PICMG 1.3 Backplane

Selection Guide

PAC series wall-mount chassis   4U rack-mount chassis

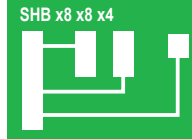| Backplane		SPE-4S	SPE-6S	SPE-9S	SPXE-9S	SPXE-14S
Total	Slot	4	6	7	7	14
PCIe	x16					
	x8	2 (x16 connector)		1 (x16 connector)	1 (x16 connector)	1 (x16 connector)
	x4	1	5	3	2	
	x1					12
	PCI-X				2	
	PCI			3	2	
PSU Type		24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+8-pin ATX
Chassis Option		PAC-106G PAC-107G PAC-1000G	PAC-106G PAC-107G PAC-1000G	PAC-125G	PAC-125G	RACK-305G RACK-360G RACK-3000G

IEI Server Grade Backplane Solution

Server grade backplane accommodates PCIe x8 and multiple PCIe x4 add-on cards. It is specially designed for intensive data transfer applications such as server data storage and any application that requires more than one PCIe x4 or four PCIe x1 cards. Given the multiple PCIe x4 and x1 support, it provides a more cost effective solution for end-users by reducing the number of systems required.
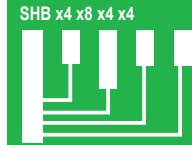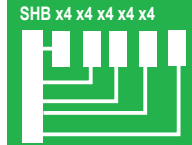
System Solution for options

Backplane	Total	PCIe						PSU Type	Chassis Option
	Slot	x16	x8	x4	x1	PCI-X	PCI		
SPE-4S	4	-	2 (x16 connector)	1	-	-	-	24+4-pin ATX	PAC-106G, PAC-1000G
SPE-6S	6	-		5	-	-	-	24+4-pin ATX	PAC-106G, PAC-1000G
SPE-9S	7	-	1 (x16 connector)	3			3	24+4-pin ATX	PAC-125G
SPXE-9S	7	-	1 (x16 connector)	2		2	2	24+4-pin ATX	PAC-125G
SPXE-14S	14	-	1 (x16 connector)	-	12	-	-	24+4-pin ATX	RACK-305G, RACK-360G, RACK-3000G

Server Grade Backplane

Example	Corresponding Model
EX1: 2 x8 & 1 x4 slots SHB x8 x8 x4	SPE-4S
EX2: 1 x8, 3 x4 slots SHB x4 x8 x4 x4	SPE-9S SPXE-9S
EX3: 5 x4 slots SHB x4 x4 x4 x4	SPE-6S

SPE–4S–R10

Server Grade
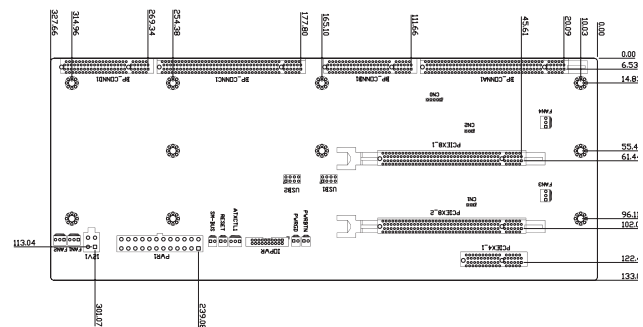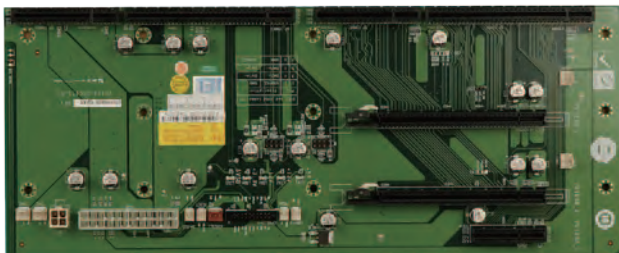
Ordering Information

SPE-4S-R10	4-slot PICMG 1.3 backplane with 2 PCIe x16 (x8 signal) and 1 PCIe x4 slots
PAC-106G	6-slot full-size compact chassis
PAC-107G	6-slot full-size compact chassis
PAC-1000G	6-slot full-size compact chassis

SPE-6S-R10
Server Grade
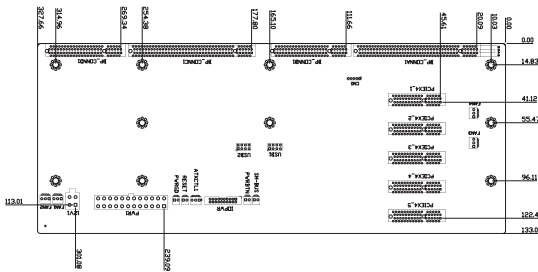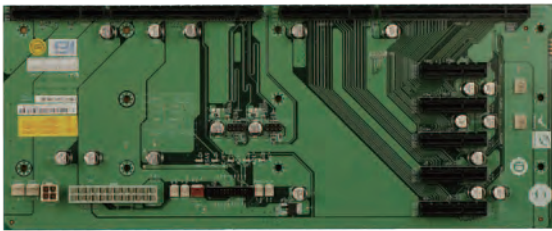
Ordering Information

