

AMD 4700S 8-CORE Processor Desktop Kit User Manual

Home » AMD » AMD 4700S 8-CORE Processor Desktop Kit User Manual

Contents

- 1 AMD 4700S 8-CORE Processor Desktop Kit
- **2 ADDITIONAL INFORMATION**
- **3 PACKAGE CONTENTS**
- **4 SPECIFICATIONS**
- **5 SAFETY INFORMATION**
 - **5.1 ELECTRICAL SAFETY**
 - **5.2 OPERATION SAFETY**
- **6 CONNECTORS QUICK GUIDE**
 - **6.1 OVERVIEW OF COMPONENTS**
- 7 REAR I/O PANEL QUICK GUIDE
- **8 AMD 4700S DESKTOP KIT INSTALLATION**
 - 8.1 MOUNTING AND I/O PLATES
 - **8.2 POWER SUPPLY**
- 8.3 GRAPHICS CARD
- 9 BIOS AND DRIVERS
- **10 WARRANTY INFORMATION**
 - **10.1 READ THIS FIRST**
 - 10.2 TWO (2) YEAR LIMITED WARRANTY FOR DESKTOP KIT
 - **10.3 WARRANTY LIMITATIONS AND EXCLUSIONS**
- 11 Documents / Resources
 - 11.1 References
- **12 Related Posts**



AMD 4700S 8-CORE Processor Desktop Kit



ADDITIONAL INFORMATION

Refer to the following sources for additional information and for product and software updates:

- AMD website: <u>www.amd.com/desktopkit</u>
 The AMD website provides updated information on AMD hardware and software products.
- Optional documentation: Your product package may include optional documentation, such as warranty flyers, that may have been added by your dealer. These documents are not part of the standard package.

PACKAGE CONTENTS

Your box includes an AMD 4700S Desktop Kit which consists of:

• MINI-ITX MOTHERBOARD

Desktop Kit includes the following which is already installed and/or mounted on the Motherboard:

- AMD PROCESSOR BUILT ON "ZEN 2" ARCHITECTURE
- 8GB OR 16GB MEMORY
- A THERMAL SOLUTION
- INSTALLATION INSTRUCTIONS
- 2-YEAR LIMITED HARDWARE WARRANTY
- 2x SATA CABLES
- I/O SHIELD

SPECIFICATIONS

CPU	AMD 4700S 8-Core Processor "Zen 2" architecture			
Memory	8GB or 16GB GDDR6			
FCH	AMD A77E Fusion Controller Hub			
Super I/O	ITE IT8772E			
LAN	Asix AX88179 Gigabit Ethernet controller			
Audio codec*	Realtek ALC897			
BIOS ROM	16MB			
Expansion slot	1x PCIe x16 slot, supports x4 signal			
Internal connectors	1x 24-pin ATX main power connector 1x 8-pin ATX 12V power connector 2x SATA 6Gb/s connectors 1x USB3.2 Gen1 5Gbps connector 1x 4-pin CPU fan connector 1x 4-pin system fan connector 1x Front panel audio connector 1x Syste m panel connector 1x Clear CMOS jumper 1x Dubug 80 port connectorx			
Rear I/O	4x USB2.0 Type-A ports 3x USB3.2 Gen2 10Gbps Type-A ports 1x LAN (RJ45) port 1x USB3.2 Gen1 5Gbps Type-A ports 3x audio jacks			

SAFETY INFORMATION

ELECTRICAL SAFETY

- To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system.
- When adding or removing devices to or from the system, ensure that the power cables for the devices are unplugged before the signal cables are connected. If possible, disconnect all power cables from the existing system before you add a device.
- Before connecting or removing signal cables from the Desktop Kit, ensure that all power cables are unplugged.
- Seek professional assistance before using an adapter or extension cord. These devices could interrupt the grounding circuit.
- Ensure that your power supply is set to the correct voltage in your area. If you are not sure about the voltage of the electrical outlet you are using, contact your local power company.
- If the power supply is broken, do not try to fix it by yourself. Contact a qualified service technician or your retailer.

