

user manual

# AMOS-5000

Fan-less, compact embedded  
chassis kit for the EITX-3000

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## Regulatory Compliance

### FCC-A Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his personal expense.

#### Notice 1

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### Notice 2

Shielded interface cables and A.C. power cord, if any, must be used in order to comply with the emission limits.



Tested To Comply  
With FCC Standards  
FOR HOME OR OFFICE USE

## Battery Recycling and Disposal



Only use the appropriate battery specified for this product.  
Do not re-use, recharge, or reheat an old battery.  
Do not attempt to force open the battery.  
Do not discard used batteries with regular trash.  
Discard used batteries according to local regulations.

## Safety Precautions



### Do's

- Always read the safety instructions carefully.
- Keep this User's Manual for future reference.
- All cautions and warnings on the equipment should be noted.
- Keep this equipment away from humidity.
- Lay this equipment on a reliable flat surface before setting it up.
- Make sure the voltage of the power source and adjust properly 110/220V before connecting the equipment to the power inlet.
- Place the power cord in such a way that people cannot step on it.
- Always unplug the power cord before inserting any add-on card or module.
- If any of the following situations arises, get the equipment checked by authorized service personnel:
  - The power cord or plug is damaged.
  - Liquid has penetrated into the equipment.
  - The equipment has been exposed to moisture.
  - The equipment has not worked well or you cannot get it work according to User's Manual.
  - The equipment has dropped and damaged.
  - The equipment has obvious sign of breakage.



### Don'ts

- Do not leave this equipment in an environment unconditioned or in a storage temperature above 60°C (140°F). The equipment may be damaged.
- Do not leave this equipment in direct sunlight.
- Never pour any liquid into the opening. Liquid can cause damage or electrical shock.
- Do not place anything over the power cord.
- Do not cover the ventilation holes. The openings on the enclosure protect the equipment from overheating

## Box Contents and Ordering Information

<b>Model Number</b>	<b>Description</b>
AMOS-5000-1MZZA1	Standard kit <ul style="list-style-type: none"><li><input type="checkbox"/> 1 x front I/O panel</li><li><input type="checkbox"/> 1 x rear I/O panel</li><li><input type="checkbox"/> 1 x top cover</li><li><input type="checkbox"/> 1 x CF cover</li><li><input type="checkbox"/> 1 x package of cable ties</li><li><input type="checkbox"/> 1 x audio cable</li><li><input type="checkbox"/> 1 x GPIO cable</li><li><input type="checkbox"/> 1 x package of chassis screws</li></ul>
AMOS-5000-1MSZA1	Expanded storage kit <ul style="list-style-type: none"><li><input type="checkbox"/> 1 x front I/O panel</li><li><input type="checkbox"/> 1 x rear I/O panel</li><li><input type="checkbox"/> 1 x top half of storage chassis</li><li><input type="checkbox"/> 1 x bottom half of storage chassis</li><li><input type="checkbox"/> 1 x CF cover</li><li><input type="checkbox"/> 1 x package of cable ties</li><li><input type="checkbox"/> 1 x audio cable</li><li><input type="checkbox"/> 1 x GPIO cable</li><li><input type="checkbox"/> 1 x package of chassis screws</li></ul>

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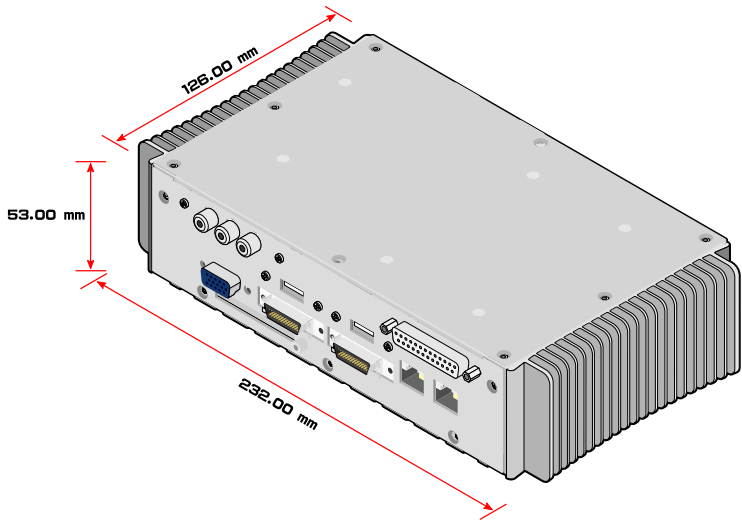
# 1

## Overview

The AMOS-5000 is a fanless and compact chassis kit that complements the EITX-3000. The AMOS-5000 comes in two configurations: *standard* and *expanded storage*. Both configurations are available to support an optional GPIO cable, LPT cable and WLAN module.

The standard AMOS-5000 configuration consists of front and rear I/O plates and a top cover. It has WLAN mounting holes for optional WLAN module and a hard drive mounting holes that can support 2.5" disk storage drive located underneath the top cover.

