Gladius G0730

7” Intel® Atom™ Z650
Semi-Rugged Tablet PC

User's Manual

Version 1.0

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The Serial number and model can be found on the label affixed to the computer. The information in this manual should include serial number, model number and purchase information.

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Chapter 1

Before you Start

Federal Communications Commission, FCC

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

- The device was tested and complies to measurement standards and procedures specified in FCC OET Bulletin 65, Supplement C
- This equipment complies with Part 15 of the 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.

Maintaining Your Tablet

Before you use your Tablet, please read carefully the following; whether it complys with these instructions as mentioned below to prolong the operation of the product. Please consult the professional for the information not mentioned in this manual.

- Please do not press the tablet display otherwise may cause any damage.
- Please do not place heavy objects on the product; neither piles of books and papers on top of tablet display in order to prevent any damage.
- Please do not place the product in direct sunlight; especially do not leave the computer in the car in direct sunlight.
- Please do not spill any liquid on the computer.
- Please prevent the product from heavy impact and shaking.
- Please do not put the product on the knees or other body parts to avoid discomfort or the injury causing by the hot air released from the product.
- Please do not place the product on an unbalance base.
- Avoid using the product in the dusty and dirty environment.
- Please place the product under the environment with temperature between 0℃ (35℉) and 40℃ (104℉).
- Prevent the product and accessories away from rain and exposing to humid environment.
- Avoid placing the product near the objects with strong magnetism.
- LCD would attract the dust due to electrostatics. If the dust is found, please turn off the product and wipe with soft and dry linen cloth but without excessive cleaning. Do not use hands to pat off the dust directly to prevent leaving fingerprints on the display.
- Using the bag with anti-collision cushion for the product and please do not put too many items in the bag to avoid crushing display.
- Turn off the product when on the airplane. Using the computer on the airplane would have interference to the electronic devices and affect the flight safety.
- Using the original or recommended accessories, please do not use the products or accessories with different types or not compatible items, otherwise the computer may be damage.

Maintaining Your AC Adapter

The list below indicates the maintenance points for AC Adapter:

- Do not use the AC adapter of this product on other devices.
- Do not step or place any heavy object on the power cord. Be careful with the power cord to avoid tripping over by legs or objects.
- When unplugging the power cord, be sure to hold the plug instead of pulling the cord directly.
- When using the extension cord, please be aware of the electric current load. The electronic devices plugged into the same extension cord must not exceed the current load. The power in the same plug also must not exceed the load of fuse.
- Please make sure that the outlet for power is close enough to the operator for easy to reach.
- When you need to cut off the power supply, please make sure the power cord from the outlet is pulled off.
- The limits for touching and surface temperature of computer and AC Adapter shall comply with the Information Technology Equipment Safety Standards (IEC 60950).
- However, if you travel to a different area and need to connect to a different outlet or voltage, you should use one of the power cords listed below. To purchase a power cord (including one for a country not listed below) or a replacement AC adapter, contact your local dealer.

CAUTION... ***The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.***

Safety and Precautions

Please carefully read the safety instructions and properly save this file for query in the future. Please be sure to follow the instructions of all the warning and indication on the computer.

Please turn off the product before cleaning

Please pull off the power outlet of this product; and then, start to clean. Do not use any liquid or spray cleaner. Use slightly wet cloth to clean the product.

Connecting the disconnected device

When connecting the power or disconnect from the power supply, please follow the instructions below:

- Before connecting the power cord to the AC power outlet, please set up the power source first.
- Before disconnecting the computer from power source, please power off first the computer then pull the power cord.
- If the system has multi-power sources, please pull off all other power cords from the power source to disconnect the power.

The volume level

- Listening to music with high volume for long period of time may injure your hearing.
- Please gradually adjust the volume up till the sound is clear and comfortable to you.
- After your ear is comfortable to the sound, do not increase any more volume to any higher level.
- Please reset the volume before using headset or headphone. Even though the volume control may have the same setup, some headset may have higher volume than others.
- Change the default audio or equalizer settings may have higher volume, please be caution when executing the changes.
- If you are unable to listen to people talking to you, please lower the volume.