OPERATION SAFETY

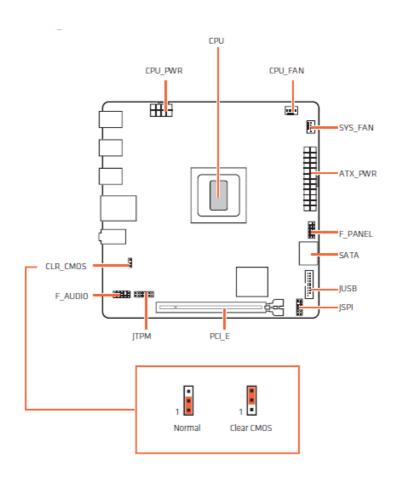
- Before installing the Desktop Kit and adding components, carefully read all the manuals that came with the package.
- Before using the product, ensure all cables are correctly connected and the power cables are not damaged. If
 you detect any damage, contact your dealer immediately.
- To avoid short circuits, keep paper clips, screws, and staples away from connectors, slots, sockets and

circuitry.

- Avoid dust, humidity, and temperature extremes. Do not place the product in any area where it may be exposed to moisture.
- Place the product on a stable surface.
- If you encounter technical problems with the product, contact a qualified service technician or your retailer.
- Your Desktop Kit should only be used in environments with ambient temperatures between 0°C and 40°C.

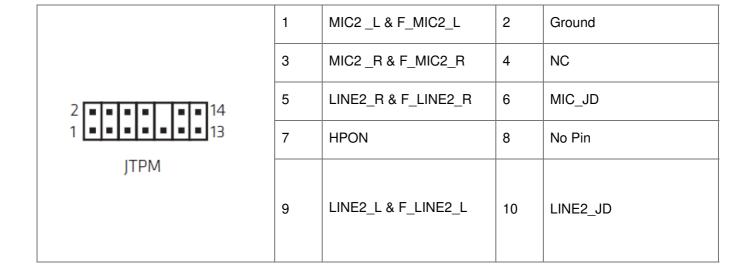
CONNECTORS QUICK GUIDE

OVERVIEW OF COMPONENTS



10 9 2 1 F_PANEL	1	HDD LED+	2	Power LED+
	3	HDD LED-	4	Power LED-
	5	Reset switch –	6	Power switch+
	7	Reset switch +	8	Power switch-
	9	NC	10	No Pin

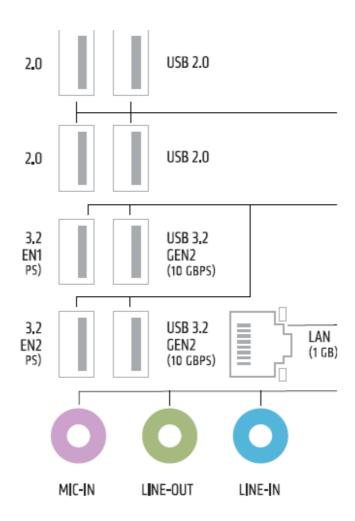
	1	FJUSB3	11	USB12P
10 11	2	USB_SS_RX3N	12	USB12N
	3	USB_SS_RX3P	13	Ground
	4	Ground	14	USB_SS_TX2P_R
	5	USB_SS_TX3N_R	15	USB_SS_TX2N_R
	6	USB_SS_TX3P_R	16	Ground
1 20	7	Ground	17	USB_SS_RX2P
JUSB	8	USB13N	18	USB_SS_RX2N
	9	USB13P	19	FJUSB3
	10	NC	20	No Pin



	1	+3.3V_SPI	2	+3.3V_SPI
2	3	FCH_SPI_DATAIN	4	FCH_SPI_DATAOUT
	5	FCH_SPI_CS#R	6	FCH_SPI_CLK
F_AUDIO	7	Ground	8	Ground
	9	FCH_PWRGD	10	No Pin
	11	FCH_SPI_WP#R	12	SPI_HOLD#