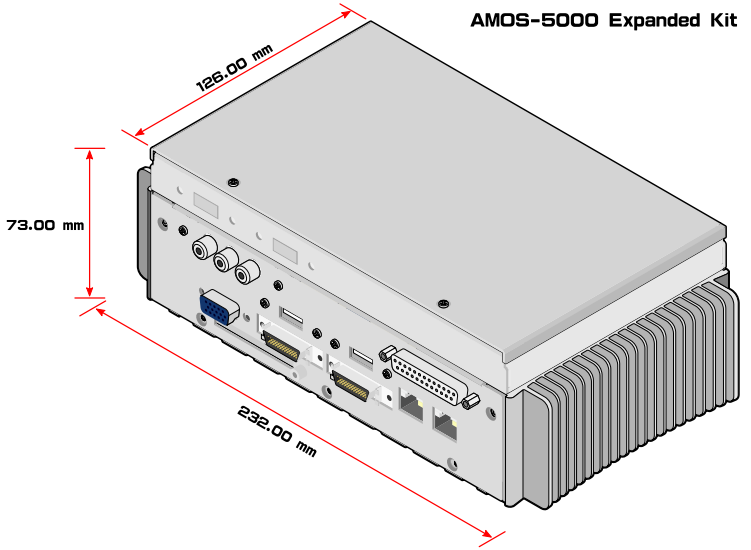
#### AMOS-5000 Standard Kit



**Note:**

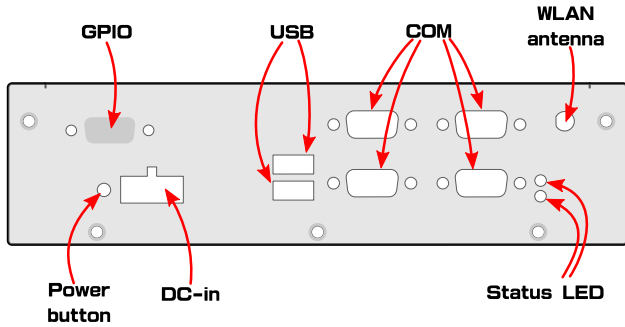
In standard AMOS-5000 configuration, users will be able to use the LPT cable only when using the CF card. The LPT cable will not be supported when using the 2.5" hard drive or vice versa.

The expanded storage configuration consists of front and rear I/O plates and a compartmentalized storage section that can support up to two 2.5" disk drives.

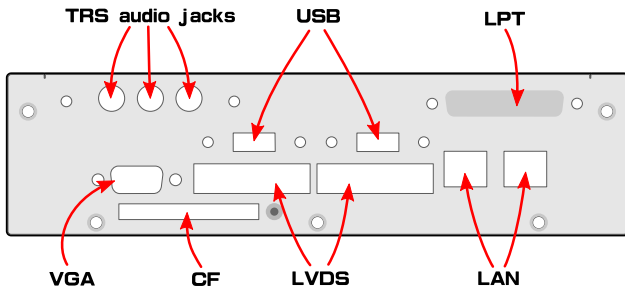




The front I/O plate features cutouts for two USB ports, four COM ports, one GPIO port, one DC-in port, two LED indicators, and one WLAN antenna.



The rear I/O plate features cutouts for three TRS jacks, one VGA port, two USB ports, two LVDS ports, one CF slot, two LAN ports, and one LPT port.



## SPECIFICATIONS

	<b>Standard kit</b>	<b>Expanded storage kit</b>
<b>Material</b>	Heavy duty steel	Heavy duty steel
<b>Disk drive capacity</b>	1	2
<b>Front I/O support</b>	1 x GPIO 1 x DC-in 2 x USB 4 x COM 1 x antenna 2 x LED	1 x GPIO 1 x DC-in 2 x USB 4 x COM 1 x antenna 2 x LED
<b>Rear I/O support</b>	3 x TRS jack 1 x VGA 1 x CF 2 x USB 2 x LVDS 2 x LAN 1 x LPT	3 x TRS jack 1 x VGA 1 x CF 2 x USB 2 x LVDS 2 x LAN 1 x LPT
<b>WLAN mounting holes</b>	Yes	Yes
<b>Weight</b>	0.4 kg	0.75 kg
<b>Dimensions (w x h x d) (after assembly)</b>	232 x 53 x 126 mm	232 x 73 x 126 mm

## OPERATING ENVIRONMENT

	<b>EITX-3000 with AMOS-5000</b>	<b>EITX-3000 without AMOS-5000</b>
<b>Operating temperature</b>	<b>With HDD</b> 0°C ~ 45°C <b>With CF</b> -20°C ~ 55°C	<b>With CF</b> -10°C ~ 65°C
<b>Storage temperature</b>	-20°C ~ 65°C	-20°C ~ 65°C
<b>Relative humidity</b>	0% ~ 90% @ 45°C (non-condensing)	10% ~ 90% @ 45°C (non-condensing)
<b>Vibration resistance</b>	<b>With CF</b> 5 Grms IEC 60068-2-64 random 5 – 500 Hz 1 Oct./min 1 hr/axis  <b>With HDD</b> 1 Grms IEC 60068-2-64 random 5 – 500 Hz 1 Oct./min 1 hr/axis	<b>With CF</b> 5 Grms IEC 60068-2-64 random 5 – 500 Hz 1 Oct./min 1 hr/axis
<b>Shock resistance</b>	<b>With CF</b> 50 G IEC 60068-2-67 half size 11 ms duration  <b>With HDD</b> 20 G IEC 60068-2-67 half size 11 ms duration	N/A

# 2

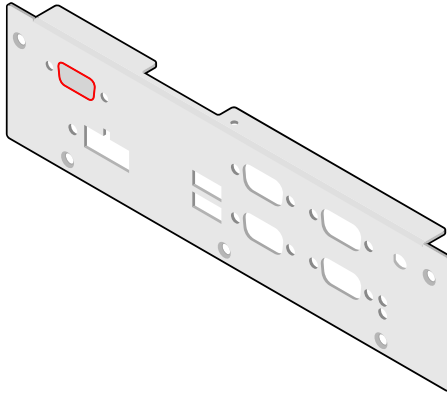
## Installing the I/O cables

## FRONT I/O PLATE CABLES

### Installing the GPIO cable

#### Step 1

Break off the GPIO cutout filler.

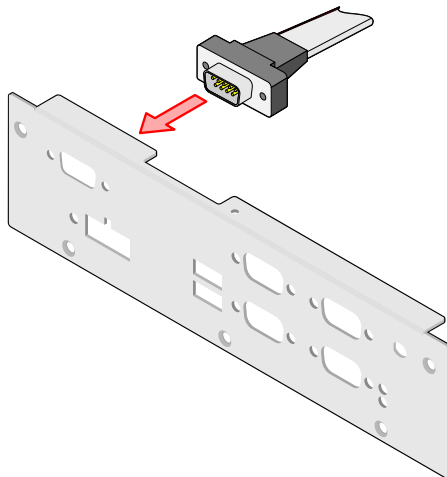


#### Step 2

Use a metal file to smooth out any rough edges.

