


Selection Guide

Single Board Computer

		PICMG® 1.0 SBC		
				
Model Name		NuPRO-852	NuPRO-935A	NuPRO-730
CPU	Socket	LGA 775	LGA775	Socket P
	CPU Support	Intel® Core™2 Duo	Intel® Core™2 Quad/Duo	Intel® Core™2 Duo Mobile/Celeron®
	FSB	1066/800/533 MHz	1333/1066/800 MHz	800/533 MHz
Chipset	Northbridge	Q965/Q963	Q35	GME965
	Southbridge	ICH8	ICH9	ICH8M
Memory	DIMM Type	DDR2	DDR2	DDR2
	Speed	667/533 MHz	800/667 MHz	667 MHz
	DIMM	2	2	2
	Max. Capacity ECC/Reg.	4 GB --	4 GB --	4 GB --
Form Factor	Dimensions	338 mm x 122 mm	338 mm x 122 mm	338 mm x 122 mm
	Bus	PCI™ / ISA	PCI™ / ISA	PCI™ / ISA
Display	Graphics Core	Intel® GMA 3000	Intel® GMA 3100	Intel® GMA X3100
	Graphics I/F	Integrated	Integrated	Integrated
	Video Memory	DVMT 256 MB	DVMT 256 MB	DVMT 384 MB
Ethernet	LCD Support	--	--	Single Channel 24-bit LVDS
	Gigabit	2	2	2
	10/100	0	0	0
Storage	Ethernet Chip	Marvell 88E8056	Intel® 82566DM and Intel® 82573L	Intel® 82573L
	Serial ATA	2 x SATA 300	2 x SATA 300	2 x SATA 300
	IDE	1 x ATA133	1 x ATA133	1 x ATA133
	CompactFlash	--	--	Yes
I/O Ports	Floppy	--	Yes	Yes
	USB	4 x USB 2.0	5 x USB 2.0	5 x USB 2.0
	LPT	Yes	Yes	Yes
	COM	1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS232/422/485	1 x RS-232, 1 x RS-232/422/485
	PS/2	Yes (MiniDIN)	Yes (MiniDIN)	Yes (MiniDIN)
	Audio	Optional audio cable	Optional audio board	Optional audio board
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Single Board Computer

		PICMG® 1.3 SBC
		
Model Name		NuPRO-965
CPU	Socket	LGA775
	CPU Support	Intel® Core™2 Duo
	FSB	1066/800/533 MHz
Chipset	Northbridge	Q965
	Southbridge	ICH8
Memory	DIMM Type	DDR2
	Speed	800/667/533 MHz
	DIMM	4
	Max. Capacity ECC/Reg.	8 GB --
Form Factor	Dimensions	338 mm x 122 mm
	Bus	PCI Express® / PCI™
Display	Graphics Core	Intel® GMA 3000
	Graphics I/F	Integrated
	Video Memory	DVMT 256 MB
Ethernet	LCD Support	--
	Gigabit	2
	10/100	0
Storage	Ethernet Chip	Intel® 82573E
	Serial ATA	2 x SATA 300
	IDE	1 x ATA133
	CompactFlash	--
I/O Ports	Floppy	--
	USB	7 x USB 2.0
	LPT	Yes
	COM	2 x RS-232
	PS/2	Yes (MiniDIN)
	Audio	Optional audio board
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6U CompactPCI® SBC

		cPCI-6965	
		cPCI-6965	cPCI-6965D
Model Name		Intel® Core™2 Duo/Celeron® M	
	CPU Support	2.2/2.0 GHz	
CPU and Core Logic	CPU Speed	GME965/ICH8M	
	Chipset	800/533	
Form Factor & Bus	CPU FSB (MHz)	2.0 (R3.0), 2.1 (R2.0)	
	PICMG Spec.	6U	
	Form Factor	1	2
	Slot Width	Host	
	Host/Peripheral	32-bit/33 MHz	
	PCI Bandwidth (Max.)	--	1 (32-bit)
Memory	PMC	--	
	XMC	--	
	DIMM Slots	2x DDR2 SODIMM	
Display	Max. Soldered	4 GB	
	Max. Memory	No	
	ECC Capability	GME965	
Ethernet	Graphic Controller	DVI-I + DVI-D	
	Interfaces	2	
Storage	Gigabit Ethernet	Ultra-320 (on RTM)	
	SCSI	3 (2F+1R)	
	SATA	--	
I/O	IDE Interface	Yes	
	CompactPCIFlash	8 (4F+4R)	
	USB	1	2
Other	Serial	--	1
	Parallel	--	1
	Keyboard / Mouse	--	1
Page Number		Yes	Yes
		Support HS Periph.	Yes
		Rear I/O	Yes
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6U CompactPCI® Chassis



Model Name		cPCIS-5080	cPCIS-5040
Form Factor	19" Rackmount	-	-
	Wallmount	√	√
	Height (1U=1.75")	7.5U	7.5U
	Board Orientation	√	√
Backplane	Total Slots	8	4
	System Slots	1	1
	Peripheral Slots	7	3
	Fabric Slots	-	-
	32-bit/ 64-bit PCI	32	32
	Additional Features	-	-
PSU	Redundant PSU	-	-
	Non-redundant PSU	External	External
Alarm	FAN Status	-	-
	Over Temp	-	-
Others	Drive Bays	-	-
	Rear I/O	-	-
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Industrial Computer Chassis

