and can be installed in virtually any application. In addition, its user-friendly interface makes it a great host for information appliances. Four serial ports and two Gigabit Ethernet ports give the PPC-177T advanced networking capabilities, and provide a great solution for versatile applications.

Processor System         CPU         Supports mSocket 478 based Core 2 Duo up to 2:16 GHz           CPU FS8         53/667 MHz           Disk Drive Housing         Room tor 1 x 2:5' SATA HDD           Disk Drive Housing         Room tor 1 x 2:5' SATA HDD           Direnzions (W ±H x D)         442 x 362 x 111 form (T:A* x 14.25' x 4.39')           Weight         7.6 k (16.74 lb)           Front Parell Protection         PR6 compliant           HDD         SATA HDD Interface (2.5' HDD bay)           HDD         SATA HDD Interface (2.5' HDD bay)           Memory         Supports up to 4 GB of 667 MHz DDR2 SODIMM system memory (socket x 2)           Network (LAN)         2 x Gigabit Elternet ports. Wake on LAN, boot from LAN and LAN teatring supported           -4 x COM ports 2 x 252 x 221 x 252 x 2452 x 221 x 252 x 221 x 252 x	_					
From Support         Chipset         9466ME + ICH7M           Disk Drive Housing         Room tor 1 x 2.5 SATA HDD           Dimensions (W K H x D)         42X 382 x 111.5mm (17.4" x 14.25" x 4.39")           Weight         7.6 kg (16.74 lb)           Front Panel Protection         IP66 compliant           HDD         SATA HDD Interface (2.5" HDD bay)           DVD-FNW Drive         Optional SATA 8X or above DVD-FNW Drive, Optional optical drive bay           Memory         Supports up to 4 60 667 MHz DDD 2002 SOUMM system memory (socket x 2)           Network (LAN)         2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported           -4 x COM ports 2 x R5-232, 1 x R5-232 (42246), -2 x Gigabit Ethernet ports         1 x D-S2B VO& Aprot           Network (LAN)         2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported           -4 x COM ports         -4 x NS2 32 (12016)         -2 x Gigabit Ethernet ports           Network (LAN)         2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported         -4 x LS2 32 (2010 C)           Network (LAN)         2 x Gigabit Ethernet ports, Wake on LAN, boot from Control         -1 x PS/2 mouse and keyboard interface           No Cort Detection         -4 x US2 PO CO Con-concontrol         R5-232/422/485 - selecting by B/OS and supporting Auto-flow control           R5-232/422/485 - selecting by B/OS and supap			CPU	Supports mSocket 478 based Core 2 Duo up to 2.16 GHz		
Processor System         Disk brive Housing Dimensions (W x H x D)         442 x 362 x 111.5mm (7.4 'x 14.25' x 4.39')           Processor System         Front Panel Protection         IP65 compliant HDD         SATA HDD Interface (2.5' HDD bay)           DVD+/-RW Drive         Optional SATA 8X or above DVD+/-RW Drive, Optional optical drive bay Memory         Supporte up to 4 G6 of 667 Mitz DDR2 SOUMM system memory (socket x 2)           Network (LAN)         2 x Gigabit Einemet ports, Wake on LAN, boot from LAN and LAN teaming supported           - 4 x COM ports: 2 x R5-322, 1 x R5-3232/422/485, - 2 x Gigabit Einemet ports, Wake on LAN, boot from LAN and LAN teaming supported           - 4 x COM ports: 2 x R5-321 Einemet ports, Wake on LAN, boot from LAN and LAN teaming supported           - 4 x COM ports: 2 x R5-322, 1 x R5-3232/422/485, - 2 x Gigabit Einemet ports - 4 x USB 2.0 ports         - 1 x PS/2 mouse and keyboard interface           - 4 x COM ports: 2 x R5-323.2 (POI (6 channels, TTL leve)*         - 1 x PS/2 mouse and keyboard interface           - 8 Siz3/242/2485         - 1 x PS/2 mouse and keyboard interface           - 8 Siz3/242/2485         - 1 x PS/2 mouse and keyboard interface           - 8 Siz3/242/2485         - 1 x PS/2 mouse and keyboard interface           - 8 Siz3/242/2485         - 1 x PS/2 mouse and keyboard interface           - 8 Siz3/242/2485         - 1 x PS/2 mouse and keyboard interface           - 1 x PS/2 mouse and keyboard interface         - 1 x PS/2 mouse and keyboard interfa			CPU FSB	533/667 MHz		
Processor System         Dimensions (W x H x D) Weight         442 x362 x 111.5mm (17.4* x 14.25* x 4.39")           Processor System         Front Panel Protection HDD         SATA HDD interface (25' HDD bay)           VDV-FRW Drive         Optional SATA 8X or above DVD+FRW Drive, Optional optical drive bay Memory         Supports up to 4 GB of 667 MHz DDR2 SODIMM system memory (socket x 2)           Network (LAN)         2 x Gigabit Elhernet ports, Wake on LAN, boot from LAM and LAN tearing supported         - 2 x Gigabit Elhernet ports, Vake on LAN, boot from LAM and LAN tearing supported           - 4 x COM ports         - 4 x COM ports; 2 x RS-232, H x RS-232/422485, - 2 x Gigabit Elhernet ports 1 x RS-232/420485, - 2 x Gigabit Elhernet ports 1 x RS-232/420485, - 2 x Gigabit Elhernet ports 1 x RS-232/42048, - 1 x RS/2 mouse and keyboard interface           - Mic In/ Line out / Line in, IW speaker         - 1 x PS/2 mouse and keyboard interface           - Mic In/ Line out / Line in, IW speaker         - 1 x PS/2 mouse and keyboard interface           - Bus Expansion         1 x PCle Expansion Slot (PCI is available as option), 1 x Mini PCI esceket           OS Support         OS Support         Os Support Win XPE / Vin XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit (64 bit only for T7400)           OPerating Temperature         0 - 50°C (32 - 122°F)         Paletive Humidity           Power Supply         AC Model         Input Voltage         -50°C (32 - 122°F)           Relative Humidity         10 - 95% @ 40°C non-conden			Chipset	945GME + ICH7M		