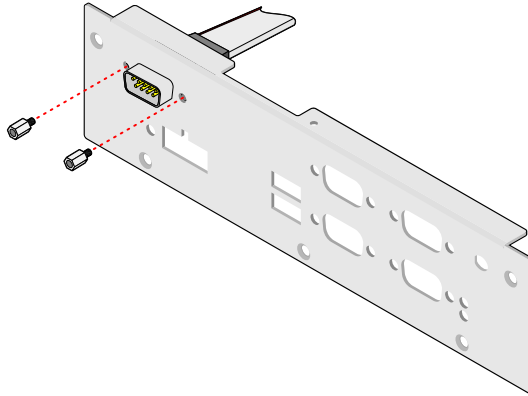
#### Step 3

Insert the 9-pin D-sub GPIO connector into the GPIO cutout.



#### Step 4

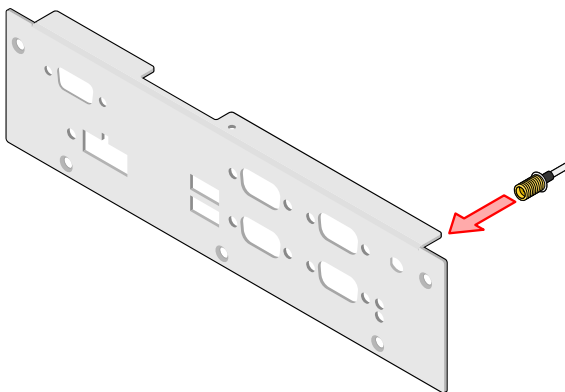
Fasten the standoff screws to secure the connector to the front I/O plate.



## Installing the WLAN antenna

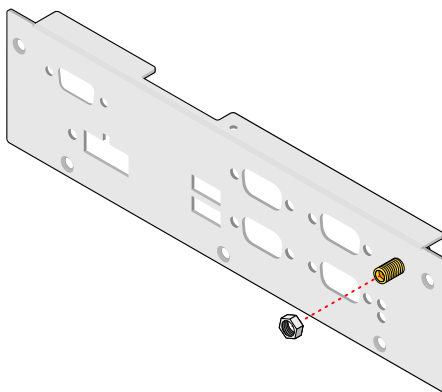
### Step 1

Insert the WLAN antenna port into the antenna cutout.



### Step 2

Fasten the WLAN antenna port in place with the nut.

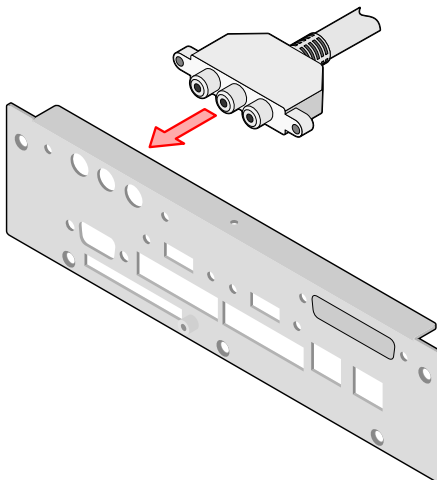


## REAR I/O PLATE CABLES

### Installing the TRS audio cable

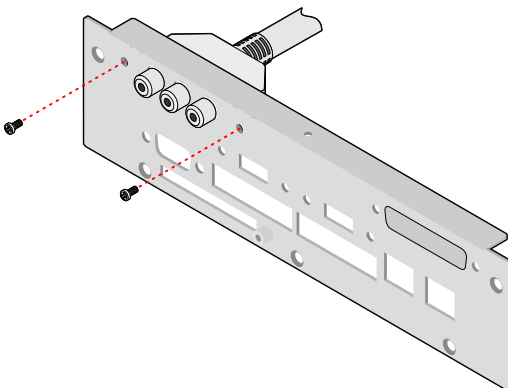
#### Step 1

Insert the 3-jack TRS connector into the TRS cutout.



#### Step 2

Fasten the standoff screws to secure the connector to the rear I/O plate.

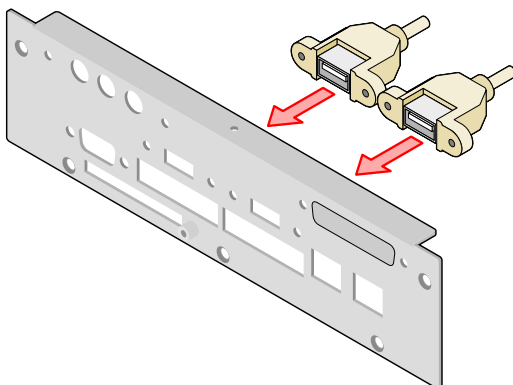




## Installing the USB I/O cable

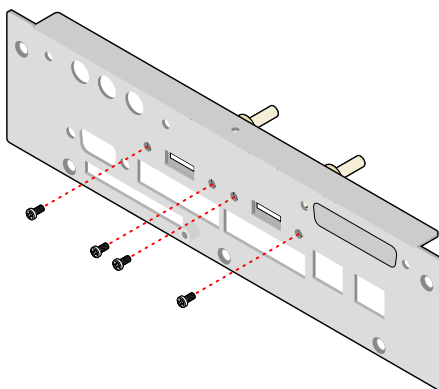
### Step 1

Insert the USB connectors into the USB cutouts.



### Step 2

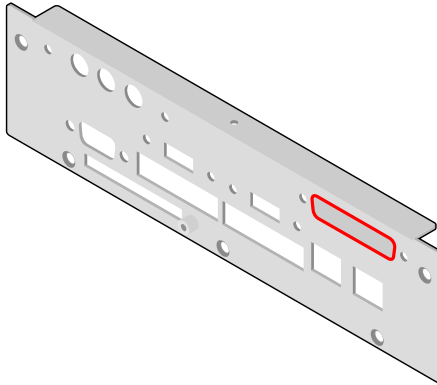
Fasten the standoff screws to secure the connectors to the rear I/O plate.



## Installing the LPT cable

### Step 1

Break off the LPT cutout filler.

