

GMKtec EVO-X1

GMKtec EVO-X1 AI Mini PC User Manual

Model: EVO-X1 | Brand: GMKtec

INTRODUCTION

This manual provides detailed instructions for the setup, operation, maintenance, and troubleshooting of your GMKtec EVO-X1 AI Mini PC. Designed for high performance in gaming, content creation, and everyday computing, the EVO-X1 features the AMD Ryzen AI 9 HX-370 Series processor, advanced graphics, and versatile connectivity options. Please read this manual thoroughly to ensure optimal performance and longevity of your device.



Figure 1: Front and rear view of the GMKtec EVO-X1 AI Mini PC, highlighting its compact design and array of ports.

PACKAGE CONTENTS

Upon opening the retail packaging, verify that all items listed below are present and in good condition:

- GMKtec Nucbox EVO AMD Ryzen AI 9 HX 370 Mini PC Computer

- Power Supply & Cable
- HDMI Cable
- VESA Mount and Screws
- User Manual (this document)

RETAIL BOXED PACKAGING



1. EVO-X1 Mini PC

2. HDMI Cable

3. User Manual

4. Vertical Stand

5. Power Supply & Cable

Figure 2: Contents of the GMKtec EVO-X1 retail package, including the mini PC, power supply, HDMI cable, VESA mount, and user manual.

SETUP GUIDE

Follow these steps to set up your GMKtec EVO-X1 Mini PC:

1. **Connect Peripherals:** Connect your keyboard, mouse, and monitor(s) to the available USB, HDMI, or DisplayPort interfaces. The EVO-X1 supports triple screen 8K display output via HDMI 2.1 (8K@60Hz), DisplayPort 2.1 (8K@60Hz), and USB 4 40Gbps (supporting PD3.0/DP1.4/DATA).
2. **Power Connection:** Connect the power supply to the DC IN port on the rear of the mini PC and then plug it into a power outlet.
3. **Network Connection:** For wired internet, connect an Ethernet cable to one of the two 2.5G LAN ports. For wireless connectivity, ensure your Wi-Fi network is available; the device supports Wi-Fi 6 and Bluetooth 5.2.
4. **Initial Boot:** Press the power button located on the front of the device. The system will boot into the pre-installed operating system (OS Pro).
5. **Operating System Setup:** Follow the on-screen instructions to complete the initial setup of the operating system, including language, region, and user account creation.

RICH INTERFACE

For Business, Office, Gaming, Home



2.5G LAN*2



USB 4.0



HDMI 2.1



DP2.1



USB*2



CTIA



OcuLink



Figure 3: Detailed view of the EVO-X1's rich interface, including USB 4.0, HDMI 2.1, DP 2.1, USB 3.2, CTIA, Oculink, and dual 2.5G LAN ports.

OPERATING INSTRUCTIONS

Performance Modes

The EVO-X1 AI Mini PC features three adjustable performance modes to suit your needs:

- **Quiet Mode (35W):** Ideal for light tasks, web browsing, and media consumption. Fan noise is minimized to approximately 35dB.
- **Balance Mode (54W):** A balanced setting for everyday productivity and moderate workloads.
- **Performance Mode (65W):** Maximizes CPU and GPU performance for demanding applications, gaming, and intensive tasks.

These modes can be adjusted via the updated UEFI (BIOS) settings. Refer to the BIOS section for detailed instructions on accessing and configuring these settings.

Display Configuration

The EVO-X1 supports up to three independent displays simultaneously, with resolutions up to 8K. Connect your monitors using the available HDMI 2.1, DisplayPort 2.1, and USB4 ports. Ensure your cables and monitors support the desired resolutions and refresh rates for optimal visual experience.

TRIPLE SCREENS DISPLAY VIA UP TO 8K RESOLUTION



HDMI 2.1 (8K@60Hz)



DisplayPort 2.1 (8K@60Hz)



USB4.0(40GB/S)



Figure 4: The EVO-X1 supporting a triple-screen display setup with up to 8K resolution.

Network and Wireless Connectivity

The device features dual Intel i226V 2.5Gbps LAN ports for high-speed wired network connections, suitable for various applications including firewalls and file servers. For wireless connectivity, the integrated Wi-Fi 6 module provides fast and stable internet access, while Bluetooth 5.2 allows for efficient connection to wireless peripherals.



Figure 5: Illustration of the EVO-X1's Wi-Fi 6 and Bluetooth 5.2 capabilities, ensuring fast and stable wireless connections.

Oculink Port for External GPUs

The EVO-X1 is equipped with an Oculink port, which supports external graphics cards with data transfer speeds up to 64 Gbps. This feature provides significant expansion options for high-end gaming and professional graphics workloads, offering higher bandwidth compared to Thunderbolt's x3 speeds.

