



## EBOX-3350EX Series

## User's Guide



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## Safety Information

### WARNING

- Do not expose EBOX to rain or moisture, in order to prevent shock and fire hazard.
- Never install EBOX in wet locations.
- Do not open the cabinet to avoid electrical shock. Refer to your nearest dealer for qualified personnel servicing.
- Never touch un-insulated terminals or wire unless your power adaptor and display monitor are disconnected.
- Locate EBOX as close as possible to the socket outline for easy access and to avoid force caused by entangling of your arms with surrounding cables from the EBOX.
- When using EBOX, avoid using or installing the modem to the serial port during a storm or a lightning.
- Do not use the modem or a telephone to report a gas leak in the vicinity of the leak.
- USB connectors are supplied with Limited Power Sources.

**DO NOT ATTEMPT TO OPEN OR TO DISASSEMBLE THE CHASSIS (ENCASING) OF THIS PRODUCT. PLEASE CONTACT YOUR NEAREST DEALER FOR SERVICING FROM QUALIFIED TECHNICIAN.**

# Regulatory

## FCC Class A Note

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference in which case the user will be required to correct the interference at his own expense. Testing was done with shielded cables. Therefore, in order to comply with the FCC regulations, you must use shielded cables with your installation.

## WARNING

This product complies with EN55022 class A. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device 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.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference - causing equipment standard entitled "Digital Apparatus", ICES-003 of the Department of Communications.

## Manufacturer's Declaration of Conformity

This equipment has been tested and found to comply with the requirements of European Community Council Directives 89/336/EEC and 73/23/EEC relating to electromagnetic compatibility and product safety respectively.

## Attention

This product has been designed and certified to comply with certain regulatory requirements pertaining to Information Technology Equipment. This product has not been designed for use as a medical device. Without limitation of the foregoing, this product is not intended and has not been certified for use in a hospital or clinical environment to diagnose, treat, or monitor patients under medical supervision, and is not intended and has not been certified to make physical or electrical contact with patients, nor to transfer energy to or from patients or to detect such energy transfer to or from patients.

# Purchase Agreement

## Purpose:

In accordance to the general commercial conduct of Trust and Fair Trade, herewith below is the agreement for the protection for both parties, DMP and Users in pursuant of trading.

## Product Description:

With this product, herewith also known as EBOX-3350EX Series, which is a simplified & an economical design of an embedded device for Special Purpose Personal Computing. The basic specification of this product is comprised of the x86 technology, design, and with onboard 512 MB DDR3 System memory, VGA display, USB, COM ports and LAN Interfaces.

## Distribution Convention:

1. This Product includes a gift box, an inner case, a PC, a Power adaptor (Optional). Upon receiving this product, kindly please refer to the User' Manual to check for the contents and appearance of this product; contact immediately your nearest dealer or DMP office for any defective or missing parts. The supplier will not be responsible for any reported discrepancy there after the expiration period of 3-days from the received date.
2. In consideration of transportation and the cost of storage, the supplier provides to the distributors a warranty of 12 months. This warranty covers the failure caused by hardware breakdown (excluding hard drives), but does not cover the act of misuse and mishandling.
3. The supplier will not accept unknown post, therefore if you wish to repair or to return your goods – kindly please contact your nearest dealer to make your declaration, and at the same time, apply for an RMA number (RMA stands for Return Merchandise Authorization – please ask for RMA form and fill-up for authorization).
4. The freight for return goods for repair will follow the International customary practice and convention: Both parties is to pay for freight of one shipment each. The shipper is required to prepay the freight from the place of origin (This means that the returnee (user) covers the freight for return goods, while the Supplier covers the freight for goods after the repair).
5. Obsolete warranty is referred to as: (1) Expiration of warranty or (2) Damage due to misuse within warranty. The Supplier will be taken into consideration of the circumstances, to provide repair service with charges expense for obsolete warranty. This expense includes the cost of material and the cost of labor.

**Note:** If there is other particular issue, not listed in the above conditions, both parties agreed to follow the General Law of Commerce with fair and reasonable discussion in handling and resolving the argument.