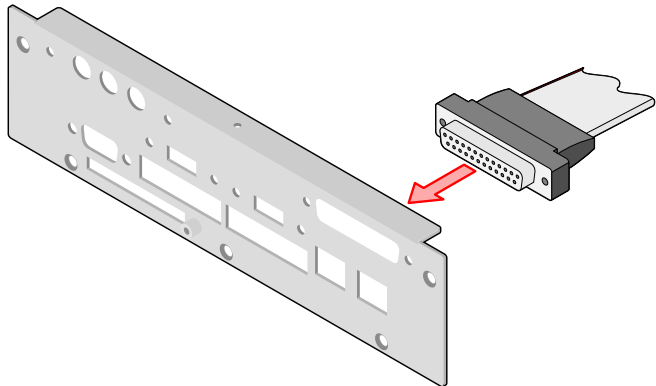


### Step 2

Use a metal file to smooth out any rough edges.

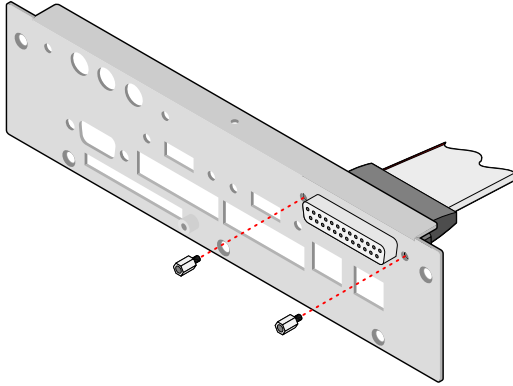
### Step 3

Insert the 25-pin D-sub LPT connector into the LPT cutout.



**Step 4**

Fasten the standoff screws to secure the connector to the rear I/O plate.

**Note:**

Users will be able to use the LPT cable only when using the CF card.

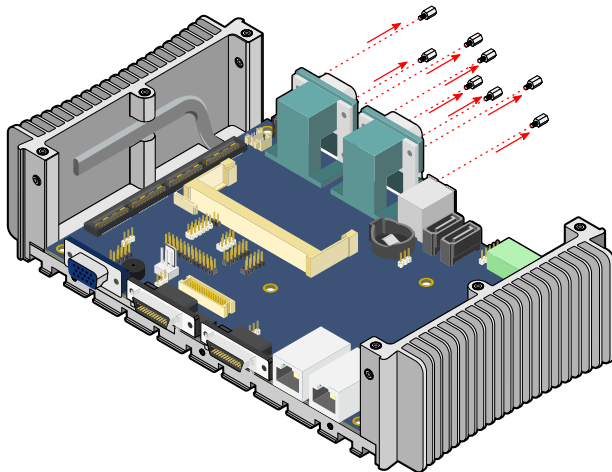
# 3

## Installing the standard kit

## INSTALLING THE FRONT I/O PLATE

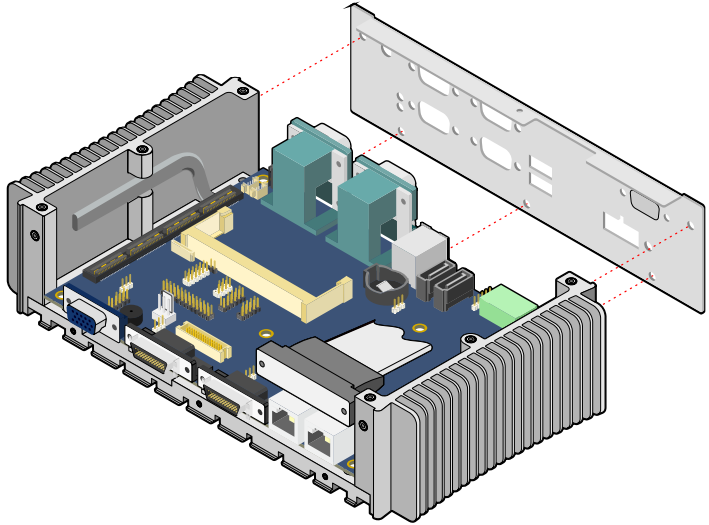
### Step 1

Remove all standoff screws from the front I/O connectors of the EITX-3000.



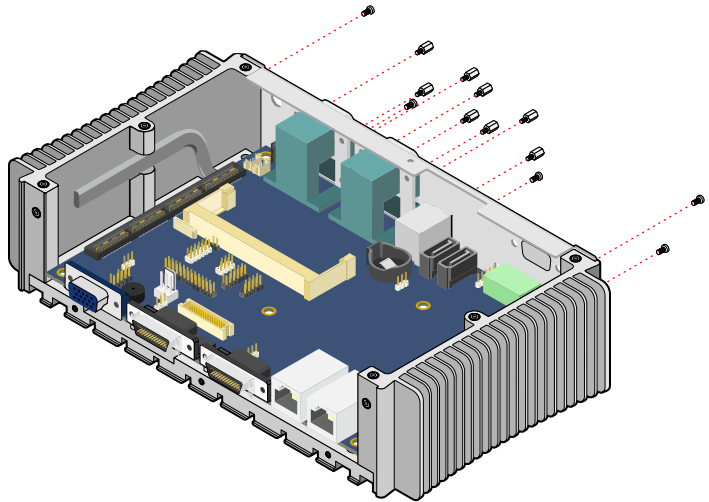
### Step 2

Align the front I/O plate with EITX-3000.



### Step 3

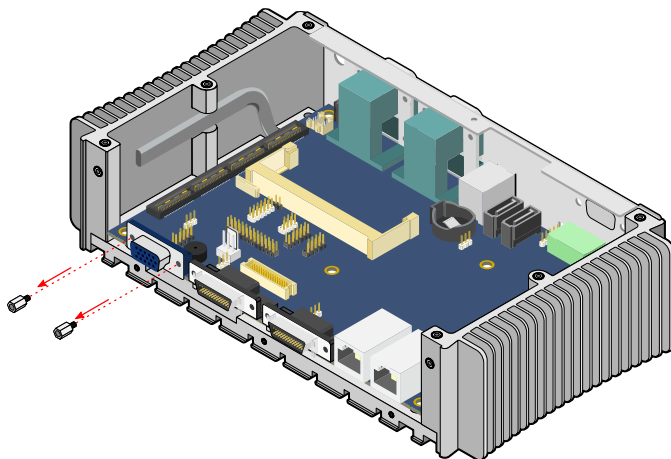
Secure the front I/O plate to the heatsink of the EITX-3000. And reinstall all standoff screws to the front I/O connectors.