Processor System         Weight         7.6 kg (16.74 lb)           Front Panel Protection         IP65 compliant           Memory         Supports up to 4 GB of 667 ML2 SOUMM system memory (socket 2)           Network (LAN)         2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported           -4 x COM ports: 2 x Cligabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported         -4 x COM ports: 2 x Si-232, 1 x R5-232, 422/485, -2 x Gigabit Ethernet ports in x R5-232/422/485, -2 x Gigabit Ethernet ports           -4 x USB 2.0 ports         -4 x COM ports: 2 x Si-232, 1 x R5-232, 1 x R5-232, 2 most and keyboard interface           -4 x USB 2.0 ports         -4 x COM ports: -1 x F528/2000 and supporting Auto-flow control           -85-232/422/485         -1 x F528/20 mouse and keyboard interface           -Mic in/ Line out / Line in, IW speaker         -85-232/42/485           -85-232/42/485         -9 x UNST 97 works 2 x 64 bit / Windws 7 32 & 64 bit (64 bit only for T7400)           OS Support         OS Support         0 - 50°C (32 - 122°F)           Relative Humidity         10 - 95% @ 40°C non-condensing           Shock         Operating Temperature         0 - 50°C (32 - 122°F)           Relative Humidity         10 - 95% @ 40°C non-condensing           Shock         Operating Random Vibration Test 5-500Hz, 1Gms, follows IEC 60068-2-27           Vibration         Operating 10 G peak accel			Disk Drive Housing	Room for 1 x 2.5" SATA HDD		
Processor System         Front Panel Protection HDD         Front Panel Protection HDD         SARA HDD interface (2:5 HDD bay)           Processor System         Memory         Supports up to 4 GB of 667 MHz DDRS 2001MM system memory (socket x 2)           Nework (LAN)         2 x Gigabit Ethernet ports, XaR so rabove DVD-/-RW Drive, Optional optical drive bay Memory         Supports up to 4 GB of 667 MHz DDRS 2001MM system memory (socket x 2)           Nework (LAN)         2 x Gigabit Ethernet ports, XaR so rabove DVD-/-RW Drive, Optional Atta RAM and LAN teaming supported			Dimensions (W x H x D)	442 x 362 x 111.5mm (17.4" x 14.25" x 4.39")		
Processor System         HDD         SATA HDD         Interface (2.5° HDD bay)           Processor System         Momory         Supports up to 4 GB of 667 MHz DDre2 SODIMM system memory (socket z)           Network (LAN)         2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported           -4 x COM ports:         -4 x COM ports: 2 x RS-232/4285, -2 x Gigabit Ethernet ports, Tx RS-232/427485, -2 x Gigabit Ethernet ports, Tx RS-220 (FPI 06 channels, TT. Level)*, -1 x PS/2 mouse and keyboard interface           //0 Ports         -4 x USB 2.0 ports         -1 x PS/2 mouse and keyboard interface           //0 Ports         -4 x USB 2.0 ports         -1 x PS/2 mouse and keyboard interface           -8 S23/22/4265         -5 selecting by BIOS and supporting Auto-flow control RS-232/GPIO - by swapping pin header           RS-232/GPIO - by Savapping pin header         -1 x PCI expansion SIot (PCI is available as option), 1 x Mini PCI socket, 1 x Mini PCI-e socket           Stopport         Visitaring Temperature         0 - 50°C (32 - 122°F)           Relative Humidity         10 - 95% @ 40°C non-condensing           Relative Humidity         0 - 95% @ 40°C non-condensing           Relative Humidity         0 - 240 Va.e, 50 - 60 Hz, 2 - 4A           Output Rating         0 - 240 Va.e, 50 - 60 Hz, 2 - 4A           Output Voltage <td></td> <td></td> <td>Weight</td> <td>7.6 kg (16.74 lb)</td> <td></td>			Weight	7.6 kg (16.74 lb)		
Processor System         DVD+/-RW Drive         Optional SATA 8X or above DVD+/-RW Drive, Optional optical drive bay           Memory         Supports up to 4 GB of 657 MHz DDR2 SODIMM system memory (socket x 2)           Network (LAN)         2 x Gigabit Ethernet ports, Wake on LAN, bool CMN LAN teaming supported           - 4 x COM ports: 2 x RS-232, 1 x RS-232/422/485, - 2 x Gigabit Ethernet ports         - 1 x D-SUB VGA port           - 4 x COM ports: 2 x RS-232, 1 x RS-232/422/485, - 1 x D-SUB VGA port         - 1 x D-SUB VGA port           - 4 x USB 20 ports         - 1 x D-SUB VGA port           - 85-232/422/485 - selecting by BIOS and supporting Auto-flow control         RS-232/422/485 - selecting by BIOS and supporting Auto-flow control           RS-232/CPIO - by swapping pin header         - 1 x PS/2 mouse and keyboard interface           - Mic in/ Line out / Line in, 1W speaker         - 1 x PS/2 mouse and keyboard interface           - Mic in/ Line out / Line in, 1W speaker         - 1 x PS/2 mouse and keyboard interface           - Mic in/ Line out / Line in, 1W speaker         - 1 x PS/2 mouse and keyboard           - Relative Mumidity         0 - 50°C (32 - 122°F)           - Operating Temperature         0 - 50°C (32 - 122°F)           - Relative Humidity         1 - 90°C (32 - 122°F)           - Relative Humidity         1 - 90°C (32 - 122°F)           - Relative Humidity         1 - 90°C (32 - 122°F)           -			Front Panel Protection	IP65 compliant		
Processol system       Memory       Supports up to 4 GB of 667 MHz DDR2 SODI/MM system memory (socket x 2)         Network (LAN)       2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN therming supported         -4 x COM ports: 2 x PR-3221, x RS-3224, 224/485, - 2 x Gigabit Ethernet ports         -4 x USB 2.0 ports       -1 x FS-232/422/485, - 2 x Gigabit Ethernet ports         -4 x USB 2.0 ports       -1 x FS-232/422/485, - 2 x Gigabit Ethernet ports         -4 x USB 2.0 ports       -1 x FS/2 mouse and keyboard interface         - Mic in/ Line out/ Line in, 1W speaker       * RS-232/422/485 - selecting by BIOS and supporting Auto-flow control         RS-232/422/485       - Seleptic Provide and Support Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit (64 bit only for T7400)         OS Support       OS Support       0 - 50°C (32 - 122*F)         Relative Humidity       10 - 95% @ 40°C non-condensing         Shock       Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27         Vibration       Operating Random Vibration Test 5-500Hz, 1 rGrms, follows IEC 60068-2-64         Environmental Specifications       Menory       100 - 60 V vs., 50 - 60 Hz, 2 - 4 A         Output Rating       150 W (max)       100 - 60 V vs., 50 - 60 Hz, 2 - 4 A         Output Voltage       103 - 20 V vs., 50 - 60 Hz, 2 - 4 A       0utput Voltage         Output Voltage       103 - 20 V vs., 50 - 60 H			HDD			