SPE-6S-R10	6-slot PICMG 1.3 backplane with 5 PCIe x4 slots
PAC-106G	6-slot full-size compact chassis
PAC-107G	6-slot full-size compact chassis
PAC-1000G	6-slot full-size compact chassis

Note: PCIEX4_3 can't not work with SPCIE-C2060

SPE-9S-R11
Server Grade
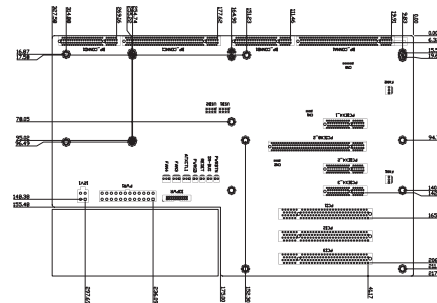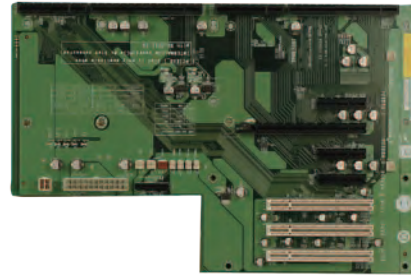
Ordering Information

SPE-9S-R11	7-slot PICMG 1.3 backplane with 1 PCIe x16 (x8 signal), 3 PCIe x4, and 3 PCI
PAC-125G	10-slot full-size compact chassis

SPXE-9S-R11
Server Grade
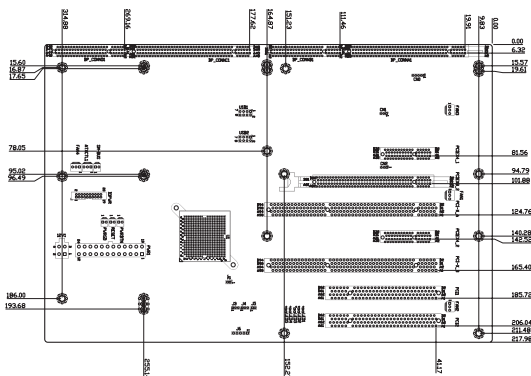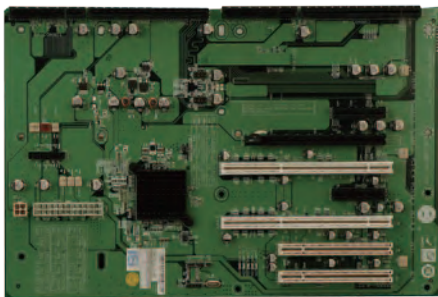
Ordering Information

SPXE-9S-R11	7-slot PICMG 1.3 backplane with 1 PCIe x16 (x8 signal), 2 PCIe x4, 2 PCI-X and 2 PCI
PAC-125G	10-slot full-size compact chassis

SPXE-14S-R10
Server Grade
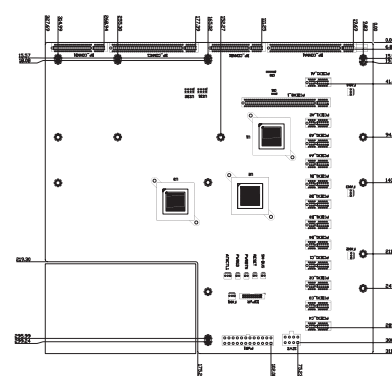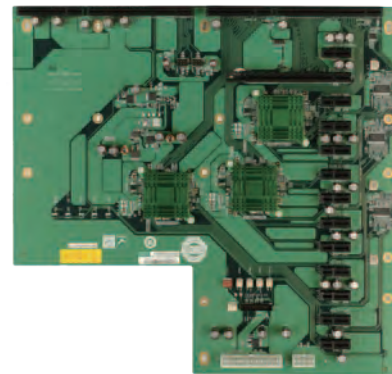
Ordering Information

SPXE-14S-R10	14-slot PICMG 1.3 backplane with 1 PCIe x16 (x8 signal) and 12 PCIe x1
RACK-305G	4U 14-slot full-size rack-mount chassis
RACK-360G	4U 14-slot full-size rack-mount chassis
RACK-3000G	4U 14-slot full-size rack-mount chassis

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PICMG 1.3 Passive Backplane

Selection Guide

☐ PAC series wall-mount chassis   ☐ 1U/5U rack-mount chassis   ☐ rack-mount chassis