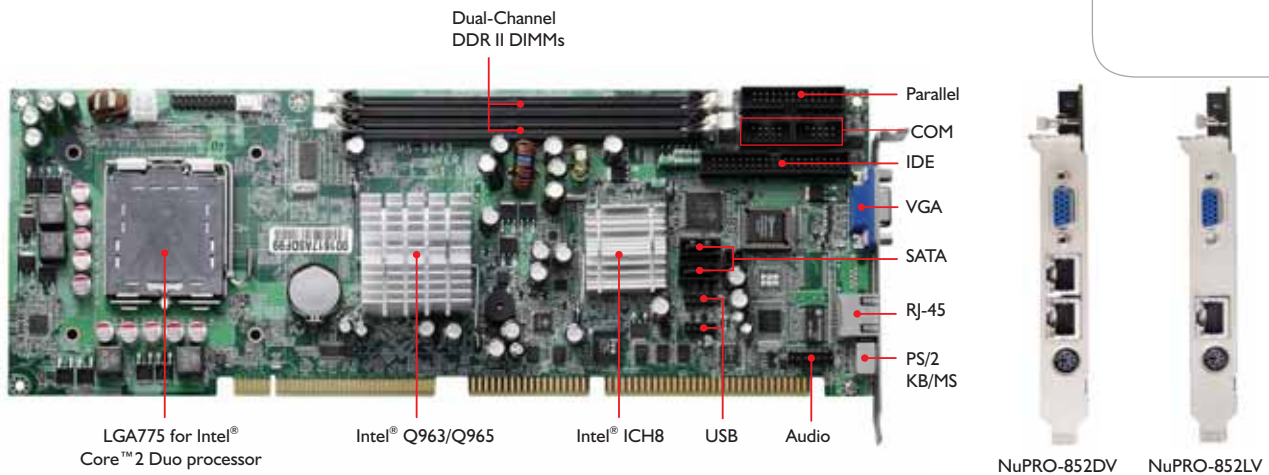


Model Name	RK-410FS	RK-606UC	RK-608B
Type	Rackmount	Standalone/Wallmount	Standalone/Wallmount
Height (1U=1.75")	4U	9.7" (246.5 mm)	6.9" (175 mm)
Depth	17.8" (451 mm)	16.2" (412 mm)	16.5" (418 mm)
Backplane Options	EBP-10E5 EBP-13E4 HPCI-13S4LU HPCI-14S7U HPCI-14S12U HPCI-14S/ATX	EBP-5E1 HPCI-6S4	HPCI-8S4 HPCI-9S7U EBP-7E2 EBP-9E2 ATX motherboard
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- 4 Modular Instruments
- 5 GPIB & Bus Expansion
- 6 PAC
- 7 Motion
- 8 Real-time Distributed I/O
- 9 Remote I/O
- 10 Communications
- 11 Vision
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- 13 cPCI & Industrial Computers
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NuPRO-852

PICMG® I.0 Full-Size LGA775 Intel® Core™ 2 Duo SBC with DDR2, GbE, SATA II, & IDE



Features

PICMG® I.0 Full-Size SBC

Supports up to 1066 MHz FSB LGA775 Intel® Core™ 2 Duo processor

Intel® Q963/Q965 + ICH8 chipset with Dual-Channel DDR2 667/533 MHz

Supports PCI Express® x1 Gigabit Ethernet port

Ordering Information

NuPRO-852LV

PICMG® I.0 Full-Size LGA775 Intel® Core™ 2 Duo SBC with Q963/Q965, DDR II, GbE, SATA II, IDE

NuPRO-852DV

PICMG® I.0 Full-Size LGA775 Intel® Core™ 2 Duo SBC with Q965, DDR II, Dual GbE, SATA II, IDE

Note 1: CPU, Memory module and Cooler kit are not included.

Specifications

Processor System

CPU	Processor
Intel® Core™ 2 Duo E6400, 2.13GHz, 1066MHz FSB, 2MB L2 Cache, 65nm, 65W TDP, LGA775	
Intel® Core™ 2 Duo E4300, 1.8GHz, 800MHz FSB, 2MB L2 Cache, 65nm, 65W TDP, LGA775	
Intel® Pentium® Dual Core E2160, 1.8GHz, 800MHz FSB, 1MB L2 Cache, 65nm, 65W TDP, LGA775	
Intel® Celeron® 440, 2.0GHz, 800MHz FSB, 512KB L2 Cache, 65nm, 35W TDP, LGA775	
Intel® Pentium® 4 651, 3.4GHz, 800MHz FSB, 2MB L2 Cache, 65nm, 95W TDP, LGA775	
Intel® Pentium® 4 551, 3.4GHz, 800MHz FSB, 1MB L2 Cache, 90nm, 84W TDP, LGA775	
Intel® Pentium® 4 531, 3.0GHz, 800MHz FSB, 1MB L2 Cache, 90nm, 84W TDP, LGA775	
Intel® Celeron® D 352, 3.2GHz, 533MHz FSB, 512KB L2 Cache, 65nm, 95W TDP, LGA775	
Intel® Celeron® D 341, 2.93GHz, 533MHz FSB, 256KB L2 Cache, 90nm, 84W TDP, LGA775	
Chipset	Intel® Q963/Q965 + Intel® ICH8 chipset
Memory	Dual-Channel DDR2 667/533 MHz, up to 4 GB

BIOS	Award 8 Mb flash memory
Watchdog Timer	1-255 sec or 1-255 min software programmable and can generate system reset
Hardware Monitor	CPU/System temperature, fan speed and onboard DC voltages
Operating Systems	Windows® XP/Server 2003, Fedora™ Core 7

I/O Interfaces

IDE (PATA)	1x UltraATA 66/100/133
Serial ATA	2x Serial ATA II ports with 3.0 Gbps data transfer rate
USB	4x USB 2.0 ports by onboard pin headers
KB/MS	1x PS/2 keyboard/mouse
Parallel Port	1x LPT
Serial Port	1x RS-232, 1x RS-232/422/485

Audio

Audio Codec	Realtek® ALC883 Codec
Interface	Audio pin header

Display

Graphics	Intel® Q963/965 integrated VGA (GMA 3000)
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Ethernet

Controller	Onboard Marvell 88E8056 GbE controller
Interface	10/100/1000 Base-T Gigabit Ethernet
Wake On LAN	Yes

Mechanical and Environmental

Form Factor	Standard Full-Size PICMG® I.0 SBC
Dimensions	338 mm x 122 mm (L x W)
Operating Temp.	0°C to 60°C
Storage Temp.	-20°C to 80°C
Certifications or Test	CE, FCC Class A
Relative Humidity	10% to 90%, non-condensed

Optional Accessories

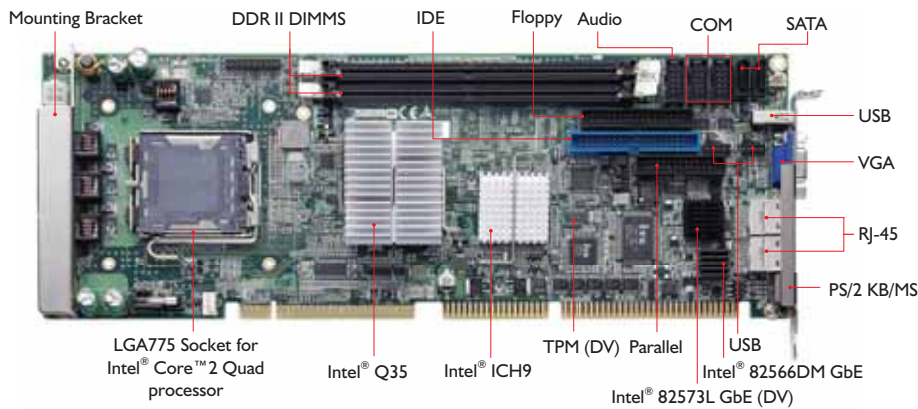
- 1U CPU Cooler + backplate**
LGA775 1U Thermal Module + backplate
- 3U CPU Cooler**
LGA775 3U Thermal Module
- Backplate**
Backplate for 3U CPU cooler
- Audio Cable**
Audio Cable for NuPRO-852

