

Assembly Instructions

SMARTCASE™ S7xx with front USB



Version V1.1

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1. SMARTCASE™ S7xx: Model Overview








SMARTCASE™	Supported Motherboard	Note
S700 Datasheet	D3543-Sx <i>Intel® GeminiLake</i>	DC-IN: 8V-34V (5A max./65W max.) via external motherboard connector Compliance with IEC 62368-1 according clause 6.2.2. to power source category PS2 ("Limited Power Source") required! Optional: Integrated PSU module S26361-F5000-P004 (Input 100-240V; Output 12V/65W) Datasheet S26361-F5000-P004
S711 Datasheet	D3713-Rx D3713-Vx <i>AMD Ryzen™ Embedded</i>	DC-IN: 8V-34V (5A max./65W max.) via external motherboard connector Compliance with IEC 62368-1 according clause 6.2.2. to power source category PS2 ("Limited Power Source") required! Optional: Integrated PSU module S26361-F5000-P004 (Input 100-240V; Output 12V/65W) Datasheet S26361-F5000-P004
S720 Datasheet	D3433-S D3434-S <i>Intel® SkyLake/KabyLake</i> D3633-S D3634-S <i>Intel® CoffeeLake</i>	DC-IN: 12V (5A max./60W max.) via DC-In connector integrated in S720 chassis (includes an EMI filter for 12V supply voltage) Compliance with IEC 62368-1 according clause 6.2.2. to power source category PS2 ("Limited Power Source") required! Optional: Integrated PSU module S26361-F5000-P004 (Input 100-240V; Output 12V/65W) Datasheet S26361-F5000-P004
S730 Datasheet	D3713-Rx D3713-Vx <i>AMD Ryzen™ Embedded</i> K3931-Nx <i>Intel ADL-N</i>	DC-IN: 8V-34V (5A max./65W max.) via external motherboard connector Compliance with IEC 62368-1 according clause 6.2.2. to power source category PS2 ("Limited Power Source") required! Optional: Integrated PSU module S26361-F5000-P004 (Input 100-240V; Output 12V/65W) Datasheet S26361-F5000-P004




This document covers following chassis versions:

- SMARTCASE™ S700 Rev. 02
- SMARTCASE™ S711 Rev. 02
- SMARTCASE™ S720 Rev. 02
- SMARTCASE™ S730 Rev. 01

2. Delivery Kit & Accessories: Screw Overview

Assembly Screws

Type	Amount	Mandatory Assembly Torque	Note
M2.5 x 4mm 	4	0.4Nm	for wall mount bracket assembly (delivered in plastic bag)
M2.5 x 5mm 	4	0.4Nm	for chassis foot assembly (delivered in plastic bag)
M2.5 x 6mm 	2	0.4Nm	screws for optional USB-C cable (included in cable kit F5000-K013) (for SC-S730/K3931-N only)
M3 x 4.5mm 	4	0.6Nm	for motherboard assembly (delivered in plastic bag)
	2		for chassis top cover assembly (delivered in plastic bag)
	1		for assembly of optional internal PSU module to crossbar (S26361-F5000-P004) (delivered in plastic bag)
	1		for assembly of DC-plug holder (delivered in plastic bag, SC-S700/SC-S711 only)
	1		for assembly of drive/fan carrier (pre-installed in chassis kit)
	1		for assembly of crossbar (riser card holder) (pre-installed in chassis kit)
	1		for assembly of PCIe slotbracket (pre-installed in chassis kit)
M3 x 3mm 	4	0.25Nm	for 2.5" drive/SSD assembly (delivered in plastic bag)
M3 x 3.2mm 	*)	0.2Nm	Screw for M.2 SSD/WLAN module assembly (pre-installed on motherboard)
M3 x 3mm 	*)	0.3Nm	Hexagon bolt ("assembly nut") for M.2 SSD module assembly (pre-installed on motherboard)

M2 x 7.5mm 	*)	0.25Nm	Screw for Mini-PCle module assembly (pre-installed on motherboard)
COM screws UNC4-40 	2	0.6Nm	Screw for optional COM cable (included in cable kit S26361-F5000-K005/-K010)
M8 x 0.75mm 	1	0.6Nm	Screw nut for DC-In connector (for SC-S711/S730; pre-installed on motherboard D3713 and D3723)

*) Amount depends on motherboard model

Note: Actual screw models may differ from pictures shown above!