Memory         Supports up to 4 GB of 66 / MF2 DDR2 SOUDMX system memory (socket x2)           Network (LAN)         2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported           -4 x COM ports:         - 2 x Gigabit Ethernet ports           1 x R5-232 (6PI0 (8 channels, TTL level)*         - 1 x DSUB VGA port           -4 x COM ports:         - 1 x PS/2 mouse and keyboard interface           - Mic in/ Line out / Line in, 1W speaker         - 1 x PS/2 mouse and keyboard interface           - Mic in/ Line out / Line in, 1W speaker         - 1 x PS/2 mouse and keyboard interface           - Mic in/ Line out / Line in, 1W speaker         - 1 x PS/2 mouse and keyboard interface           - Mic in/ Line out / Line in, 1W speaker         - 1 x PS/2 mouse and keyboard interface           - Mic in/ Line out / Line in, 1W speaker         - 1 x PS/2 mouse and keyboard interface           - Mic in/ Line out / Line in, 1W speaker         - 1 x PS/2 mouse and keyboard interface           - Mic in/ Line out / Line in, 1W speaker         - 0 0 S support           OS Support         OS Support         - 0 S Cu2/2 - 122*F           Relative Humidity         10 - 95% @ 40°C cono-condensing         - 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0	Processor Sveta	m	DVD+/-RW Drive			
Image: Second	FIDLESSUI SYSIE	111	Memory	Supports up to 4 GB of 667 MHz DDR2 SODIMM system memory (socket x 2)		
I x RS-232/ GPI0 (B channels, TTL level)*         - 1 x D-SUB VGA port           - 4 x USB 2.0 ports         - 1 x PS/2 mouse and keyboard interface           - 4 x USB 2.0 ports         - 1 x PS/2 mouse and keyboard interface           - 4 x USB 2.0 ports         - 1 x PS/2 mouse and keyboard interface           - 8 - 232/422/485 - selecting by BIOS and supporting Auto-flow control RS-232/422/485 - selecting by BIOS and supporting Auto-flow control RS-232/422/485 - selecting by BIOS and supporting Auto-flow control           OS Support         OS Support         0 S Support         Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit (64 bit only for T7400)           OS Support         Operating Temperature         0 - 50°C (32 - 122°F)         Relative Humidity         10 - 95% @ 40°C non-condensing           Relative Humidity         10 - 95% @ 40°C non-condensing         Stock         Operating To B peak acceleration (11 ms duration), follows IEC 60068-2-27           Vibration         Operating Random Vibration Test 5-500Hz, 1 Grms, follows IEC 60068-2-27         Vibration         Operating To B peak acceleration (11 ms duration), follows IEC 60068-2-27           Vibration         Operating To B peak acceleration (11 ms duration), follows IEC 60068-2-27         Vibration         Operating To B peak acceleration (11 ms duration), follows IEC 60068-2-27           Vibration         Operating To B peak acceleration (11 ms duration), follows IEC 60068-2-27         Vibration         Operating To B peak acceleration (11 ms			Network (LAN)	2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported		
V0 Ports     - 4 x USB 2.0 ports     - 1 x PS/2 mouse and keyboard interface       - Mic in/ Line out / Line in, 1W speaker     * R5-232/422/485 - selecting by BIOS and supporting Auto-flow control R5-232/420- by swapping pin header       Bus Expansion     1 x PCIe Expansion Slot (PCI is available as option), 1 x Mini PCI socket, 1 x Mini PCI-e socket       OS Support     OS Support       Os Support     Os Support       Win XPE / Win XP Pro / WES7 32 & 64 bit (A64 bit only for T7400)       Operating Temperature     0 ~ 50°C (32 ~ 122°F)       Relative Humidity     10 ~ 95% @ 40°C non-condensing       Shock     Operating Nandom Vibration Test 5-500Hz, 1Gms, tollows IEC 60068-2-27       Vibration     Operating Random Vibration Test 5-500Hz, 1Gms, tollows IEC 60068-2-64       EMC     BSMI, CE, FCC Class B, CCC       Safety     CB, CE, UL       Power Supply     AC Model     Input Voltage       Input Voltage     100 ~ 240 Vac, 50 ~ 60 Hz, 2 ~ 4 A       Output Rating     150 W (max.)       Input Voltage     130 × 1024       Max. Resolution     1280 × 1024       Max. Colors or Grayscales     16.7M       Viewing Angle     800°(tett), 80°(top), 80°(down)       LCD Display     Pisel Pitch (mm)     0.264 × 0.264       Luminance (cd/m²)     380       Contrast Ratio     800:1       Viewing Angle     80°(tett), 8				- 4 x COM ports: 2 x RS-232, 1 x RS-232/422/485, - 2 x Gigabit Ethernet ports		
Image: Instant State         Image: Imag				1 x RS-232/ GPIO (8 channels, TTL level)* - 1 x D-SUB VGA port		
A Micri My Lifte Out / Li			1/0 Porto			
RS-232/GPI0 - by swapping pin header           Bus Expansion         1 x PCIe Expansion Stot (PCI is available as option), 1 x Mini PCI socket, 1 x Mini PCI-e socket           OS Support         Vin XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit (64 bit only for T7400)           Operating Temperature         0 - 50°C (32 - 122°F)           Relative Humidity         10 - 95% @ 40°C non-condensing           Shock         Operating Random Vibration Test 5-500Hz, 16rms, follows IEC 60068-2-27           Vibration         Operating Random Vibration Test 5-500Hz, 16rms, follows IEC 60068-2-64           EMC         BSMI, CE, FCC Class B, CCC           Safety         CB, CE, UL           Output Rating         150 W (max)           Input Voltage         100 - 240 Vac, 50 - 60 Hz, 2 - 4 A           Output Voltage         13.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vsb @ 1.5 A, -12 V @ 0.3 A           LCD Display         Display Type         Color TFT LCD           Nax. Resolution         1280 x 1024           Max. Colors or Grayscales         16.7M           Prixel Pitch (mm)         0.264 x 0.264           Luminance (cd/m³)         380           Color of Grayscales         16.7M           Viewing Angle         80°(left), 80°(up), 80°(down)           LCD MTBF         50,000 hrs			1/0 F 0113			