Warning notice

- Please only use the product on solid surface. Do not place the product on unstable platform, stand or table. It may seriously damage the product due to the falling.
- Visible slots and vents are for ventilation purpose; in order to reduce any propable damage caused by heat or overheated problem, please do not put

the computer right on the top of knees or block the vents. Please also do not place the product on soft surface, such as pillow, carpet, pile of clothes or sofa which would interfere with the air flow and may result in vents blockage. Unless there is proper ventilation, otherwise do not put the product near to the heater or heat conductor or place in the electronic devises like microwaves.

- Please do not insert any objects into the vents which may get an electric shock or cause shortage and lead to a fire or electric shock.
- Please do not spill any liquid on the product.

The usage of power

- The product can only be used under the voltage indicated on the power cord label. If the type of voltage provided is not sure, please contact your dealer or local power company.
- Do not place any heavy objects on the power connection surface. The power cord has to be carefully layout and align to avoid tripping over.
- When use an extension cord, please be aware of the electric current load. The electronic devices plugged into the same extension cord must not exceed the current load. The power in the same plug also must not exceed the load of fuse. Please do not connect electrical outlets, extension cords and many other devices to avoid over loaded.
- The overall systematic load must not exceed 80% of the branched circuit of power. If using extension cord, its load should not exceed the 80% input power of the extension cord.
- AC Adapter come with the product is equipped with class II (2 pin).
- The plug only can be used with grounded outlet. Please make sure the outlet is grounded before inserting AC Adapter plug.
- Do not plug in a non-grounded outlet.
- For more information. Please contact the electrician. The grounded pin of plug is a safety protection.
- If it’s not completely grounded when using power outlet, electric shock or physical injury may occur.
- The grounding pin provided good protection to prevent the nearby electronic devices to interfere with the quality of product and make noise.
- Only use the power cord specified for the product (included in the accessory box).

AC Adapter

Input: 100-240VAC, 50-60Hz, 0.6A
Output: 12VDC, 2.0A
Or
Input: 100-240VAC, 50-60Hz, 0.8A
Output: 12VDC, 2.0A

Operating environment

- Please be sure to obey the local laws and regulations when using. When regulations prohibit the use, or it may cause interference or danger, please turn off the device. Please use the device only in the normal operating sites. This device does not contain metals.
- The device requires a good quality internet connection in order to successfully transfer data files and information. In some cases, transmission of data files or information may be delayed until the connection quality mentioned above is reached, the transmission can be continued.
- Please follow the instructions of separation distance mentioned above until the transmission is completed. Some parts in the device are magnetic.
- Metal objects may be absorbed to the device; people who wear hearing aids please do not put the device close to the ear with the hearing aids.
- Please do not place the credit cards or other magnetic media storage devices near this device, because the information saved inside may be deleted.

Electronic device in the car

RF signals may affect electronic systems with improperly installed and not sufficiently shielded, such as electronic fuel injection systems, electronic antiskid (antilock) braking systems, electronic speed control systems, and airbag systems, in the car.

Only qualified maintenance personnel can maintain the device or install the device in the car. Any false installation may cause incidences and void the warranty for the device. Please always check the wireless equipment in the car to see if it's installed properly.

The environment may lead to an explosion

When staying in the environment that may lead to an explosion, please turn off your device and follow all the instructions and indications. When being near refueling guns in the gas station, please turn off the device.

Do not turn on the device in the areas where prohibit the use of mobile phone

or may lead to interference or danger.

Environmental statement

Do not discard and treat the electronic device as general waste. In order to minimize the pollution and make the greatest contribution on protecting global environment, please recycle and reuse. For more information on Waste Electronics and Electrical Equipment (WEEE), please refer to the website, http://www.etc.org.tw/etc/000/WEE3R/WEEE.htm

Content statements of governmental information

Toxic and hazardous substances / components and the table content, Government Information Products Pollution Control Regulations require the use of trademarks: all trademarks and names mentioned in this manual belong to the holder of the trademarks.

Icon	Description
	Note: indicates that there may be damage to the hardware or loss of data, and tell you how to prevent the problem
	Warning: indicates that there are risks which may lead to property damage, personal injury and other potential hazards.
	Pollution control of electronic product: the digital number in the icon as the usage lifetime of the product with environmental protection. Refers only to the lifetime of electronic information product containing toxic or hazardous substances that will not have leakage or pollution to cause serious injury to people and serious damage to property.

Toxic and hazardous substances / components and the table content, Government Information Products Pollution Control Regulations require the usage:

Risk of Explosion if Battery is replaced by an Incorrect Type. Dispose of Used Batteries According to the Instructions.