PICMG 1.3 (PCIe+PCI)	Model		PE-2SD1	PE-2SD2	PE-4S	PE-4S2	PE-4S3	PE-5S	PE-5S2	PE-6S	PE-6S2	PE-6S3	PE-6SD	PE-6SD2	PE-6SD3
Total Slot			2	2	4	4	4	5	5	6	6	6	5	5	5
Expansion Slots	PCIe Slots	x16 *	1		1	1	1	1	1	1	1	1	1	1	1
		x4			1			1			1				1
		x1					2		3	2		3	3	2	
	PCI-X Slots														
	PCI Slots			1	1	2		2		2	3	1		1	2
USB Connectors by Pin Header			4	4	4	4	4	4	4	4	4	4	4	4	4
PSU Type			24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX
Chassis			RACK-1150-PE RACP-1151-PE	RACK-1150-PE RACP-1151-PE	N/A	N/A	N/A	RACK-500G	RACK-500G	RACK-305G RACK-360G RACK-3000G PAC-1700G PAC-125	PAC-106G x 1 PAC-107G x 1 PAC-1000G	PAC-106G x 1 PAC-107G x 1 PAC-1000G	N/A	N/A	N/A
Note			1U Type	1U Type									2U Type	2U Type	2U Type

| PICMG 1.3 (PCIe+PCI)	Model		PE-7S	PE-7S2	PE-8S	PE-9S	PE-10S	PE-10S2	PE-13SD	PE-16SQ	PXE-9X2	PXE-12S	PXE-13S	PXE-19S	PXE-19S2
Total Slot			7	7	8	9	10	10	13	16	9	12	13	19	19
Expansion Slots	PCIe Slots	x16 *	1	1	1	1	1	1	1/1	1/1/1/1	1	1	1	1	1
		x4							1/0	1/1/1/1	3				
		x1	2	4	3	4	4	4	0/4	0	0		3	1	1
	PCI-X Slots										0	6			
	PCI Slots		3	1	3	3	4	4	2/2	1/1/1/1	4	4	8	16	16
USB Connectors by Pin Header			4	4	4	4	4	4	8	4/4/4/4	4	4	4	4	4
PSU Type			24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	Dual 24+4-pin ATX	Three 20+4-pin ATX One 24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX	24+4-pin ATX
Chassis			PAC-1700G	PAC-1700G	PAC-125G	N/A	RACK-305G RACK-360G RACK-3000G	RACK-3000G RACK-305G RACK-360G	RACK-3000G RACK-305G RACK-360G	N/A	RACK-3000G RACK-305G RACK-360G	RACK-3000G RACK-305G RACK-360G	RACK-3000G RACK-305G RACK-360G	N/A	N/A
Note									Dual System Backplane	Quad System Backplane	PCIe to PCIe switch Backplane	PCIe to PCI-X Bridge Backplane		PCIe to PCI Bridge Backplane	

*When using a PCIe x16 add-on card, the length of the card must not exceed 167mm or 6.57 inches.

IEI Graphics Grade Backplane Solution

The graphics grade backplane solution targets the applications which concern system speed and performance. It has higher performance over cost ratio than the previous PICMG 1.0 solution.
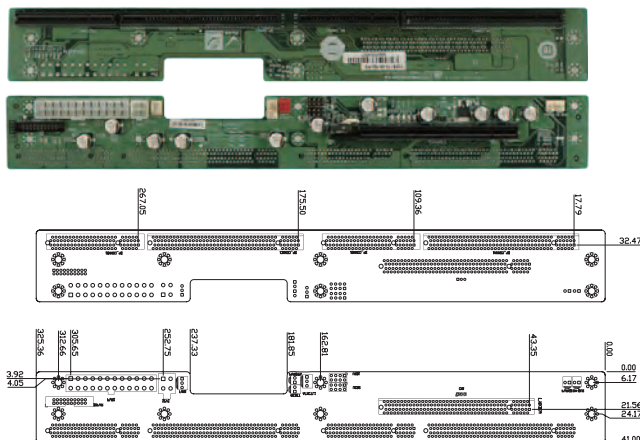

