

**5-slot PICMG 1.3 backplane  
with one PCIe x16 slot and one PCIe x4 slot, RoHS**

# **PE-3S1**

## **Quick Installation Guide** **Version 1.0**

April 30, 2019

### **Package List**

PE-3S1 package includes the following items:

- 1 x PE-3S1
- 1 x QIG (Quick Installation Guide)



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## Specifications

- Type: PICMG 1.3 backplane
- Slots:
  - 1 x PICMG 1.3 slot for full-size SBC
  - 1 x PCIe x16
  - 1 x PCIe x4
- Connector interface:
  - 4 x Fan connector (3-pin)
  - 1 x ATX power control connector (3-pin)
  - 1 x ATX power connector (24-pin)
  - 1 x ATX +12V power connector (4-pin)
  - 1 x Power button connector (2-pin)
  - 1 x Reset button connector (2-pin)
  - 1 x Power good connector (2-pin)
  - 1 x System management connector (2-pin)
  - 1 x I/O power connector (20-pin)
- Dimensions:
  - 327.66 mm x 106.48 mm

## Ordering Information

- **PE-3S1-R10:**
  - 5-slot PICMG 1.3 backplane with one PCIe x16 slot and one PCIe x4 slot, RoHS
- **RACK-500AI:**
  - 5U 5-slot full-size rackmount chassis

## Jumper Settings and Connectors

LABEL	FUNCTION
BP_CONNA1, BP_CONNB1, BP_CONNC1, BP_CONND1	PICMG 1.3 slots for full-size SBC
PCIEX16_1	PCIe x16 slot
PCIEX_1	PCIe x4 slot
12V1	ATX +12V power connector
ATXPWR1	ATX power connector
ATXCTL1	ATX power control connector
FAN1, FAN2, FAN3, FAN4	Fan connectors
IOPWR1	I/O power connector
PWRBTN1	Power button connector
PWRGD1	Power good signal output connector
RESET1	Reset button connector
SM-BUS1	System management connector

<b>ATXPWR1: ATX Power Connector (p=4.2 mm)</b>			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	+3.3V	13	+3.3V
2	+3.3V	14	-12V
3	GND	15	GND
4	+5V	16	PS_ON#
5	GND	17	GND
6	+5V	18	GND
7	GND	19	GND
8	PWR_OK	20	NC
9	+5VSB	21	+5V
10	+12V	22	+5V
11	+12V	23	+5V
12	+3.3V	24	GND

<b>12V1: ATX +12 V Power Connector (p=4.2 mm)</b>			
<b>PIN NO.</b>	<b>DESCRIPTION</b>	<b>PIN NO.</b>	<b>DESCRIPTION</b>
1	GND	3	+12V
2	GND	4	+12V

<b>ATXCTL1: ATX Power Control Connector (p=2.54 mm)</b>			
<b>PIN NO.</b>	<b>DESCRIPTION</b>	<b>PIN NO.</b>	<b>DESCRIPTION</b>
1	GND	3	5VSB
2	PSO#		

<b>FAN1, FAN2, FAN3, FAN4: Fan Connectors (p=2.54 mm)</b>			
<b>PIN NO.</b>	<b>DESCRIPTION</b>	<b>PIN NO.</b>	<b>DESCRIPTION</b>
1	GND	3	NC
2	+12V		

<b>IOPWR1: I/O Power Connector (p=2.00 mm)</b>			
<b>PIN NO.</b>	<b>DESCRIPTION</b>	<b>PIN NO.</b>	<b>DESCRIPTION</b>
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	SMDATA	14	EXTRST#
15	5VSB	16	GND
17	SMCLK	18	PSO#
19	+3.3V	20	PWRBT#

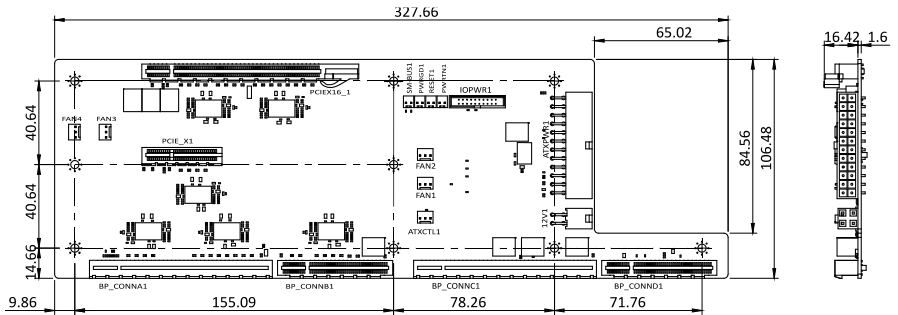
<b>PWRBTN1: Power Button Connector (p=2.54 mm)</b>			
<b>PIN NO.</b>	<b>DESCRIPTION</b>	<b>PIN NO.</b>	<b>DESCRIPTION</b>
1	GND	2	PWRBTN#

<b>PWRGD1: Power Good Signal Output Connector (p=2.54 mm)</b>			
<b>PIN NO.</b>	<b>DESCRIPTION</b>	<b>PIN NO.</b>	<b>DESCRIPTION</b>
1	GND	2	Power Good

<b>RESET1: Reset Button Connector (p=2.54 mm)</b>			
<b>PIN NO.</b>	<b>DESCRIPTION</b>	<b>PIN NO.</b>	<b>DESCRIPTION</b>
1	GND	2	EXTRST#

<b>SM-BUS1: System Management Connector (p=2.54 mm)</b>			
<b>PIN NO.</b>	<b>DESCRIPTION</b>	<b>PIN NO.</b>	<b>DESCRIPTION</b>
1	SMDATA	2	SMCLK

## Board Layout: Jumper and Connector Locations



(Unit: mm)