

Industrial Aluminum PPC-53 Series

PPC-5350

Intel® Celeron® M/Pentium® M Processor with 15" TFT LCD and Touchscreen



Features

1. 15" TFT LCD touch Panel PC
2. New upgrade model from PPC-5350/A300 model
3. Aluminum die-casting IP 65
4. Intel® Celeron® M mobile CPU with 400 MHz FSB supported
5. Two DDR2 SO DIMM 667 MHz SDRAM DIMM support up to 2GB
6. Two SATA connectors supported by ICH6M
7. Dual PCIe Gigabit Ethernet support
8. High speed express card and PCIe mini card support
9. Optional 802.11 b/g PCIe mini wireless kit



Specifications

		PPC-5350GS/A300	PPC-5350GS/A311
Display	LCD Size	15"	
	Max Resolution	1024(W) x 768(H)	
	Brightness (cd/m2)	350	
	Contrast Ratio	700:1	
	LCD Color	16.2M	
	Pixel Pitch (mm)	0.297(H) x 0.297(V)	
	Viewing Angle (H-V)	140/125	
	Backlight MTBF (hrs)	50,000	
Motherboard	SBC Model	A300	A311
	CPU	Socket 479 Intel® Pentium® 4, Celeron M with 400MHz(max.) FSB 1 GHz ULV Intel Celeron zero cache CPU	Socket 479 Intel® Pentium® M, Celeron M with 400/533MHz(max.) FSB 1 GHz ULV Intel Celeron zero cache CPU
	Chipset	Intel 855GME + ICH4	910GML E + ICH6M
	RAM	Supports two 266/333MHz DDR DIMM (2GB Max.)	Supports two 400/533MHz DDR2 DIMM (2GB Max.)
I/O Ports and Switches		4 x RS232 COM Port	4 x RS232 COM Port
		1 x RS-232/422/485 Port	1 x RS-232/422/485 Port
		2 x RJ-45 for LAN Port	2 x RJ-45 for LAN Port
		4 x USB 2.0	4 x USB 2.0
		1 x VGA Port	1 x VGA Port
		1 x Audio (Line-in, Line-out, MIC-in)	1 x Audio (Line-in, Line-out, MIC-in)
		1 x PS/2 (KB/MS)	1 x PS/2 (KB/MS)
		1 x Power Switch	1 x Power Switch
		1 x AT / ATX Switch	1 x AT / ATX Switch
		1 x DVI port	1 x DVI port
Driver Bay	HDD Driver Bay	1 x 2.5" SATA/IDE HDD bay with anti-shook	1 x 2.5" SATA HDD bay with anti-shook
	SSD	CF Type II	
	CD-ROM Driver Bay	Slim Type CD-ROM Bay	
Extension Slot	1 x PCI slot	1 x PCI slot 1 x PCIe mini card	
Physical	Construction Front Panel	Aluminum	
	Construction Chassis	Heavy-duty Steel	
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm	
	Front Panel Color	Silver (Pantone 8001C)	
	Dimension (WxHxD) (mm)	410 x 309 x 110.5	
	Net Gross Weight	8 Kg / 12 Kg	7 Kg / 11 Kg
Environment	Operation Temperature (°C)	-10°C ~50°C	
	Storage Temperature (°C)	-20°C ~60°C	
	Vibration	5~17Hz, 0.1" double amplitude displacement 17~640Hz, 1.5G acceleration peak to peak	
	Shoock	10G acceleration part to part (11ms)	
Touch Screen	Resistive Type 5-Wire with RS-232 interface		
Power Supply	ATX AC-Input	AC Input ATX Power Supply - P/N: ACE-4518AP-RS - 180W Power Supply - Input: 90VAC~240VAC, 50/60Hz - Output(max.): 3.3A@16.8A, 5V@12A, 12V@10A, -12V@0.8A	
	ATX DC-Input	DC Input ATX Power Supply - P/N: ACE-815C-RS - 100W Power Supply - Input: 24VDC, 50/60Hz - Output(max.): 3.3A@4A, 5V@13A, 12V@2.5A, -12V@0.3A	
Front Panel Protection	IP65 Compliant		
Certificate	Meets CE, FCC		
Ethernet	Dual Realtek RTL8110S GbE Controllers		
Audio	AC' 97 2.3 Realtek ALC 655		AC' 97 2.3 Realtek ALC 655

