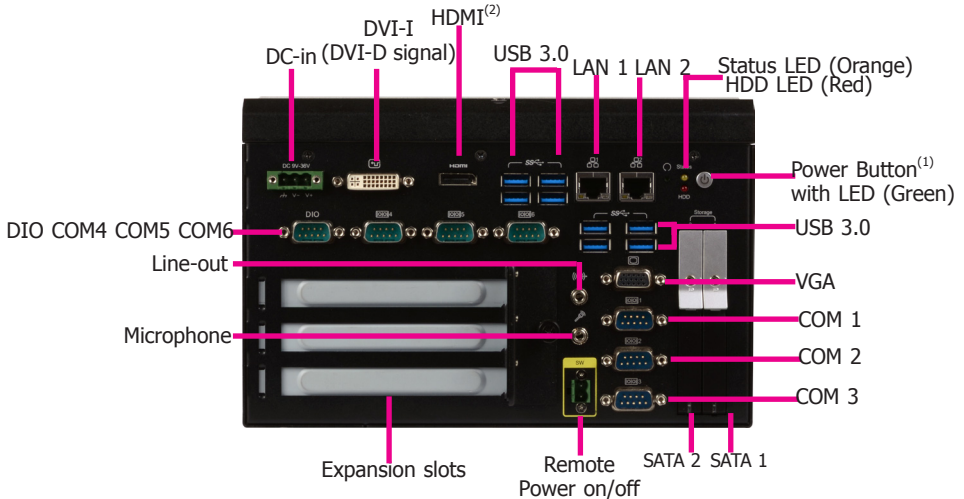


## EC531-SD/EC532-SD Installation Guide

### Package Contents

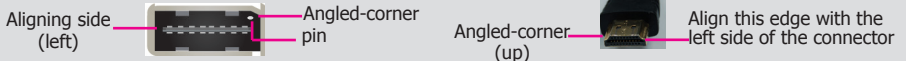
- 1 EC531-SD/EC532-SD system unit
- Mounting screws for SATA drive
- Mounting screws for Mini PCIe module

### Panel



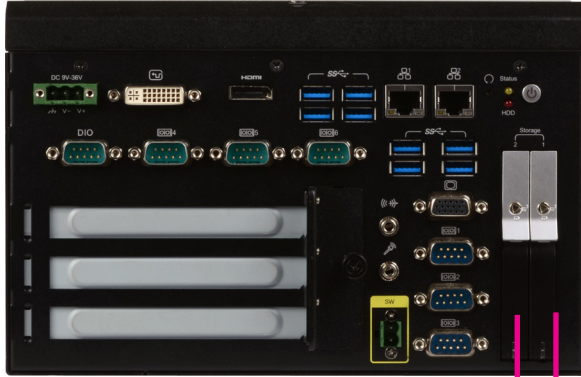
#### Notes:

1. Please gently press the power button to avoid possible damages.
2. The HDMI is a DP/HDMI combo port but can only transmit HDMI signals (unless wired as a DP port by request). Please plug in an HDMI cable with the right orientation and alignment to avoid damage to the connector. You should feel resistance (due to a pin on the right) if the cable is not inserted correctly. For detailed instructions, please see a video at <https://youtu.be/SUj07rFn5I8>.



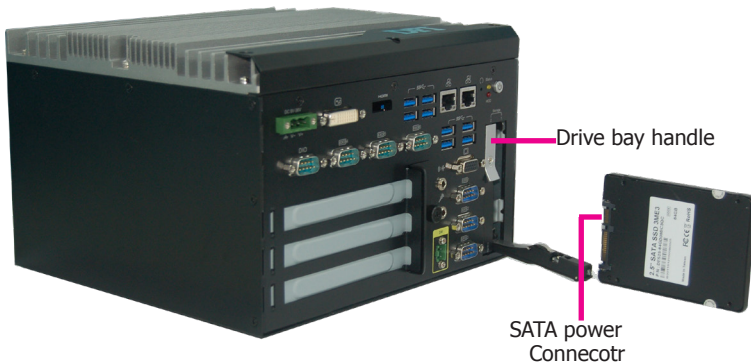
## Installing a 2.5" SATA Drive

1. The SATA drive bay can be easily accessed without opening the system. However, the system does not support hot-swapping hard drives; turn off the system first. Locate the drive bay on the front panel and open it by releasing the handle.