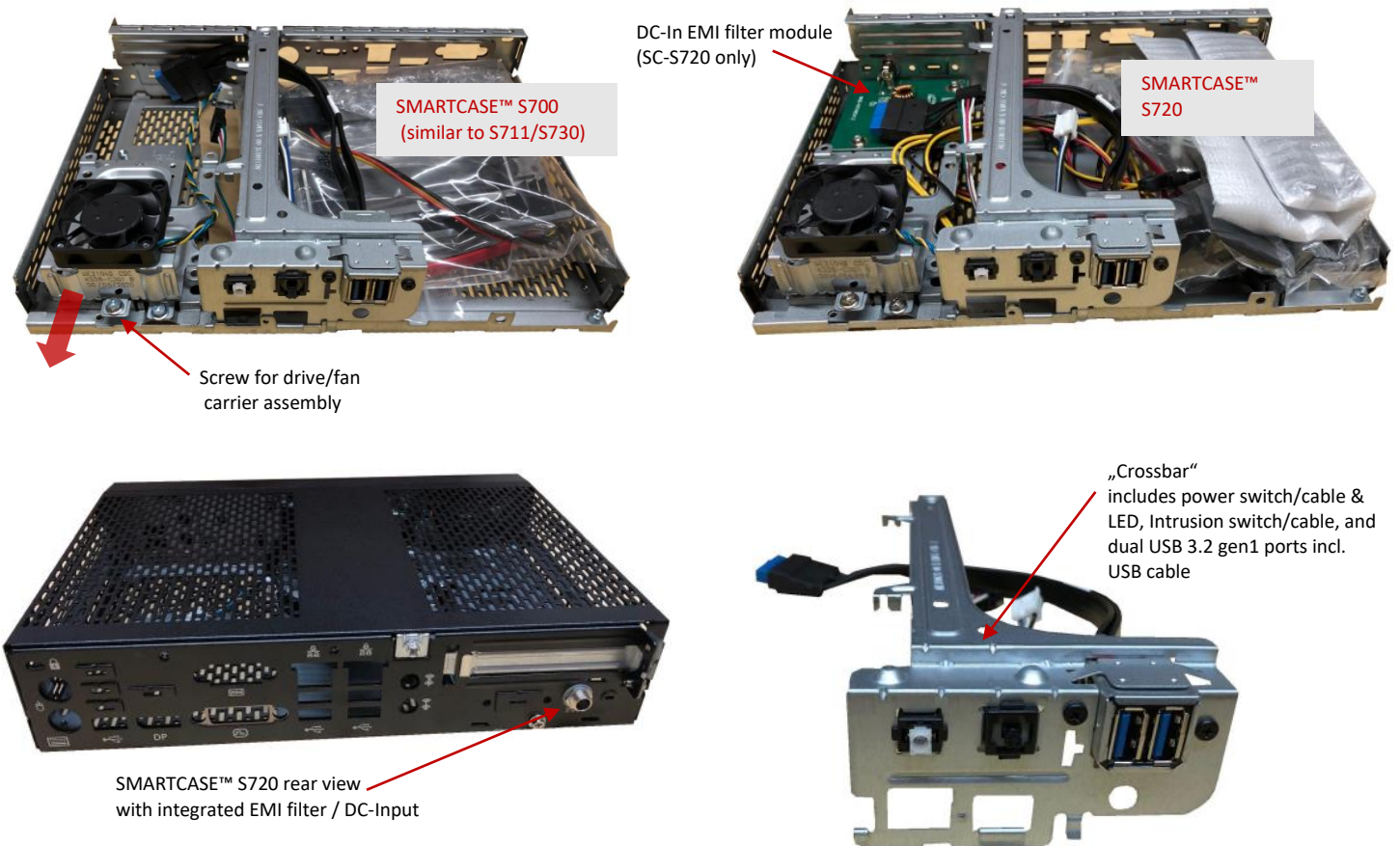
3. Step 1: Preparing the Chassis

The chassis top cover can be removed w/o uninstalling any screws, just slide the top cover forward and then pull it upwards.



After removing the top cover:

- › Unpack the accessories (content depends on SMARTCASE™ S7xx model).
- › Remove the crossbar (“risercard holder”) screw and remove the crossbar carefully
- › Remove the drive/fan carrier screw and remove the carrier by sliding it to the front



4. Step 2: Motherboard Assembly

Note: Before assembling the motherboard into the chassis, it's recommended to install the optional onboard components like processor, heatsink, memory, M.2 modules, etc.

