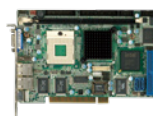
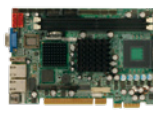
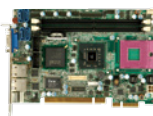
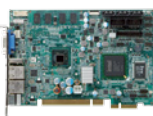


Half Size PICOe, PICO, ISA, Selection Guide

NEW!!

Model Name	PICOe-PV-D510	PICOe-945GSE	PICOe-GM45A	PICOe-9452-R20	PICO-8522-R20	IOWA-8522
CPU Socket	On Board	On Board	Socket P	Socket M	Socket 479/ On Board	Socket479/ On board
CPU Type	Intel® Atom™ Processor D510 1.66GHz	Intel® Atom™ Processor N270 1.6GHz	Intel® 45nm Core™2 Duo, Celeron®M	Intel® Core™2 Duo, Core™ Duo, Core™ Solo, Celeron® M	Intel® Pentium® M/ Celeron® M On board Celeron® M 1G zero cache	Intel® Pentium® M/ Celeron® M On board Celeron® M 600MHz 512Kcache/1G zero cache
FSB	NA	533 MHz	667/800/1066 MHz	533/667 MHz	400 MHz	400 MHz
Chipset	Intel® ICH8M	Intel® 945GSE + ICH7M	Intel® GM45 + ICH9M	Intel® 945GME + ICH7M	Intel® 852GM + ICH4	Intel® 852GM + ICH4
Memory	1 x 200-pin, Max.2GB, 667/800 MHz DDR2 SO-DIMM On board 512MB DDR2 667MHz memory	1 x 200-pin, Max.2 GB, 400/533 MHz DDR2 SO-DIMM On board 512MB DDR2 533MHz memory	2 x 240-pin, Max.4 GB, 667/800 MHz dual-channel DDR2 DIMM	2 x 240-pin, Max.4 GB, 533/667 MHz dual-channel DDR2 DIMM	1 x 184-pin, Max.1 GB, 200/266 MHz Single-channel DDR DIMM	1 x 200-pin, Max. 1 GB DDR 200/266 MHz SO-DIMM On-board 128 MB DDR SDRAM
Display Interface	VGA Integrated in Intel® D510 Processor 18-bit Single-channel LVDS	VGA Integrated in Intel® 945GSE 18-bit dual-channel LVDS HDTV-out	VGA Integrated in Intel® GM45 24-bit dual-channel LVDS HDTV-out	VGA integrated in the Intel® 945GME 24-bit dual channel LVDS HDTV-out	VGA integrated in Intel® 852GM 24-bit dual channel LVDS	VGA integrated in 852GM 24-bit dual channel LVDS
Ethernet	Intel® GbE Phy 82567V Intel® PCIe GbE 82583V	Dual Realtek RTL8110S GbE controller	Dual Intel® 82574L GbE controllers	Intel® 82573L PCIe GbE chipset Intel® 82562 Ethernet 10/100 Mbps LAN	Dual Realtek RTL8110SC GbE controller	Intel® 82562ET Ethernet controller
I/O Interface	2 x RS-232 7 x USB 2.0 1 x Infrared Interface 1 x PS/2 for KB & MS 1 x 6-pin header for Keyboard and mouse	2 x RS-232 7 x USB 2.0 1 x Infrared Interface 1 x PS/2 for KB & MS 1 x 6-pin header for Keyboard and mouse	2 x RS-232 7 x USB 2.0 1 x LPT 1 x Infrared Interface 1 x PS/2 for KB & MS	2 x RS-232 5 x USB 2.0 1 x LPT 1 x Infrared Interface 1 x PS/2 for KB & MS 1 x 6-pin header for Keyboard and mouse	2 x RS-232 5 x USB 2.0 1 x LPT 1 x PS/2 for KB & MS 1 x 5-pin header for Keyboard	1 x RS-232 1 x RS-232/422/485 4 x USB 2.0 1 x LPT 1 x Infrared 1 x 6-pin header for Keyboard and mouse
Drive Interface	3 x SATA II	2 x SATA 1 x CF type II	4 x SATA II	2 x SATA 1 x IDE 1 x CF type II	2 x SATA RAID 1 x IDE 1 x FDD 1 x CF type II	2 x SATA RAID 1 x IDE 1 x FDD 1 x CF type II
Audio	7.1channel HD Audio kit with Realtek ALC883 supports dual audio streams	5.1 channel audio kit with Realtek ALC655 AC'97 codec 7.1channel HD Audio kit with Realtek ALC883 supports dual audio streams	10-pin on-board header supports 7.1 channel HD Audio by AC-KIT883HD	5.1 channel audio kit with Realtek ALC655 AC'97 codec 7.1channel HD Audio kit with Realtek ALC883 supports dual audio streams	5.1 channel audio kit with Realtek ALC655 AC'97 codec	supports 5.1 channel by IEI AC-KIT08R
Digital I/O	8-bit digital I/O (4-bit input/4-bit output)					
Power consumption	5V@4.55A, 12V@0.46A (Intel® Atom™ D510 1.66GHz CPU, 1GB DDR2 667MHz)	5V@2.89A, 12V@0.22A (Intel® Atom™ processor N270 1.6 GHz 533 MHz CPU, 1 GB DDR2 533MHz)	5V@5.59A, 12V@0.15A (Intel® Core™2 Duo T9400 2.53 GHz CPU, 4 GB DDR2 SDRAM)	5 V@3.49A, 3.3V@0.2A, 12V@1.75A (Intel® Core™2 Duo T7400 2.16 GHz CPU, 512 MB DDR2 667 MHz SDRAM DIMM)	5V@4.64A (Intel® Celeron® M 1.6GHz CPU, 1 GB DDR 333 MHz DIMM)	3.3V@0.01A, 5V@5.29A, 12V@0.13A (Intel® Pentium® M 2.0GHz CPU, 1GB DDR DIMM)
Watchdog Timer	Software programmable and supports 1~255 sec. system reset					
Operating Environment	Temperature Range: 0°C~60°C (32°F ~ 140°F) Relative Humidity: 5%~95% non-condensing					
Expansion Slot	PCI/ PCIE	PCI/ PCIE	PCI/ PCIe	PCI/ PCIE	PCI	ISA
CPU Cooler	Cooler	Heatsink	CF-479B-RS	CF-479B-RS	CF-479B-RS	CF-479B-RS