Chapter 2

Introduction

Introduction

Tablet PC is an easily operable and light-weight portable computer with intuitive graphical interface and integrated wireless internet connecting ability, the wireless network can be easily accessed at anytime and anywhere.

This manual will help you get the most from your computer. If you are a less experienced user, you should read through the manual carefully before using your computer.

What to Do Before You Work on Your Computer

Let your Computer acclimatize itself

Rapid changes in temperature such as those from the cold outdoors to a warm office would not be suitable for your system.

Do not power up your system immediately if it has been exposed to hot or cold conditions. Instead, allow the system to adjust gradually to room temperature over a three to four hour period.

Suitable place to work

Your computer will run well under most conditions but avoid extreme temperatures and humidity levels.

There are some things you can tolerate that the computer can't – things like static electricity, dust, water, steam and oil.

The Top View

1. CCD Camera

Use the Built-in camera for video conference.

2. Light Sensor

The system provides a sensor directly proportional to the light intensity of your surrounding working environment.

3. Microphone

The microphone is used when you are having an audio/video conference with the other party.

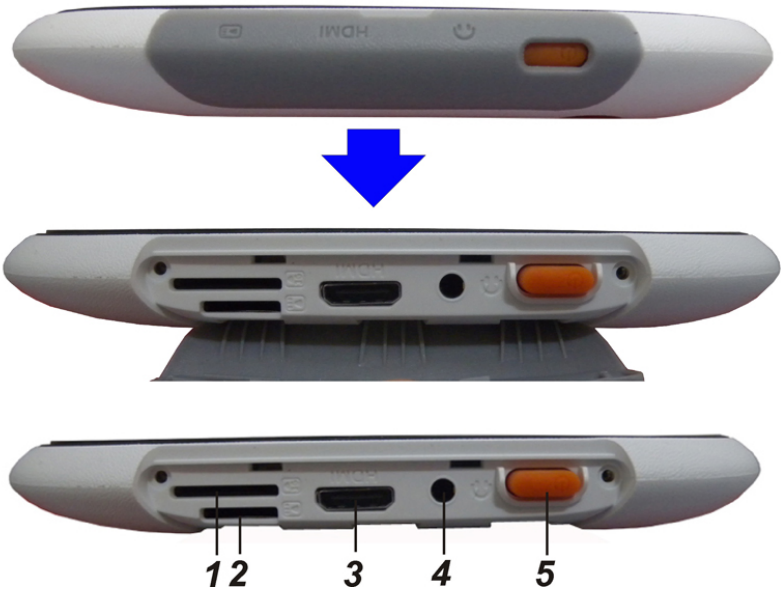
4. Home Key

Press once to bring back to desktop screen.

5. Charger Light

Show the status of charging.

Side 1



1. **3G SIM Slot (no function)**

Reserve for 3G support

2. **Micro SD cards reader**

Support SD memory cards

3. **Mini HDMI port**

This compact audio/video interface is for transmitting uncompressed digital data.

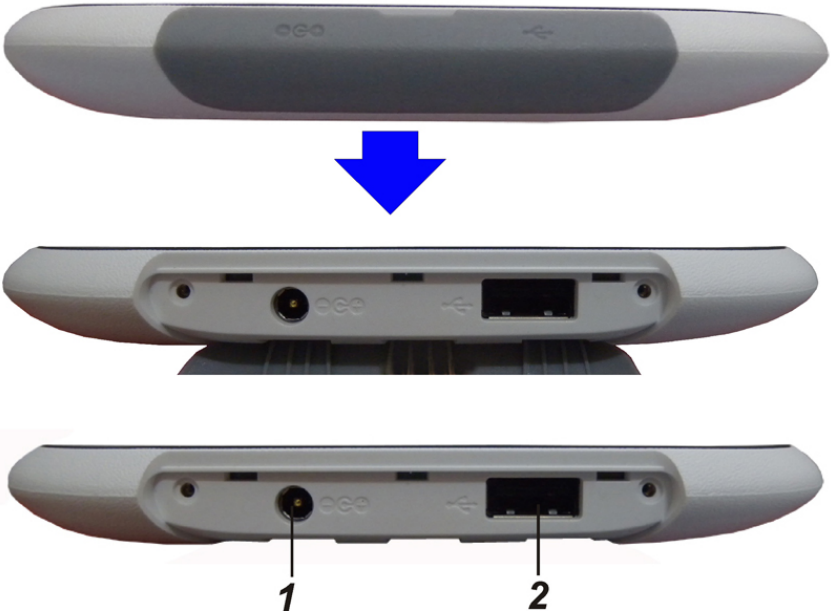
4. **Headphone + microphone combo port**

This jack is for connecting headphone + microphone device for video conferencing.