Detailed notes/instructions concerning onboard component assembly are available in the related motherboard TechNotes documents.

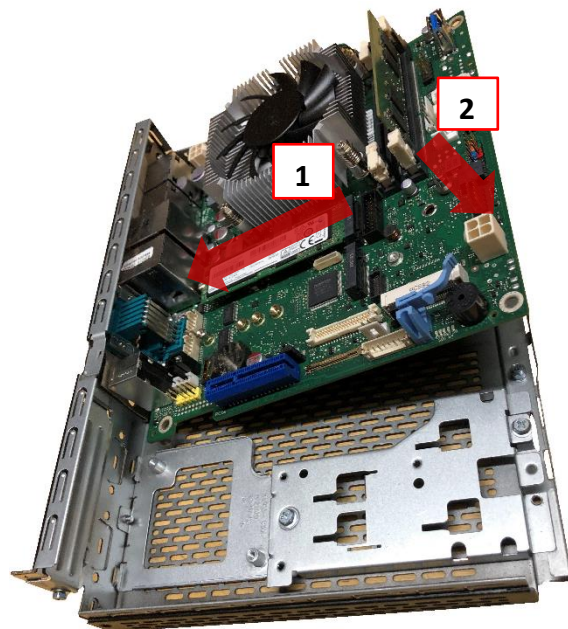
The SMARTCASE™ S7xx chassis provides several breakout covers for the rear I/O connectors, which must be removed before inserting the motherboard, additional COM-ports or a WLAN antenna.

Make sure to remove the appropriate covers, dependent on the motherboard version.

An appropriate screwdriver is recommended for removing these covers.

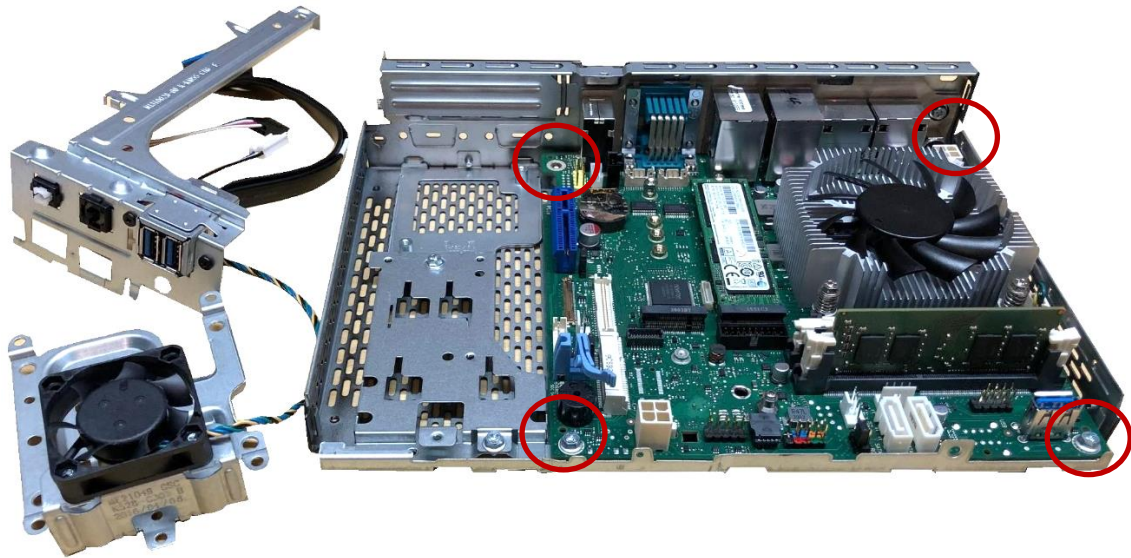


1. Slide in the motherboard carefully towards the rear I/O apertures
2. Move the motherboard carefully down to the final position