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Industrial Computing Solutions

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Embedded Computing Solutions

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Industrial Data Collector and Controller

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Video Capture Solutions

5

I/O Communication Solutions

6

Panel Solutions

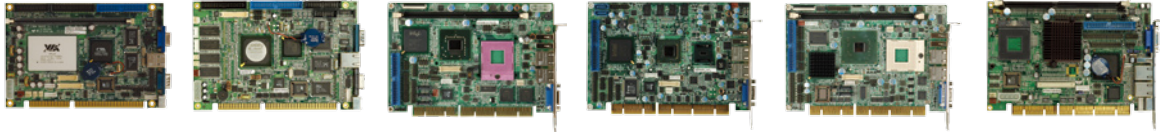
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ORing Network Communication

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Power Supply/ Peripherals

Half Size PCISA Selection Guide



Model Name	IOWA-MARK-R11	IOWA-GX-R11	PCISA-9652	PCISA-945GSE-R11	PCISA-9102	PCISA-6770E2-RS-R30
CPU Socket	On Board	On Board	Socket P	On Board	Socket 479/ On Board	Socket 479/ On Board
CPU Type	VIA MARK 533 MHz or 800 MHz	AMD® Geode™ GX466	Intel® Core™2 Duo, Celeron® M	Intel® Atom™ Processor N270 1.6GHz	Intel® Pentium® M/ Celeron® M On board Celeron® M 1GHz zero cache	Intel® Pentium® M / Celeron® M On board Celeron® M 600 MHz 512Kcache/1G zero cache
FSB	N/A	N/A	533/800MHz	533MHz	400 MHz	400 MHz
Chipset	VIA® MARK + VT82C686B	AMD® Geode™ GX466 + AMD® CS5536	Intel® GME965 + ICH8ME	Intel® 945GSE + ICH7M	Intel®910GML E + ICH6M	Intel® 852GM + ICH4
Memory	1 x 168-pin, Max. 512 MB, PC 100/133 DIMM 128 MB On-board 128 MB memory	1 x 200-pin, Max. 512 MB, 200/266 DDR DIMM On-board 128 MB memory	1 x 240-pin, Max. 2 GB, 533/667 MHz single-channel DDR2 SDRAM DIMM	On board 512 MB DDR2 533 MHz memory 1x 200-pin, system max. 2GB, 533 MHz DDR2 SDRAM SO-DIMM	1 x 240-pin, Max. 1 GB, 400 MHz single-channel DDR2 SDRAM DIMM	1 x 184-pin, Max. 1 GB, 266 MHz DDR SDRAM DIMM
Display Interface	VGA integrated in the VIA® Mark 24-bit TTL 18-bit dual channel LVDS	VGA integrated in AMD® Geode™ GX466 24-bit TTL	VGA Integrated in Intel® GME965 HDTV-Out 24-bit dual channels LVDS	VGA Integrated in Intel® 945GSE 18-bit dual-channel LVDS HDTV-out	VGA Integrated in Intel® 910GML E 24-bit dual channels LVDS	VGA integrated in Intel® 852GM 24-bit dual channel LVDS
Ethernet	Realtek RTL8100C Ethernet controller	Realtek RTL8100C Ethernet controller	Dual PCIe Intel® 82573L GbE controller	Dual PCIe Realtek RTL8111CP GbE controller	Dual PCIe Broadcom BCM5787M GbE controller	Dual 10/100Mbps Intel®82562ET/ 82551ER controller
I/O Interface	2 x RS-232 4 x USB 1.1 1 x LPT 1 x Infrared Interface 1 x PS/2 for KB & MS 1 x 6-pin header for Keyboard and mouse	2 x RS-232 1 x RS-422/485 4 x USB 2.0 1 x LPT 1 x Infrared Interface 1 x PS/2 for KB & MS 1 x 6-pin header for Keyboard and mouse	1 x RS-232 1 x RS-232/422/485 6 x USB2.0 1 x LPT 1 x 6-pin header for Keyboard and mouse	1 x RS-232 1 x RS-232/422/485 6 x USB 2.0 1 x LPT 1 x Infrared Interface 1 x 6-pin header for Keyboard and mouse	1 x RS-232 1 x RS-232/422/485 6 x USB2.0 1 x LPT 1 x Infrared Interface 1 x 6-pin header for Keyboard and mouse	1 x RS-232 1 x RS-232/422/485 5 x USB 2.0 1 x LPT 1 x Infrared Interface 1 x PS/2 for KB & MS 1 x 5-pin header for Keyboard