5. **Power Button**

Turn the power on/off.

Side 2



1. Power Jack (DC-in)

The DC-out jack of the AC Adapter connects here and power on the computer.

2. Standard USB port

This port conforms to the latest USB2.0 plug-and-play standards.

The Bottom View

1. **Volume Control**

Increases/decrease the speaker volume

2. **CCD Camera**

Use the Built-in camera for video conference.

3. **Internal Speaker**

This will serve as sound output for the system.

LED Status

Power-off/Standby/Hibernate

Discharging

- LED status is off

Charging state

- When AC adapter is plug in
  - Blinking red status signify it starts charging.
  - Adapter is plugged in the system.
- Capacity <30% -
  - LED blinking in red color (interval of 2 sec/cycle)
- 30% ≤ capacity < 100% -
  - LED lit in red color
  - If over temperature, LED cycles (0.6s/cycle): blue (0.3s) ->off (0.3s) ->Red (0.3s) ->off (0.3s) ->blue
- Battery fully charged / 100% -
  - LED lit in blue color
  - At the time of plugging-in AC adaptor, if battery capacity was above 95% (>95%), the battery will stop charging.

Power-On Status

Discharging

- 30% ≤ capacity
  - LED status is off
- 10% ≤ capacity < 30%
  - LED status is off
- 5% ≤ capacity < 10%
  - LED status is off
  - Beeps 3 times in 1.2 sec (each beep lasts for 200ms then 200ms off interval before the next beep
- 0 < capacity < 5%
  - LED status is off
  - Beeps 3 times in 1.2 sec (each beep lasts for 200ms then 200ms off interval before the next beep

Charging state

- Battery fully charged (=100%)
  - LED lit in blue color
  - At the time of plugging-in AC adaptor, if battery capacity was above 95% (>95%), the battery stop charging.
- Battery not fully charged (30% ≤ capacity < 100%)
  - LED lit in blue color
  - At the time the AC adapter is plugged-in AC adaptor, if battery capacity was above 95% (>95%), the system will stop charging.
- Battery almost fully discharged / capacity at less than 30% (< 30%)
  - Blinking in red color (interval 2sec/cycle)

Standby/Hibernate State

Discharging

- Battery capacity getting to almost 0%
  - LED status is Off

Chapter 3

Getting Started

Connecting to a Power Source

Connecting the AC Adapter

A universal AC adapter is provided to supply your computer with power and also charge the computer's battery pack. The adapter's AC input voltage can range anywhere from 100 to 240 volts, covering the standard voltages available in almost every country. To connect the computer to an external power source:

WARNING.... ***Do not use inferior extension cords as this may result in damage to your Tablet PC. The Tablet PC comes with its own AC adapter. Do not use a different adapter to power the computer and other electrical devices.***

Whenever possible, keep the AC adapter plugged into the computer and an electrical outlet to recharge the battery.

WARNING.... ***Never turn off or reset your computer while the hard disk is in use; doing so can result in loss or destruction of your data. Always wait at least 5 seconds after***

turning off your computer before turning it back on; turning the power on and off in rapid succession can damage the computer electrical circuitry.

Turning On/Off Your Computer

Turn on your computer by pressing the power button. Hold the button down for a second or two and release. The Power-On Self Test (POST) runs automatically.

After the POST is completed, the computer reads the operating system from the hard disk drive into computer memory (this is commonly referred to as "booting" a computer). If your OS (Operating System such as Windows 7…. etc.) is installed, it should start automatically.

- If want to turn on the product, simply push the [Power] button.
- If want to turn off, please execute one of the methods shown below:
  - Use Windows "shutdown" command;
  - Press "start" and then press "shutdown";
  - Push [Power] bottom for a few more seconds.

NOTE.... ***If you are unable to shutdown the computer, please push the power buttonfor more than 4 seconds to force the system to shutdown.***

If you want to turn on the computer right after the system is shutdown, please wait at least 2 seconds.

Tablet PC power button can also be set to activate the suspend mode.