Packing List

- NuPRO-852**
- 1x Y cable for PS/2 keyboard/mouse
- 1x UltraATA 100 IDE cable
- 1x USB 2.0 cable bracket
- 1x COM+Parallel port cable with bracket
- 2x SATA data cables
- 2x SATA power cables
- Driver CD
- User's manual

NuPRO-935A

PICMG® I.0 SBC with Intel® Q35 Chipset, VGA, SATA II, Dual GbE, USB, IDE, FDD



Features

- Intel® Core™ 2 Duo/Quad processors supports up to 1333 MHz FSB
- Trusted Platform Module
- Dual Intel® Gigabit Ethernet Controllers
- Optional High Definition Audio Kit

Specifications

Processor System	
CPU	Intel® Core™ 2 Quad Q9400, 2.66GHz, 1333MHz FSB, 6MB L2 Cache, 45nm, 65W TDP, LGA775FSB Intel® Core™ 2 Duo E8400, 3.0GHz, 1333MHz FSB, 6MB L2 Cache, 45nm, 65W TDP, LGA775 Intel® Core™ 2 Duo E7400, 2.8GHz, 1066MHz FSB, 3MB L2 Cache, 45nm, 65W TDP, LGA775 Intel® Core™ 2 Duo E6400, 2.13GHz, 1066MHz FSB, 2MB L2 Cache, 65nm, 65W TDP, LGA775 Intel® Core™ 2 Duo E4300, 1.8GHz, 800MHz FSB, 2MB L2 Cache, 65nm, 65W TDP, LGA775 Intel® Pentium® Dual Core E2160, 1.8GHz, 800MHz FSB, 1MB L2 Cache, 65nm, 65W TDP, LGA775 Intel® Celeron® 440, 2.0GHz, 800MHz FSB, 512K L2 Cache, 35nm, 65W TDP, LGA775
Chipset	Intel® Q35 + ICH9 Express Chipset
Memory	2 x 240-pin DIMM sockets Dual-Channel DDR2-800/667 SDRAM, up to 4 GB
TPM	Infineon SLB9635 TT 1.2 (optional)
BIOS	AMI BIOS/ SPI Flash ROM 16Mb
Watchdog Timer	1-255 sec or 1-255 min software programmable
Hardware Monitor	CPU/System temperatures, fan speed and onboard DC voltages
Operating Systems	Windows® XP, Windows® Vista, Fedora™ 8, RedHat™ Enterprise Linux 5

I/O Interfaces	
IDE (PATA)	1x UltraATA 66/100/133, support one device
Serial ATA	2x Serial ATA ports with 3.0 Gbps data transfer rate
USB	5x USB 2.0 ports (1x faceplate, 4x onboard pin headers)
KB/MS	1x PS/2 keyboard/mouse
Floppy	1x Floppy
Parallel	1x LPT
Serial Port	1x RS-232, 1x RS-232/422/485

Audio	
Audio Codec	Realtek® ALC262 on DB-Audio2
Interface	Supports HDA Line-in/Line-out/Mic-in

Display	
Graphics	Intel® GMA 3100 integrated in Intel® Q35 GMCH
VRAM	Shared system memory up to 256 MB
CRT	External D-sub 15 connector, up to 2048x1536 @ 75Hz

Ethernet	
Controller	Intel® 82566DM and Intel® 82573L (optional)
Interface	2x 10/100/1000Mbps Ethernet ports
Wake On LAN	Supported on 82566DM

Mechanical and Environmental	
Form Factor	Full-Size PICMG® I.0 SBC
Dimensions	338 mm x 122 mm (L x W)
Operating Temp.	0 to 60°C
Storage Temp.	-20 to 80°C
Certifications or Test	CE, FCC Class A
Relative Humidity	10% to 90%

Ordering Information

NuPRO-935A/DV

PICMG® I.0 Core™ 2 Quad/Duo Single Board Computer, Q35/ICH9, TPM, Dual GbE/SATA II/ IDE/ Floppy

NuPRO-935A/LV

PICMG® I.0 Core™ 2 Quad/Duo Single Board Computer, Q35/ICH9, GbE/SATA II/ IDE/Floppy

Optional Accessories

- 1U CPU Cooler + backplate
- LGA775 1U Thermal Module + backplate
- 2U CPU Cooler + backplate
- LGA775 2U Thermal Module + backplate
- 3U CPU Cooler
- LGA775 3U Thermal Module
- Backplate
- Backplate for 3U CPU cooler
- DB-Audio2
- Realtek ALC262 High Definition Audio kit supports Line-in, Line-out, and Mic-in

Packing List

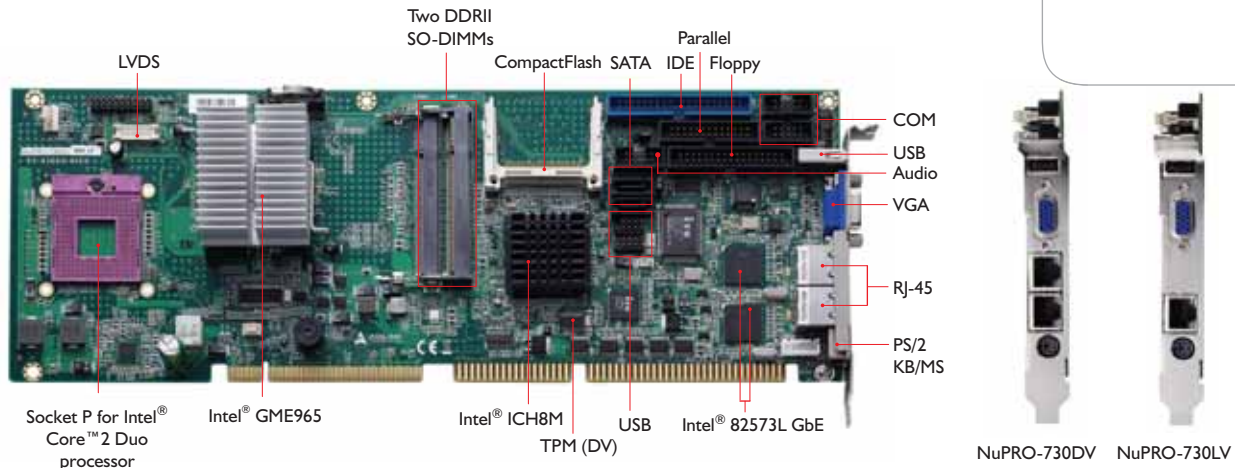
NuPRO-935A

- 1x Y cable for PS/2 keyboard/mouse
- 1x UltraATA 100 IDE cable
- 1x Floppy cable
- 1x USB 2.0 cable bracket
- 1x COM port cable with bracket
- 1x COM+Parallel port cables with bracket
- 2x SATA data cables
- 1x Dual-plug SATA power cable
- Driver DVD
- User's manual