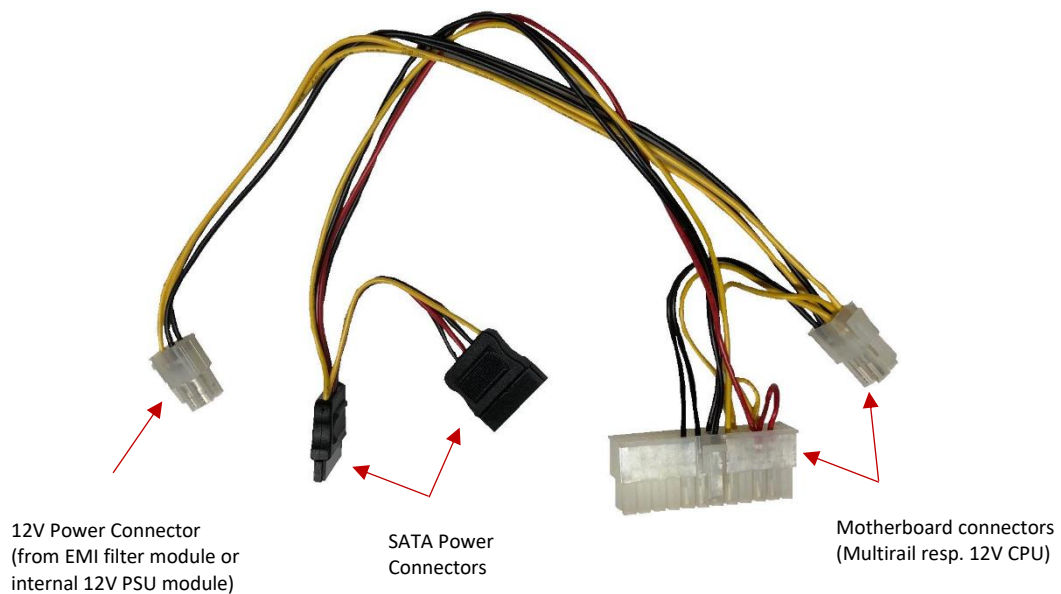


Push down the motherboard carefully while the four mounting holes fit onto the chassis nuts.
Assemble the red marked four mounting screws M3 x 4.5.

Mandatory torque = 0.6Nm



- › Usage of internal power cable (SMARTCASE™ S720 only)



5. Step 3: Installing Riser Card and HDD/SSD (optional)

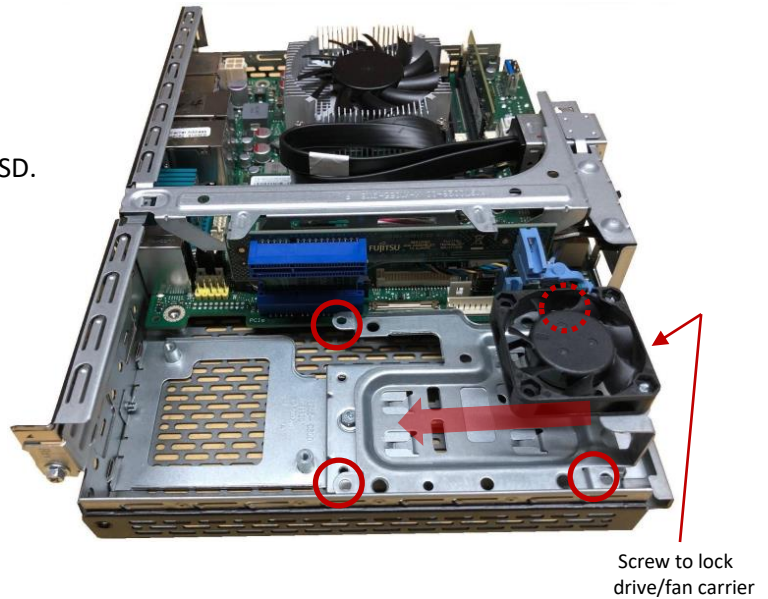
Insert the optional riser card before assembling the drive/fan carrier.

The drive/fan carrier provides 4 mounting holes (red circles) in order to assemble a 2.5" drive or SSD. Use the four M3 x 3.0 screws and plug in the SATA/Power connectors.

(Mandatory screw torque = 0.25Nm)

Lock the drive/fan carrier by a M3 x 4.5 screw.