SUPPORT FOR EXTERNAL GPUS WITH ULTRA-FAST OCULINK PORT

The OCuLink port supports external graphics cards with data transfer speeds up to 64 Gbps, enabling powerful expansion options for high-end gaming and professional graphics work.



Figure 6: The Oculink port enabling connection to an external GPU for enhanced graphics performance.

Official Product Video

Your browser does not support the video tag.

Video 1: An official overview of the GMKtec EVO-X1 AI Mini PC, showcasing its features and capabilities.

MAINTENANCE

Cooling System

The EVO-X1 features an upgraded Hyper Ice Chamber 2.0 cooling design with larger top and bottom cooling fans, providing 360-degree airflow. The copper base helps maintain optimal temperatures. To ensure efficient cooling, keep the ventilation areas clear of obstructions. Regularly inspect and gently clean any dust accumulation from the vents using compressed air.



Figure 7: Internal structure of the EVO-X1, illustrating the dual cooling fans and component layout for efficient heat dissipation.

Storage Expansion

The mini PC includes dual M.2 2280 PCIe 4.0 SSD slots, supporting up to 8TB total storage. If you need to expand storage, ensure you use compatible M.2 NVMe SSDs. Consult a professional if you are unsure about installing additional storage to avoid damaging the device.

TROUBLESHOOTING

This section addresses common issues you might encounter with your GMKtec EVO-X1 Mini PC.

No Display Output

- Ensure all display cables (HDMI, DisplayPort, USB4) are securely connected to both the mini PC and the monitor.
- Verify the monitor is powered on and set to the correct input source.
- Try connecting to a different display port on the mini PC or a different monitor if available.
- Restart the mini PC.

No Power

- Check that the power adapter is securely connected to the mini PC and the wall outlet.
- Ensure the wall outlet is functioning by testing it with another device.
- Verify the power adapter is the original one provided with the mini PC.

Slow Performance

- Check the selected performance mode in the BIOS. Switch to Balance or Performance mode for demanding tasks.
- Ensure the cooling vents are not obstructed and the fans are operating correctly. Overheating can lead to performance throttling.

- Close unnecessary applications running in the background.
- Ensure your operating system and drivers are up to date.

Network Connectivity Issues

- For wired connections, ensure the Ethernet cable is properly connected and the router/modem is working.
- For Wi-Fi, check if Wi-Fi is enabled in the operating system settings. Restart your router.
- Ensure Wi-Fi drivers are installed and up to date.

If issues persist after attempting these steps, please contact GMKtec customer support.

SPECIFICATIONS

Feature	Detail
Processor	AMD Ryzen AI 9 HX-370 Series (Up to 5.1GHz, 12 Cores, 24 Threads)
AI NPU	XDNA 2 Architecture, up to 50 TOPS
Graphics	AMD Radeon 890M iGPU (RDNA 3.5)
RAM	64GB LPDDR5X 8000MT/s (Quad Channel)
Storage	1TB PCIe 4.0 M.2 2280 SSD (Dual Slots, Max. 8TB)
Display Output	Triple Screen 8K (HDMI 2.1, DisplayPort 2.1, USB4)
Networking	Dual Intel i226V 2.5Gbps LAN, Wi-Fi 6, Bluetooth 5.2
Ports	USB4 (PD/DP/DATA), Oculink (PCIe 4.0 x4), USB 3.2 (Gen2) x4, 3.5mm Audio, DC IN
Operating System	OS Pro (Compatible with Win 11 Pro, Linux, Ubuntu)
Dimensions	Approx. 7.4 x 7.32 x 5.39 inches
Weight	Approx. 4.02 pounds