- Software & Utilities
- DAQ
- PXI
- Modular Instruments
- GPIB & Bus Expansion
- PAC
- Motion
- Real-time Distributed I/O
- Remote I/O
- Communications
- Vision
- Fanless I/O Platforms
- cPCI & Industrial Computers
- Accessories

NuPRO-730

Intel® Core™ 2 Duo Mobile PICMG® I.0 SBC



Features

- Intel® Core™ 2 Duo/Celeron® Mobile processors in Micro-FCPGA package
- Integrated Graphics Controller, supports Dual Independent Display on VGA/LVDS
- Trusted Platform Module
- Dual Intel® Gigabit Ethernet controllers
- Optional High Definition Audio kit
- Extended temperature support (-20°C to 70°C)

Specifications

Processor System

CPU	Intel® Core™ 2 Duo Mobile T7500, 2.2GHz, FSB 800MHz, 4MB L2 Cache, 65nm, 35W TDP Mobile Intel® Celeron® M 550, 2GHz, FSB 533MHz, 1MB L2 Cache, 65nm, 27W TDP
Chipset	Intel® GME965 + ICH8M Express Chipset
Memory	2 x 200-pin SO-DIMM sockets supporting dual-channel DDR2-667 SDRAM, up to 4 GB
TPM	Infineon SLB9635 TT 1.2 (optional)
BIOS	AMI BIOS/ SPI Flash ROM 16 Mb
Watchdog Timer	1-255 sec./min. software programmable
Hardware Monitor	CPU/System temperature, fan speed and onboard DC voltages
Operating Systems	Windows® XP, Windows® Vista, Fedora™ 8, RedHat™ Enterprise Linux 5

I/O Interfaces

IDE (PATA)	1x UltraATA 66/100/133 supports up to 2 devices
CompactFlash	1x CompactFlash type II socket (share with IDE)
Serial ATA	2x Serial ATA ports, with 3.0 Gbps data transfer rate
USB	5x USB 2.0 ports (1 x faceplate, 4 x onboard pin headers)
KB/MS	1x PS/2 keyboard/mouse
Floppy	1x floppy
Parallel Port	1x LPT
Serial Port	1x RS-232, 1x RS-232/422/485

Audio

Audio Codec	Realtek ALC262 on DB-Audio2
Interfaces	Pin header for High Definition audio interface

Display

Graphics	Intel® GMA X3100 Integrated in Intel® GME965 GMCH
VRAM	Shared system memory up to 384 MB
CRT	External D-sub 15 connector, up to 2048x1536 @ 75 Hz
LVDS	Single channel 24-bit LVDS

Ethernet

Controller	Dual Intel® 82573L (optional)
Interfaces	Two 10/100/1000Mbps Ethernet ports
Wake On LAN	Yes

Mechanical and Environmental

Form Factor	Full-Size PICMG® I.0 SBC
Dimensions	338 mm x 122 mm (L x W)
Operating Temp	-20°C to 70°C
Storage Temp	-40°C to 80°C
Certifications or Test	CE, FCC Class A
Relative Humidity	10% to 90%, non-condensed

Ordering Information

NuPRO-730DV

PICMG® I.0 Full-size SBC, Mobile Core™ 2 Duo/Celeron® (Socket P), GME965/ICH8M, TPM, VGA/LVDS, Dual GbE, SATA II, IDE and Floppy

NuPRO-730LV

PICMG® I.0 Full-size SBC, Mobile Core™ 2 Duo/Celeron® (Socket P), GME965/ICH8M, VGA/LVDS, GbE, SATA II, IDE and Floppy

Optional Accessories

Socket-M 1U CPU Cooler

1U CPU cooler with backplate

DB-Audio2

Realtek® ALC262 High Definition Audio kit supports Line-in, Line-out, and Mic-in

Packing List

NuPRO-730

1x Y cable for PS/2 keyboard/mouse

1x UltraATA 100 IDE cable

1x Floppy cable

1x USB 2.0 cable bracket

1x COM port cable with bracket

1x COM+Parallel port cables with bracket

2x SATA data cables

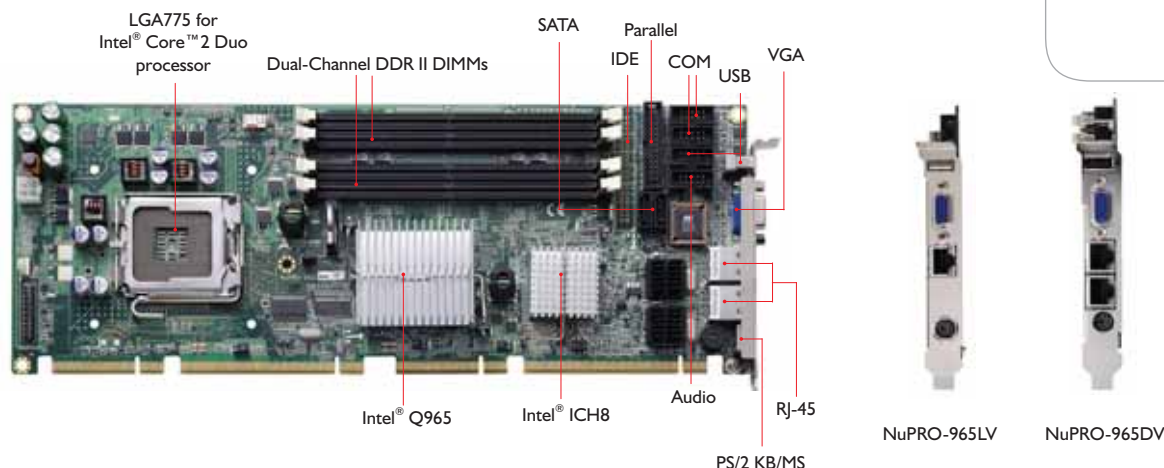
1x Dual-plug SATA power cable

Driver DVD

User's manual

NuPRO-965

PICMG® I.3 Full-Size LGA775 Intel® Core™ 2 Quad/Duo SHB



Features

PICMG® I.3 Full-Size SBC

Supports 1066 MHz FSB LGA775 Intel® Core™ 2 Duo processor
Intel® Q965+ICH8 chipset with Dual-Channel DDR2
800/667/533 MHz, up to 8 GB
One PCI Express® x16 and four PCI Express® x1
(or one x4) Link to backplane
Dual Gigabit Ethernet via PCI Express® x1 Bus