SATA drive bay  
SATA 2 SATA 1

2. Slide the HDD into the drive bay. Note that the HDD should be positioned vertically with the SATA power connector on top of the data connector to correctly engage with the system's SATA connectors. Then close the drive bay and lock the handle.

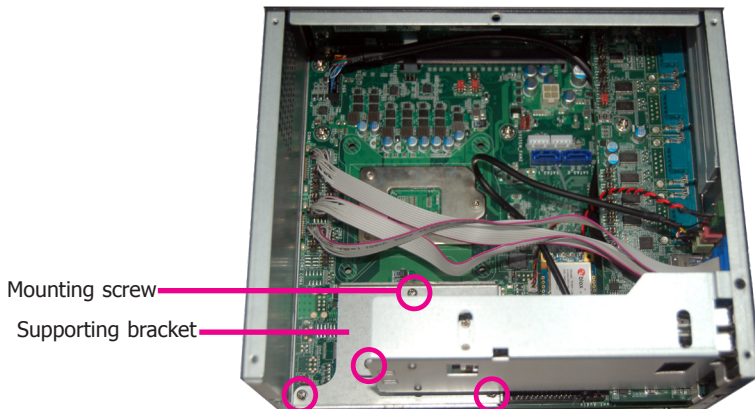
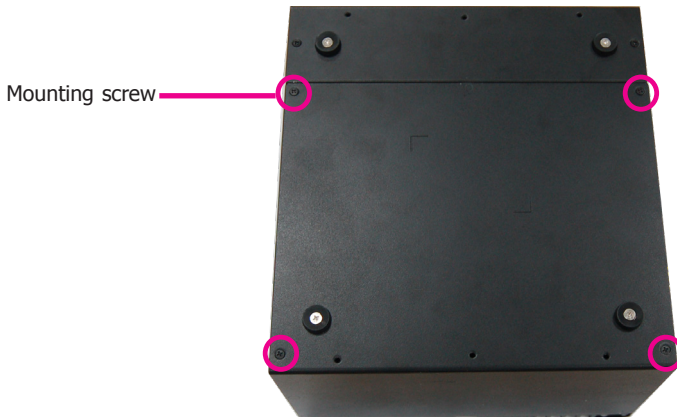


### Notes:

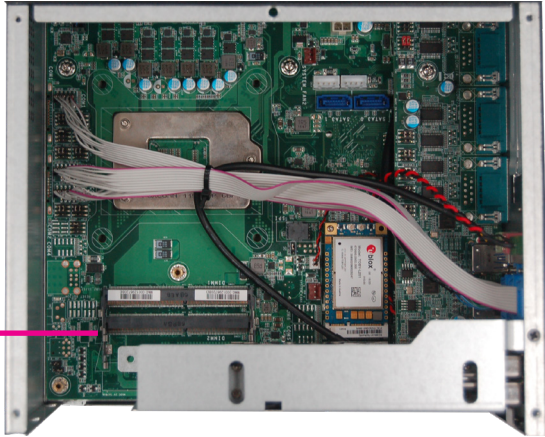
1. The slot is designed to exactly fit a 2.5" SATA drive with 7mm thickness; it cannot fit SATA drives with other sizes.
2. Do not force to close the drive bay if the HDD is not correctly inserted.

## Installing a SODIMM

1. The SODIMM sockets are located on the system board. You need to remove the system cover first. Before working inside your system, observe the following precautions:
  - (1) Make sure the system and all other peripherals connected to it have been powered off.
  - (2) Disconnect all power cords and external cables.
2. The 4 mounting screws on the bottom of the system are used to secure the cover to the chassis. Remove these screws and put them in a safe place for later use.
3. Remove the supporting bracket to access the SODIMM sockets.

