

**PICMG 1.3 Backplane with One PCIe x16 Slot,
Four PCI-X Slots and Four PCI Slots**

PXE-12S

Quick Installation Guide

Version 1.1

November 19, 2015

Package List

PXE-12S package includes the following items:

- 1 x PXE-12S PICMG 1.3 backplane
- 1 x QIG



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Specifications

- System Type: PICMG 1.3 backplane
- Slots:
 - 1 x PICMG 1.3 bus
 - 1 x PCIe x16 slot
 - 4 x PCI-X slots
 - 4 x PCI slots
- Connectors:
 - 4 x Fan (1x3 pin)
 - 2 x USB 2.0 (2x4 pin)
 - 1 x Power CTRL (1x3 pin)
 - 1 x ATX power (2x12 pin)
 - 1 x ATX 12 V power (2x4 pin)
 - 1 x I/O power (2x10 pin)
 - 1 x Power button (1x2 pin)
 - 1 x Reset button (1x2 pin)
 - 1 x Power good (1x2 pin)
 - 1 x SMBus (1x2 pin)
- Dimensions: 311 mm x 328 mm

Ordering Information

- **PXE-12S-R11:**
PICMG 1.3 backplane with one PCIe x16 slot, four 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

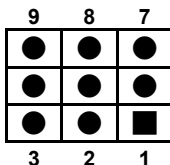
Jumper Settings and Connectors

LABEL	FUNCTION
JP2, JP3	PCI-X slot frequency setting
VIO_J1	PCI-X slot VIO power setting
USB1, USB2	External USB 2.0 connectors from the mainboard
FAN1, FAN2, FAN3, FAN4	Fan connectors
ATXCTL1	Backplane to mainboard ATX power control connector
PWR1	ATX power connector
12V1	ATX 12V power source connector
PWRBTN	External power button connector
RESET	External reset button connector
PWRGD	External power good connector
SM-BUS	External system management connector
CN1	PCIe x16 SDVO control signal connector
IOPWR	I/O power connector
PWR2	AT +5V power connector
PWR3, PWR4	AT +3.3V power connectors
PCIE1	PCIe x16 slot
PCI-X_A1, PCI-X_A2, PCI-X_A3, PCI-X_A4	PCI-X slots
PCI1, PCI2, PCI3, PCI 4	PCI slots

JP2, JP3: PCI-X slot frequency setting

		JP2		JP3	
FREQUENCY/PIN NO.		1 - 2	2 -3	1 - 2	2 - 3
PCI	33 MHz	Short	Open	Open	Short
	66 MHz (Default)	Open	Short	Short	Open
PCI-X	66 MHz (Default)	Open	Short	Short	Open

VIO_J1: PCI-X slot VIO power setting	
OPTIONS	DESCRIPTION
+5V	Short 1-4, 2-5, 3-6
+3.3V	Short 7-4, 8-5, 9-6 (Default)



USB1, USB2: External USB 2.0 connectors from the mainboard			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	USB_VCC	2	GND
3	DATA-	4	DATA+
5	DATA+	6	DATA-
7	GND	8	USB_VCC

FAN1, FAN2, FAN3, FAN4: Fan connectors			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	+12V
3	NC		

ATXCTL1: Backplane to mainboard ATX power control connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	PSON#
3	5VSB		

PWR1: ATX powerconnector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	+3.3V	13	+3.3V
2	+3.3V	14	-12V
3	GND	15	GND
4	+5V	16	PERSON#
5	GND	17	GND
6	+5V	18	GND
7	GND	19	GND
8	PWRGD	20	NC
9	+5VSB	21	+5V
10	+12V	22	+5V
11	+12V	23	+5V
12	+3.3V	24	GND

12V1: ATX 12V power source connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	+12V
2	GND	4	+12V
3	GND	6	+12V
4	GND	8	+12V

PWRBTN: External power button connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	PWRBT#

RESET: External reset button connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	SHB_RST#

PWRGD: Power good connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	PWRGD

SM-BUS: External system management connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	SMDAT	2	SMCLK

CN1: PCIe x16 SDVO control signal connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	EXP_EN	2	SDVO_CLK
3	SDVO_DAT		