Specifications

Processor System

CPU	Processor
Intel® Core™ 2 Duo E6400, 2.13GHz, 1066MHz FSB, 2MB L2 Cache, 65nm, 65W TDP, LGA775	Intel® Core™ 2 Duo E4300, 1.8GHz, 800MHz FSB, 2MB L2 Cache, 65nm, 65W TDP, LGA775
Intel® Pentium® Dual Core E2160, 1.8GHz, 800MHz FSB, 1MB L2 Cache, 65nm, 65W TDP, LGA775	Intel® Celeron® 440, 2.0GHz, 800MHz FSB, 512KB L2 Cache, 65nm, 35W TDP, LGA775
Intel® Pentium® 4 651, 3.4GHz, 800MHz FSB, 2MB L2 Cache, 65nm, 95W TDP, LGA775	Intel® Pentium® 4 551, 3.4GHz, 800MHz FSB, 1MB L2 Cache, 90nm, 84W TDP, LGA775
Intel® Pentium® 4 531, 3.0GHz, 800MHz FSB, 1MB L2 Cache, 90nm, 84W TDP, LGA775	Intel® Celeron® D 352, 3.2GHz, 533MHz FSB, 512KB L2 Cache, 65nm, 95W TDP, LGA775
Intel® Celeron® D 341, 2.93GHz, 533MHz FSB, 256KB L2 Cache, 90nm, 84W TDP, LGA775	
Chipset	Intel® Q965 + ICH8
Memory	Dual-Channel DDR2 800/667/533 MHz, up to 8 GB

BIOS	AMI BIOS 8 Mb Flash memory
Watchdog Timer	1-255 sec or 1-255 min software programmable and can generate system reset
Hardware Monitor	CPU/System temperature, fan speed and onboard DC voltages
Operating Systems	Windows® 2000/XP/Vista, Fedora™ Core 6

I/O Interfaces

IDE (PATA)	1x UltraATA 66/100/133 (only LV version)
Serial ATA	2x Serial ATA II ports with 3.0 Gbps data transfer rate
USB	7x USB 2.0 ports (1x faceplate, 2x onboard pin headers, and 4x backplane)
KB/MS	1x PS/2 keyboard/mouse
Parallel Port	1x LPT
Serial Port	2x RS-232

Audio

Audio Codec	Realtek ALC262 support by DB-Audio2
Interfaces	Pin header for High Definition audio interface

Display

Graphics	Intel® GMA 3000 integrated in Intel® Q965 GMCH
VRAM	Shared system memory up to 256MB
CRT	External D-sub 15 connector, resolution up to 2048 x 1536 @ 75Hz

Ethernet

Controller	Integrated Intel® 82573 PCIe® network controllers 10/100/1000Base-T dual-Gigabit Ethernet
Interfaces	PCIe® x1 Bus (dual-GbE only available on NuPRO-965DV)
Wake On LAN	Yes

Mechanical and Environmental

Form Factor	Full-Size PICMG® I.3 System Host Board
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Dimensions	338 mm x 122 mm (L x W)
Operating Temp.	0°C to 60°C
Storage Temp.	-20°C to 80°C
Certifications or Test	CE, FCC Class A
Relative Humidity	10% to 90%, non-condensed

Ordering Information

NuPRO-965DV

Full-Size PICMG® I.3 LGA775 Intel® Core™ 2 Quad/Duo SHB with dual-channel DDR2, dual GbE, SATA II

NuPRO-965LV

Full-Size PICMG® I.3 LGA775 Intel® Core™ 2 Quad/Duo SHB with dual-channel DDR2, GbE, SATA II, IDE

Note 1: CPU, Memory module and Cooler kit are not included.

Optional Accessories

1U CPU Cooler + backplate

LGA775 1U Thermal Module + backplate

3U CPU Cooler

LGA775 3U Thermal Module

Backplate

Backplate for 3U CPU cooler

DB-Audio2

High Definition audio daughter board with mic-in/line-in/line-out

Packing List

NuPRO-965

1x Y cable for PS/2 keyboard/mouse
1x UltraATA 100 IDE cable (NuPRO-965LV only)
1x USB 2.0 cable bracket
1x COM port cable with bracket
1x COM+Parallel port cables with bracket
2x SATA data cables
1x Dual-plug SATA power cable
Driver CD
User's manual

1

Software & Utilities

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DAQ

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PXI

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Modular Instruments

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GPIB & Bus Expansion

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PAC

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Motion

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Real-time Distributed I/O

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Remote I/O

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Communications

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Vision

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Fanless I/O Platforms

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cPCI & Industrial Computers

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Accessories

cPCI-6965 Series

Value 6U CompactPCI® Intel® Core™ 2 Duo Processor Blade with Dual Independent Displays



Features

- Low power Intel® Core™ 2 Duo 2.2GHz
- Dual Channel DDR2-667 SODIMM, up to 4GB
- Dual independent display (DVI+VGA or DVI+DVI)
- Two egress PCI Express® Gigabit Ethernet ports
- Serial ATA, USB SSD module and CompactFlash storage options

Storage	
SBC	One SATA port for 2.5" hard drive direct mounting One 7-pin signal SATA port for external hard drive Optional USB Flash Disk module, up to 8GB One CompactFlash slot
RTM	One internal and one external 68-pin SCSI connector by LSI53C1020 SCSI Ultra320 single channel controller (cPCI-R6000-965(D) only) Floppy header onboard
Operating System	
OS	Microsoft Windows XP Professional Microsoft Windows Vista Enterprise Fedora™ 7
Miscellaneous	
LED	Power, WDT, HDD, General Purpose
Battery	Coin cell lithium battery onboard for CMOS RAM