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# ***Chapter 1***



# Unpacking Your EBOX Mini PC

Congratulation! You have just acquired EBOX-3350EX Series, please check the following items:

## Packing List:

| Item No. | Description                                            | Q'ty |
|----------|--------------------------------------------------------|------|
| 1        | EBOX-3350EX Series Mini PC                             | x1   |
| 2        | 75 x 75mm to 100 x 100mm VESA mounting rack (Optional) | x1   |

**Note:** The accessories are subject to change without immediate notice.

## Check Before Use



# Preface

## EBOX-3350EX Series: VESA PC



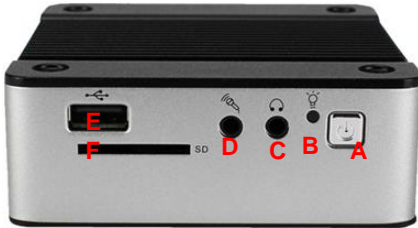
The EBOX-3350EX Series is a revolutionary device which is especially designed for limited physical space and temperature concerns. No matter you are in a jammed office, a crowded place, or public transportation, it can be easily integrated with a VESA LCD to bring you EBOX-3350EX Series access at any time. It can attach to any VESA mounting fixture; allowing it to be securely mounted onto desks, walls, or buildings, and thereby optimizes your work area. It can also attach directly to any size LCD for a mobile system for the use at trade shows, presentations, promotions, etc.

Unlike traditional portable laptop design, the EBOX-3350EX Series can be used with a large size LCD. Furthermore, with FANLESS design, EBOX-3350EX Series is ideal to be used in the environment where temperature demand is critical. If you are looking for a device that is able to provide with more mobility & space, and at the same time uses less power consumption, EBOX-3350EX Series will be surely meet your need.

The VESA® FDMI™ Standard defines mounting interfaces, hole patterns and associated cable/ power supply locations for LCD monitors, plasma displays and other flat panel devices. EBOX-3350EX Series is designed to fit this standard to make monitor attachment quickly and easily.

# ***Chapter 2***

# EBOX-3350EX Series Overview



## Front Panel

### A: Reset Button

For system reset or turn on.  
(Available in 3350EX/ 3350EX-C2).

### B: Power LED

The power LED lights up when the system is turned on.

### C: Audio Line Out

Audio output to speaker.

### D: Audio Mic In

For Microphone input.

### E: USB 2.0 port

Connection for external USB devices.

### F: SD Card Slot

For the storage SD Card, the system is bootable from SD Card.



## Back Panel

### G: USB 2.0 port

### H: VGA port D-Sub 15-pin

### I: RJ-45 LAN Jack

### J: Mini 5pin USB Power Jack

### K: RS-232 port

Available in EBOX-3350EX-C2/ C2AP

# System Specification

## CPU

Vortex86EX (400MHz)

## Main Memory

512MB DDR3 (32-bit DRAM bus)

## BIOS

SeaBIOS

## VGA

Resolution up to 1024 x 768 pixels

## Peripheral

1. USB 2.0 x 2 (1 at front, 1 at rear)
2. SD Card slot x 1
3. Audio (Mic In, Line Out)
4. RS-232 port x 2

(Available in EBOX-3350EX-C2/ C2AP)

## Dimension & Weight

EBOX-3350EX/ AP

95 x 95 x 20mm/ 277g

EBOX-3350EX-C2/ C2AP

95 x 95 x 35mm/ 350g

## Power consumption

DC +5V@0.62A

## Supported Operating System

Windows XP

Windows XP Embedded

Windows Embedded CE

Linux OS

(click [Linux Support List](#) for details)

# Peripherals

## Connecting the Power Adaptor



### A: Mini 5pin USB DC Power Jack

To use EBOX-3350EX Series please attach the USB cable or spec in +5V@2A AC adapter for the power source.

Note: Unit with Auto Power On support function, it will turned on automatically after power adaptor plug on.

## Connecting the Monitor



### B: VGA Connection

Connect your LCD display Monitor with VGA cable (Not included in EBOX console bundles) to the 15-pin D-Sub VGA port.

# Peripherals

## Connecting the USB

EBOX-3350EX series provides 2 external USB ports (1 at the front, 1 at the rear).