(Mandatory torque = 0.6Nm)



6. Step 4: Installing internal DC-in Module (optional)



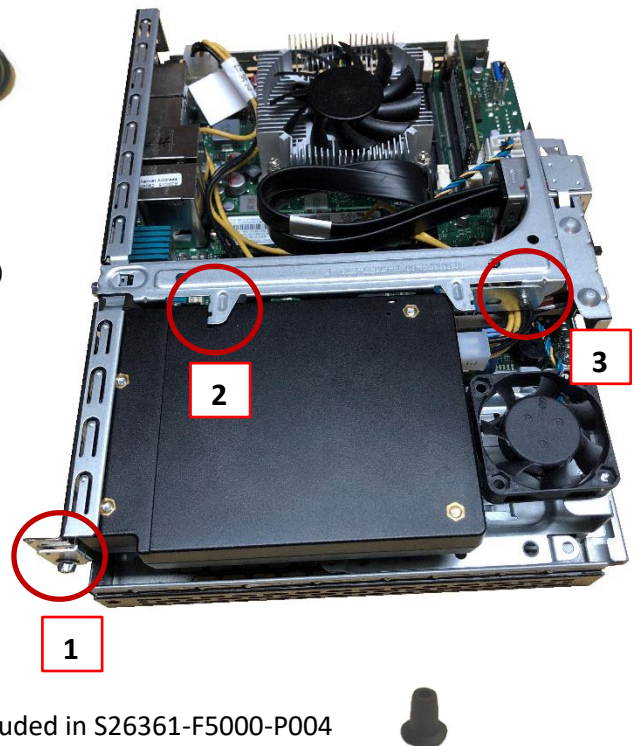
- 1) Remove PCIe slot bracket and insert DC-In module
- 2) Hook of crossbar must fit to recess of DC module
- 3) Fix metal sheet of DC module to crossbar by screw
- 4) Connect internal power cable between DC module and motherboard (internal DC-In connector)

Note: For SC-S720 specific internal power cable (included in chassis kit) has to be used. Instead of filter module the DC-In module has to be connected.

- 5) In order to avoid any misuse, the external DC-In connector of the motherboard respectively DC-In filter (SC-S720) should be closed by the rubber included in S26361-F5000-P004

Assembly screws for #1 and #3: M3 x 4.5

(Mandatory torque = 0.6Nm)

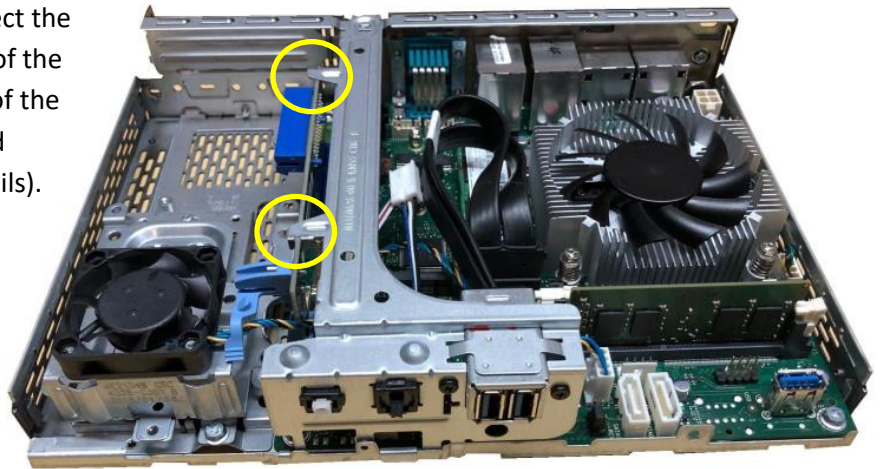


"Rubber" to close unused DC-In connector

7. Step 5: Crossbar & Front USB Assembly

In order to assemble the crossbar, connect the power button cable and intrusion cable of the crossbar to the appropriate connectors of the installed motherboard (see motherboard TechNotes document for connector details).

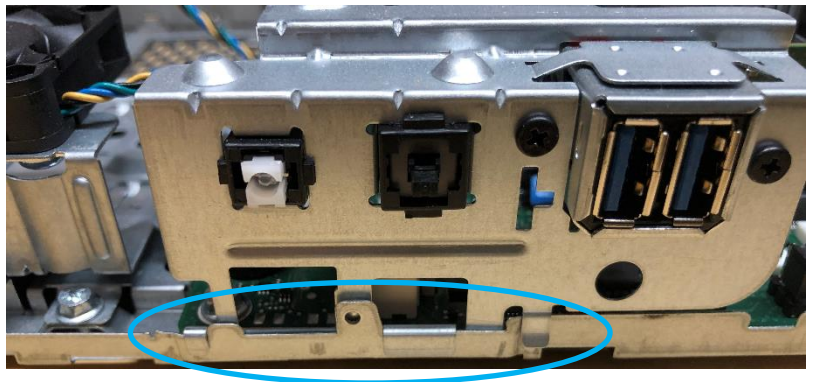
Install the USB cable of the crossbar to the appropriate USB 3.2 gen1 connector of the motherboard. Consider the cable routing; severe kinking of the USB cable must be avoided.