	1	LPC_CLK0	2	3VSB
42	3	A_RST#	4	VCC3
	5	LAD0	6	SERIRQ
12 • • 11	7	LAD1	8	VCC5
· ·	9	LAD2	10	No Pin
2 • • 1	11	LAD3	12	Ground
JSPI	13	LFRAME#	14	Ground

REAR I/O PANEL QUICK GUIDE



- USB 2.0 Port–USB 2.0 port is for attaching USB
 2.0 devices such as keyboard, mouse, or other USB 2.0-compatible devices.
- USB 3.2 Port
 – USB 3.2 port is backward-compatible with USB 2.0 devices. It supports data transfer rate up to 5 Gbit/s for Gen 1 and up to 10 Gbit/s for Gen 2.
 In order to use USB 3.2 devices, you must connect to a USB 3.2 port. If a USB cable is used, it must be USB

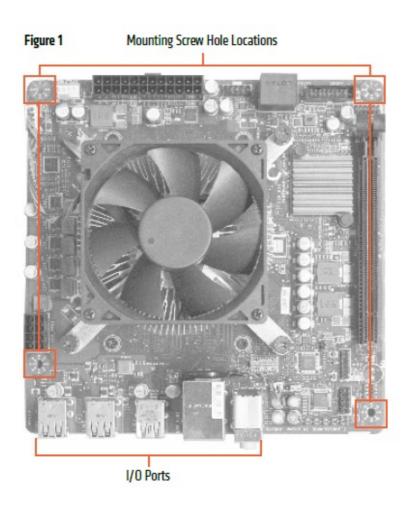
3.2 compliant.

- LAN Port-The standard RJ-45 LAN jack is for connecting to a Local Area Network (LAN).
- Audio Ports-These connectors are used for audio devices. The color of the jack refers to the function of the

connector.

- PINK- Mic-In: Used as a connector for a microphone.
- GREEN- Line Out: Used as a connector for speakers or headphone.
- BLUE- Line-In: Used for connecting external audio outputting devices.

AMD 4700S DESKTOP KIT INSTALLATION



MOUNTING AND I/O PLATES

When installing the motherboard, first install the necessary mounting stands required for the motherboard on the mounting plate in your computer case.

If there is an I/O back plate that came with the computer case, please replace it with the I/O backplate that came with the motherboard package. The I/O backplate should snap easily into the computer case without the need for any screws.

[Fig. 1] Align the mounting plate's mounting stands with the screw holes on the motherboard and secure the motherboard with the screws provided with your computer case. The locations of the screw holes on the motherboard are shown on the left.

For more information, please refer to the manual that came with the computer case.

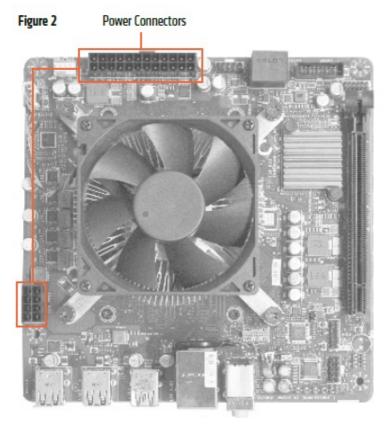
[Fig. 1] The I/O ports should be facing toward the rear of the computer case. They should line up with the holes on the I/O backplate.

- Install the motherboard on a flat surface free from unnecessary debris.
- To prevent damage to the motherboard, any contact between the motherboard circuitry and the computer case, except for the mounting stands, is prohibited.
- Please make sure there are no loose metal components on the motherboard or within the computer case that
 may cause a short circuit of the motherboard.