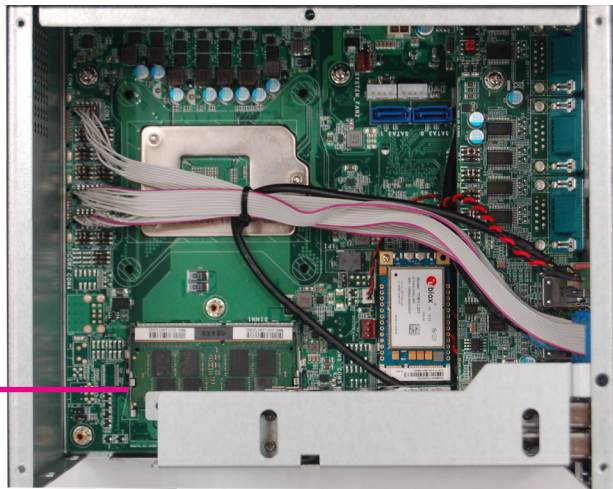


SODIMM socket



2. Grasp the module by its edges and align the memory's notch with the socket's notch; then insert the memory into the socket at an angle and push it down until you feel a click.

SODIMM module



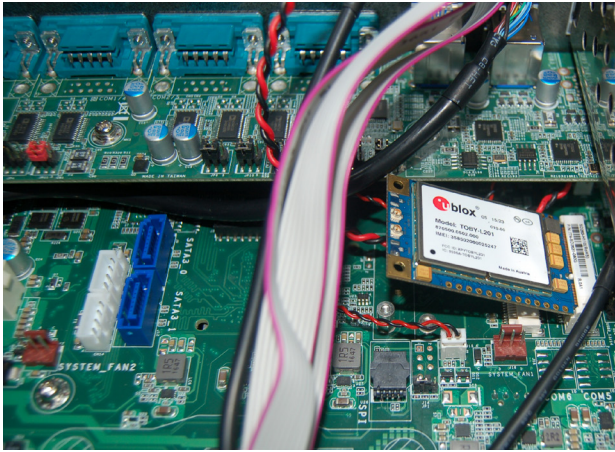
**Notes:**

1. The system supports dual-channel configuration. To enable dual-channel, populate both SODIMM sockets.
2. The SODIMM sockets can only accept DDR4 memory modules. Please do not install other types of memory modules.

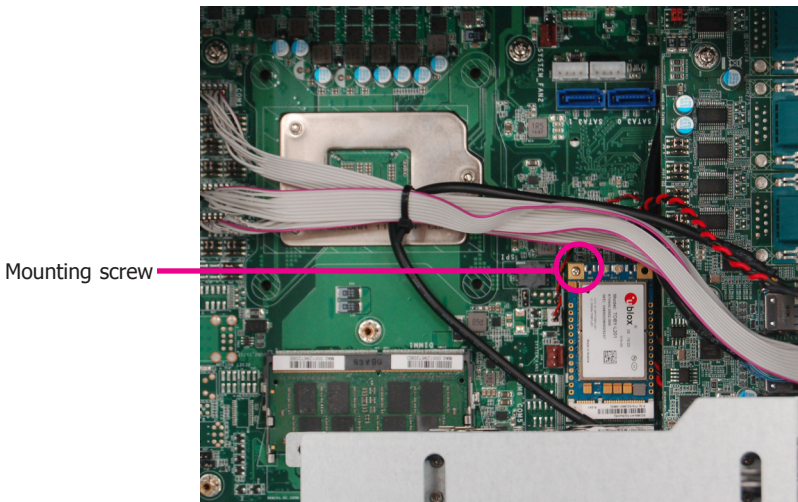
## Installing a Mini PCIe or mSATA Card

The system board is equipped with 2 Mini PCIe slots: one full-size and one half-size slot. Here we will demonstrate the installation of a full-size Mini PCIe card.

1. Grasp the Mini PCIe card by its edges and align the notch in the connector of the Mini PCIe card with the notch in the connector on the system board.



2. Push down the other end of the card and secure it on the board with the provided mounting screw.



### Note:

The system also has a half-size Mini PCIe slot that can accommodate a Mini PCIe card using mSATA or USB signals.