Position the crossbar on the chassis. Consider the correct locking of the riser card, if installed (yellow circles).

Take care of the correct position of the crossbar front hooks (blue circle), and install the rear crossbar screw M3 x 4.5mm.

(Mandatory torque = 0.6Nm)



(rear crossbar screw)

8. Step 6: Closing the Chassis

Slide the cover on top of the chassis while pushing it backward.
Some slight pressure may be required.

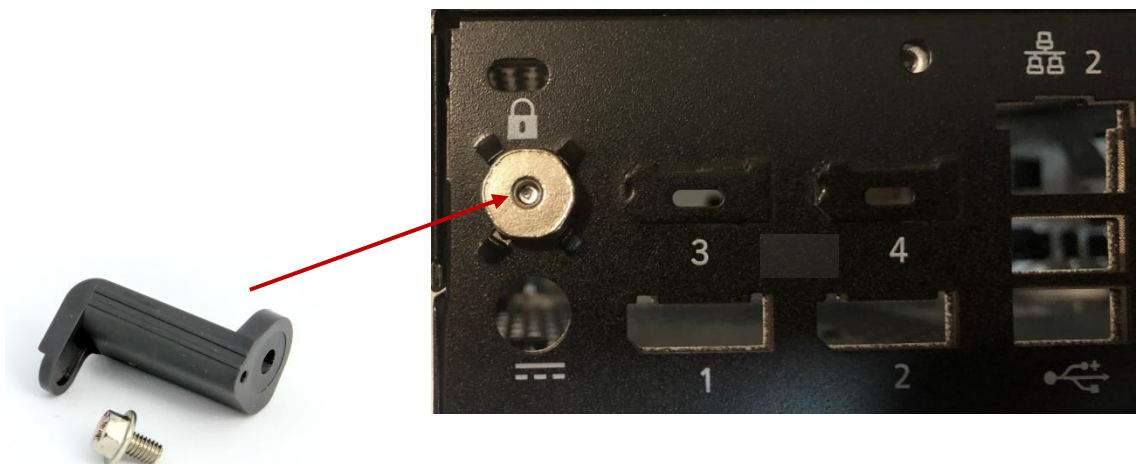


Close the chassis cover using two screws (M3x4.5) included in the SMARTCASE™ chassis kit.

Mandatory torque: 0.6Nm

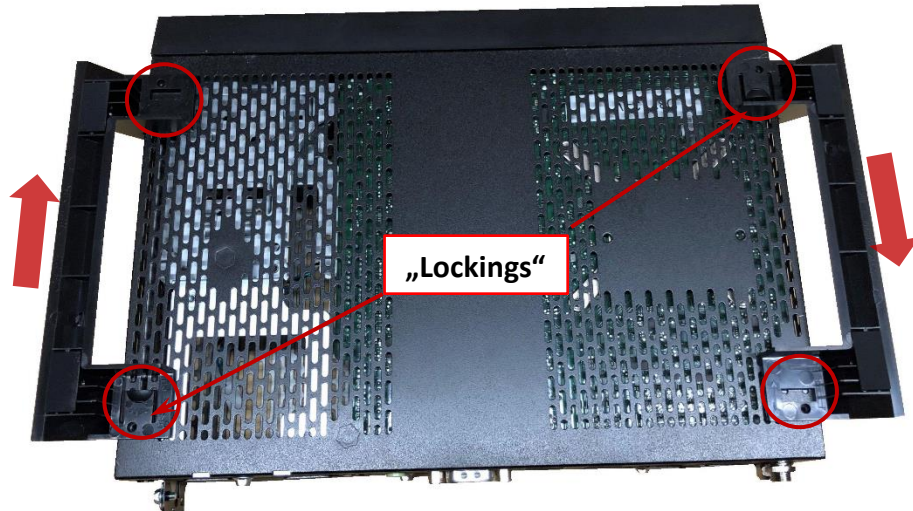
For SMARTCASE™ S700, SMARTCASE™ S711, or SMARTCASE™ S730 the DC-In lock can be installed;
screw M3x4.5