Operating on Battery Power

Your computer comes with a rechargeable battery pack that lets you operate the computer without an external power source. When the battery pack is fully charged, you can operate the computer under the following conditions:

- The battery pack initially has a full charge.
- No peripheral devices are installed.

Battery Charging

When Tablet computer needs to be charged, please connect the AC Adapter while the other end to the power outlet on the wall. When the battery is charging, the computer is still operable with AC Adapter. However, the time of charging can be shortened when the computer is shutdown.

Checking the Battery Level

You can check the remaining battery power in Operating System battery status indicator.

Prolonging the Battery's Life and Usage Cycles

There are ways you can prolong the use of battery.

- Use the AC adapter wherever AC wall outlet is available. This will ensure uninterrupted computing.
- Make good use of the power management function. Save To Disk (Hibernate) saves the most energy by storing current system contents in a hard disk space reserved for this function.
- The life expectancy of the battery is approximately 300 recharges.

To achieve optimal battery performance, you may need to do a battery calibration at a 3-month interval.

Chapter 4

Using the Computer

Using the OnScreen Keypad

As the system enters the windows, the onscreen keypad icon is located at the left most upper side of the screen. Drag the icon out and double click to display the keypad.

On Screen Sofware Keyboard

The keyboard is in Input Panel. Use it the same way that you would use a standard keyboard.

Capacitive Touch Application

A touch screen is an electronic visual display that can detect the presence and location of a touch within the display area.

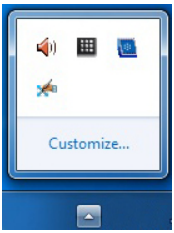
The term generally refers to touching the display of the device with a finger or hand.

G Sensor

G Sensor is used to rotate your screen display vertically or maintain the original position in a horizontal view.

- Hold your computer on standard horizontal position, flip it in vertical position will start rotating at 90 degrees clockwise angle until your screen is in vertical view.
- Flip it back to horizontal the screen will turn it back to its original view.

Function Keys

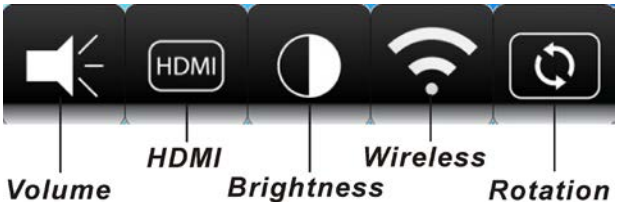


The Function keys utility is a Microsoft Windows 7 Application program. It provides a very simple way to call function.

It will run and show at notification area automatically when Windows 7 starts up.

- Press the icon calls the function key menu bar.
- Press the icon hides the function key menu bar.
- Menu Bar Mapping

Windows 7



Click one of the icons to call target function. The icon would be suffused with

a hazy, atmospheric glow.

Volume

Click the “Volume” icon of menu bar to show volume bar.

- Drag the bar to increase or decrease the volume.
- Click “Mute” icon to change the status of volume.

- Un-mute status, - Mute status

Drag or click “Value Bar” will be able to adjust the volume.

HDMI Switch

Click the “HDMI Switch” icon of menu bar to show Window’s Display Selector Menu.

OS will not change to target mode if user has changed target mode and have not plugged external monitor.

Brightness

Click the “Brightness” icon of menu bar to show Brightness Bar.

Mode |< Value Bar >|

Click “mode” icon to change which mode is the Light-Sensor on/off in Brightness Bar. - Manual mode, - Auto mode

- Drag or click “Value bar” will be able to adjust the value of brightness in manual mode.
- But user can’t able to adjust the value of brightness in auto mode.

Light-Sensor mode.

- The default mode of Light Sensor is disabled from Power to Enter Windows 7 OS.
- The OS can’t keep last brightness level in auto mode.
- The mode will follow last setting by reading EC.

	Cold boot	Warm boot	S3	S4
Light Sensor Mode	Keep Last State			
Brightness Level	Set Value by Light Sensor/Operating System			

Wireless

Click the “Wireless” icon of menu bar to show Wireless Selector Frame.
Provide two devices in Wireless Selector Frame.

- Click one of items to switch device in Wireless Selector Frame.
- It is enabled if the background color of item is gray.
- It is disabled if the background color of item is white.

The default status of wireless:

	Default	Cold boot	Warm Boot	S3	S4
wireless	On	Default		Keep Status	

Device on/off silent time is 3sec.