1
Automation

2
Point of Service

3
Digital Signage

4
RISC-based Solutions

5
Medical Solutions

New PPC-5350 Features

Serial ATA is the next -generation internal storage interface designed to replace parallel ATA technology. Serial ATA was introduced at **150Mbytes/sec.** New PPC-5350/A311 supports two native SATA ports without additional driver requirement which is highly increasing device compatibility in all different OS

Native serial ATA interface support



PPC-5350/A311

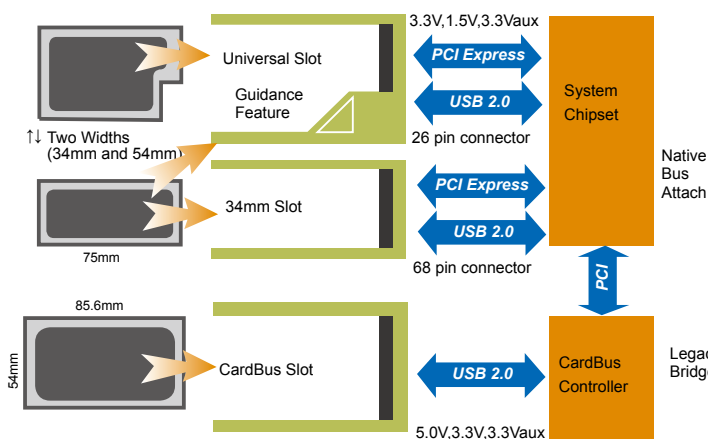


PPC-5350/A300

New ExpressCard Features

ExpressCard is a hardware standard replacing PC cards (also known as PCMCIA cards), both developed by the Personal Computer Memory Card International Association (PCMCIA). The host device supports both PCI Express and USB 2.0 connectivity through the Express Card slot, and each card uses whichever the designer feels most appropriate to the task. The cards are hot-pluggable.

ExpressCard Technology vs. CardBus



ExpressCard Modules	Brand
FireWire	Abcom, Addonics, Belkin, SIIG
Memory Card Adapter	Atech Flash, Buffalo, Delkin, Griffin, Hagiwara
TV tuners	AverMedia, HP
WLAN/WWAN/Smart Card/SATA	Abcom, Addonics, Belkin, SIIG, Atech Flash, Buffalo, Delkin, Gemplus, Hagiwara, Novatel, Rotoc, SCM
Bluetooth device	Newton
Expansion chassis and docking stations	Belkin
Remote control devices	HP, Interlink

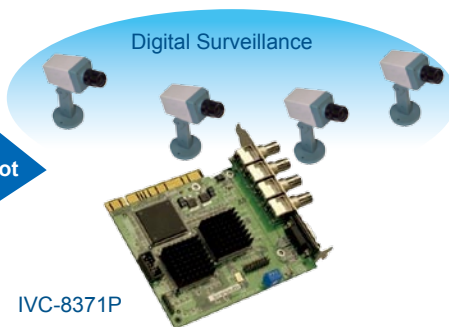
New PPC-5350/A311 Expansions

Flexible extension interface: 1 x PCI slot, 1 x PCIe mini slot, 1 x ExpressCard

PPC-5350 provides most rich expansion interfaces, including one standard 32 bit PCI slot for various PCI add-on card, one PCIe mini card socket for small form factor extender like wireless module, and one express slot for expansion.



PPC-5350GS



IVC-8371P

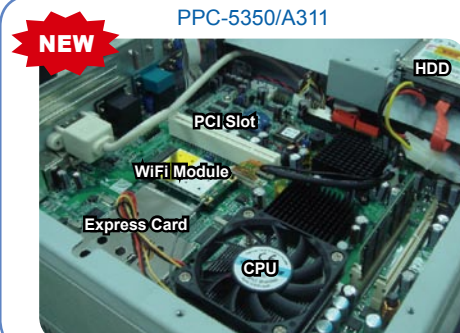


PCI



New PPC-5350/A311 Placement

All new PPC-5350/A311 system board is designed with native SATA and PCIe interfaces supported from chipset directly with no extra driver requirement. All internal connector placements are redesigned for easy installation and better internal air flow inside.