Mandatory torque: 0.6Nm

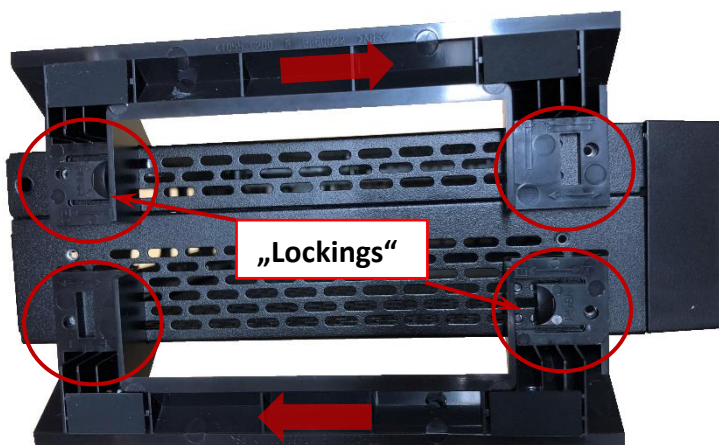


9. Step 7: Adding Stands (Chassis Feet)

- › The stands included in the chassis kit can be used for horizontal or vertical chassis operation
- › The feet are assembled by snap-in plastic notches while gently pressing the two lockings (consider snap-in direction as shown below).
- › Secure the stands by four screws M2.5 x 5. **Mandatory torque: 0.4Nm**



Foot assembly for horizontal operation (Bottom view)



Foot assembly for vertical operation (Bottom view)

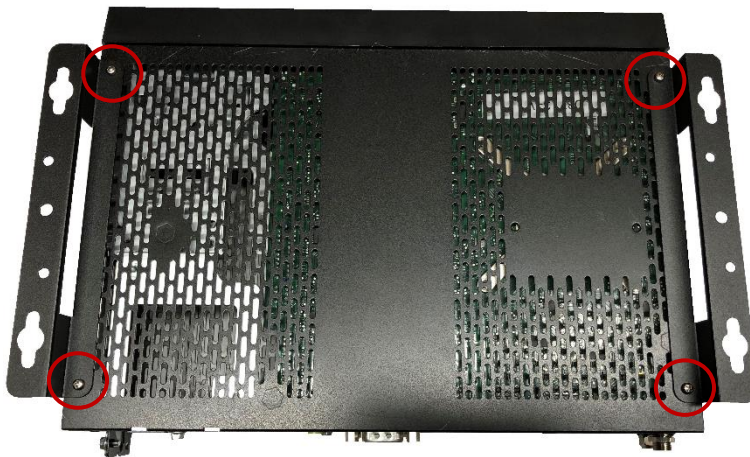


Note: Vertical operation is supported in shown orientation only (upside down not possible)

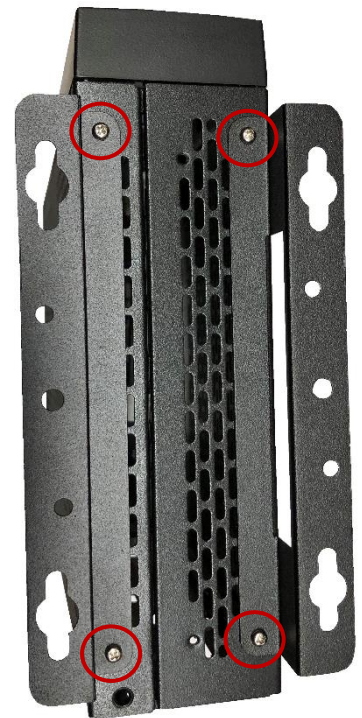
10. Step 8: Adding Wallmount Brackets

The chassis kit includes two wallmount brackets for horizontal or vertical use, which are assembled by four screws M2.5 x 4.