Hardware Monitor	Integrated in super I/O IT8712F, monitoring CPU temperature, system temperature, Vcore and DC voltages
Watchdog Timer	Integrated in super I/O IT8712F, two stage watchdog timer
Mechanical & Environmental	
Form Factor	6U 4HP/8HP CompactPCI® 233.33 mm x 160 mm (L x W)
Operating Temperature	0°C to 55°C (with forced air flow)
Storage Temperature	-40°C to 85°C
Rel. Humidity	90% @ 55°C (non-condensing)
Shock	15G peak-to-peak, 11ms duration, non-operating
Vibration	1.88 Grms, 5-500Hz, each axis, operating IEC68-2-64 standard
Safety & EMI	
Certifications	EN55022 CE, FCC class A

Specifications

Processor System	
CPU	µFC-PGA Intel® Core™ 2 Duo 2.2GHz (T7500), 4MB L2 cache, FSB 800MHz µFC-PGA Intel® Celeron® M 2.0GHz (550), 1MB L2 cache, FSB 533MHz
Chipset	Intel® GME965 with ICH8M
RAM	Dual Channel DDR2-667 SDRAM with two SO-DIMM sockets, up to 4GB capacity
BIOS	AMI® Core 8 16Mbit SPI Flash memory
CompactPCI Bus	32-bit/ 33 MHz CompactPCI® Bus
PICMG standard	PICMG® 2.0 CompactPCI R3.0 PICMG® 2.1 Hotswap R2.0
Connectivity	
PMC	One 32-bit/33 MHz PMC site
Ethernet	Two PCI Express Intel® 82573L Gigabit Ethernet controllers Two egress GbE ports
Graphics	Integrated in GME965 One DVI-D and one DVI-I ports on front panel Analog CRT supports up to 2048 x 1536 resolution @ 75Hz refresh rate
USB	Four front panel USB 2.0 ports Four rear panel USB 2.0 ports
PS/2	One PS/2 KB/MS Combo Port
Serial Port	Two front panel DB-9 RS-232/422/485/485+ selectable serial ports
Printer port	One front panel printer port
Audio	Mic-in, line-out ports on RTM

I/O Table

Function	cPCI-6965 (4 HP)		cPCI-6965D (8 HP)	
	Face-plate	Onboard	Face-plate	Onboard
GbE	Y x 2	-	Y x 2	-
USB 2.0	Y x 4	-	Y x 4	-
DVI-D	Y	-	Y	-
DVI-I	Y	-	Y	-
VGA	-	-	-	-
COM	Y	-	Y x 2	-
SATA	-	Y x 2	-	Y x 2
CF	-	Y	-	Y
PS/2 KB/MS	-	-	Y	-
Floppy	-	-	-	-
SCSI	-	-	-	-
Parallel	-	-	Y	-
Mic-in	-	-	-	-
Line-out	-	-	-	-
PMC	-	-	-	1

Ordering Information

cPCI-6965/550/M512

4HP (single slot) 6U CompactPCI Celeron® 2.0GHz (550) processor blade and 512MB SODIMM

cPCI-6965/T75/M2G

4HP 6U CompactPCI Core™ 2 Duo 2.2GHz (T7500) processor blade and 2x 1GB SODIMM

cPCI-6965D/550/M512

8HP 6U CompactPCI® Celeron® 2.0GHz (550) processor blade and 512MB SODIMM

cPCI-6965DZ/T75/M2G

8HP 6U CompactPCI® Core™ 2 Duo 2.2 GHz (T7500) processor blade and 2x 1GB SODIMM, without J3, J5 cPCI connectors

cPCI-6965D/550/M1G

8HP (dual slot) 6U CompactPCI® Celeron® 2.0GHz (550) processor blade and 2x 512MB SODIMM

cPCI-6965D/T75/M1G

8HP 6U CompactPCI® Core™ 2 Duo 2.2GHz (T7500) processor blade and 2x 512MB SODIMM

cPCI-6965D/T75/M2G

8HP 6U CompactPCI® Core™ 2 Duo 2.2GHz (T7500) processor blade and 2x 1GB SODIMM

cPCI-6965D/T75/M4G

8HP 6U CompactPCI® Core™ 2 Duo 2.2GHz (T7500) processor blade and 2x 2GB SODIMM

cPCIS-5040/cPCIS-5080

4-slot/8-slot CompactPCI Chassis for 6U Front I/O cPCI Boards



cPCIS-5040



cPCIS-5080

Features

- Concise design for 6U pure front I/O CompactPCI boards
- cPCIS-5040 is suitable for one system with 3 I/O boards, 32-bit/33 MHz
- cPCIS-5080 is suitable for one system with 7 I/O boards, 32-bit/33 MHz
- CPU board in system slot could be single-slot (4TE/HP) or dual-slot (8 TE/HP)
- Standard ATX power connector for system DC power input
- External mounting holes for the housing of PS/2 form factor ATX power supply
- Integrated with 3U CompactPCI backplane for optimized cost-performance value
- Hot-swappable system cooling fan(s)
- Compliant with PICMG 2.0 CompactPCI Specification R3.0
- PICMG 2.1 CompactPCI Hot Swappable Specification R2.0 Compliant

Introduction

The cPCIS-5040/5080 Series are specially designed as computer based embedded controller enclosure for mission critical and high reliability applications. The enclosure is about 8U height to accommodate an industry standard 6U CompactPCI front boards up to 4/8 slots (one system with 3/7 peripheral I/O slots.) Very concisely mechanical arrangement provides the minimum necessary space when integrating the enclosure into machine or vehicles. Non-blocked ventilation design with hot-swappable fan(s) provides the best system cooling efficiency and easy maintenance capability. Built-in high quality backplane cBP-3204/cBP-3208 provides the 32-bit cPCI bus running at 33 MHz speed with best impedance control and full range compatibility. The combination with cPCI-6842 series CPU board provides computing power up to Intel® Pentium® M 1.8 GHz with lower power dissipation. The concept of cPCIS-5040/5080 Series design makes it as an ideal computer platform for demanding industrial automation and machine automation.