Drive Interface	1 x IDE 1 x FDD 1 x CF type II	1 x IDE 1 x FDD 1 x CF type II	1 x IDE 3 x SATA II RAID 0, 1 1 x FDD 1 x CF Type II	2 x SATA 1 x IDE 1 x FDD 1 x CF type II	1 x IDE 2 x SATA 1 x FDD 1 x CF Type II	2 x IDE 1 x FDD 1 x CF Type II
Audio	Realtek ALC655 with AC'97 Codec	Realtek ALC203 with AC'97 Codec	10-pin header on board supports 7.1 channel HD audio by IEI AC-KIT883HD	5.1 channel audio kit with Realtek ALC655 AC'97 codec 7.1 channel HD audio kit with realtek ALC883 supports dual audio streams	5.1 channel audio kit with Realtek ALC655 AC'97 codec 7.1 channel HD audio kit with realtek ALC883 supports dual audio streams	Realtek ALC655 with AC'97 codec
Digital I/O	8-bit digital I/O (4-bit input/4-bit output)					
Power consumption	5V@2.99A, 12V@0.09 (On-board 800 MHz 128 MB VIA MARK CPU, 128 MB of PC133 memory) 5V@2.81A, 12V@ 0.04 (On-board 533 MHz 128 MB VIA MARK CPU, 128 MB of PC133 memory)	5V@0.92A (AMD® Geode™ GX466 333 MHz, 256MB DDR DIMM)	5V@7.72A, 12V@0.139A (Intel® Core™2 Duo T7300 2.0 GHz CPU, 1GB DDR2 667 MHz DIMM)	5V@2.89A, 12V@0.22A (Intel® Atom™ N270 1.6 GHz 533 MHz CPU, 512 MB DDR2 533MHz)	5V@6.12A, 12V@0.08A (Intel® Pentium® M 745 1.80 GHz / 400 MHz CPU, 1GB DDR2 400MHz SDRAM DIMM)	5V@3.5A, 12V@1.9A (Intel® Pentium® M 1.7 GHz CPU, 512 MB DDR 266 MHz DIMM)
Watchdog Timer	Software programmable and supports 1~255 sec. system reset					
Operation Environment	Temperature Range: 0°C~60°C (32°F ~ 140°F) Relative Humidity: : 5%~95% non-condensing		Temperature Range 0°C~60°C (32°F ~ 140°F)	Temperature Range 0°C~60°C (32°F ~ 140°F) Relative Humidity: 5%~95% non-condensing	Temperature Range 0°C~60°C (32°F ~ 140°F)	Temperature Range 0°C~60°C (32°F ~ 140°F) Relative Humidity: 5%~95% non-condensing
Expansion Slot	ISA	ISA	PCI / ISA	PCI / ISA	PCI / ISA	PCI / ISA
CPU Cooler	Heatsink	Heatsink	CF-479B-RS	Heatsink	Heatsink / CF-479B-RS	CF-518-RS CF-479B-RS

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Industrial Computing Solutions

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Industrial Data Collector and Controller

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Video Capture Solutions

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Panel Solutions

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ORing Network Communication

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Power Supply/ Peripherals