PE-4S **PE-5S** **PE-6S2** **PE-7S2** **PE-9S** **PE-10S** **PE-10S2**
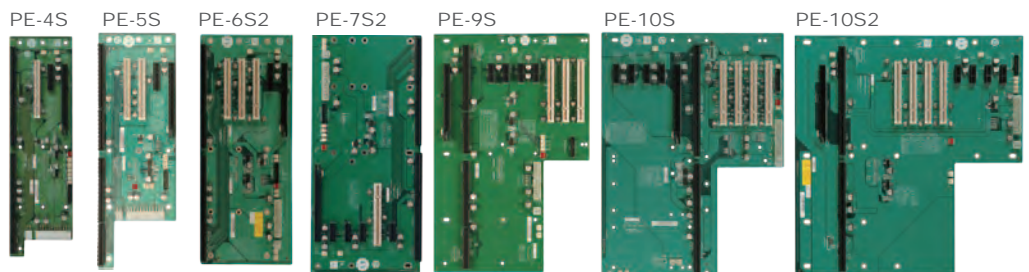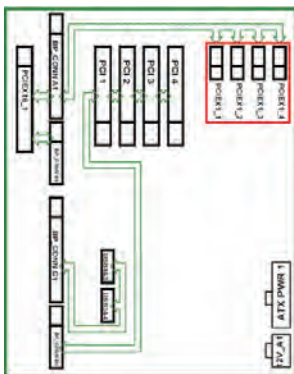
• Twenty PCIe lanes total
• One PCIe x16 slot
• Up to four PCIe x1 or one PCIe x4 slot
• Up to four local PCI slots (w/o bridge)

PXE-13S **PXE-19S**
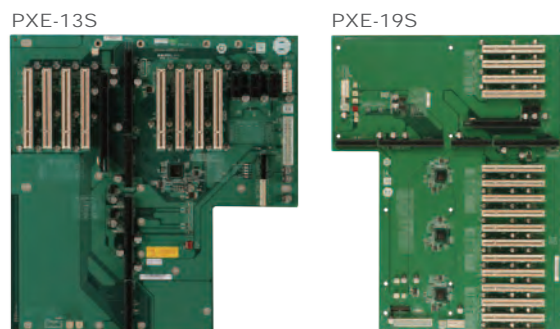
• Twenty PCIe lanes total
• One PCIe x16 slot
• Up to four PCIe x1 slots
• PCI slots expandable via PCIe to PCI bridge

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Panel Solutions Introduction

PE-2SD1-R10

For 1U system!

Ordering Information

PE-2SD1-R10	2-slot backplane with one PCIe slot
RACK-1150G-PE	1U full-size rack-mount chassis

PE-4S2-R40

Mounting holes compatible with PCI-4S
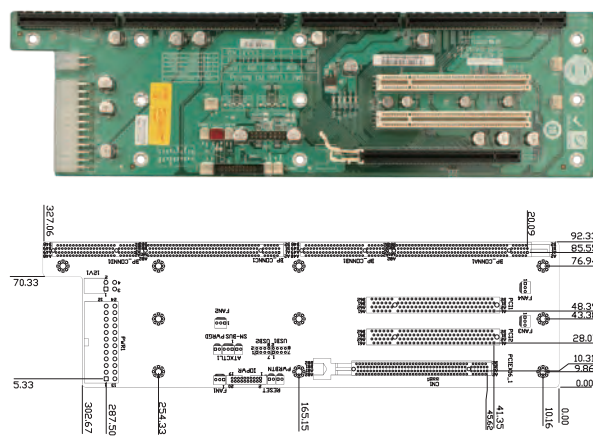
Ordering Information

PE-4S2-R40	4-slot backplane with one PCIe x16 slot and two PCI slots

PE-2SD2-R10

For 1U system!
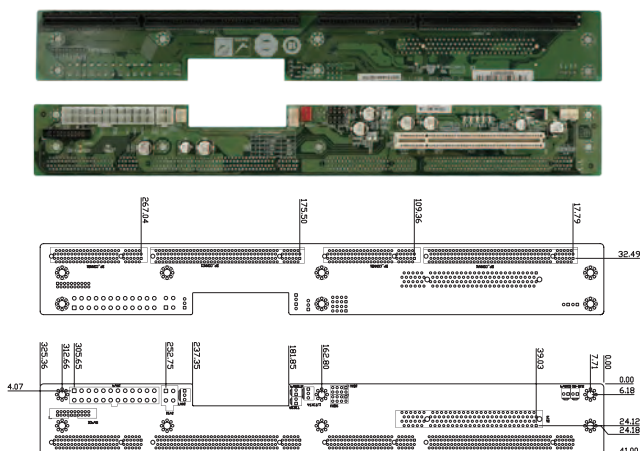
Ordering Information

PE-2SD2-R10	2-slot backplane with one PCI slot
RACK-1150G-PE	1U full-size rack-mount chassis

PE-4S3-R40

Mounting holes compatible with PCI-4S
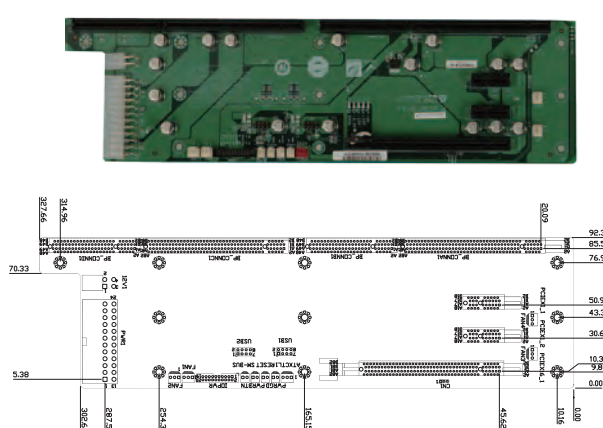
Ordering Information