POWER SUPPLY

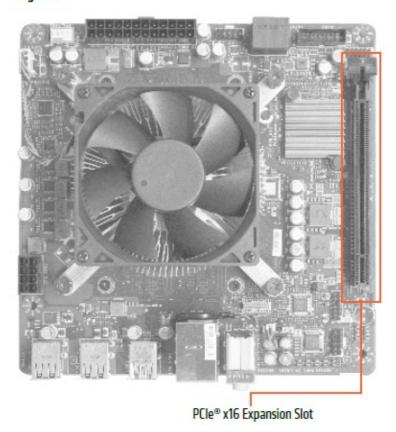
[Fig. 2] These connectors allow you to connect an ATX power supply. To connect the ATX power supply, align the power supply cable with the connector and firmly press the cable into the connector. If done correctly, the clip on the power cable should be hooked on the motherboard's power connector.

Make sure that all the power cables are securely connected to a proper ATX power supply to ensure stable operation of the motherboard.



GRAPHICS CARD

Figure 3



- 1. [Fig. 3] Line up the graphics card on top of the PCle® x16 expansion slot with the display ports facing out of the computer case.
- 2. Push the graphics card into its expansion slot.

Please consult your graphics card's manual for further instructions regarding driver installation or other special settings.

BIOS AND DRIVERS

After you install the operating system you will need to install the latest drivers to maximize the performance of the new AMD 4700S Desktop Kit-based computer you just built. Drivers allow you to utilize the Desktop Kit more efficiently and to take advantage of any special features AMD provides.

The latest drivers for the AMD 4700S Desktop Kit are available at www.amd.com/en/support

WARRANTY INFORMATION

- CERTIFICATE OF AUTHENTICITY
- · READ THIS FIRST
- TWO-YEAR LIMITED WARRANTY

THIS CERTIFICATE IS YOUR ASSURANCE THAT THE DESKTOP KIT YOU HAVE OBTAINED IS A PRODUCT OF ADVANCED MICRO DEVICES, INC.

RECORD SERIAL NUMBER HERE:

The contents of this document are provided in connection with Advanced Micro Devices (AMD), Inc. products. AMD makes no representations or warranties with respect to the accuracy or completeness of the contents of this publication and reserves the right to make changes to specifications and product descriptions at any time without

notice. No license, whether express, implied, arising by estoppel or otherwise, to any intellectual property rights is granted by this publication. Except for purchasers buying products directly from AMD pursuant to AMD's Standard Terms and Conditions of Sale and except for the express, limited warranties set forth in this insert or on www.amd.com/warranty, AMD disclaims all implied warranties, including, without limitation, the implied warranty of merchantability, fitness for a particular purpose or infringement of any intellectual property right. Your AMD Processor is not designed, intended, authorized for use as a component in any system intended for surgical implant into the body, or in any other application intended to support or sustain life, or in any other application in which the failure of AMD's product could create a situation where personal injury, death, or severe property or environmental damage may occur. Any such use will cause this Limited Warranty to be null and void, and you agree to indemnify and hold AMD harmless from and against any and all third-party lawsuits or other claims for losses, costs and damages against AMD that arise out of or in connection with such use. For products purchased in Australia, the following provision applies: Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

CONGRATULATIONS ON YOUR PURCHASE OF AN AMD DESKTOP KIT.

Please follow these instructions carefully to help ensure the most positive experience with your system. **WARNING** –

- 1. As with all computer equipment, the Desktop Kit can be damaged by Electro Static Discharge (ESD). Take proper ESD precautions when handling the Desktop Kit.
- 2. To ensure full compliance with the AMD Limited Warranty for the Desktop Kit, a thermal solution must be used.

 This Desktop Kit includes a thermal solution that must be used.
- 3. The Desktop Kit is intended to be operated only within the associated AMD published specifications and factory settings (AMD Specifications) and may only be used with socket infrastructure set forth in such specification. Operation of the Desktop Kit outside of the AMD Specifications, including but not limited to use with a socket infrastructure other than the socket infrastructure set forth in the specification, may damage the processor and/or lead to other problems, including but not limited to: damage to your system components including your motherboard and components thereon (e.g. memory); system instabilities (e.g. data loss and corrupted images); reduction in system performance; shortened processor, system component and/or system life; and in extreme cases, total system failure.