## INSTALLING THE REAR I/O PLATE

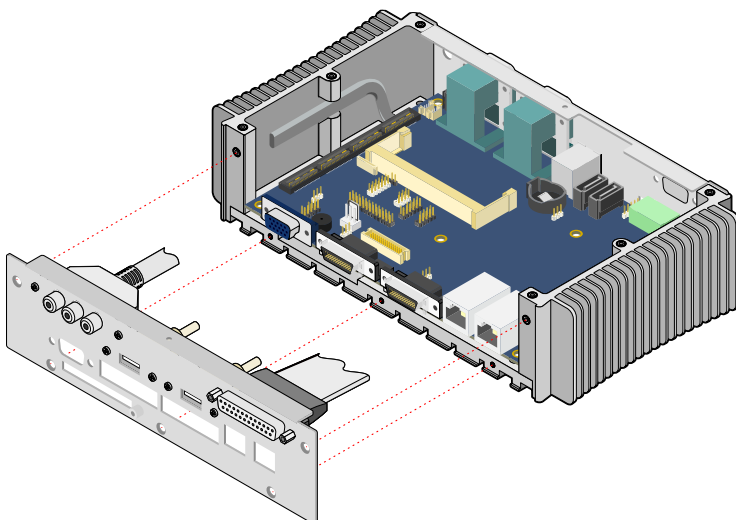
### Step 1

Remove all standoff screws from the rear I/O connectors of the EITX-3000.



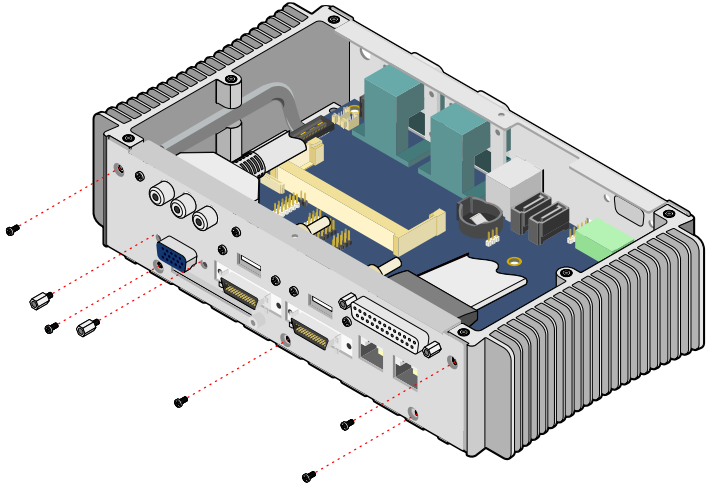
### Step 2

Align the rear I/O plate with EITX-3000.



### Step 3

Secure the rear I/O plate to the heatsink of the EITX-3000. And reinstall all standoff screws to the rear I/O connectors.



### Step 4

Install the CF cover on the rear I/O plate.



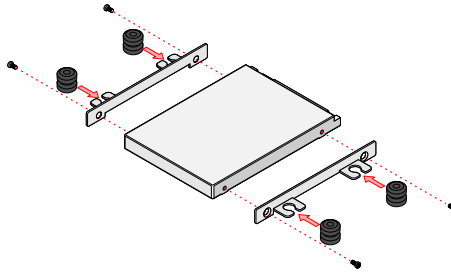
## INSTALLING THE TOP COVER

Before installing the top cover, the hard drive and WLAN module (optional) should be installed.

### Installing the hard drive

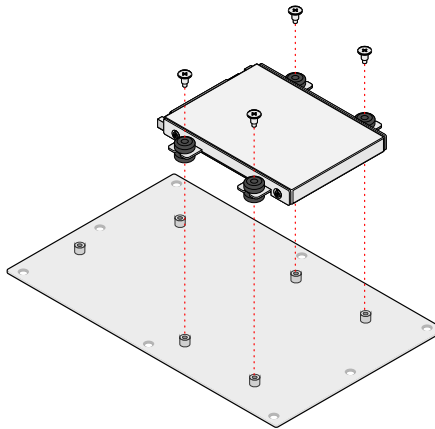
#### Step 1

Mount the hard disk brackets on the 2.5 inch hard disk drive. And insert the rubber shock absorbers to the HDD mounting brackets.



#### Step 2

Flip the top cover over and align the shock absorbers over the hard drive mounting holes on the inner side of the top cover and mount the hard drive to the top cover. Then secure the hard drive to the top cover with the four hard drive mounting screws.



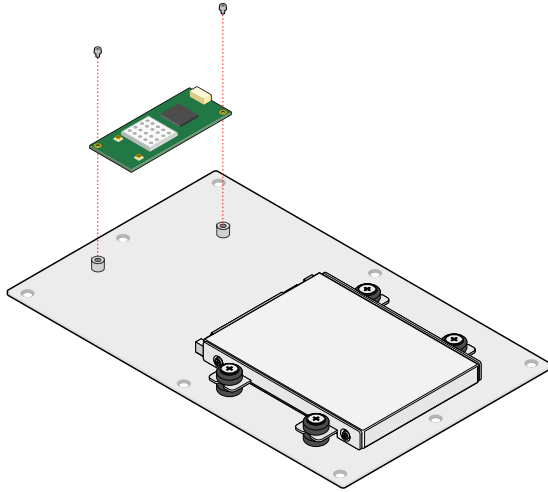
**Note:**

When using the 2.5" hard drive the LPT cable will not be supported.

## Installing the WLAN module

### Step 1

Align the WLAN module over the WLAN mounting holes on the inner side of the top cover.