PE-4S3-R40	4-slot backplane with one PCIe x16 slot and two PCIe x1 slots

PE-4S-R40

Mounting holes compatible with PCI-4S
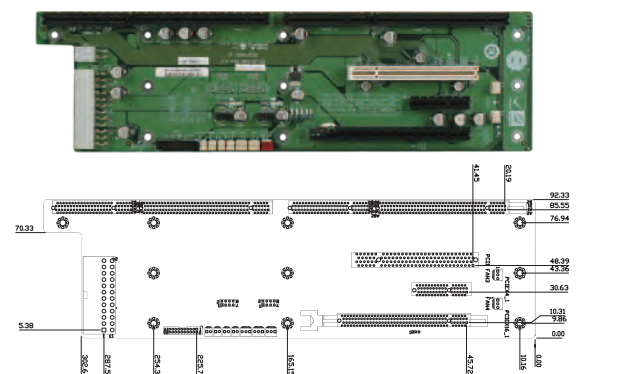
Ordering Information

PE-4S-R40	4-slot backplane with one PCIe x16 slot, one PCIe x4 slot and one PCI slot

PE-5S-R40

Mounting holes compatible with PCI-5S
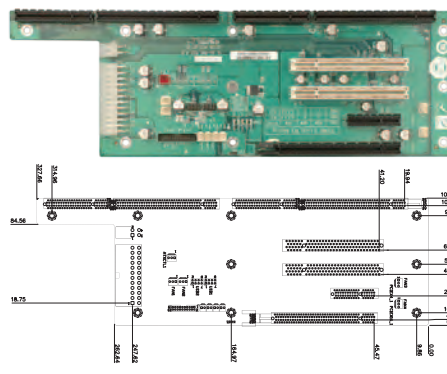
Ordering Information

PE-5S-R40	5-slot backplane with one PCIe x16 slot, one PCIe x4 slot and two PCI slots
RACK-500G	5U 5-slot full-size rack-mount chassis

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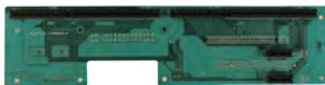
7 Panel Solutions Introduction

PE–5S2–R40
Mounting holes compatible with PCI-5S
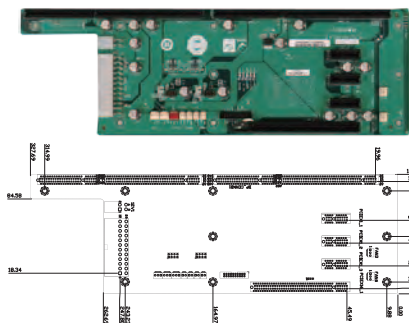
Ordering Information

PE-5S2-R40	5-slot backplane with one PCIe x16 slot and three PCIe x1 slots
RACK-500G	5U 5-slot full-size rack-mount chassis

PE–6S–R41
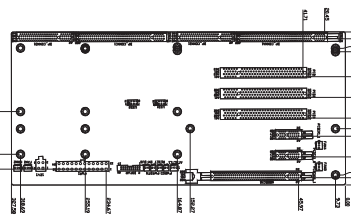**Mounting holes compatible with PCI-7S**
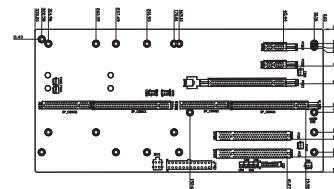
Ordering Information

PE-6S-R41	6-slot backplane with one PCIe x16 slot, two PCIe x1 slots and two PCI slots
RACK-305G	4U 14-slot full-size rack-mount chassis
RACK-360G	4U 14-slot full-size rack-mount chassis
RACK-3000G	4U 14-slot full-size rack-mount chassis
PAC-1700G	7-slot full-size compact chassis
PAC-125G	10-slot full-size compact chassis

PE–6S2–R40
Mounting holes compatible with PCI-6S

Ordering Information

PE-6S2-R40	6-slot backplane with one PCIe x16 slot, one PCIe x4 slot and three PCI slots
PAC-106G *	6-slot full-size compact chassis
PAC-107G *	6-slot full-size compact chassis
PAC-1000G	6-slot full-size compact chassis

* When using a PCIe x16 add-on card, the length of the card must not exceed 167mm or 6.57 inches.