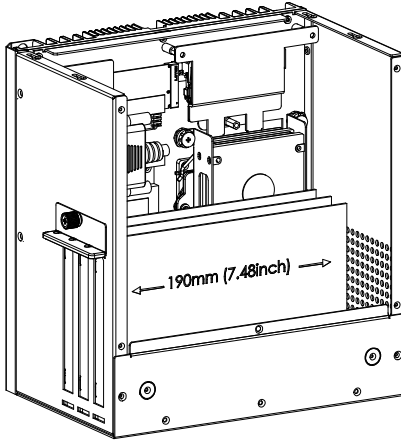


## Installing a PCI or PCIe Expansion Card

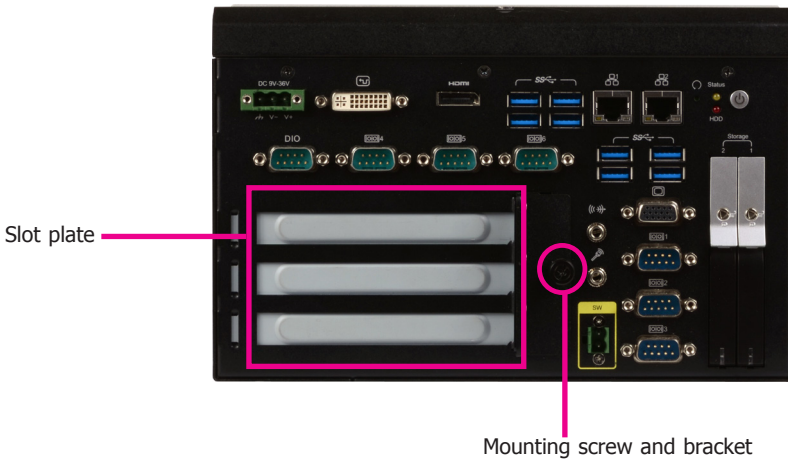


**Important:**

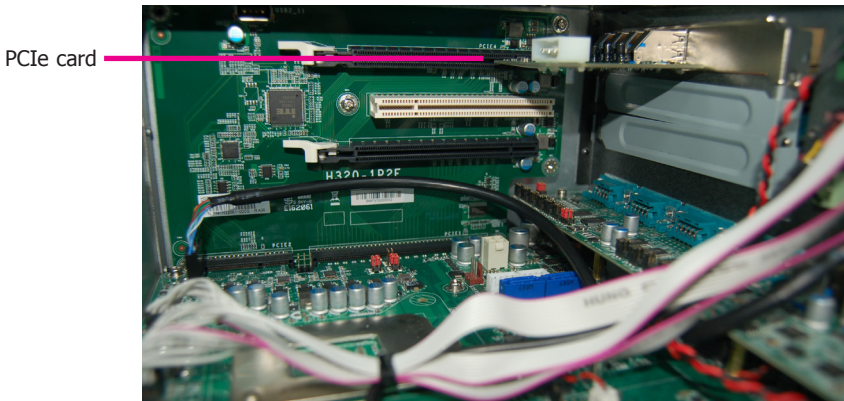
When inserting expansion cards into the system unit, please select a standard card within 190mm (as shown in the picture below) in order to fit expansion slots.



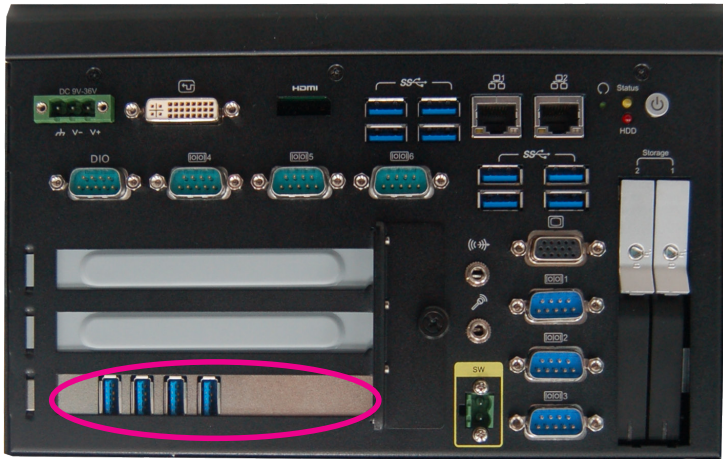
1. PCI and PCIe slots on the riser card inside the system are used to install the expansion cards. To install the expansion cards, you need to first remove the slot plates and bracket by uninstalling the mounting screws on the front chassis.



