

**PEMUX backplane, 4 PCIe Gen 3.0 x8 w/ x16 slot, 6 PCIe Gen3.0 x4 w/
x4 slots, and RoHS**

PEMUX-10S1-R10

Quick Installation Guide

Version 1.0

Feb.15, 2019

Package List

PEMUX-10S1-R10 package includes the following items:

- 1 x PEMUX-10S1-R10
- 1 x QIG (Quick Installation Guide)



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Specifications

- System Type: PEMUX Backplane
- PiMax: 1 ea (full size)
- PCI-E slot:
 - 4 x PCIE x8 from CPU
 - 4 x PCIE x4 from CPU
 - Slot type: x8 signal with x16 slot
 - Slot type: x4 signal with x4 slot
 - 2 x PCIE x4 from PCH
 - Slot type: x4 signal with x4 slot
- Chassis: Mounting hole compatible with PCI-14S
- Others:
 - ATX power connector x1 (24pin)
 - note: Add addition 8pin power connector if needed
 - STATUS_LED1 connector (2X7 pin) x1 (pwr_led, sata_led, lan_led, 10g_led)
 - Reset connector (2 pin) x1
 - SM BUS connector (2 pin) x1
 - PWRGD connector (2 pin) x1
 - LCM connector (4 pin) x1
 - PWRBTN connector (2 pin) x1
 - Fan connector (4 pin) x4
 - CASE OPEN (2 pin) x1
 - Note:
 - x4 slot with open-ended connector

Ordering Information

- **PEMUX-10S1-R10:**
 - 1-Slot PEMUX backplane, 4 PCIe Gen 3.0 x8 w/ x16 slot, 6 PCIe Gen3.0 x4 w/ x4 slots, and 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

Jumper Settings and Connectors

LABEL	FUNCTION
HDC_CONNA1, HDC_CONNB1, HDC_CONNC1	Motherboard connectors
PCIEX16_1, PCIEX16_4, PCIEX16_6, PCIEX16_7	PCIEX8 BUS connectors
PCIEX4_2, PCIEX4_3, PCIEX4_5	PCIEX4 BUS connectors
LCM1, LCM2	LCM connectors
USB1	USB connector
PSU2	ATX power connector
PSU1	12V DC-IN connector
SM-BUS1	SMBUS connector
PWRBTN1	Power Button connector
RESET1	Reset Button connector
BP_FAN1~BP_FAN4	Fan connectors
PWRGD1	Power good signal output
CASE_OPEN1	Case open connector
PWR_SMB1	Power supply SMBus connector
K_TYPE1, K_TYPE2	Temperature measurement connectors
STATUS_LED1	System status LED connector

PSU2: ATX Power Connector			
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	-5V
9	STB5V	21	+5V
10	+12V	22	+5V
11	+12V	23	+5V
12	+3.3V	24	GND

PSU1: 12V DC-IN Connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	5	+12V
2	GND	6	+12V
3	GND	7	+12V
4	GND	8	+12V

BP_FAN1~BP_FAN4: Fan connectors			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	+12V
3	FAN SENSE	4	FAN CONTROL

PWRGD1: Power Good output			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	Power Good

LCM1, LCM2: LCM Connectors			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	LCM_TX	2	+5V
3	LCM_RX	4	GND

PWRBTN1: Power Button			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	PWRBTN_N

RESET1: Reset Button			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	RESET_N

SM-BUS1: SMBUS Connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	SMDATA	2	SMBCLK

PWR_SMB1: Power Supply SMBus Connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	SMbus_CLK1	2	SMbus_DAT1
3	NC	4	GND
5	NC		

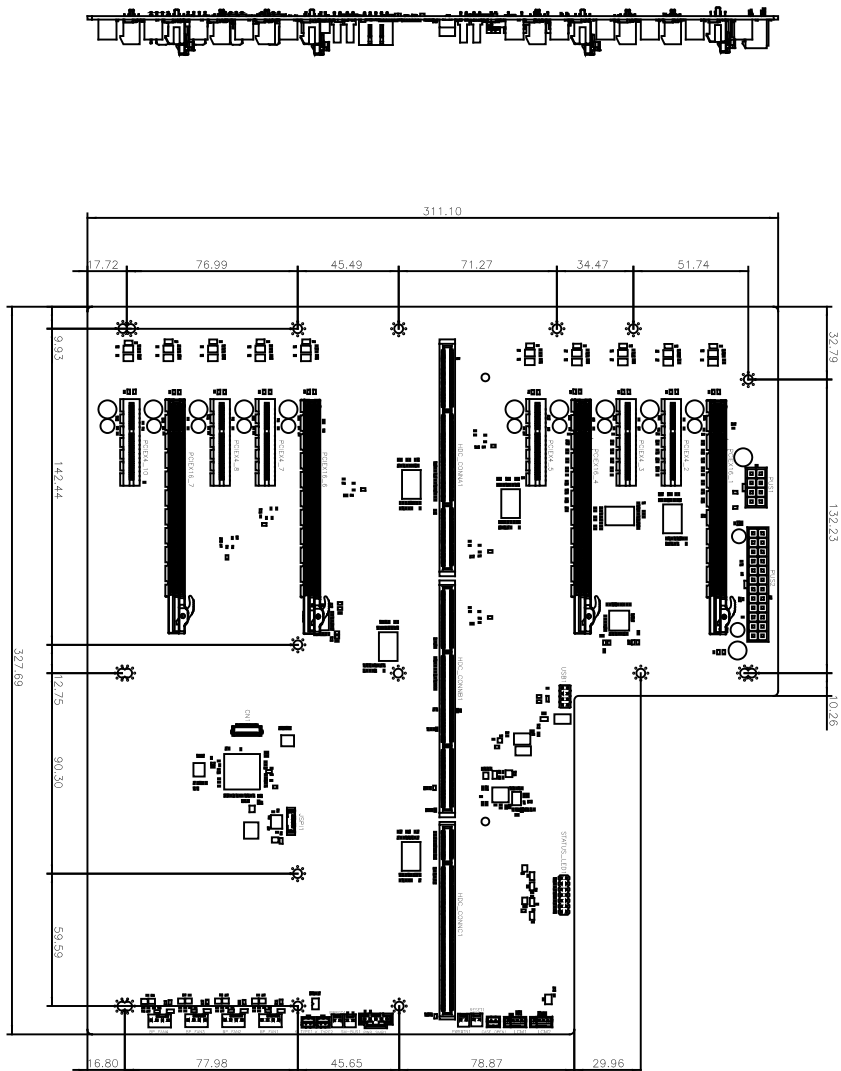
USB1: USB Connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	+5V	2	GND
3	DATA-	4	DATA+
5	DATA+	6	DATA-
7	GND	8	+5V

CASE_OPEN1: Case Open Connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	CASEOPEN_N

K-TYPE1, K-TYPE2: Temperature Measurement Connectors			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	T-SENSE_N	2	T-SENSE_P

STATUS_LED1: System Status LED connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	System Power LED_N	2	+3.3V
3	HDD active_LED_N	4	+3.3V
5	USB active_LED_N	6	+3.3V
7	System Green LED_N	8	+3.3V
9	System Red LED_N	10	+3.3V
11	10G LAN active LED_N	12	+3.3V
13	1G LAN active LED_N	14	+3.3V

Board Layout: Jumper and Connector Locations



(Unit: mm)