Specifications

Chassis		Backplane Options	
General	CompactPCI Aluminum framework with coated metal plate outer covering Front-access, hot-swappable fan module(s) for suck-in 12VDC brush-less motor, precise ball bearing	cBP-3204	4-slot 32-bit 3U Compact PCI backplane for cPCI-5040
Rated speed	2600 ± 300 RPM	cBP-3208	8-slot 32-bit 3U Compact PCI backplane for cPCI-5080
Rated power	2.4 W	Dimensions	
Air flow	48.5 CFM/each (when zero static pressure)	cPCIS-5040	137 mm x 329.9 mm x 231 mm (W x H x D, w/o handle, PSU, support frame)
Fan	Total two fans for cPCIS-5080, one fan for cPCIS-5040	cPCIS-5080	218.3 mm x 329.9 mm x 231 mm (W x H x D, w/o handle, PSU, support frame)
Power Supply Options		Weight	
Standard ATX power connector for system DC power input		cPCIS-5040	4.1 Kg (include backplane, w/o PSU, support frame)
External mounting holes for the housing of PS/2 form factor ATX power supply		cPCIS-5080	5.1 Kg (include backplane, w/o PSU, support frame)
Note: Chassis delivered without power supply			

Ordering Information

cPCIS-5040
4-slot 6U cPCI Front board chassis with backplane

cPCIS-5080
8-slot 6U cPCI Front board chassis with backplane

Note: Blank filler panels with EMC spring are optional.

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Accessories

RK-410FS

4U Rackmount Industrial Chassis with 14-slot Backplane



Backplane Options

Model Name	PICMG SBC	PCIe x1	PCIe x4	PCIe x16	PCI	ISA	PSU Connector
EBP-10E5	1	4	--	1	4	--	ATX
EBP-13E4	1	--	3	1	7	--	ATX
HPCI-13S4LU	3	--	--	--	4	7	ATX/AT
HPCI-14S7U	3	--	--	--	7	5	ATX/AT
HPCI-14S12U	2	--	--	--	12	1	ATX/AT
HPCI-14S/ATX	2	--	--	--	4	8	ATX/AT

Mechanical Layout



Features

- EIA RS-310C 19" rackmount standard
- 17.8 inch (451 mm) short depth
- Three 5.25" and one 3.5" shock-resistant drive bays
- Two front accessible USB connectors
- Adjustable hold down bar for cards
- Supports various backplanes and power supply units

Specifications

Dimensions	19 in x 7 in x 17.8 in (480 mm x 177 mm x 451 mm) (W x H x D)
Drive Bays	Three 5.25" and one 3.5" front accessible drive bays
Construction	Heavy-Duty Steel
Color	Standard: beige
Cooling Fans	Two 9 cm ball bearing fans, 51 CFM each
Front Panel	Front door with lock Two front accessible USB connectors LEDs: HDD active and system power System reset switch
Backplane	Supports 14-slot passive backplanes
Power Supply	Supports PS2 form factor AT, ATX power supply unit
Carton Size	23.6 in x 13.6 in x 25.2 in (600 mm x 345 mm x 640 mm)
Weight	Net 18 kg (39.6 lb)

Power Supply Options

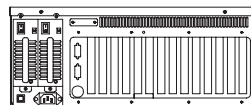
Model Number	Watt	Input Range	Output (Max.)						Current Type
			+5 V	+3.3 V	+12 V	-12 V	-5 V	+5 Vsb	
APS-935XA-EPS12	360 W	90-264 V ac Full Range	35 A	28 A	26 A	0.8 A	0.5 A	2 A	EPS12 V
APS-940XA-EPS12	400 W	90-264 V ac Full Range	35 A	28 A	30 A	0.8 A	0.5 A	2 A	EPS12 V
APS-946XA-EPS12	460 W	90-264 V ac Full Range	40 A	30 A	32 A	1 A	0.8 A	2 A	EPS12 V

Ordering Information

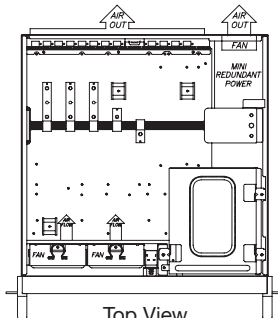
Model Number	Color	Backplane	Power Supply
NS-410FS-14S7U-350	Beige	HPCI-14S7U	APS-935XA-EPS12
NS-410FS-14S12U-400	Beige	HPCI-14S12U	APS-940XA-EPS12
NS-410FS-10E5-350	Beige	EBP-10E5	APS-935XA-EPS12
NS-410FS-13E4-350	Beige	EBP-13E4	APS-935XA-EPS12

Dimensions

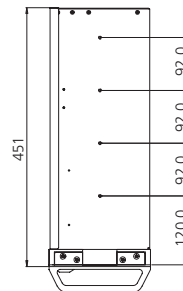
Units: mm



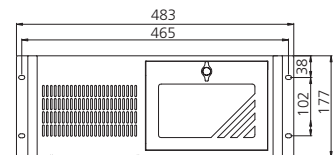
Rear View



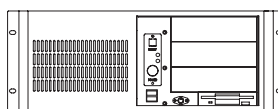
Top View



Right-side View



Front Outside View



Front Inside View

RK-606UC

Desktop/Wallmount Chassis with 6-slot Backplane for Full-Size SBC

- 1 Software & Utilities
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Mechanical Layout



Features

- Supports 6-slot PICMG® backplane
- Equipped with one 5.25" and one 3.5" front access drive bays
- Adjustable hold down bar for cards
- Replaceable and easy-to-clean filter

Specifications

Dimensions	7.5 in x 9.7 in x 16.2 in (190.5 mm x 246.4 mm x 411.5 mm) (W x H x D)
Drive Bays	One 5.25" and one 3.5" front accessible drive bay Two internal 3.5" drive bays
Construction	Heavy-Duty cold-rolled Steel
Color	Standard: black
Cooling Fans	One 8-cm in-take fan, 49 CFM
Front Panel	LEDs: HDD active and system power System reset switch, ATX Power switch, optional AT power on/off switch Two USB connectors
Backplane	Supports 6-slot passive backplane
Carton Size	22 in x 13.2 in x 16.2 in (561 mm x 336 mm x 412 mm)
Weight	Net 7 kg (15.4 lb)

Power Supply Options

Model Number	Watt	Input Range	Output (Max.)					Type	
			+5 V	+3.3 V	+12 V	-12 V	-5 V		+5 Vsb
APS-9130XU	300 W	90-264 V _{AC} Full Range	24 A	20 A	20 A	0.5 A	0.5 A	1.5 A	ATX12V

Ordering Information

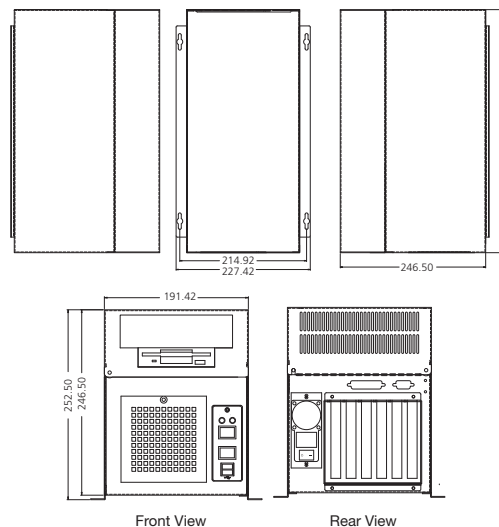
Model Number	Color	Backplane	Power Supply
NS-606UC-6S4-300	Black	HPCI-6S4	APS-9130XU