2. Insert the expansion card into a PCI or PCIe slot on the riser card and secure the bracket in place.



## Rear View

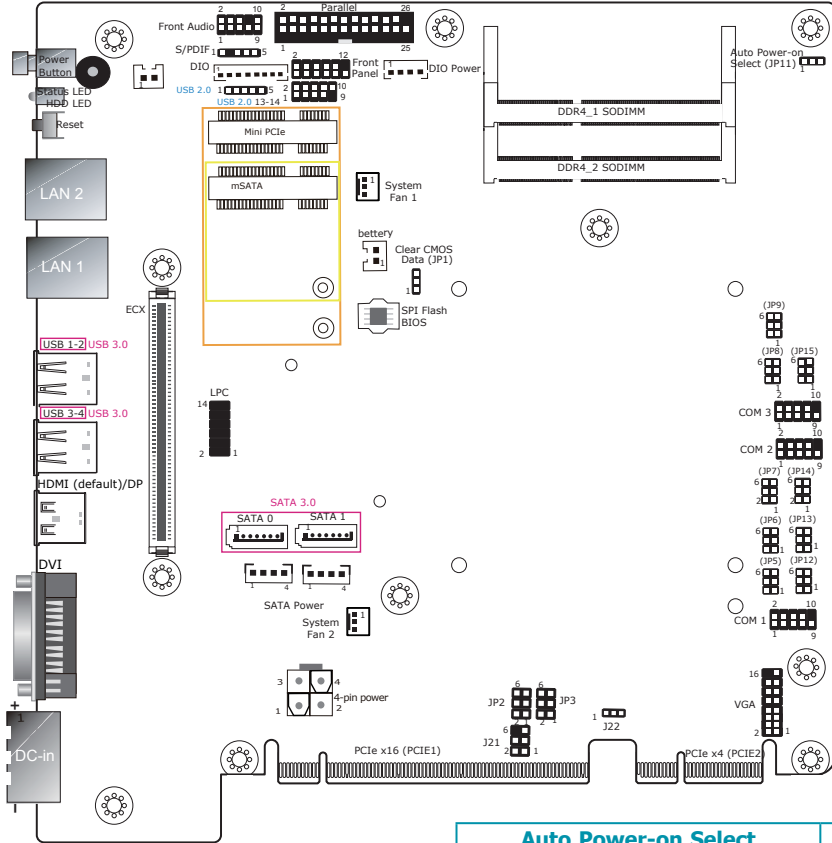


### Note:

The EC531-SD has one PCIe x16 slot and two PCI slots with the H320-2P1E card, whereas the EC532-SD has two PCIe x16 slots and one PCI slot with the H320-1P2E card.



# Board Layout and Jumper Settings



|                        |            |
|------------------------|------------|
| <b>Clear CMOS Data</b> | <b>JP1</b> |
| Normal (default)       | 1-2 On     |
| Clear CMOS Data        | 2-3 On     |

|                                 |                          |
|---------------------------------|--------------------------|
| <b>RS232/Power Select:</b>      |                          |
| <b>COM 1 (JP3), COM 2 (JP2)</b> |                          |
| RS232 (default)                 | 1-3 (RI), 2-4 (DCD) On   |
| RS232 with power                | 3-5 (+5V), 4-6 (+12V) On |

|                                  |        |
|----------------------------------|--------|
| <b>RS232/422/485 Select:</b>     |        |
| <b>COM 1 (JP6), COM 2 (JP13)</b> |        |
| RS232 (default)                  | 1-2 On |
| RS422 Full Duplex                | 3-4 On |
| RS485                            | 5-6 On |

