



KOPS-Family

User's Guide (preliminary)

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2. Introduction

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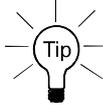
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2.1. Symbols used in this Manual

Symbol	Meaning
	This symbol indicates the danger of injury to the user or the risk of damage to the product if the corresponding warning notices are not observed.
	This symbol indicates that the product or parts thereof may be damaged if the corresponding warning notices are not observed.
	This symbol indicates general information about the product and the user manual.
	This symbol precedes helpful hints and tips for daily use.

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Other product names cited in this manual may also be trademarks and are used here solely for identification purposes.

3. Important Instructions

This chapter contains safety instructions which must be observed when using the SBC-749 board.

The manufacturer's instructions provide useful information on your SBC-749 Board.

3.1. Note on the Warranty

Due to their limited service life, parts which by their nature are subject to a particularly high degree of wear (wearing parts) are excluded from the warranty beyond that provided by law. This applies to the batteries, for example.

3.2. Exclusion of Accident Liability Obligation

Kontron Europe shall be exempted from the statutory accident liability obligation if the user fails to observe the safety instructions.

3.3. Liability Limitation / Exemption from the Warranty Obligation

In the event of damage to the device caused by failure to observe the hints in this manual and eventually on the device (especially the safety instructions), Kontron Europe shall not be required to honor the warranty even during the warranty period and shall be exempted from the statutory accident liability obligation.



4. General Safety Instructions for IT Equipment

Please read this section carefully and observe the instructions for your own safety and correct use of the board. Observe the warnings and instructions on the board and in the manual.

The SBC-749 Board has been built and tested by Kontron Europe in accordance with IEC / EN 60950-1 and was delivered in perfect condition.

In order to maintain this condition and ensure safe operation, the user must observe the instructions and warnings acc.

IEC / EN 60950-1 contained in this manual.

Kontron Europe can only guarantee the safety, reliability and performance of the board if all of the following safety instructions are observed.

- The SBC-749 Board must be used in accordance with the instructions for use.
- The SBC-749 Board is designed to be built-in to a system. The integration into the system has to be done such that the system complies with the IEC / EN 60950-1 safety rules.
- When installing the board into a system, ensure that the system is switched off and the systems power cord is disconnected from the mains power. Disconnect all cable connections of peripheral devices from the system.
- Ensure that the DC operating voltages adheres to the specification given in the "Power Requirements".
- Repairs may only be carried out by Kontron Europe.
- It must be assumed that safe operation is no longer possible,
 - if the device has visible damage or
 - if the device no longer functions.
 In these cases the device must be shut down and secured against unintended operation.



4.1. Electrostatic Discharge (ESD)

The components on the board are sensitive to static electricity. Care must therefore be exercised at all times during handling and inspection of the SBC-749 Board, in order to ensure the product integrity.

- Do not handle this product while it is outside its protective enclosure, while it is not used for operational purposes, unless it is otherwise anti-static protected.
- Unpack or install this product only at EOS/ESD safe work stations. When safe work station are not guaranteed, it is important for the user to be electrically discharged before touching the SBC-749 Board with his/her hands or tools. This is most easily done by touching a metal part of your system housing.
- Only hold the assemblies at the edge.
- Do not touch any connection pins or conductors on the assembly.

5. Install Introduction

1. The described KOPS-Family has been designed according to the electronic, mechanical and thermal specifications of the OPS Standard, (Open Pluggable Specification), developed by Intel.
2. Please have a look at the user manual and/or datasheet of your display to confirm whether an adapter is needed or additional adapters might be needed.
3. Please switch off the display, projector completely using the hard on/off switch or preferred disconnect the equipment fully from the mains, before inserting the Slot-In PC.
4. The KOPS-System has to be inserted in the appropriate OPS Slot or Dual Slot Adapter. (Picture 3A / 3B)
5. The KOPS-System starts up automatically after turning on the display.
6. The KOPS-System controls its own fan according to the thermal circumstances. At low temperatures, and if the CPU workload is low, the fans may not activate.
7. This is a normal procedure and not classified as a failure.
8. If the KOPS-Family is equipped with a WIFI option, please ensure to attach the antenna to the WIFI connector on the KOPS-System.