PE–6SD–R40
Mounting holes compatible with PCI-6SD

2U Type

Ordering Information

PE-6SD-R40	5-slot backplane with one PCIe x16 slot and three PCIe x1 slots

PE–6SD2–R40
Mounting holes compatible with PCI-6SD
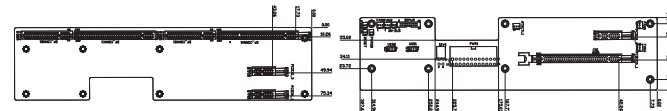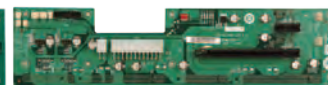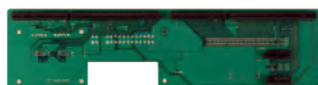
2U Type

Ordering Information

PE-6SD2-R40	5-slot backplane with one PCIe x16 slot, two PCIe x1 slots and one PCI slot

PE–6SD3–R40
Mounting holes compatible with PCI-6SD

2U Type

Ordering Information

PE-6SD3-R40	5-slot backplane with one PCIe x16 slot, one PCIe x4 slot and two PCI slots

PE–7S–R40
Mounting holes compatible with PCI-7S
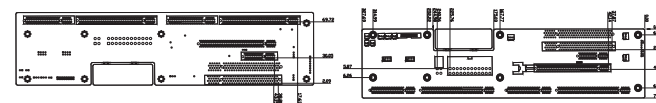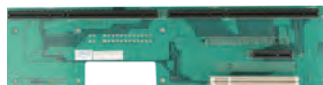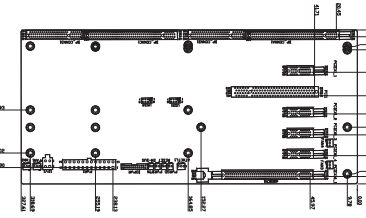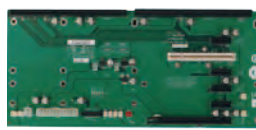

Ordering Information

PE-7S-R40	7-slot backplane with one PCIe x16 slot, two PCIe x1 slots and three PCI slots
PAC-1700G	7-slot full-size compact chassis

PE–7S2–R40
Mounting holes compatible with PCI-7S

Ordering Information

PE-7S2-R40	7-slot backplane with one PCIe x16 slot, four PCIe x1 slots and one PCI slot
PAC-1700G	7-slot full-size compact chassis

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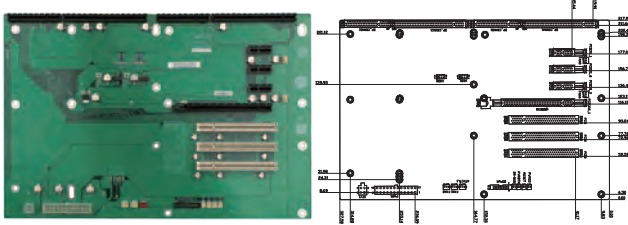
5 ORing Network Communication

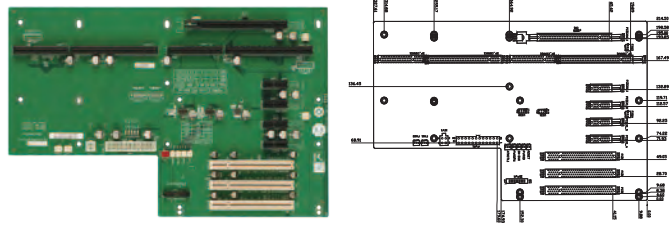**6** Power Supply/ Peripherals

7 Panel Solutions Introduction

PE–8S–R40

Ordering Information

PE-8S-R40	8-slot backplane with one PCIe x16 slots, three PCIe x1 slots and three PCI slots
PAC-125G	10-slot full-size compact chassis

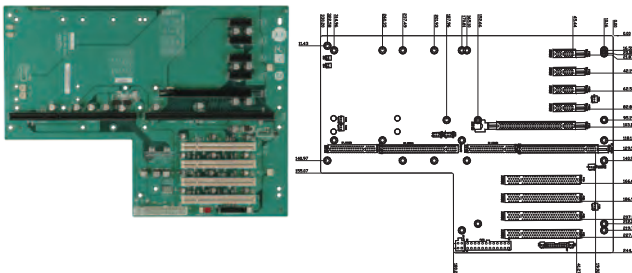# PE–9S–R40

Mounting holes compatible with PCI-10S2

Ordering Information

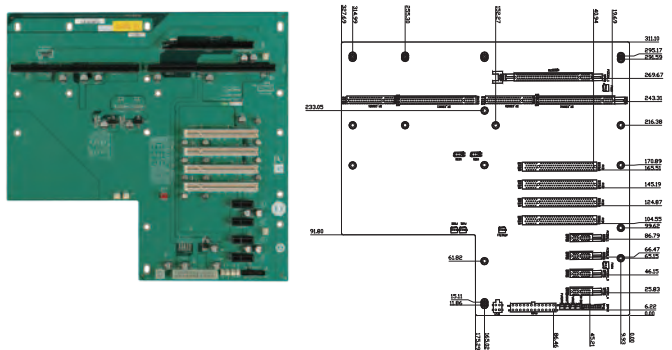| PE-9S-R40	9-slot backplane with one PCIe x16 slot, four PCIe x1 slots and three PCI slots