IOPWR: I/O power connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	-12V
3	+12V	4	GND
5	IPMB_DA	6	5VSB
7	GND	8	GND
9	IPMB_CL	10	5VSB
11	+5V	12	PWRGD
13	SMDAT	14	SHB_RST#
15	5VSB	16	GND
17	SMCLK	18	PSOEN#
19	+3.3V	20	PWRBTT#

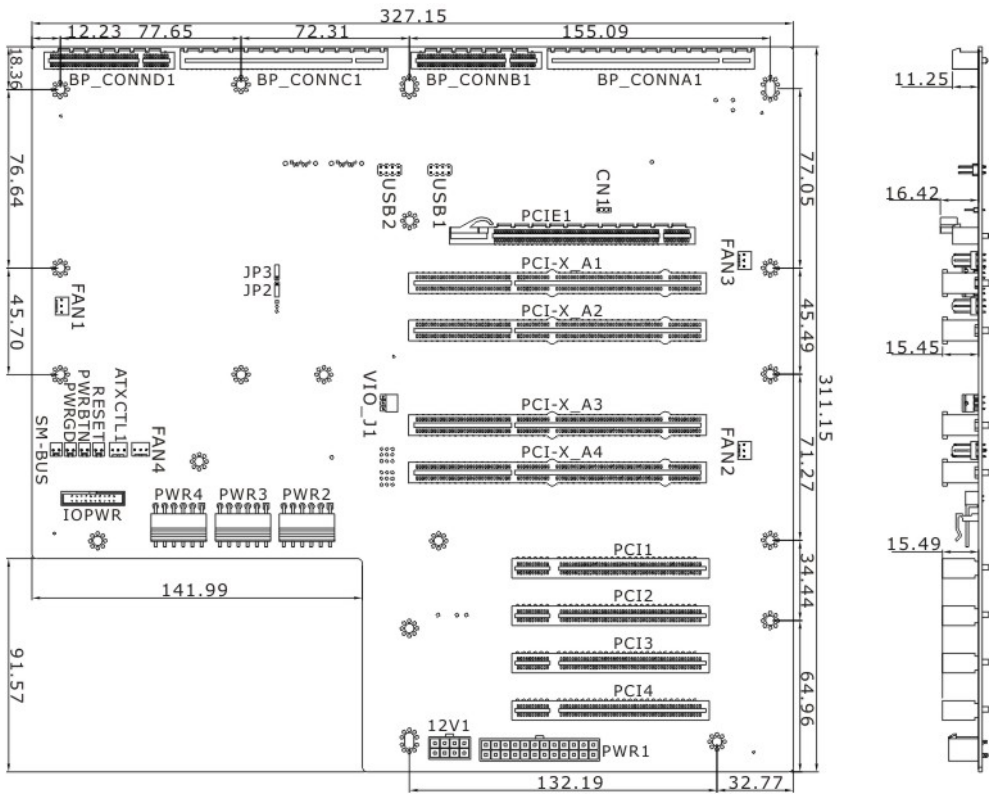
PWR2: AT +5V power connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	+5V	2	+5V
3	+5V	4	GND
5	GND	6	GND

PWR3, PWR4: AT +3.3V power connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	+3.3V	2	+3.3V
3	+3.3V	4	GND
5	GND	6	GND

PICMG 1.3 local PCI routing table							
SIGNAL	REQ#	GNT#	IDSEL	INTA#	INTB#	INTC#	INTD#
PIN NO.	B18	A17	A26	A6	B7	A7	B8
PCI1	REQ0#	GNT0#	AD31	B	C	D	A
PCI2	REQ1#	GNT1#	AD30	C	D	A	B
PCI3	REQ2#	GNT2#	AD29	D	A	B	C
PCI4	REQ3#	GNT3#	AD28	A	B	C	D

PCI Express to PCI-X routing table							
SIGNAL	REQ#	GNT#	IDSEL	INTA#	INTB#	INTC#	INTD#
PIN NO.	B18	A17	A26	A6	B7	A7	B8
PCI1	REQ0#	GNT0#	AD28	A	B	C	D
PCI2	REQ1#	GNT1#	AD29	B	C	D	A
PCI3	REQ2#	GNT2#	AD30	C	D	A	B
PCI4	REQ3#	GNT3#	AD31	D	A	B	C

Board Layout: Jumper and Connector Locations



(Unit: mm)