Bus Expansion         1 x PCle Expansion Slot (PCl is available as option), 1 x Mini PCl socket, 1 x Mini PCl-e socket           OS Support         OS Support         Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit (64 bit only for T7400)           Operating Temperature         0 - 50°C (32 - 122°F)         Perating Temperature         0 - 50°C (32 - 22°F)           Relative Humidity         10 - 95% @ 40°C non-condensing         Shock         Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27           Vibration         Operating Random Vibration Test 5-500Hz, 1Grms, follows IEC 60068-2-64         EMC         BSMI, CE, FCC Class B, CCC           Safety         CB, CE, UL         Safety         CB, CE, UL         Input Voltage         150 W (max.)           Power Supply         AC Model         Input Voltage         100 - 240 Vac, 50 ~ 60 Hz, 2 ~ 4 A         Output Voltage         +3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vsb @ 1.5 A, -12 V @ 0.3 A           LCD Display         Display Type         Color TFT LCD         Size (Diagonal)         17"           Max. Resolution         1280 x 1024         Max. Resolution         1280 x 1024           Max. Colors or Grayscales         16.7M         Max. Colors or Grayscales         16.7M           LCD Display         Pixel Pitch (mm)         0.264 x 0.264         Luminance (cd/m²)         380 <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>						
OS Support         OS Support         Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit (64 bit only for T7400)           Persting Temperature         0 perating Temperature         0 ~ 50°C (32 ~ 122°F)           Relative Humidity         10 ~ 95% @ 40°C non-condensing           Power Support         Shock         Operating Random Vibration Test 5-500Hz, 16rms, follows IEC 60068-2-27           Vibration         Operating Random Vibration Test 5-500Hz, 16rms, follows IEC 60068-2-64           EMC         BSMI, CE, FCC Class B, CCC           EMP         Output Rating         150 W (max.)           Power Supply         AC Model         Input Voltage         100 ~ 240 Vac, 50 ~ 60 Hz, 2 ~ 4 A           Output Voltage         100 ~ 240 Vac, 50 ~ 60 Hz, 2 ~ 4 A         0utput Voltage         3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vsb @ 1.5 A, -12 V @ 0.3 A           Size (Diagonal)         17"         Max. Resolution         1280 x 1024           Max. Colors or Grayscales         16.7M         Max. Colors or Grayscales         16.7M           LCD Display         Fixel Pritch (mm)         0.264 x 0.264         Luminance (cd/m²)         380           Luminance (cd/m²)         380         10.1         Viewing Angle         800:1         Viewing Angle         800:1           Viewing Angle         800'(lett), 80°(right), 80°(up), 80°(down)				RS-232/GPIO - by swapping pin header		
Power Supply         AC Model         Operating Temperature Relative Humidity         0 ~ 50°C (32 ~ 122°F) Relative Humidity         10 ~ 95% @ 40°C non-condensing           Power Supply         AC Model         Operating Random Vibration Test 5~500Hz, 1Grms, follows IEC 60068-2-64           EMC         BSMI, CE, FCC Class B, CCC           Safety         CB, CE, UL           Output Rating         150 W (max.)           Input Voltage         10 ~ 240 Vac, 50 ~ 60 Hz, 2 ~ 4 A           Output Voltage         100 ~ 240 Vac, 50 ~ 60 Hz, 2 ~ 4 A           Output Voltage         13.0 W (max.)           Max. Resolution         1280 x 1024           Max. Colors or Grayscales         16.7M           Vibraits Ratio         0.264 x 0.264           LCD Display         Pixel Pitch (mm)         0.264 x 0.264           Luminance (cd/m²)         380           Contrast Ratio         800:1           Viewing Angle         80°(left), 80°(right), 80°(up), 80°(down)           LCD MTBF         50,000 hrs						
Environmental Specifications         Relative Humidity         10 ~ 95% @ 40°C non-condensing           Shock         Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27           Vibration         Operating Random Vibration Test 5500Hz, 1Grms, follows IEC 60068-2-64           EMC         BSMI, CE, FCC Class B, CCC           Safety         CB, CE, UL           Output Rating         150 W (max.)           Input Voltage         100 ~ 240 Vac, 50 ~ 60 Hz, 2 ~ 4 A           Output Voltage         -3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vsb @ 1.5 A, -12 V @ 0.3 A           Display Type         Color TFT LCD           Size (Diagonal)         17"           Max. Resolution         1280 x 1024           Max. Colors or Grayscales         16.7M           LCD Display         Pixel Pitch (mm)         0.264 x 0.264           Luminance (cd/m²)         380           Contrast Ratio         800:1           Viewing Angle         80°(left), 80°(up), 80°(up), 80°(down)           LCD MTBF         50,000 hrs	OS Support					
Environmental Specifications       Shock       Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27         Vibration       Operating Random Vibration Test 5-500Hz, 1Grms, follows IEC 60068-2-64         EMC       BSMI, CE, FCC Class B, CCC         Safety       CB, CE, UL         Power Supply       AC Model       Input Voltage         Input Voltage       150 W (max.)         Output Voltage       +3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vs@ 0.15 A, -12 V @ 0.3 A         Output Voltage       +3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vs@ 0.15 A, -12 V @ 0.3 A         Size (Diagonal)       17"         Max. Resolution       1280 x 1024         Max. Colors or Grayscales       16.7M         Max. Colors or Grayscales       16.7M         Vibriance (cd/m²)       380         Contrast Ratio       800:1         Viewing Angle       80°(left), 80°(up), 80°(up), 80°(down)         LCD MTBF       50,000 hrs						