5.1. Unpack and prepare

	<p>Check the box:</p> <ul style="list-style-type: none">- Undamaged- correct configuration you ordered
	<p>Open</p> <ul style="list-style-type: none">- Turn to rear side- Push below latch and open cover
	<p>Opened cover</p>

	<p>Remove unit form package</p>
	<p>If you ordered a WiFi version: There is an antenna included ☞ Do not crap it together with some packaging material</p>
	<p>If included: Assemble antenna</p>

5.2. Prepare the OPS-Slot

	<p>Check your display</p> <p>If the slot is covered, please consult the monitor manual how to prepare this.</p>
	<p>Make sure that the rear side is covered but offers ventilation holes</p>

*Symbolpictures

5.3. Install the OPS-Unit

	<p>Install the unit:</p> <ul style="list-style-type: none">- Interfaces to the monitor "outside"- FAN to the rear side- Make sure there are ventilation-holes for FAN and heat sink
	<p>To prevent theft and fix the unit against shock and vibrations</p> <ul style="list-style-type: none">- Fix it with the screws (part of the monitor)

5.4. Update/replace the OPS-Unit

		<p>Remove the unit:</p> <ul style="list-style-type: none">- Use the handle to remove the unit  <p>Do not use any cable or the antenna to remove the unit</p>
		<p>Please place the unit in an adequate bag and package for sending back</p> <p>*refer 7.1 Returning Defective Merchandise</p>

6. Troubleshooting

1. The KOPS-System does not start up

a. Does the KOPS-Family fit properly in the Option Slot? Are the screws tightened properly?

b. The BIOS settings in the KOPS-System may have been changed in that way that the KOPS-System only starts up if the on/off switch is pressed.

Press the on/off switch or reset the original BIOS settings.

2. The KOPS-System starts up but there is no picture on the display

a. Did you choose "option" as input on the display?

b. If you have connected an external display, the internal display could be deactivated.

Please connect an external display again and configure the monitor controls under display, in the control panel.- the internal display has to be primary.

c. If you changed the BIOS settings the consequences described in 2b could occur. Therefore please reset the BIOS settings.

3. The picture is out of focus.

a. Is the resolution set correctly?

The native resolution of your display/projector is described in the datasheet or manual of your device. This resolution should also be chosen in the operating system of the KOPS-System.

b. The display might have been set to another size. Push the button "size" or "aspect" of your remote control until you see a green "standard" on the screen.

4. After installation / de-installation of software the system is slow / unstable.

a. The operation system is limited by the software and/or parts of the software concerning functionality and performance. Please install the operating system again.

Remark 1: All stored data will be lost

Remark 2: The installation / reboot process can take 15 minutes.

Remark 3: Please make sure that you only download the image of the operating system you own a license for.

5. A device connected by USB does not work properly

a. Make sure that all drivers have been installed successfully for your USB device.

b. Please contact the manufacturer of the USB device

c. Please download the operating system again (please see 4b)

Remark 1: All stored data will be lost

Remark 2: The installation / reboot process can take 15 minutes.

d. Please ensure there is nothing else connected to the USB sockets, which could be drawing additional power (for example a touch panel), thus rendering your USB device undetectable

6. After a short operation time the performance of the system decreases significantly, a blue screen is seen or the system switches off.
 - a. This issue could occur due to overheating of the system. Therefore please make sure that there is appropriate cooling around the system. If the display with KOPS-System is too close to the wall this can cause insufficient space for appropriate ventilation. Dust build up can also cause the system to overheat. Thus please ensure there is sufficient ventilation around the unit, and dust build up has been removed.
7. By using the mini display port no picture is shown / the picture is defective
 - a. Make sure that the mini display port cable is connected correctly to the mini display port interface on the KOPS-System. Ensure the cable is connected fully.
 - b. Please check whether there is any dirt on the cable or on the display port interface of the KOPS-System. Dirt can be removed with contact cleaner and a small brush.
8. By using the mini display port the native resolution of the display is not recognized.
 - a. Please try and reboot the KOPS-System, to ensure successful EDID handshaking. Once rebooted, please go into the graphics properties, to check if the native resolution of the connected monitor can be selected.
 - b. There could be a restriction of the graphic drivers for your configuration. Please contact your Kontron support.

7. Technical Support

For technical support, please contact our Technical Support department.

Tel: +49 (0) 8165/77 112

e-mail: support-keu@kontron.com

Web: <http://www.kontron.com/support>

Make sure you have the following on hand when you call:

- the unit part id number (P/No #),
- and the serial number (S/No #) of the unit (provide the serial number found on the label, placed on the rear side of the board).

Be ready to explain the nature of your problem to the service technician.

If you have any questions about Kontron Europe or our products and services, you may reach us at the aforementioned numbers, or at: www.kontron.com or by writing to:

Kontron Europe GmbH
Oskar-von-Miller-Str. 1

85386 Eching
Germany

7.1. Returning Defective Merchandise

Please follow these steps before you return any merchandise to Kontron Europe:

1. Download the corresponding form for returning a device with an RMA No. [RMA (Return of Material Authorization)] from our website www.kontron.com / Support /.RMA Information; contact our Customer Service department to obtain an RMA No.
e-mail: service@kontron.com
2. Ensure that you have received an RMA number from Kontron Customer Services before returning any device. Write this number clearly on the outside of the package.
3. Describe the fault that has occurred.
4. Please provide the name and telephone number of a person we can contact to obtain more information, where necessary. Where possible, please enclose all the necessary customs documents and invoices.
5. When returning a device:
 - Pack it securely in its original box.
 - Enclose a copy of the RMA form with the consignment.

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