Rotation

Click the “Rotation” icon of menu bar to enable/disable Auto Rotation Screen.

Enable Rotation Screen

Disable Rotation Screen

Rotation table

The ST Sensor Control Panel setting and the Utility setting are synchronous to enable rotation screen.

ST Sensor Control Panel	Utility	Rotation Screen
Enable	Enable	Enable
	Disable	Disable
Disable	Disable, Don’t allow switching	Disable

The “Rotation Item” would be controlled by detecting “WebCam Companion” (WCC).

Utility	WCC/On	Rotation Screen	WCC/Off	Rotation Screen
Enable	Disable, Don’t allow switching	Disable	Enable	Enable
Disable			Disable	Disable

WCC would always execute on 0 degree, if Function keys utility is executing.

Chapter 5

Troubleshooting

Troubleshooting

Q: Can the shared memory size of graphic controller be adjusted?

A: No.

Q: How long the battery can last?

A: Under 6 hours under normal usage. However, the more specific time depends on the workload of the computer.

Q: The computer does not response or turn on when press power bottom

A: Please follow the instructions below:

- Please connect the AC adapter and charge the computer.
- If the computer connects to the external USB devices, check whether or not the USB device has the non-booting (system). If there is, please take it out and push [Power] bottom downward for a few seconds to force shutdown; and then, restart the computer.

Q: The screen cannot display image.

- A: Due to saving power from the power management system of the computer, the screen would automatically darken. The display will be back to normal by pressing any bottom.
- If the screen is not back to normal by pressing any bottom, please press [ ] icon and check the brightness of screen is reduced too much.

Q: The sound effect of computer does not response.

A: Please check the following one by one:

- The volume may set up in mute mode. Please check the volume control icon on the lower right taskbar of the Windows, if the icon is shown as mute, please click twice on the icon to open “volume” and turn off mute, press [ ] to turn off the mute mode.
- If the headphone or external speaker is connected to the audio output jack, built-in speaker would automatically turn off.

Q: How to check the battery capacity?

A: The battery status indicator of Windows shows the remaining battery capacity. Simply use the stylus to select battery/power indicator icon on the lower right taskbar, and the remaining battery capacity is shown.

Q: The display of time and date are incorrect.

A: Please correct the time and date with the following steps:

- Use stylus to click and open “Time and Date” in the lower right taskbar, enter “Change Date and Time Setting” ;
- Change date and time: after manually change the date and time, click “Confirm”;
- Change time zone: after set up your local time zone, click “Confirm”;
- Last, go back to “Time and Date”, click “Confirm”, the changing is finished.

Appendix A

Specifications

Specification

Operating System

- Windows Embedded 7 Professional
- Windows 7 Professional

CPU

- Intel® Atom™ Z650 processor,
  - 1.2GHz/512K L2
  - C6 support

Memory

- DDR2 800 Memory on board
- Max: 2GB

Chipset

- Intel® SM35 Express Chipset

Audio Codec

- Integrated Microphone
- Integrated Speaker
- Integrated headphone + microphone combo Jack

Wireless LAN

- Wi-Fi 802.11 b/g/n

Bluetooth

- Bluetooth 4.0

Touch

- Capacitive Multitouch

Storage

- 32G MLC SSD

LCD

- TFT Color LCD, LED Backlight
- 7” with 1024x600 (Anti-Glare)

Light Sensor

- I2C interface

Battery Pack

- 2 cell 2S1P
  - 7.4V / 2800mAH (2S1P)

AC-Adapter

- Automatics Voltage adjustment between 100 and 240VAC 50/60Hz 40Watts, 12V/24W

BIOS

- Support PnP & ACPI 2.0
- Support external USB flash memory card boot up.

Physical Outline

- Dimension: 207.1x135x16.8
- Weight: 526g

EMC

- CE, FCC, CCC

RF

- FCC&SAR / R&TTE

Safety

- UL / CB

- CCC
- WEEE
- RoHS (Restriction of Hazardous Substances, EU directive 2002/95/EC + amendments)

Certificate

- IP41

U.S.

- FCC ID: TX2RTL8188CUB8
- FCC ID: TX2-RTL8188CUS
-

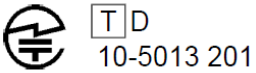
Europe

-
- RoHS (Restriction of Hazardous Substances, EU directive 2002/95/EC + amendments)

China

-

Japan

- 

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