PE–10S–R40

Mounting holes compatible with PCI-14S

Ordering Information

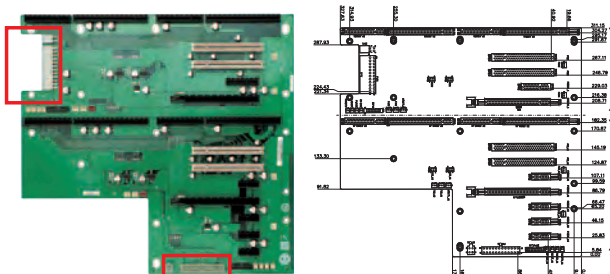| PE-10S-R40	10-slot backplane with one PCIe x16 slot, four PCIe x1 slots and four PCI slots
RACK-305G	4U 14-slot full-size rack-mount chassis
RACK-360G	4U 14-slot full-size rack-mount chassis
RACK-3000G	4U 14-slot full-size rack-mount chassis

PE–10S2–R40

Mounting holes compatible with PCI-14S

Ordering Information

PE-10S2-R40	10-slot backplane with one PCIe x16 slot, four PCIe x1 slots and four PCI slots
RACK-3000G	4U 14-slot full-size rack-mount chassis
RACK-305G	4U 14-slot full-size rack-mount chassis
RACK-360G	4U 14-slot full-size rack-mount chassis

PE–13SD–R40

**Mounting holes compatible with PCI-14S**

Dual system

2 independent power resources

Ordering Information

PE-13SD-R40	13-slot backplane with two PCIe x16 and one PCIe x4 and four PCIe x1 and four PCI slot
RACK-3000G	4U 14-slot full-size rack-mount chassis
RACK-305G	4U 14-slot full-size rack-mount chassis
RACK-360G	4U 14-slot full-size rack-mount chassis

PE–16SQ–R10

Quad system
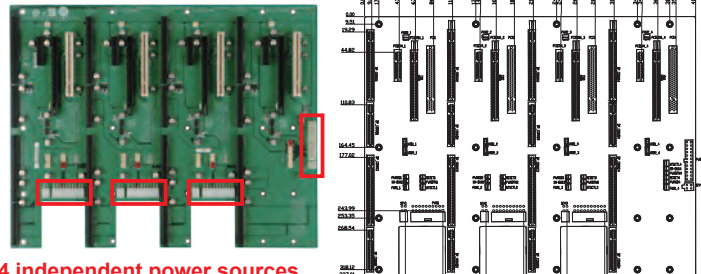
4 independent power sources

Ordering Information

PE-16SQ-R10	4-system backplane with each system having one PCIe x16 slot, one PCIe x4 slot and one PCI slot

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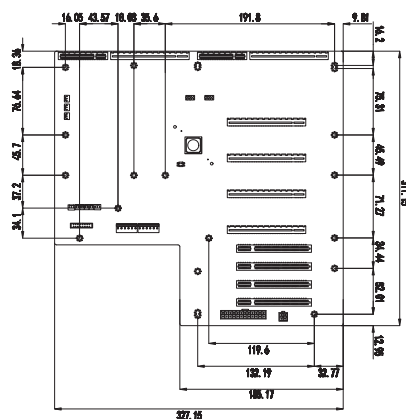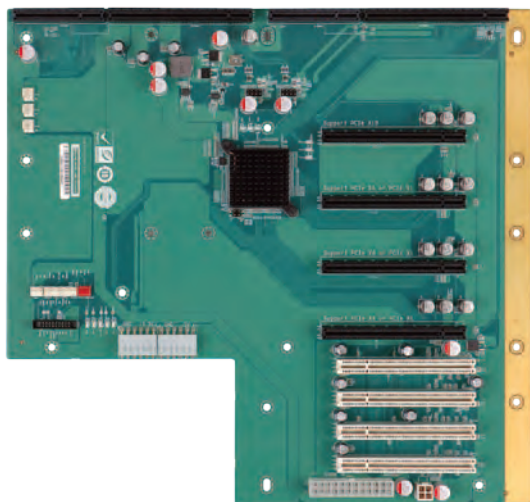**4** Automation Control

**5** ORing Network Communication

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7 Panel Solutions Introduction

PXE–9S2–R10

Mounting holes compatible with PCI-14S

New

Ordering Information	
PXE-9S2-R10	9-slot PICMG 1.3 backplane, 1 PCIe x16 w/ x16 slots, 3 PCIe x4 w/ x16 slots, 4 PCI, RoHS
RACK-305G	4U 14-slot full-size rack-mount chassis
RACK-360G	4U 14-slot full-size rack-mount chassis
RACK-3000G	4U 14-slot full-size rack-mount chassis

