



Asus AAEON BOXER-8256AI User Manual

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BOXER-8256AI

AI@Edge Fanless Embedded AI System
with NVIDIA



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Jetson Xavier™ NX

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User's Manual 1

Ed

Last Updated: August 26, 2022

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2.3.2 Auto Power Setting (CN3) Function Open AT Close ATX (Default) List of Connectors The board has a number of connectors that allow you to configure your system to suit your application. The table below shows the function of each of the board's connectors. Label Function Jetson NX CPU Module Connector...

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2.4.9 HDMI In Connector *Please note that HDMI in application decodes via a HDMI in chipset. The application is different from the HDMI out connection to the monitor. Here are the limitations of the current HDMI in Chipset, especially for 4K 30fps usage on HDMI in: The HDMI source needs to have a stable output and pass the HDMI 2.0 signal integrity.

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[Page 47: Hardware Assembly](#)

Hardware Assembly This section details the hardware assembly steps for the BOXER-8256AI. Please read this section thoroughly before beginning installation and ensure you have all necessary components ready. A Phillips head screwdriver is required. 2.5.1 Module Access & M.2 M-Key Installation The Xavier NX module is located under the top heat sink.

[Page 48: M.2 E-Key And B-Key Installation](#)

2.5.2 M.2 E-Key and B-Key Installation The M.2 E-Key (2230) and B-Key (3042/3052) slots are accessible by removing the bottom panel. To access, remove the two (2) screws securing the bottom panel to the chassis, and then lift the panel off, as shown below. Follow standard procedures for expansion card installation, aligning the notch on each M.2 SSD with its respective key slot.

[Page 49: Hard Disk Drive \(Hdd\) Installation](#)

2.5.3 Hard Disk Drive (HDD) Installation The hard disk drive bracket plate is accessible by removing the bottom panel. To access, remove the two (2) screws securing the bottom panel to the chassis, and then lift the panel off, as shown below. Remove the baseplate, then place the HDD on the bracket plate, then insert and tighten the four (4) screws to secure the HDD to the bracket plate.

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2.5.4 Wall Mount Kit Installation To install the wall mount kit, simply line up the brackets as shown and secure with four (4) screws (two for each bracket). Chapter 2 – Hardware Information...

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Chapter 3 Chapter 3 – OS Flash Guide...

[Page 52: Before Installation](#)

Before Installation Before starting the process, make sure your BOXER-8256AI system is turned off and the power is disconnected. You will need a host PC running Ubuntu 18.04, and to ensure the NVIDIA Jetson Xavier NX module is installed onto the BOXER-8256AI carrier board system.

[Page 53: Connecting To Pc/Force Recovery Mode](#)

Download the compressed OS image file. The file name will follow the format of: {PJ_IF}. {OS_IF}_{PLF_IF}{JPV_IF}_{IMGV_IF}_{BD_IF} For example: BOXER-8256AI.Ubuntu18.04_NXJP4.6.2_V1.0.0_23/06/2022 Note: Filename may differ from this example. {OS_IF} is OS Information; e.g. Ubuntu18.04 {PLF_IF} is Platform Information; e.g. NX {PJ_IF} is Project Information; e.g. BOXER-8256AI {IMGV_IF} is Build Number;...

[Page 54](#) then release. The BOXER-8256AI should enter recovery mode. To check if device is in recovery mode, enter lsusb command in terminal on host. \$ lsusb | grep "0955:7e19" If successful, the command will return "0955:7e19 Nvidia Corp" Recovery mode can be initiated with the system disassembled. Ensure the NVIDIA Jetson Xavier NX module is installed and refer

to the image below to perform the steps: Chapter 3 -...

[Page 55: Flash Image To Board](#)

Flash Image to Board Use the following steps to flash the OS to the BOXER-8256AI. Open the terminal on Ubuntu host PC, then access the bootloader folder you extracted in the previous section. Enter the following command in terminal to flash the image: `$ sudo ./flashboxer.sh` Wait as the image is installed.