UP-GWS01

Gateway System for UP-CHT01

User's Manual 2nd Ed

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Packing List

Before setting up your product, please make sure the following items have been shipped:

Item	Quantity
● UP-GWS01	1

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

About this Document

This User's Manual contains all the essential information, such as detailed descriptions and explanations on the product's hardware and software features (if any), its specifications, dimensions, jumper/connector settings/definitions, and driver installation instructions (if any), to facilitate users in setting up their product.

Users may refer to the AAEON.com for the latest version of this document.

Safety Precautions

Please read the following safety instructions carefully. It is advised that you keep this manual for future references

1.   All cautions and warnings on the device should be noted.
2.   Make sure the power source matches the power rating of the device.
3.   Position the power cord so that people cannot step on it. Do not place anything over the power cord.
4.   Always completely disconnect the power before working on the system's hardware.
5.   No connections should be made when the system is powered as a sudden rush of power may damage sensitive electronic components.
6.   If the device is not to be used for a long time, disconnect it from the power supply to avoid damage by transient over-voltage.
7.   Always disconnect this device from any AC supply before cleaning.
8.   While cleaning, use a damp cloth instead of liquid or spray detergents.
9.   Make sure the device is installed near a power outlet and is easily accessible.
10.   Keep this device away from humidity.
11.   Place the device on a solid surface during installation to prevent falls
12.   Do not cover the openings on the device to ensure optimal heat dissipation.
13.   Watch out for high temperatures when the system is running.
14.   Do not touch the heat sink or heat spreader when the system is running
15.   Never pour any liquid into the openings. This could cause fire or electric shock.
16.   As most electronic components are sensitive to static electrical charge, be sure to ground yourself to prevent static charge when installing the internal components. Use a grounding wrist strap and contain all electronic components in any static-shielded containers.

17.   If any of the following situations arises, please the contact our service personnel:

   i.   Damaged power cord or plug

   ii.   Liquid intrusion to the device

   iii.   Exposure to moisture

   iv.   Device is not working as expected or in a manner as described in this manual

   v.   The device is dropped or damaged

   vi.   Any obvious signs of damage displayed on the device

18.   **DO NOT LEAVE THIS DEVICE IN AN UNCONTROLLED ENVIRONMENT WITH TEMPERATURES BEYOND THE DEVICE'S PERMITTED STORAGE TEMPERATURES (SEE CHAPTER 1) TO PREVENT DAMAGE.**

FCC Statement

This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

Caution:

There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions and your local government's recycling or disposal directives.

Attention:

Il y a un risque d'explosion si la batterie est remplacée de façon incorrecte.
Ne la remplacer qu'avec le même modèle ou équivalent recommandé par le constructeur.
Recycler les batteries usées en accord avec les instructions du fabricant et les directives gouvernementales de recyclage.

China RoHS Requirements (CN)

产品中有毒有害物质或元素名称及含量

AAEON Main Board/ Daughter Board/ Backplane

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板 及其电子组件	○	○	○	○	○	○
外部信号 连接器及线材	○	○	○	○	○	○

O：表示该有毒有害物质在该部件所有均质材料中的含量均在
　　SJ/T 11363-2006 标准规定的限量要求以下。

X：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出
　　SJ/T 11363-2006 标准规定的限量要求。

备注：此产品所标示之环保使用期限，系指在一般正常使用状况下。

China RoHS Requirement (EN)

Poisonous or Hazardous Substances or Elements in Products

AAEON Main Board/ Daughter Board/ Backplane

Component	Poisonous or Hazardous Substances or Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr(VI))	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
PCB & Other Components	O	O	O	O	O	O
Wires & Connectors for External Connections	O	O	O	O	O	O
O：The quantity of poisonous or hazardous substances or elements found in each of the component's parts is below the SJ/T 11363-2006-stipulated requirement. X: The quantity of poisonous or hazardous substances or elements found in at least one of the component's parts is beyond the SJ/T 11363-2006-stipulated requirement. **Note: The Environment Friendly Use Period as labeled on this product is applicable under normal usage only**						

Table of Contents

Chapter 1

Product Specifications

1.1   Specifications

System	
CPU	Intel® Atom™ x5-Z8350 Processor (2M Cache, 1.44 GHz up to 1.92 GHz) CPU with 64 bit architecture; Quad Core
Memory	Onboard DDR3L memory
Graphics	Intel® HD 400 Graphics ,12 EU GEN 8, up to 500MHz Support DX*11.1/12, Open GL*4.2, Open CL*1.2 OGL ES3.0, H.264, HEVC (decode), VP8
Storage	Onboard eMMC
Ethernet	Giga LAN x 1
WIFI/BT	Optional
Audio	HDMI x 1
USB	USB2.0 x 4, USB3.0 OTG x 1
Expansion Slot	—

I/O Placements	
Power	DC-in Jack x 1
USB	USB2.0 x 4, USB3.0 OTG x 1
Display Port	HDMI x 1
Ethernet	Giga LAN x 1
COM	—