Finite Control       Vibration       Operating Random Vibration Test 5-500Hz, 1Grms, follows IEC 60068-2-64         EMC       BSMI, CE, FCC Class B, CCC         Safety       CB, CE, UL         Power Supply       AC Model       Input Voltage         Input Voltage       100 ~ 240 V <sub>AC</sub> , 50 ~ 60 Hz, 2 ~ 4 A         Output Voltage       +3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vsb @ 1.5 A, -12 V @ 0.3 A         Display Type       Color TFT LCD         Size (Diagonal)       17"         Max. Resolution       1280 x 1024         Max. Colors or Grayscales       16.7M         Pixel Pitch (mm)       0.264 x 0.264         Luminance (cd/m²)       380         Contrast Ratio       800:1         Viewing Angle       80°(1eft), 80°(tright), 80°(down)         LCD MTBF       50,000 hrs			· · · · · · · · · · · · · · · · · · ·			
Image: Provide the second s	Environmental S	Specifications				
Safety         CB, CE, UL           Power Supply         AC Model         Output Rating         150 W (max.)           Input Voltage         100 ~ 240 V <sub>AC</sub> , 50 ~ 60 Hz, 2 ~ 4 A         Output Voltage         +3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vsb @ 1.5 A, -12 V @ 0.3 A           Display Type         Color TFT LCD         Size (Diagonal)         17"           Max. Resolution         1280 x 1024         Max. Colors or Grayscales         16.7M           Max. Colors or Grayscales         16.7M         2.64 x 0.264         Luminance (cd/m²)           Viewing Angle         80°(1eft), 80°(up), 80°(down)         2.00 x (up), 80°(down)           LCD MTBF         50,000 hrs         50,000 hrs	Environmontare	poomoations				
Power Supply       AC Model       Output Rating       150 W (max.)         Input Voltage       100 ~ 240 V <sub>AC</sub> , 50 ~ 60 Hz, 2 ~ 4 A       Output Voltage       +3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vsb @ 1.5 A, -12 V @ 0.3 A         Display Type       Color TFT LCD       Size (Diagonal)       17"         Max. Resolution       1280 x 1024         Max. Colors or Grayscales       16.7M         Pixel Pitch (mm)       0.264 x 0.264         Luminance (cd/m²)       380         Contrast Ratio       800:1         Viewing Angle       80° (left), 80° (up), 80° (down)         LCD MTBF       50,000 hrs						
Power Supply         AC Model         Input Voltage         100 ~ 240 V <sub>AC</sub> , 50 ~ 60 Hz, 2 ~ 4 A           Output Voltage         +3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vsb @ 1.5 A, -12 V @ 0.3 A           Display Type         Color TFT LCD           Size (Diagonal)         17"           Max. Resolution         1280 x 1024           Max. Colors or Grayscales         16.7M           Pixel Pitch (mm)         0.264 x 0.264           Luminance (cd/m²)         380           Contrast Ratio         800:1           Viewing Angle         80° (left), 80° (up), 80° (down)           LCD MTBF         50,000 hrs						
Output Voltage         +3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vsb @ 1.5 A, -12 V @ 0.3 A           Display Type         Color TFT LCD           Size (Diagonal)         17"           Max. Resolution         1280 x 1024           Max. Colors or Grayscales         16.7M           Pixel Pitch (mm)         0.264 x 0.264           Luminance (cd/m²)         380           Contrast Ratio         800:1           Viewing Angle         80° (left), 80° (up), 80° (down)           LCD MTBF         50,000 hrs						
Display Type       Color TFT LCD         Size (Diagonal)       17"         Max. Resolution       1280 x 1024         Max. Colors or Grayscales       16.7M         Pixel Pitch (mm)       0.264 x 0.264         LCD Display       Pixel Pitch (mm)         Octat Ratio       800:1         Viewing Angle       80°(left), 80°(up), 80°(down)         LCD MTBF       50,000 hrs	Power Supply	AC Model				
Size (Diagonal)       17"         Max. Resolution       1280 x 1024         Max. Colors or Grayscales       16.7M         Pixel Pitch (mm)       0.264 x 0.264         Luminance (cd/m²)       380         Contrast Ratio       800:1         Viewing Angle       80°(left), 80°(up), 80°(down)         LCD MTBF       50,000 hrs						
Max. Resolution       1280 x 1024         Max. Colors or Grayscales       16.7M         Pixel Pitch (mm)       0.264 x 0.264         Luminance (cd/m²)       380         Contrast Ratio       800:1         Viewing Angle       80° (left), 80° (up), 80° (down)         LCD MTBF       50,000 hrs						
Max. Colors or Grayscales       16.7M         LCD Display       Pixel Pitch (mm)       0.264 x 0.264         Luminance (cd/m²)       380         Contrast Ratio       800:1         Viewing Angle       80°(left), 80°(up), 80°(down)         LCD MTBF       50,000 hrs						
LCD Display         Pixel Pitch (mm)         0.264 x 0.264           Luminance (cd/m²)         380           Contrast Ratio         800:1           Viewing Angle         80°(left), 80°(up), 80°(down)           LCD MTBF         50,000 hrs						
Luminance (cd/m²)         380           Contrast Ratio         800:1           Viewing Angle         80°(left), 80°(up), 80°(down)           LCD MTBF         50,000 hrs						
Contrast Ratio     800:1       Viewing Angle     80°(left), 80°(right), 80°(down)       LCD MTBF     50,000 hrs	LCD Display					
Viewing Angle     80°(left), 80°(up), 80°(down)       LCD MTBF     50,000 hrs						
LCD MTBF 50,000 hrs						
Touchscreen (optional)         Type         5-wire Analog Resistive (USB interface)						
	Iouchscreen (op	otional)	Туре	5-wire Analog Resistive (USB interface)		