|   |             |
|---|-------------|
| <b>RS232/422/485 Select:</b>              |             |
| <b>COM 1 (JP5/JP12), COM 2 (JP7/JP14)</b> |             |
| RS232 (default)                           | 1-3, 2-4 On |
| RS422 Full Duplex/RS485                   | 3-5, 4-6 On |

|                                     |             |
|-------------------------------------|-------------|
| <b>Auto Power-on Select</b>         | <b>JP11</b> |
| Power-on via Power Button (default) | 1-2 On      |
| Power-on via AC Power               | 2-3 On      |

|  |        |
|--|--------|
| <b>RS232/422/485 Select: COM 3 (JP9)</b> |        |
| RS232 (default)                          | 1-2 On |
| RS422 Full Duplex                        | 3-4 On |
| RS485                                    | 5-6 On |

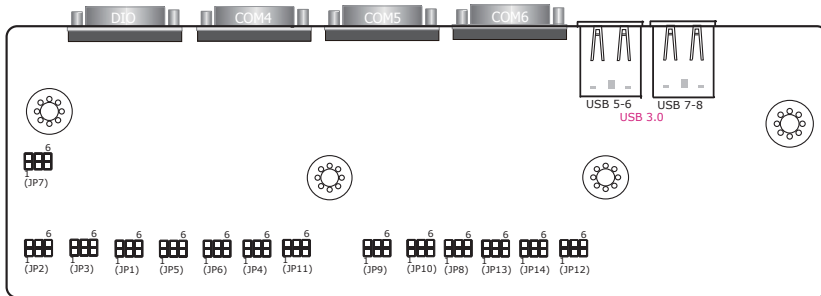
|                              |             |
|------------------------------|-------------|
| <b>RS232/422/485 Select:</b> |             |
| <b>COM 3 (JP8/JP15)</b>      |             |
| RS232 (default)              | 1-3, 2-4 On |
| RS422 Full Duplex/RS485      | 3-5, 4-6 On |

**Notes:**

1. When COM1 RS232/422/485 is selected, JP5 and JP12 must be set in accordance to JP6.
2. When COM2 RS232/422/485 is selected, JP7 and JP14 must be set in accordance to JP13.
3. When COM3 RS232/422/485 is selected, JP8 and JP15 must be set in accordance to JP9.



# I/O board



| <b>RS232/Power Select:<br/>COM 4 (JP7), COM 5 (JP11)</b> |                          |
|--|--------------------------|
| RS232 (default)  | 1-3 (RI), 2-4 (DCD) On   |
| RS232 with power   | 3-5 (+5V), 4-6 (+12V) On |

| <b>RS232/422/485 Select:<br/>COM 6 (JP12)</b> |        |
|---|--------|
| RS232 (default)                               | 1-2 On |
| RS422 Full Duplex                             | 3-4 On |
| RS485   | 5-6 On |

| <b>RS232/422/485 Select:<br/>COM 4 (JP1), COM 5 (JP8)</b> |        |
|---|--------|
| RS232 (default)   | 1-2 On |
| RS422 Full Duplex   | 3-4 On |
| RS485   | 5-6 On |

| <b>RS232/422/485 Select:<br/>COM 6 (JP13/JP14)</b> |             |
|--|-------------|
| RS232 (default)                                    | 1-3, 2-4 On |
| RS422 Full Duplex/RS485                            | 3-5, 4-6 On |

| <b>RS232/422/485 Select:<br/>COM 4 (JP2/JP3), COM 5 (JP9/JP10)</b> |             |
|--|-------------|
| RS232 (default)  | 1-3, 2-4 On |
| RS422 Full Duplex/RS485  | 3-5, 4-6 On |

### Notes:

1. When COM 4 RS232/422/485 is selected, JP2 and JP3 must be set in accordance to JP1.
2. When COM 5 RS232/422/485 is selected, JP9 and JP10 must be set in accordance to JP8.
3. When COM 6 RS232/422/485 is selected, JP13 and JP14 must be set in accordance to JP12.