PPC-5350/A311



PPC-5350/A300

1
Automation

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Digital Signage

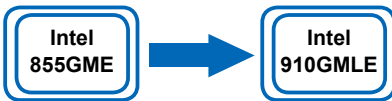
4
RISC-based Solutions

5
Medical Solutions

Model	PPC-5350GS/A311	PPC-5350GS/A300
CPU	Socket 479 with 400/533 MHz FSB Intel® Pentium® M Processor Intel® Celeron® M processor	Socket 479 400 MHz FSB Intel® Pentium® M Processor Intel® Celeron® M processor
NB	Mobile Intel® 910GMLE Express Chipset	Mobile Intel® 855GME Express Chipset
SB	ICH6M	ICH4
Display	CRT integrated in 910GMLE -- D-SUB CONNECTOR Chrontel CH7307C -- DVI CONNECTOR 910GMLE for LVDS Panel Interface	CRT integrated in 855GME -- D-SUB CONNECTOR Silicon image -- DVI CONNECTOR 855GME for LVDS Panel Interface
Memory	Two DDR2 667MHz, Up to 2GB	Two DDR 266/333MHz, Up to 2GB
SSD	CF Type II	CF Type II
Audio	AC'97 codec with Realtek ALC655	Realtek ALC655 with AC'97 codec
LAN	Dual PCIe Realtek RTL8111CP GbE chipsets	Dual RealTek RTL8110S GbE chipsets
COM	6 COM ports(5x RS-232, 1x RS-232/422/485)	6 COM ports(5x RS-232, 1x RS-232/422/485)
USB 2.0	8x USB 2.0 (4 by pin header, 2 for external, 2 for Express card and Mini PCIe)	6x USB 2.0
IDE	1 X IDE 40 pin connector. (From ICH6M) 1 x CF type II (From ICH6M)	2 X IDE 40 pin connector. 1 x CF type II
SATA	2 x SATA connector by ICH6M	2 x SATA connector by ALIM5283
FAN connector	4pin Smart fan	3pin fan
Expansion	ExpressCard x 1 PCI x1 PCIe mini card on board x1	PCMCIA X 1 PCI x1 mini PCI x1

Transition to New Generation

Upgrading Performance



Featuring the Intel® Graphics Media Accelerator 900, the 910GMLE chipset in PPC-5350/A311 enables 2x the graphics performance of the previous generation of platforms based on the Intel® 855GME chipset in PPC-5350/A300.

Extra CPU support list :

Package Type	Brand Name	CPU No.	Clock Speed	FSB (MHz)	L2	TDP	Chipset
Socket 479	90nm	Pentium M	780	2.26G	533	2M	915GME
			770	2.13G		2M	
			760	2G		2M	
			755	2G		2M	
			750	1.86G		2M	
			740	1.73G		2M	
			730	1.6G		2M	

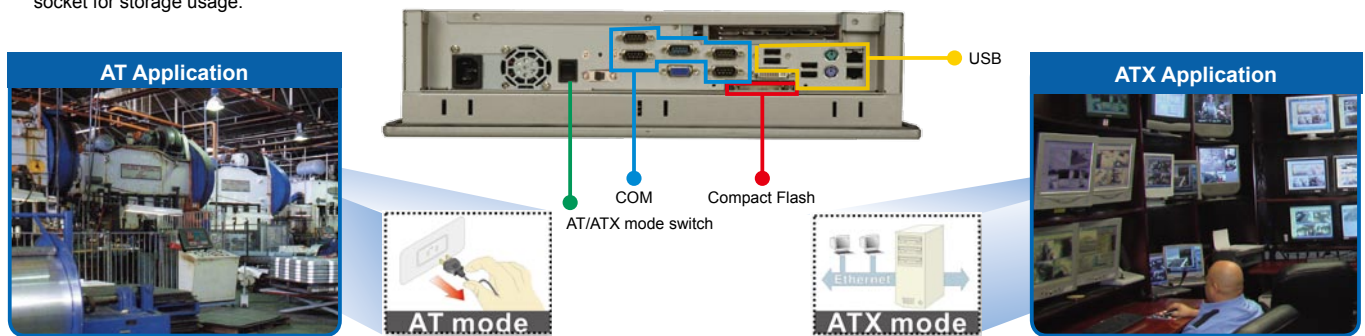
Comparison Graphic Core

Chipset	910GMLE	855GME
DirectX Support	9	7.1
OpenGL Support	1.4	1.3
Core Clock	333/320 MHz 200 MHz 166/160 MHz 133 MHz	250 MHz 200 MHz 166 MHz 133 MHz
Pixel Pipes	4	1
Display Support	Dual Independent	Dual Independent
Video Memory	DVMT 3.0	DVMT 2.0
Memory Bandwidth	8.5 GB/sec	2.6 GB/sec
Max. Resolution	QXGA 75 Hz 2048x1535	QXGA 60 Hz 2048x1535