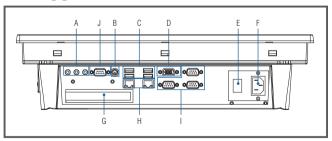
#### **PPC-177T**



#### **Ordering Information**

Part No.	Description
PPC-177T-BAREE	17" Core 2 Duo Based Panel PC without T/S
PPC-177T-BARE-TE	17" Core 2 Duo Based Panel PC with Resistive T/S
PPC-155T STAND	Stand kit for PPC-155/157/175/177 series
PPC-ARM-A03	PPC ARM VESA Standard
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-175 RACK-MT	Rack mount kit for PPC-175/177 series
1702002605	Power cord 90D 220V EUROPEAN 250V/6A, 1.8M
1702002600	Power cord UL/CSA (USA) 180D 125V/10A 1.83M
989K017700E	Optical disc drive kit for PPC-177T (W/O ODD)
989K017702E	DVD-RW (SATA) module for PPC-177T
989K070601E	PCI riser card for PPC-177T
PPC-L158T-WLANE	802.11 b/g/n RT5390 1T1R Full Size Mini PCIe for
	PPC-L158/157/177 Series
2070011804	XPE WES2009 V4.3, 24 multi-language with SUSI Access

#### I/O Appearance



A: Line in/Line out/Mic in B: PS2 Mouse & Keyboard C: USB 2.0 x 4 D: VGA Port E: Power Switch F: AC Inlet G: PCI Slot x 1 H: 10/100/1000 Base-T Ethernet x 2 I: RS-232 x 3 (including RS232/422/485 x 1, COM2) J: RS-232/GPI0 (by swapping pin header)

#### **Feature Details**

#### Protection

To meet the requirements of a public environment, the front panel PPC-177T complies with the IP65 protection standard. Furthermore, the watchdog timer and power management features make the system secure and stable. The onboard hardware monitoring feature provides an automatic protection function, which prevents the CPU from becoming overheated.

#### Expansion

To extend functionality, the PPC-177T is designed with one PCI-e expansion Slot (PCI is available as option) and Four USB 2.0 (Univeral Serial Bus) ports. With these expansion capabilities, the PPC-177T not only functions as an HMI, but also as a computing center on which to build your applications.

## **PPC-179T**

#### 17" Panel PC with Intel<sup>®</sup> Core™2 Duo Processor



#### SUSIÂCCESS I Mindows G C C C FC @us

#### Introduction

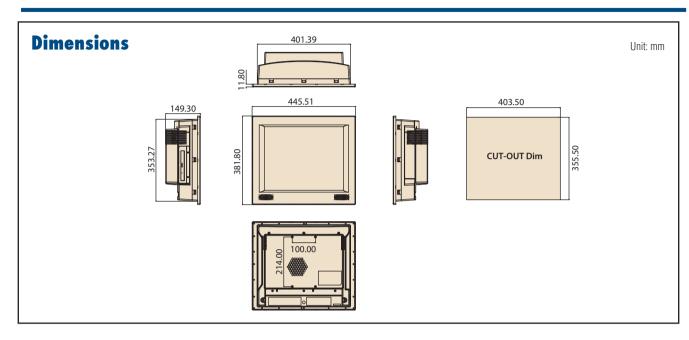
#### Features

- 17" TFT SXGA LCD
- Intel<sup>®</sup> Core<sup>™</sup>2 Duo LGA775 Socket-based processor up to 3.0 GHz
- Supports 240-pin DDR3 1333/1066 DIMM x2 Up to 4 GB
- Rugged die-cast aluminum housing with removable plastic front bezel
- Supports One Mini PCIe socket, Dual Gigabit Ethernet
- One PCI and one PCIe expansion slot
- One RS-232/422/485; (supporting Auto-flow control, jumper-selected)

PPC-179T is a top performing and highly expandable panel PC. Equipped with a 17" Color TFT LCD, it features high performance, multimedia devices, connectors, and 2 expansion sockets (PCI and PCIe) for high expansion capacity. Because of its multifunctional design, the PPC-179T meets demands from multimedia applications and interactive kiosks that require big displays and powerful computing performance.