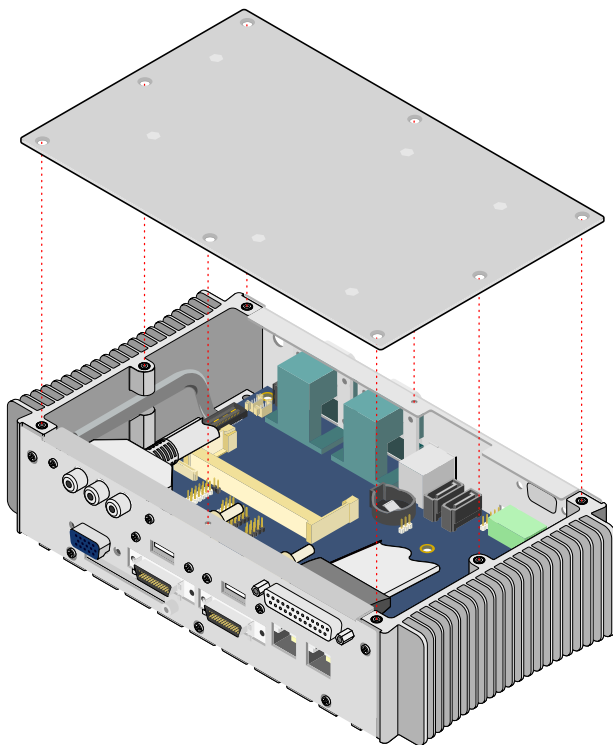
### Step 2

Secure the WLAN module to the top cover with two mounting screws.

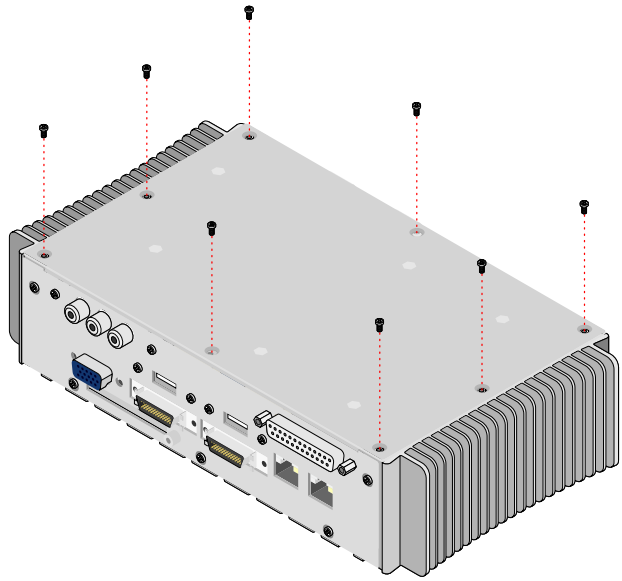
## Installing the top cover

### Step 1

Align the top cover over the mounting holes on the heatsink.



Step 2  
Secure the top cover with eight mounting screws.





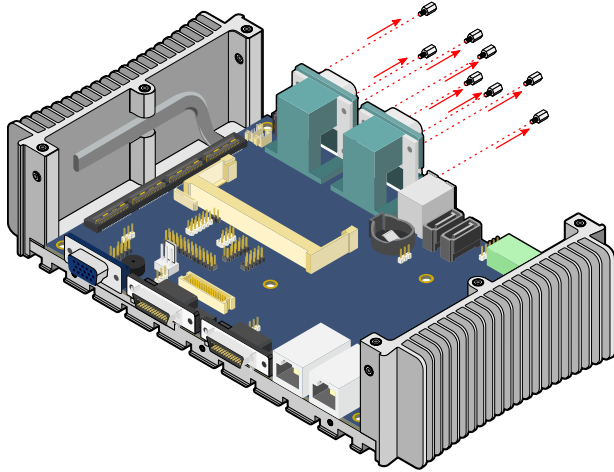
# 4

## Installing the expanded storage kit

## INSTALLING THE FRONT I/O PLATE

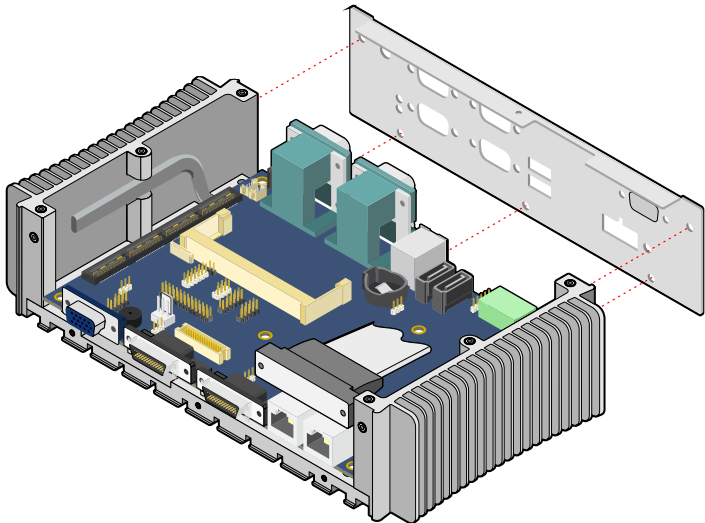
### Step 1

Remove all standoff screws from the front I/O connectors of the EITX-3000.



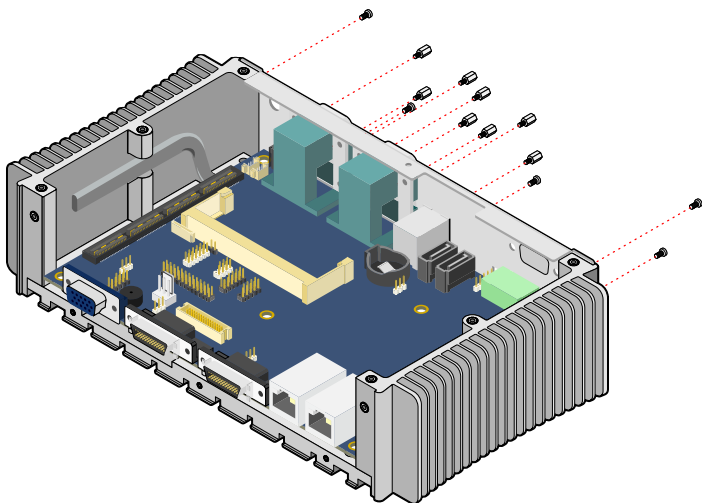
### Step 2

Align the front I/O plate with EITX-3000.