Features / Options	DDR	DDR2	DDR2 Advantages
Voltage	2.5V / 2.5V I/O	1.8V / 1.8V I/O	Reduces memory system power demand
Densities	128MB-1GB	256MB-4GB	High-density components enable large memory subsystems
Speed (data pin)	200, 266, 333, 400	400, 533, 667	Migration to higher speed IO
Read Latency	2, 2.5, 3 CLK	CL + AL / CL = (3,4,5)	Eliminating one-half clock helps speed internal DRAM logic and improves yields
Additive Latency	N/A	AL options (0,1,2,3,4)	Mainly used in Server applications to improve command bus efficiency
Write Latency	1 clock	read latency-1	improves command bus efficiency
Data Strobes	Single-ended	Differential or single-ended	Improves system timing margin by reducing strobe cross-talk

Rich I/O in PPC-5350/A311

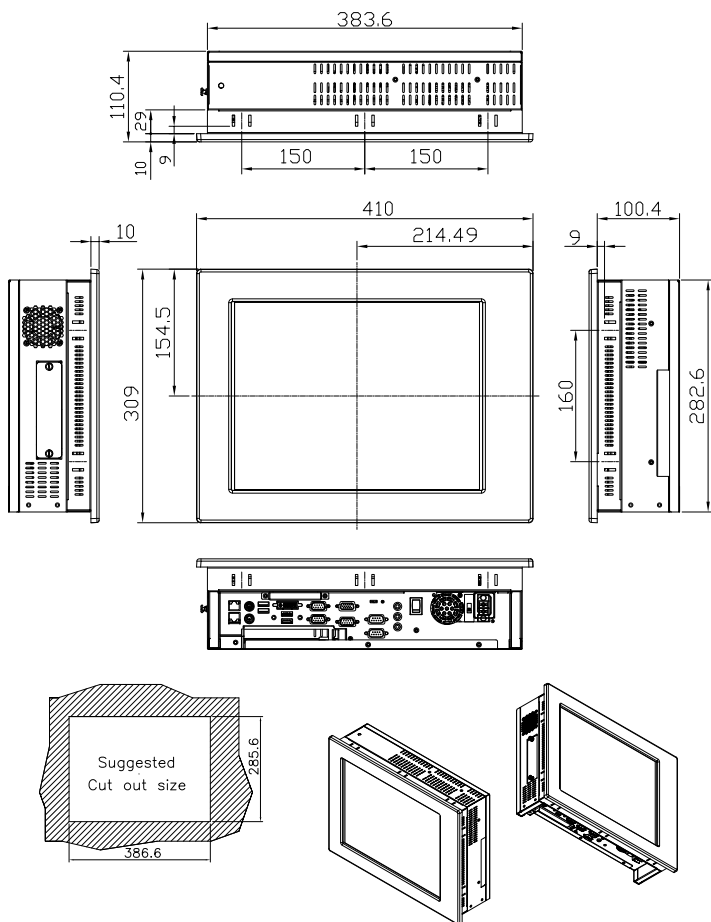
Fully I/O function support: 6 x COM (One for Touch screen), 4 x USB, 1 x CF socket PPC-5350 combines multiple traditional UART ports (five RS-232 ports and one RS-232/422/485 port) and four most popular USB 2.0 ports for IO extension. Additionally, PPC-5350 also support one CompactFlash® Type II socket for storage usage.



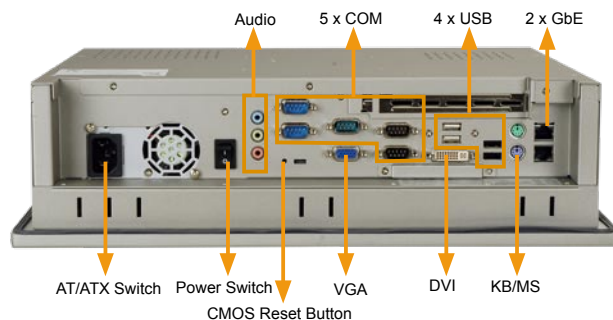
AT power mode allows multiple panel PCs automatically start when the central power unit is connected.