READ THIS FIRST

PART 1. IMPORTANT — Prior to installing: To help ensure a positive experience, continued warranty coverage during the warranty term, and reliable operation, please consider the following points before installing the Desktop Kit:

- 1. Record the serial number in the front page of this poster. You can find the serial number on the opening panel of the retail box. The serial number is required for any warranty claims.
- 2. Use only with the thermal solution sold with this AMD Desktop Kit. Use of any other thermal solution will void the warranty.
- 3. Never use the Desktop Kit without the included thermal solution installed.
- 4. Read and follow installation instructions carefully. Incorrect installation may result in overheating or other damage to the Desktop Kit that will void the limited warranty.

Except as otherwise provided herein, and only for the two (2) year period (the "Warranty Term") beginning after the date the AMD Desktop Kit contained in this box and that has a valid, AMD verified serial number (the "AMD Desktop Kit") was first purchased by the original customer, AMD warrants that the AMD Desktop Kit, when properly installed and used with the thermal solution provided herewith, under normal use conditions, will be free from defects in material and workmanship and will substantially conform to the AMD publicly available specifications.

If the AMD Desktop Kit fails to meet the above warranties during the Warranty Term, AMD, at its sole option, will: (1) repair the AMD Desktop Kit by means of hardware and/or software; (2) replace the AMD Desktop Kit with a new, previously owned or reconditioned AMD Desktop Kit of equivalent performance; OR (3) refund the value of the AMD Desktop Kit at the time of the warranty claim. The remedies stated above will be the exclusive remedy for any breach of this Limited Warranty, notwithstanding any failure of the essential purpose of any such remedy. This warranty does not extend beyond the first purchaser of the AMD Desktop Kit.

WARRANTY LIMITATIONS AND EXCLUSIONS

THIS LIMITED WARRANTY IS EXPRESSED IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, THE IMPLIED WARRANTY AGAINST INFRINGEMENT, AND OF ALL OTHER OBLIGATIONS OR LIABILITIES ON AMD'S PART, AND AMD NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR AMD ANY OTHER LIABILITIES. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES SO THIS LIMITATION MAY NOT APPLY TO YOU.

ALL WARRANTIES HEREUNDER ARE LIMITED IN DURATION TO THE WARRANTY TERM AND ALL CLAIMS FOR WARRANTY SUPPORT MUST BE PROPERLY SUBMITTED TO AMD ON OR BEFORE THE END OF THE WARRANTY TERM. SOME JURISDICTIONS DO NOT ALLOW LIMITATIONS ON THE DURATION OF A WARRANTY, SO THIS LIMITATION MAY NOT APPLY TO YOU.

This Limited Warranty does not apply to any AMD Desktop Kit where AMD determines that the defect or non-conformance was caused by any of the following: (i) use of a heatsink/fan not provided or expressly recommended by AMD or otherwise conforming to the applicable AMD thermal design documentation requirements; (ii) improper use, operation or modification outside of the AMD Specifications; (iii) abuse, negligence, or improper handling, installation or testing; (iv) accident, loss or damage in transit; (v) overclocking the Product (even when enabled by AMD); (vi) design defects or errors in the Product disclosed as Errata in AMD technical documents found at www.amd.com/en/support/tech-docs; (vii) defects in the board, computer system or other product into which the AMD Desktop Kit was incorporated; (vii) unauthorized repair or alteration by a person other than AMD; or (viii) any other external factors beyond the control of AMD. Further, this Limited Warranty provides no coverage against security vulnerabilities or security threats, including intentional misconduct by third parties.

AMD does not warrant that your AMD Desktop Kit will be free from design defects or errors known as "errata". This Limited Warranty shall be null and void if the AMD Desktop Kit is used with any heatsink/fan other than the one provided herewith.

AMD is not responsible for payment or reimbursement of removal or replacement costs, or any other costs or expenses arising out of or related to a breach of this Limited Warranty.