Environment

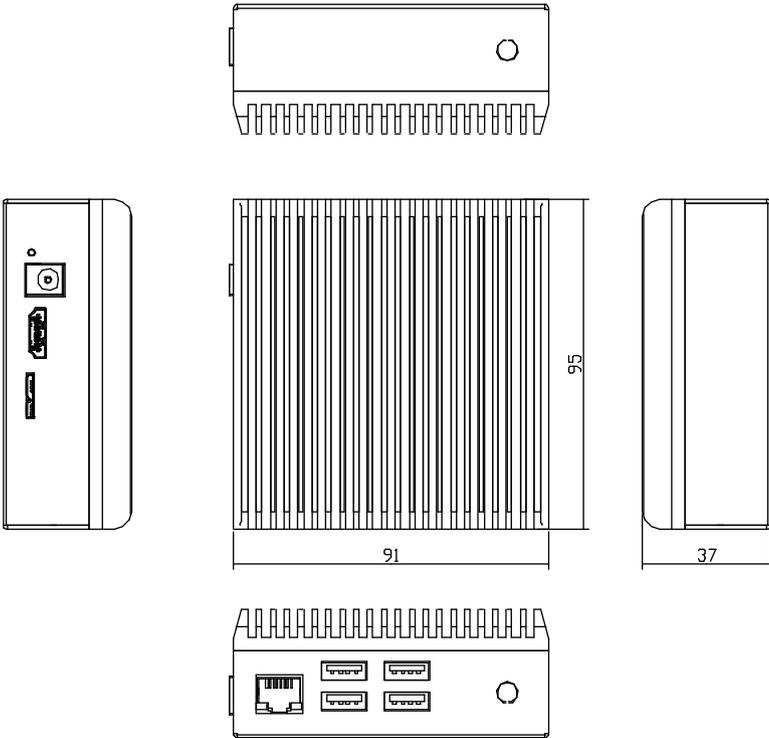|	
Power	5V/4A DC Only
Form Factor	95mm x 91mm x 37mm (WxLxH)
Gross Weight	—
Operating Temperature	32°F ~ 104°F (0°C ~ 40°C)
Operating Humidity	0% ~ 90% relative humidity non-condensing
Certification	CE/FCC Class A
OS Support	Windows® 10
	Linux
	Android 6.0
	Windows® 10 IoT core

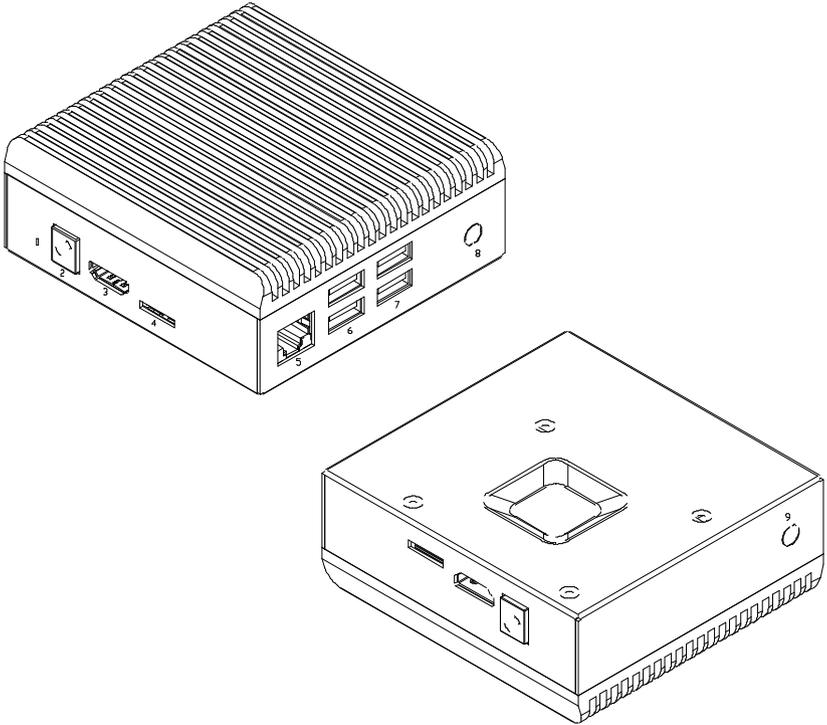# Chapter 2

Hardware Information

2.1   Dimensions

95

91   37

2.2   I/O Location

2.3   List of Jumpers and Connectors

Please refer to the table below for all of the board's jumpers that you can configure for your application

Label	Function
1	Power BT
2	Power Jack Input
3	HDMI connector
4	USB 3.0 OTG
5	RJ45 Ethernet connector
6	USB 2.0 connector
7	USB 2.0 connector
8	Antenna
9	Antenna

Chapter 3

Drivers Installation

3.1   Driver Download and Installation

Step 1 – Download the drivers
1.   Click **Driver** tab in the Downloads section of UP page of AAEON website at: http://www.aaeon.com/en/p/up-board-computer-board-for-professional-makers#downloads

2.   Download the **Step 1 - Chipset and peripherals Driver, Step 2 - TXE Driver, Step 3 - LAN Driver** and **Step 4- Dummy driver (Manual)** and open the self-extracting EXE files.

3.   Assign a destination folder and click **Install.**

4.   The driver folders will be extracted to the destination folder.

Step 2 – Install Chipset and peripherals Driver
1.   Open the **Step1 - Chipset and peripherals** folder

2.   Open the subfolder based on you OS

3.   Open the **Setup.exe** file in the folder

4.   Follow the instructions

5.   Drivers will be installed automatically

Step 2 – Install TXE Driver
1.   Open the **Step2 - TXE** folder

2.   Open the subfolder based on you OS

3.   Open the **SetupTXE.exe** file in the folder

4.   Follow the instructions

5.   Drivers will be installed automatically

Step 3 – Install LAN Driver
1.   Open the **Step3 - LAN** folder

2.   Open the subfolder based on you OS

3. Open the **Setup.exe** file in the folder

4. Follow the instructions

5. Drivers will be installed automatically

Step 4 – Install Dummy Driver*

1. Open the **Step4 - Dummy Driver (Manual)** folder

2. Extract the **UP_DDriver.rar** file to a new folder

3. Open the **Install_Dummy_Driver_on_UP.docx** file in the new folder

4. Follow the instructions to manually update the driver

Some virtual devices required for Linux to function properly will appear as unknown devices in Windows Device Manager. Updating these devices with the dummy driver will resolve the problem.