Backplane Options

Model Name	PICMG SBC	PCI	ISA	PSU Connector
HPCI-6S4	I	4	I	ATX/AT

Dimensions

Units: mm



RK-608B

Wallmount Chassis with 10-slot Backplane



Backplane Options

Model Name	PICMG SBC	PCIe x1	PCIe x4	PCIe x16	PCI	ISA	PSU Connector
HPCI-9S7U	2	--	--	--	7	1	ATX/AT

Mechanical Layout



Features

- Supports 10 slot PICMG backplane (RK-608B)
- Two 5.25" and two 3.5" external drive bays, one internal 3.5" drive bay
- Drive bay with shock and vibration resistant design
- Replaceable and easy-to-clean air filter
- 12cm cooling fan (85CFM)
- Two USB and one PS/2 keyboard connectors on front panel

Specifications

Dimensions	13 in x 7.7 in x 16 in (330 mm x 196 mm x 406 mm) (W x H x D)
Drive Bays	One 5.25" and two 3.5" front accessible drive bays Four internal 3.5" drive bays
Construction	Heavy-Duty Steel
Color	Standard: beige
Cooling Fans	In: one 120 mm x 120 mm x 25 mm ball bearing fan (85CFM)
Front Panel	LEDs: HDD active and system power System reset switch and ATX power switch Two USB and one PS/2 keyboard connector
Backplane	10-slot passive backplane
Power Supply	PS2 form factor ATX power supply
Carton Size	20.9 in x 13.2 in x 18.1 in (530 mm x 335 mm x 460 mm)
Weight	Net 7.8 kg (17.2 lb)

Power Supply Options

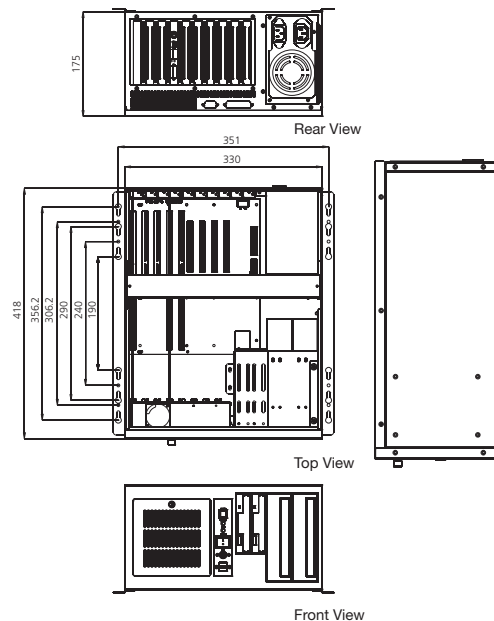
Model Number	Watt	Input Range	Output (Max.)						Type
			+5 V	+3.3 V	+12 V	-12 V	-5 V	+5 Vsb	
APS-935XA-EPS12	350 W	90-264 Vac Full Range	35 A	28 A	26 A	0.8 A	0.5 A	2 A	EPS12 V
APS-940XA-ATX12	400 W	90-264 Vac Full Range	35 A	28 A	30 A	0.8 A	0.5 A	2 A	ATX12 V

Ordering Information

Model Number	Color	Backplane	Power Supply
NS-608B-9S7U-350	Beige	HPCI-9S7U	APS-935XA-EPS12

Dimensions

Units: mm



PICMG Backplanes

ADLINK offers a wide selection of standard PCI /ISA or PCI Express backplanes from 4 up to 20 slots. Our professional OEM team is capable of quick turnarounds for custom backplanes tailored to your specifications and chassis. We make designing, developing, prototyping, and maintaining your projects simple and efficient. For all your backplane needs, contact us. We have a solution for you.

EBP-5E1



PCI-E® x16	1	PICMG®	1
PCI-E® x4		AT	
PCI-X™	1	ATX	Yes
PCI™	2	Segments	1
Dimensions	153 mm x 330 mm		

EBP-7E2



PCI-E® x16	1	PICMG®	1
PCI-E® x4	1	AT	
PCI-E® x1		ATX	Yes
PCI™	4	Segments	1
Dimensions	328 mm x 206 mm		

EBP-9E2



PCI-E® x16	1	PICMG®	1
PCI-E® x4	1	AT	
PCI-E® x1		ATX	Yes
PCI™	6	Segments	1
Dimensions	328 mm x 206 mm		

EBP-10E5



PCI-E® x16	1	PICMG® CPU	1
PCI-E® x4		AT	
PCI-E® x1	4	ATX	Yes
PCI™	4	Segments	1
Dimensions	330 mm x 318 mm		

EBP-13E4



PCI-E® x16	1	PICMG® CPU	1
PCI-E® x4	3	AT	
PCI-E® x1		ATX	Yes
PCI™	7	Segments	1
Dimensions	330 mm x 318 mm		

HPCI-6S4



PICMG®	1	AT	Yes
PCI™	4	ATX	Yes
ISA	1	Segments	1
Dimensions	264.2 mm x 132.7 mm		

HPCI-8S4



PICMG®	2	AT	Yes
PCI™	4	ATX	Yes
ISA	4	Segments	1
Dimensions	264.2 mm x 218 mm		

HPCI-9S7U



PICMG®	2	AT	Yes
PCI™	7	ATX	Yes
ISA	2	Segments	1
Dimensions	213.4 mm x 259.1 mm		

HPCI-13S4LU



PICMG®	3	AT	Yes
PCI™	4	ATX	Yes
ISA	9	Segments	1
Dimensions	314.7 mm x 259 mm		

HPCI-14S12U



PICMG®	2	AT	Yes
PCI™	12	ATX	Yes
ISA	2	Segments	1
Dimensions	314.7 mm x 259 mm		

HPCI-14S7U



PICMG®	3	AT	Yes
PCI™	7	ATX	Yes
ISA	7	Segments	1
Dimensions	314.7 mm x 259.1 mm		

HPCI-14S/ATX



PICMG®	2	AT	Yes
PCI™	4	ATX	Yes
ISA	9	Segments	1
Dimensions	312 mm x 265 mm		

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