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

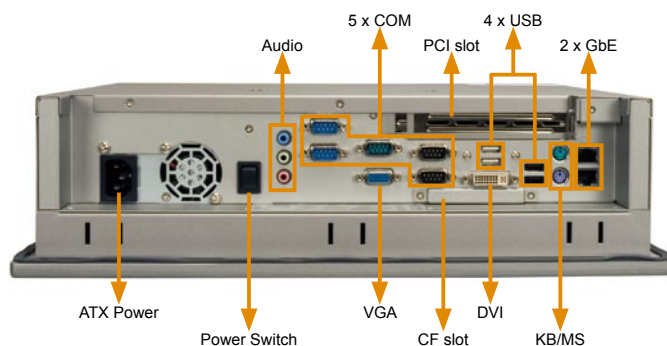
Dimensions (Unit: mm)



▼ PPC-5350GS/A311



▼ PPC-5350GS/A300



Packing List

Description	Part Number	Amount
Slim Type CD-ROM Packing	19B00-000032-RS	1
HDD IDE Cable	32200-069900-RS (PPC-5350GS/A300)	1
HDD SATA Cable	32000-077000-RS	1
Screw Kit	19600-000078-RS	1
Jumper Pack	33100-000079-RS	1
Power Cord	32000-000002-RS	1
Panel Mounting Kit	PK-170M	1
Wall Mounting Kit	WK-190MS-R10	1
Touch Screen Driver CD / Touch Pen		1
User Manual & Driver CD		1

Options

Panel Mounting Kit	PK-170M
Wall Mounting Kit	WK-190MS-R10
Rack mount kits	RK-150MS-R10
LCD Monitor Arm	ARM-31-RS
LCD Monitor Stand	STAND-210-RS

Ordering Information

Intel® Celeron® M 1GHz Platform	PPC-5350GS-R11/A300-1GZ/T-R/512MB	15" 350 cd/m ² XGA TFT LCD panel PC with A300,ULV Celeron M 1GHz CPU,512MB RAM and Touch screen,ACE-4518AP,RoHS
	PPC-5350GS-R11/A300-CM370/T-R/1GB	15" 350 cd/m ² XGA TFT LCD panel PC with A300 main board,CPU Celeron M 1.5Ghz,1GB RAM and Touch screen,ACE-4518AP,RoHS
	PPC-5350GS/A300-1GZ/ACE-815C/T-R/512MB	15" 350 cd/m ² XGA TFT LCD panel PC with A300,ULV Celeron M 1GHz CPU,512MB RAM,Touch screen and ACE-815C (24VDC input,100W power supply),RoHS
	PPC-5350GS/A300-CM370/ACE-815C/T-R/1GB	15" 350 cd/m ² XGA TFT LCD panel PC with A300 main board,CPU Celeron M 1.5Ghz,1GB RAM,Touch screen and ACE-815C (24VDC input,100W power supply),RoHS
Intel® Celeron® M 1GHz Zero Cach Platform	PPC-5350GS/A311-1GZ/4518AP/T-R/1GB-R10	15" 350 cd/m ² XGA panel PC with A311 system board,Intel® Celeron M 1GHz Zero Cache, 1GB RAM,Touch screen and ATX AC input power supply,ACE-4518AP
	PPC-5350GS/A311-CM370/4518AP/T-R/1GB-R10	15" 350 cd/m ² XGA panel PC with A311 system board, Intel® Celeron M 1.5GHz,1GB RAM, Touch screen and ATX AC input power supply,ACE-4518AP
	PPC-5350GSD/A311-1GZ/815C/T-R/1GB-R10	15" 350 cd/m ² XGA panel PC with A311 system board,Intel® Celeron®M 1GHz Zero Cache, 1GB RAM,Touch screen and ATX DC input Power supply,ACE-815C(24VDC input. 100W),RoHS
	PPC-5350GSD/A311-CM370/815C/T-R/1GB-R10	15" 350 cd/m ² XGA panel PC with A311 system board, Intel® Celeron®M 1.5GHz, 1GB RAM, Touch screen and ATX DC input Power supply, ACE-815C (24VDC input. 100W) ,RoHS