### Step 3

Secure the front I/O plate to the heatsink of the EITX-3000. And reinstall all standoff screws to the front I/O connectors

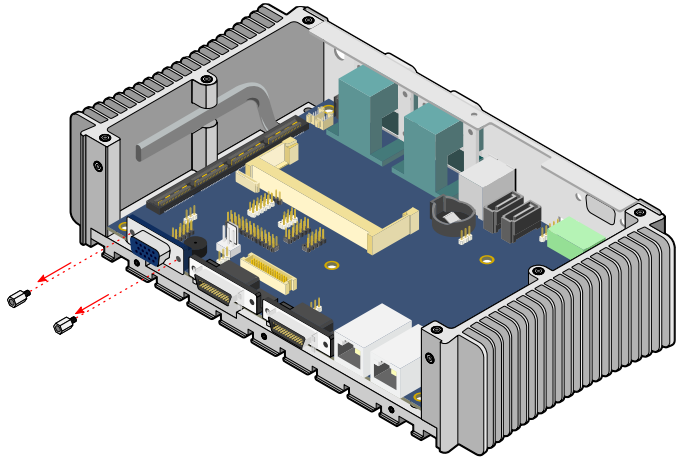




## INSTALLING THE REAR I/O PLATE

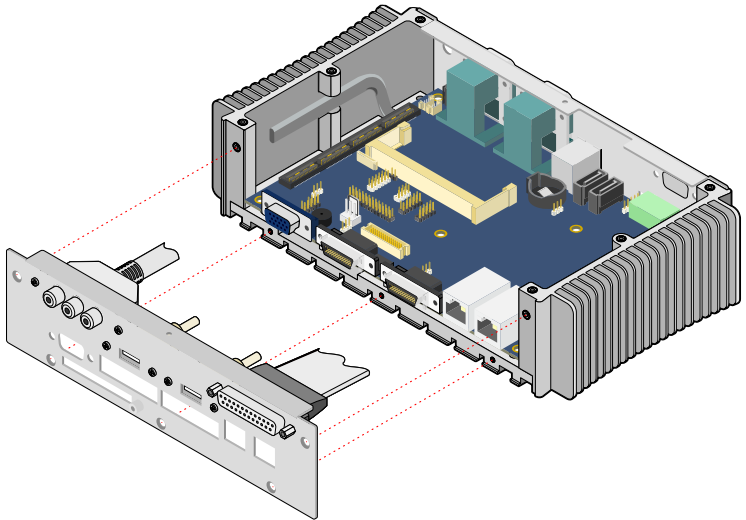
### Step 1

Remove all standoff screws from the rear I/O connectors of the EITX-3000.



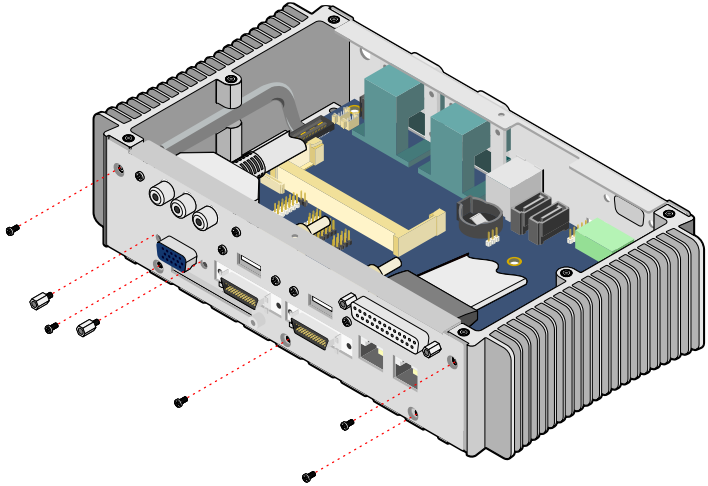
### Step 2

Align the rear I/O plate with EITX-3000.



### Step 3

Secure the rear I/O plate to the heatsink of the EITX-3000. And reinstall all standoff screws to the rear I/O connectors.



### Step 4

Install the CF cover on the rear I/O plate.

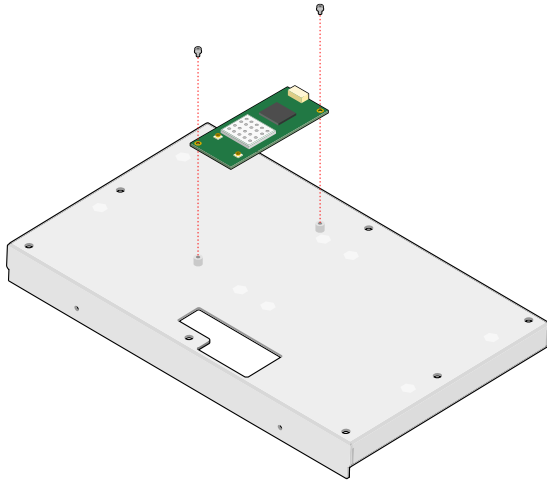
## INSTALLING THE EXPANDED STORAGE KIT

The expanded storage chassis consists of two pieces. The bottom portion of the storage chassis must be mounted first before mounting the top portion. Before mounting the bottom portion of the storage chassis, the WLAN module (optional) should be installed.

### Installing the WLAN module

#### Step 1

Flip the bottom half of the storage kit over and align the WLAN module over the WLAN mounting holes.



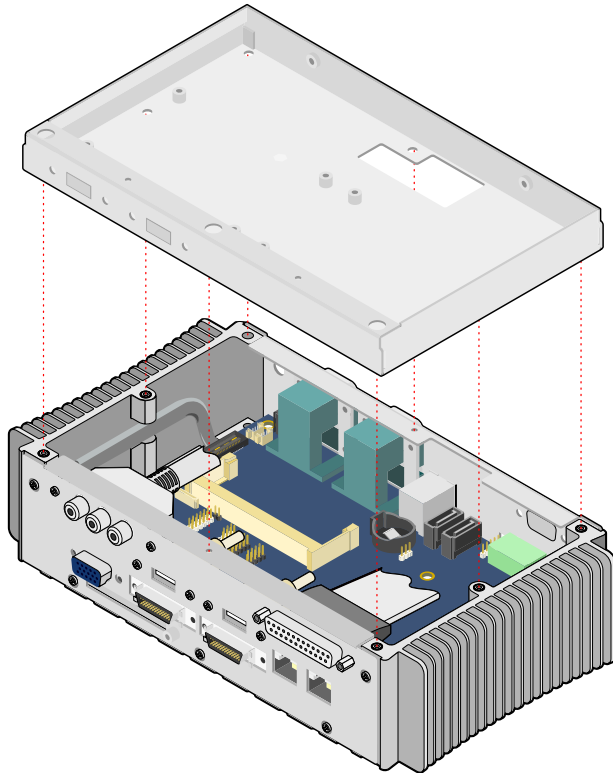
#### Step 2

Secure the WLAN module to the top cover with two mounting screws.