	CPU	Supports LGA775 Socket-based Intel Core 2 Duo Processor up to 3.0 GHz
	Dimensions (W x H x D)	446 x 382 x 149 mm (17.56" x 15.04" x 5.87")
	Weight	10 kg (22 lb)
	Front Panel Protection	IP65 compliant
	HDD	One internal SATA interface - 2.5" Type
	DVD+/-RW Drive	Equipped with one slim 8x SATA DVD +/- RW (BLACK)
Processor System	Memory	Supports 240-pin DDR3 1333/1066 DIMM x2 Up to 4 GB (only supports 64X8 and 128X8, not for 256X8)
	Network (LAN)	2 x 10/100/1000 Mbps (RJ-45)
		- 4 x serial ports: 3 x RS-232, 1 x RS-232/422/485
	1/0 porto	- 6 x USB2.0 ports
	I/O ports	- Mic-in, Line-in, Line-out, 1W speaker
		- 1 x D-SUB VGA port
	Bus Expansion	1 x PCI + 1 x PCIe (standard) , 2 x PCI (in the accessory box), 1 x Mini PCI-e socket
	Operating Temperature	0 ~ 45°C (32 ~ 113°F)
	Relative Humidity	10 ~ 95% @ 40°C, non-condensing
Environmental	Shock	Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27
Specifications	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follows IEC 60068-2-64
	EMC	BSMI, VČCI, CE, FCC Class B, CCC
	Safety	CB, CE, UL
	Types	Analog Resistive
	Resolution	2048 x 2048
Touchscreen (Optional)	Light Transmission	75%
	Controller	RS-232 interface, (COM6)
	Power Consumption	+5 V @ 200 mA
	Display Type	Color TFT LCD
	Size (Diagonal)	17"
	Max. Resolution	1280 x 1024
	Max. Colors or Grayscales	16.7M
LCD Display	Pixel Pitch (mm)	0.264 x 0.264
	Luminance (cd/m <sup>2</sup> )	380
	Contrast Ratio	1000:1
	Viewing Angle	80°(left), 80°(right), 80°(up), 80°(down)
	LCD MTBF	50,000 hrs
	Output Rating	220W (max.)
Power Supply	Input Voltage	100 ~ 240 VÁC @ 50 ~ 60Hz
	Output Voltage	+3.3 V @ 14.0A, +5 V @ 16.0A, +12 V @ 16 A + 10 A, -12 V @ 0.8 A, +5 Vsb @ 2.5 A

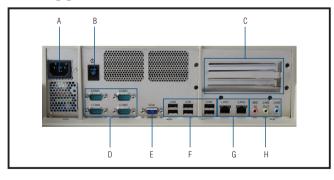
#### **PPC-179T**



#### **Ordering Information**

Part No.	Description
PPC-179T-BAREE	Panel PC with 17" TFT LCD display (resolution: 1280 x 1024)
PPC-179T-BARE-TE	PPC-179T with resistive touchscreen
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-174 RACK-MT	19" Rack Mounting kit for PPC-174 (9U)
1702002600	Power Cable UL/CSA (USA) 180D 125V10A 1.83M
1702002605	Power Cable 90D 220V EUROPEAN 250V/6A 1.8M
2070010804	XPE WES2009 V4.0, 24 multi-languages

#### I/O Appearance



A. AC inlet

B. Power switch

C. PCI expansion x 1, PCIe expansion x 1

D. RS232 x 3, RS232/422/485 x 1

E. VGA port F. USB2.0 x 6 G. 10/100/1000 Mbps Ethernet x 2 H. Line-in/Line-out/Mic-in

#### **Feature Details**

#### Protection

The PPC-179T is robust enough to withstand harsh environments on factory floors and in an external environment. The die-cast housing also acts as a heat sink to prevent the system from overheating.

#### Networking

Four serial ports and dual 10/100/1000 Mbps Ethernet port give the PPC-179T advanced networking capabilities and provide the best solution for versatile applications.

#### Expansion

To extend its functionality, the PPC-179T is designed with two expansion slots for one PCI and one PCIe card, one Mini PCIe slot, six USB 2.0 (Universal Serial Bus) ports, four COM ports. With these expansion capabilities, the PPC-179T not only functions as an HMI, but also as a computing center around which to build your application.

## 17" Panel PC with Intel® Core<sup>TM</sup> i3 / i5 / Celeron® Processor



#### Windows<sup>7</sup> ÍManager SUSIÂccess 📾 🏘 Windows<sup>6</sup> 😔 C C C C uus

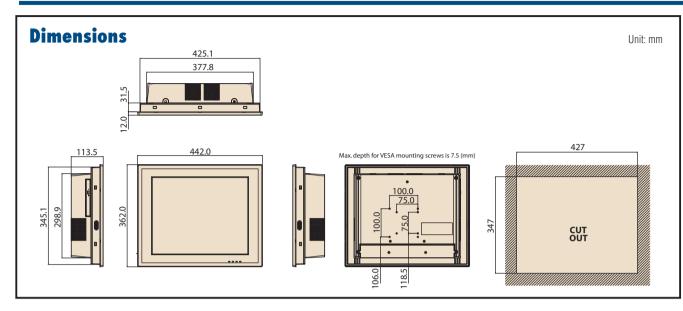
#### Introduction

#### **Features**

- Intel<sup>®</sup> Core<sup>™</sup> i3, i5, Celeron 847E and 1020E + Intel QM77 PCH
- 1X DDR3/DDR3L SODIMM support to 8 GB
- Multiple expansion slots including one PCIe x4, one PCI + one PCIe x1, two PCI (optional) and two PCIe x1 (optional)
- Optional second HDD, supports Intel RAID
- One isolated RS-232/422/485 port; (selectable in by BIOS)
- One GPIO/RS-232 (8 channels, TTL level); (by swapping pin header)
- Dual GbE, supports Intel AMT8.0
- Supports iManager, SUSIAccess and Embedded Software APIs

The PPC-6170 is a Panel PC with an Intel Core i3/i5 or Celeron processor, and a 17" color TFT LCD panel. It features extremely high computing power, modular design, excellent connectivity, and can support virtually any application. In addition, its user-friendly interface makes it a great host for information appliances. Two expansion slots, dual hard drives supporting Intel RAID, and one isolated RS-232/422/485 port make the PPC-6170 highly reliable, and provide a great solution for a wide range of applications.