Mandatory torque: 0.4Nm



Wallmount bracket assembly at bottom side



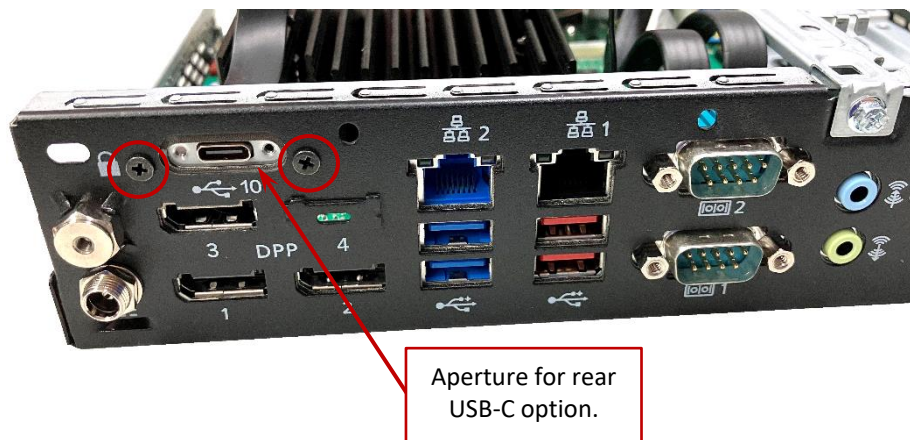
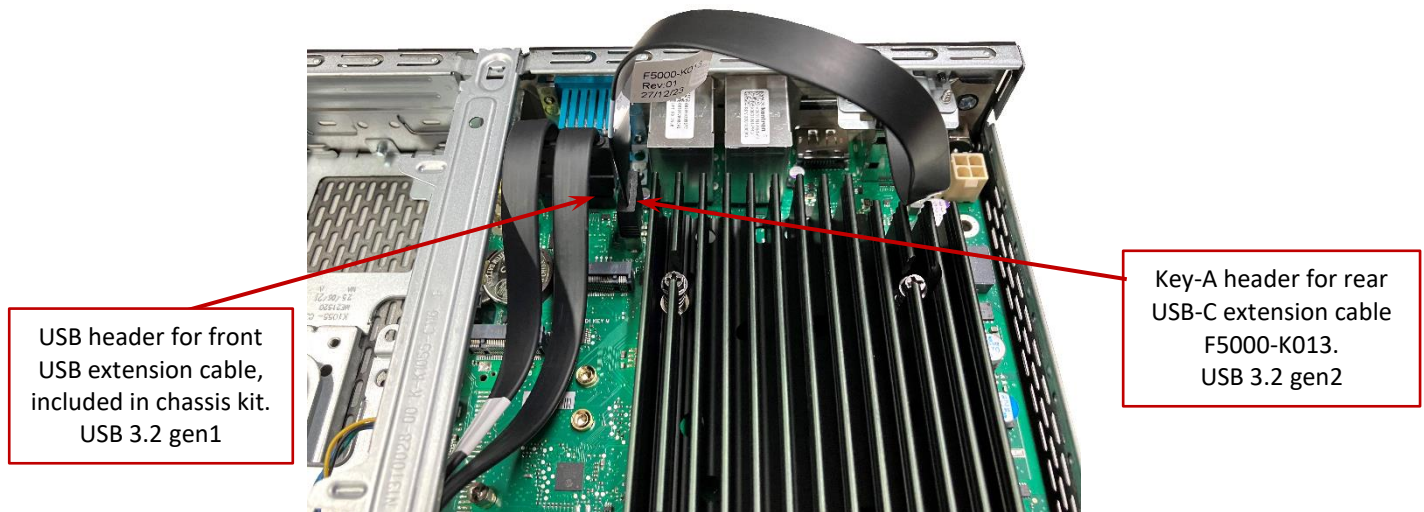
Wallmount bracket assembly at side wall

11. Step 9: Adding Rear USB-C Cable (optional)

For SMARTCASE™ S730 and K3931-N motherboard, an optional USB-C extension cable ([F5000-K013](#)) can be installed.

The cable connector has to be installed to the onboard USB 3.2 gen2 header (20 pin Key-A), and the USB-C connector is assembled to the rear I/O of the chassis. The appropriate breakout cover has to be removed first.

This USB-C port provides up to 3A (5V).



Assembly screws: M2.5 x 6 (included in F5000-K013)

Mandatory torque: 0.4Nm



About Kontron

Kontron is a global leader in IoT/Embedded Computing Technology (ECT). Kontron offers individual solutions in the areas of Internet of Things (IoT) and Industry 4.0 through a combined portfolio of hardware, software and services. With its standard and customized products based on highly reliable state-of-the-art technologies, Kontron provides secure and innovative applications for a wide variety of industries. As a result, customers benefit from accelerated time-to-market, lower total cost of ownership, extended product lifecycles and the best fully integrated applications.

For more information, please visit: www.kontron.com

Global Headquarters

Kontron Europe GmbH

Gutenbergstraße 2

85737 Ismaning, Germany

Tel.: + 49 821 4086 0

Fax: + 821 4086 111

pcmb-sales@kontron.com