PXE–12S–R10

Mounting holes compatible with PCI-14S

(PCIe to PCI-X Bridge)
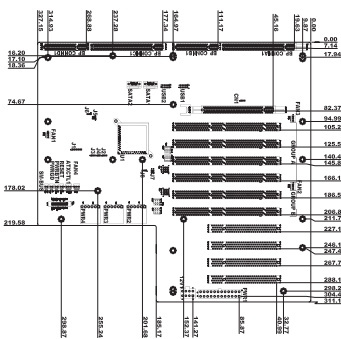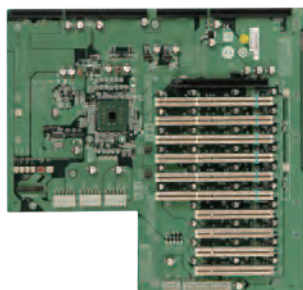
Ordering Information	
PXE-12S-R10	12-slot backplane with one PCIe x16 slot, six PCI-X slots and four PCI slots
RACK-3000G	4U 14-slot full-size rack-mount chassis
RACK-305G	4U 14-slot full-size rack-mount chassis
RACK-360G	4U 14-slot full-size rack-mount chassis

PXE–13S–R50

Mounting holes compatible with PCI-14S

(PCIe to PCI Bridge)
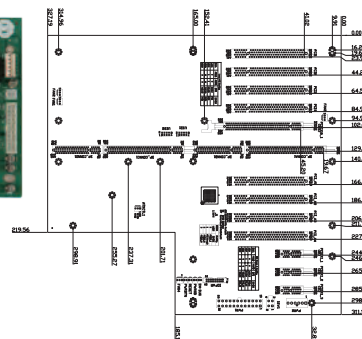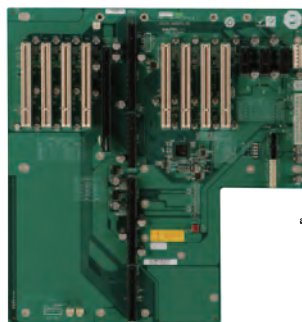
Ordering Information	
PXE-13S-R50	13-slot backplane with one PCIe x16 slot, three PCIe x1 slots and eight PCI slots
RACK-3000G	4U 14-slot full-size rack-mount chassis
RACK-305G	4U 14-slot full-size rack-mount chassis
RACK-360G	4U 14-slot full-size rack-mount chassis

PXE–19S–R40

Mounting holes compatible with PCI-19S

(PCIe to PCI Bridge)
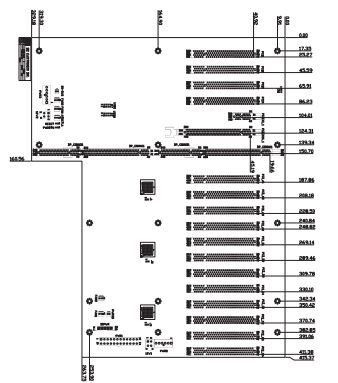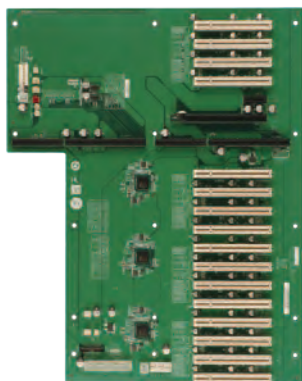
Ordering Information	
PXE-19S-R40	19-slot backplane with one PCIe x16 slot, one PCIe x1 slot and sixteen PCI slots

PXE–19S2–R10

Mounting holes compatible with PCI-19S

(PCIe to PCI Bridge)
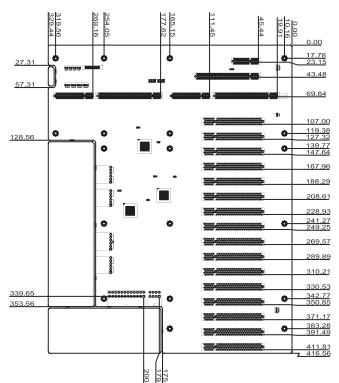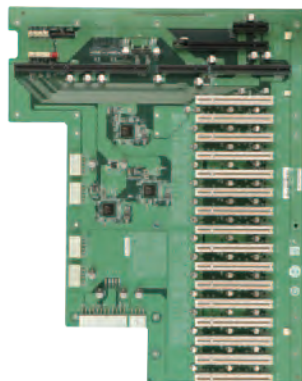
Ordering Information	
PXE-19S2-R10	19-slot backplane with one PCIe x16 slot, one PCIe x1 slot and sixteen PCI slots

Sidebar tabs:

1 Industrial Computing Solutions

2 Video Capture Solutions

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