AMD RYZEN AI 9 HX 370

Zen 5 Microarchitecture with XDNA 2 NPU

12

Cores

5.1 GHz

max boost

36 MB

3.cache

24

Threads

Radeon 890M

Graphics

50 TOPS

NPU

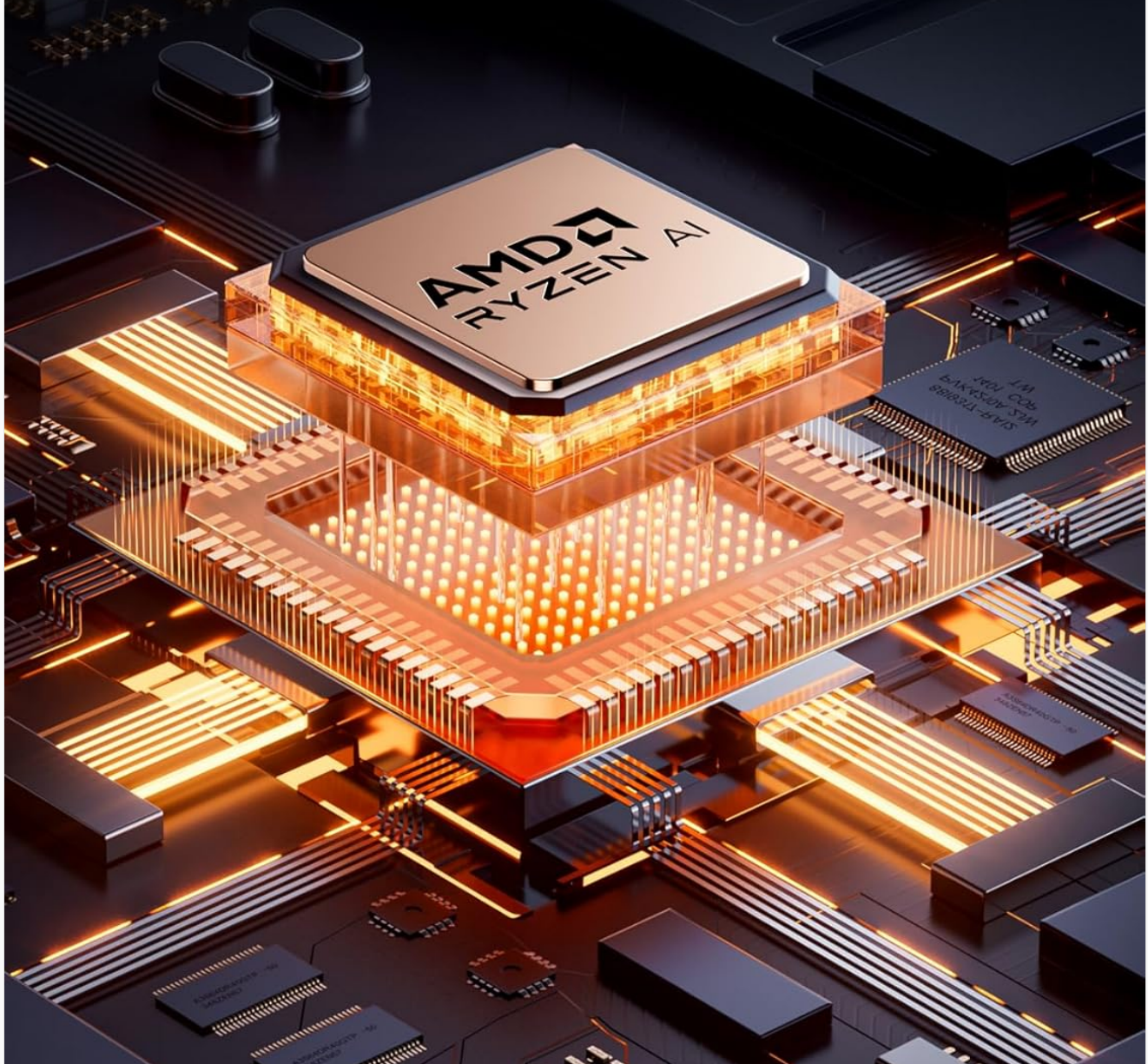


Figure 8: Key specifications of the AMD Ryzen AI 9 HX 370 processor, including cores, threads, max boost clock, cache, Radeon 890M graphics, and NPU TOPS.

WARRANTY AND SUPPORT

GMKtec offers a 1-year limited warranty for each mini PC, starting from the date of purchase. This warranty covers all defects due to design and workmanship. For warranty claims or technical assistance, please use the following contact methods:

- **Contact Us on Amazon:** Log in to your Amazon account, navigate to "Your Orders," and select "Ask Product Question" for your purchase.
- **Send E-mail to After-Sales Team:** support@gmktec.com
- **24/7 Customer Support:** Available for assistance.

Please retain your proof of purchase for warranty validation.

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For the latest information and updates, please visit the official GMKtec website.