	Intel	Core i5-3610ME	Core i3-3120ME	Celeron 847E	Celeron 1020E		
	Frequency	2.7 GHz	2.4 GHz	1.1 GHz	2.2 GHz		
	L3 Cache	4M	3M	2M	2M		
	Chipset	Intel QM77					
	Memory	1 x 204-pin SODIMM, DD	R3 (1600 MHz) / DDRL (13	33 MHz), supports up to 8 G	В		
	Storage 1	1 x 2.5" SATA bay					
		Either one					
	Storage 2	- Second 2.5" SATA bay (I	ntel RAID supported, option	al)			
		- Slim type 8X or above D	VD +/- RW (optional)				
	Network (LAN)	2 x Gigabit Gigabit Ethern	2 x Gigabit Gigabit Ethernet connectors, Intel AMT supported (GbE1- Intel 82579LM, GbE2 - Intel 82583V)				
Processor System		- 4 x COM ports, 1 x isolated RS-232/422/485, - 2 x Gigabit Ethernet					
		3 x RS232		- 1 x D-SUB VGA port			
	I/O ports	- 1 x GPIO/RS-232 (8 cha	nnels, TTL level); by pin	- 1 x HDMI			
		header		- 1 x Line-out, 1 x Mic-in,	2 x 1W speaker		
		- 3 x USB3.0 + 2 x USB2.	0 ports				
	Expansion Slots	Either:					
		- one PCI + one PCIe x1 (		- two PCIe x 1 (optional)			
		- one x PCle x 4 (in the ac		- two PCI (optional)			
	Additional Expansion	1 x Full-size mini PCIe (S	upports mSATA)				
		1 x half-size mini PCIe					
	FAN	Two 12V 60 x 60 x 13 (mm) with smart fan control, (70,000 hours continuous test @ 40° C) 442 0 x 362 0 x 113 5 (mm) (17 4" x 14 25" x 4 47")					
Physical Characteristics	Dimensions	442.0 x 362.0 x 113.5 (mm) (17.4" x 14.25" x 4.47")					
,	Weight	7.5Kg (16.52lb)					
OS Support	OS Support	Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit					
	Output Rating	150 W (max.)					
	Input Voltage	100 - 240V <sub>AC</sub> , 50/60Hz, 4-					
Power Supply		With Core i5-3610ME is 65W					
	Power Consumption	With Core i3-3120ME is 55W					
		With Celeron 847E is 53W					
		(Burn-in test 7.0 in Windo					
	Display Type	17" TFT LCD (LED Backlig	ght)				
	Max. Resolution	1280 x 1024					
	Colors	262K					
	Dot Size (mm)	0.264 x 0.264	) 00 (   _ )				
LCD Display	Viewing Angle	85 (left), 85 (right), 80 (up	), 80 (down)				
	Luminance(cd/m2)	350					
	Contrast Ratio	1,000					
	Operating Temperature	-30 ~ 85°C					
	Backlight Lifetime	50, 000 hrs (typical)					



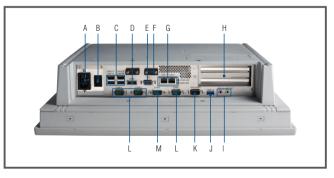
#### **Specifications (Cont.)**

Touchscreen	Touch Type	Analog Resistive 5-wire
	Resolution	2048 x 2048
	Light Transmission	81+/-3%
	Controller	RS-232 interface (COM5), USB interface is available as an option
	Software Driver Support	Windows 7, XP
	Durability (Touches)	36 million
Environment	Operating Temperature	0 ~ 50°C (32 ~ 122°F)
	Storage Temperature	-20 ~ 60°C (-4 ~ 140°F)
	Relative Humidity	10 ~ 95% @ 40°C (non-condensing)
	Shock	Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27
	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follows IEC 60068-2-64
	EMC	BSMI, CE, FCC Class A
	Safety	CB, CCC, BSMI, UL
	Front Panel Protection	IP65 compliant

#### **Ordering Information**

Part No.	Description
PPC-6170-Ri5AE	Intel Core i5-3610ME (2.7G) Panel PC with 17" XGA LED backlight and 5-wire resistive T/S, w/o memory
PPC-6170-Ri3AE	Intel Core i3-3120ME (2.4G) Panel PC with 17" XGA LED backlight and 5-wire resistive T/S, w/o memory
PPC-6170-RC8AE	Intel Celeron 847E (1.1G) Panel PC with 17" XGA LED backlight and 5-wire resistive T/S, w/o memory
PPC-6150-WLANE	WiFi Module with Intel 6205 support 802.11 abgn, 2T2R
PPC-6150-PCIE	Riser card support two PCI slots for PPC-6150/PPC-6170
PPC-6150-PCIEE	Riser card support two PCIe x1 slots for PPC-6150/ PPC-6170
PPC-6150-HDDE	Kit to install the second 2.5" SATA HDD for PPC-6150/ PPC-6170, w/o HDD
PPC-6150-DVDE	Module with 8X SATA DVD-RW for PPC-6150/PPC-6170
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-ARM-A03	PPC ARM VESA Standard
PPC-155T STAND	Stand kit for PPC-6150/PPC-6170
1702002605	Power cord 90D 220V EUROPEAN 250V/6A, 1.8M
1702002600	Power cord UL/CSA(USA) 180D 125V/10A 1.83M
2070011780	WES 7 32-bit (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access
2070011779	WES 7 64-bit (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access
PPC-6170-RC10AE	Intel Celeron 1020E (2.2G) Panel PC with 17" XGA LED backlight and 5-wire resistive T/S, w/o memory

#### I/O Placement



- A: AC Inlet B: Power Switch
- C: USB 3.0 x 2, USB 2.0 x 2
- D: HDMI
- E: VGA
- F: Cable clip x 2 G: Gigabit Ethernet x 2
- H: 2 Expansion slots I: Line out / Mic in
- J: USB 3.0 x 1
- K: GPIO / RS-232 (by swapping pin header) L: RS232 x 3
- M: Isolated RS-232/422/485 (selecting by BIOS)