## Installing the bottom half of the storage kit

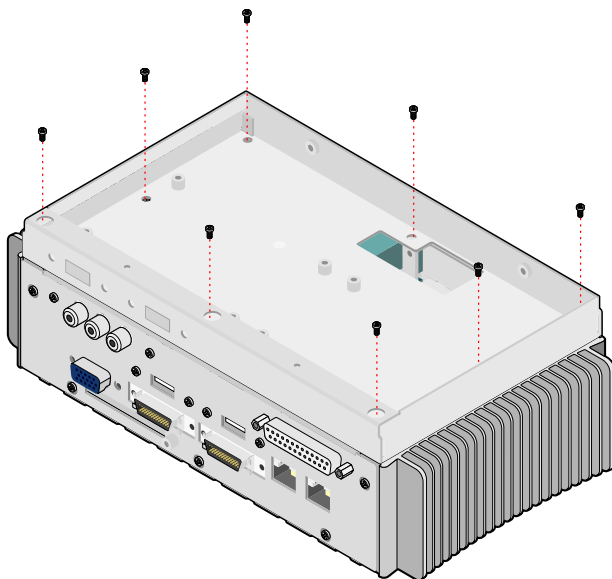
### Step 1

Align the bottom half of the storage chassis over the mounting holes on the heatsink.



## Step 2

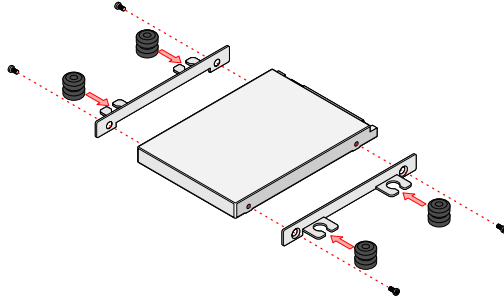
Secure the bottom half of the storage chassis to the heatsink with eight mounting screws.



## Installing the hard drives

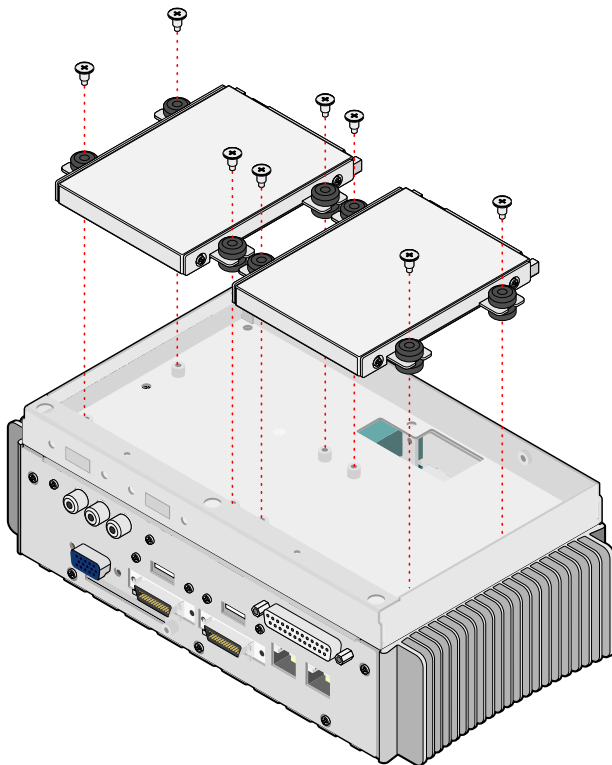
### Step 1

Mount the hard disk brackets on the 2.5 inch hard disk drives. And install the rubber shock absorbers to the HDD mounting brackets.



## Step 2

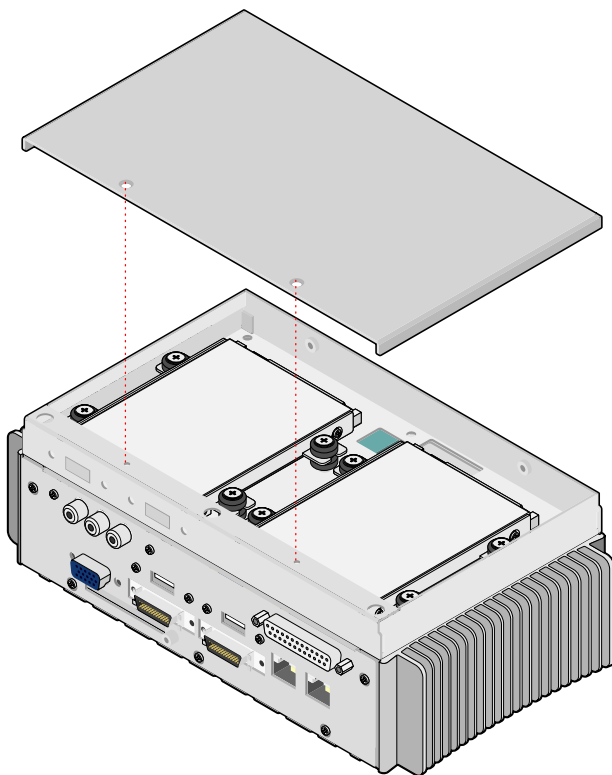
Align the shock absorbers over the hard drive mounting holes on the inside of the storage chassis and mount the hard drives. And secure the hard drives to the storage chassis with the four hard drive mounting screws per hard drive.



## Installing the top half of the storage kit

### Step 1

Align the top half of the storage chassis with the bottom half of the storage chassis.





## Step 2

Secure the top half of the storage chassis to the bottom half with four mounting screws.