LIMITATIONS OF LIABILITYAMD'S RESPONSIBILITY UNDER THIS, OR ANY OTHER WARRANTY, IMPLIED OR EXPRESS, IS LIMITED TO REPAIR, REPLACEMENT OR REFUND, AS SET FORTH ABOVE. NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY, THESE REMEDIES ARE THE SOLE AND EXCLUSIVE REMEDIES FOR ANY BREACH OF WARRANTY. AMD IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR UNDER ANY OTHER LEGAL THEORY INCLUDING, BUT NOT LIMITED TO, LOST REVENUES, LOST PROFITS, DOWNTIME, GOODWILL, DAMAGE TO OR REPLACEMENT OF EQUIPMENT AND PROPERTY, COST OF LABOR, AND ANY COSTS OF RECOVERING, REPROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED IN OR USED WITH A SYSTEM CONTAINING YOUR AMD DESKTOP KIT. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM JURISDICTION TO JURISDICTION.

JURISDICTION AND VENUE

This warranty gives you specific legal rights. You may also have other rights which vary from state to state, and jurisdiction to jurisdiction. Unless prohibited by law, you hereby agree to all terms of this warranty in the English language. The United Nations Convention on Contracts for the International Sale of Goods does not apply to this warranty and is excluded. This warranty and all disputes that may arise from it shall be governed by the laws of the state of Texas in the United States. You hereby consent to the personal jurisdiction of the state and federal courts located in Travis County, Texas, for any lawsuit filed there arising from or related to this warranty.

HOW TO OBTAIN WARRANTY SERVICE

To obtain warranty service for the AMD Desktop Kit, first contact the company from which you bought your boxed Desktop Kit. After their warranty expires or if you are unable to otherwise obtain warranty service you should contact AMD online at: in the U.S., Canada, Europe, the Middle East, Africa, and the Russian Federation, http://support.amd.com/consumer for Consumers, and http://support.amd.com/consumer for Resellers; in Asia, Asia.support@amd.com/.

Please be prepared to provide 1) your name, address, and telephone numbers; (2) proof of purchase; (3) a description of the type of boxed Desktop Kit; (4) the serial number found on your boxed Desktop Kit and (5) a detailed description of the problem. The Technical Service Center Representative may need additional information from you depending on the nature of the problem.

Upon receipt of a Return Material Authorization (RMA) number from the Technical Service Center Representative, you will be required to send in your Desktop Kit including the heatsink/fan that were packaged together in the retail container. The packaging materials themselves will not be required to process your RMA.

Any replacement AMD Desktop Kit is warranted under this written warranty and is subject to the same limitations and exclusions for the remainder of the original Warranty Term or two (2) years, whichever is longer.

Online RMA service is available at http://support.amd.com/consumer for Consumers and

http://support.amd.com/partner for Resellers.

Other warranty inquires may be sent by mail to:

AMD Warranty Questions

P.O. Box 3453, Sunnyvale, CA 94088-3453

or visit http://amd.com/warranty

(Do not send the product to this address.)

LEARN MORE ABOUT THE AMD 4700S DESKTOP KIT. WWW.AMD.COM/DESKTOPKIT

© 2021 Advanced Micro Devices, Inc. All rights reserved.

The information contained herein is for informational purposes only and is subject to change without notice. While every precaution has been taken in the preparation of this document, it may contain technical inaccuracies, omissions and typographical errors, and AMD is under no obligation to update or otherwise correct this information. Advanced Micro Devices, Inc. makes no representations or warranties with respect to the accuracy or completeness of the contents of this document, and assumes no liability of any kind, including the implied warranties of non-infringement, merchantability or fitness for particular purposes, with respect to the operation or use of AMD hardware, software or other products described herein. No license, including implied or arising by estoppel, to any intellectual property rights is granted by this document. Terms and limitations applicable to the purchase or use of AMD's products are as set forth in a signed agreement between the parties or in AMD's Standard Terms and Conditions of Sale.

PID# 21791450-C

Documents / Resources



References

- Warranty Services | AMD
- AMD Drivers and Support | AMD
- AMD Drivers and Support | AMD
- AMD 4700S 8-Core Processor Desktop Kit | AMD
- AMD Drivers and Support | AMD

Manuals+,