Documents - GMKtec – EVO-X1

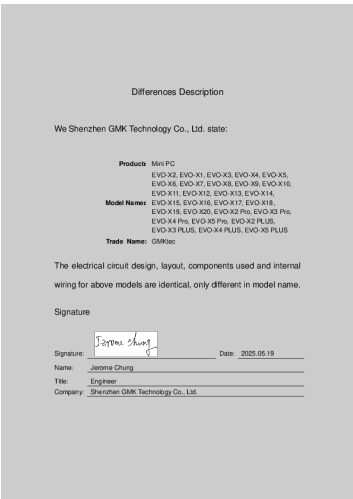


[\[pdf\]](#) Test Report

Measurement Report Kent RF MPE FCC exposure Shenzhen GMK Technology Co Ltd EVO X2 Mini PC 2AXUD 2AXUDEVOX2 evo x2

MPE Report Report No.:STS2505017H01 Issued for Shenzhen GMK Technology Co., Ltd. 4/F, #9 Bldg, HuaLian Industrial Park, XinShi Community, Dalang St, Longhua Dist, Shenzhen, 518109, China Product Name: Mini PC Brand Name: GMKtec Model Name: EVO-X2 Series Model s : **EVO-X1**, EVO-X3, EVO-X4, EVO-X5...

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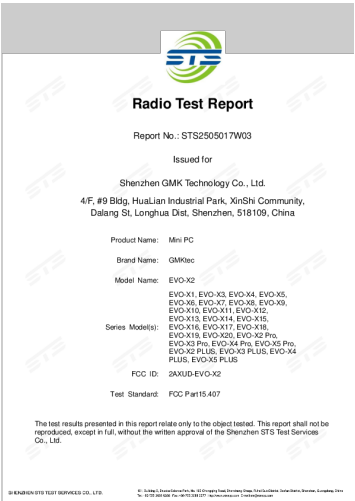


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Differences Description simple Shenzhen GMK Technology Co Ltd EVO X2 Mini PC 2AXUD 2AXUDEVOX2 evo x2

Differences Description We Shenzhen GMK Technology Co., Ltd. state: Product Mini PC EVO-X2, **EVO-X1**, EVO-X3, EVO-X4, EVO-X5, EVO-X6, EVO-X7, EVO-X8, EVO-X9, **EVO-X10**, **EVO-X11**, **EVO-X12**, **EVO-X13**, **EVO-X14**, Model Name **EVO-X15**, **EVO-X16**, **EVO-X17**, **EVO-X18**, **EVO-X19**, EVO-X20, EVO-X2 Pro, EVO-X3 Pro, EVO-X4 Pro...

lang:de score:17 filesize: 43.29 K page_count: 1 document date: 2025-05-19



[pdf] Test Report

Measurement Report Kent RF 5GWIFI PART15 407 Shenzhen GMK Technology Co Ltd EVO X2 Mini PC 2AXUD 2AXUDEVOX2 evo x2

Radio Test Report Report No.: STS2505017W03 Issued for Shenzhen GMK Technology Co., Ltd. 4/F, #9 Bldg, HuaLian Industrial Park, XinShi Community, Dalang St, Longhua Dist, Shenzhen, 518109, China Product Name: Mini PC Brand Name: GMKtec Model Name: EVO-X2 Series Model s : **EVO-X1**, EVO-X3, EVO-X4... lang:en score:15 filesize: 2.86 M page_count: 40 document date: 2025-05-16



GMKtec EVO-X2 Mini PC Radio Test Report

This report details the radio test results for the GMKtec EVO-X2 Mini PC, covering conducted and radiated emissions, bandwidth, power spectral density, and antenna requirements according to FCC Part 15.247 standards.

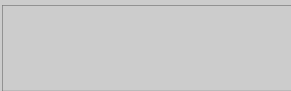
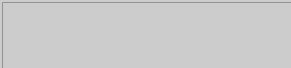
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[pdf] Test Report

Microsoft Word TR STS2505017W02 RF BT Part 15 247 docx admin Part15 Shenzhen GMK Technology Co Ltd EVO X2 Mini PC 2AXUD 2AXUDEVOX2 evo x2

Radio Test Report Report No.:STS2505017W02 Issued for Shenzhen GMK Technology Co., Ltd. 4/F, #9 Bldg, HuaLian Industrial Park, XinShi Community, Dalang St, Longhua Dist, Shenzhen, 518109, China Product Name: Mini PC Brand Name: GMKtec Model Name: Series Model s : FCC ID: EVO-X2 **EVO-X1**, EVO-X3, ... lang:en score:14 filesize: 3.33 M page_count: 95 document date: 2025-05-19



[NucBox Mini PC FCC Test Report - GMKtec Compliance](#)

Comprehensive FCC compliance test report for Shenzhen GMK Technology Co., Ltd's NucBox mini PCs, detailing results for models like M7, K8, G2, G3, and EVO series, tested by Shenzhen Tongzhou Testing Co.,Ltd. against FCC CFR Title 47 Part 15C and ANSI C63.10:2013 standards.

lang:en score:10 filesize: 1.13 M page_count: 32 document date: 2024-12-24