### C: SD Card Slot

For booting device by SD Card.

### D: Microphone/ Earphone

The EBOX-3350EX Series supports Microphone Input and Speaker Output

### E: Reset Button

For system reset or turn on

**Note:** Models with Auto Power On feature has Reset Button Eliminated.

### F: USB 2.0 port

Connection for external USB devices.



## Connecting the LAN



### G: RJ-45 LAN

RJ-45 LAN jack for Ethernet connection.

## Connecting Serial port



### H: Serial port

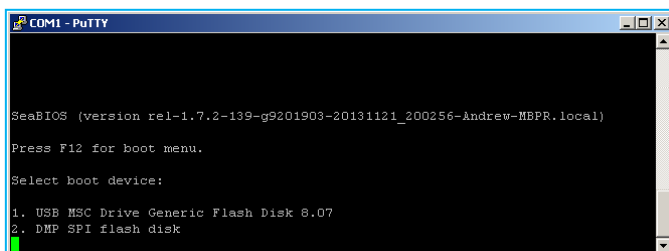
Connection for serial port interface devices.

# ***Chapter 3***



## BIOS Reconfiguring

SeaBIOS is used in EBOX-3350EX Series, press <F12> during boot up and enter SeaBIOS setup menu.



(SeaBIOS Setup menu)

1. SeaBIOS time and date setting is fixed, it can't be change. Suggest to change the setting from operating system (i.e DOS or Linux) .
2. COM port configuration is embedded in SeaBIOS as default :  
COM1 => 3F8h, IRQ4, 115200bps  
COM2 => 3E8h, IRQ3, 115200bps  
COM3 => 2F8h, IRQ10, 115200bps  
COM4 => 2E8h, IRQ11, 115200bps

If user need to have appointed IO address or IRQ, please contact manufacturer (or the company where the units purchased from) for BIOS customization service.

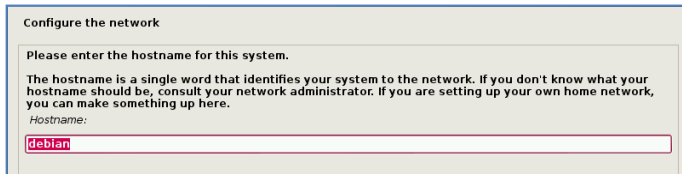
## Linux installation For Debian7.0/ Ubuntu10.04

Regarding the system installation of Debian7.0/Ubuntu10.04, please follow the steps and suggestions to complete the system installation on the EBOX-336x Series platform. The following is a brief instruction, users may configure it according to their specific needs.

### 1. Basic system installation

- For Debian7.0, after booting from the installation CD, moving straight to install system would get a text mode system only, please choose Graphic Install for Graphical User Interface OS installation.
- Set basic configuration such as language, keyboard map and time zone, etc. steps by steps.

- Then the system will detect the network hardware, and requires users to load the firmware files for network device rtl8168, just answer no for this inquiry and move forward.
- Next the system will detect multiple network interfaces on the EBOX-336x Series, and users have to decide the primary network interface, both of them could be chosen. Note: the Ethernet cable must be plugged in during this period.



Configure the network

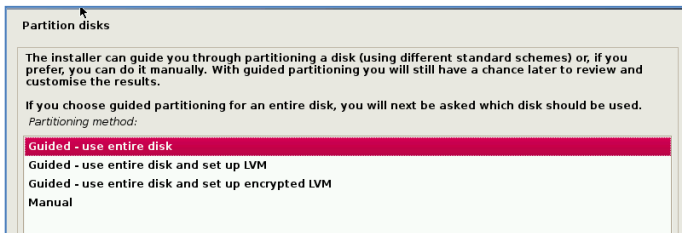
Please enter the hostname for this system.

The hostname is a single word that identifies your system to the network. If you don't know what your hostname should be, consult your network administrator. If you are setting up your own home network, you can make something up here.

Hostname:

debian

- During the installation process, the system would ask users to create partitions for the operating system. Following example is using entire disk for the beginner. Choose "Guided - use entire disk".



Partition disks

The installer can guide you through partitioning a disk (using different standard schemes) or, if you prefer, you can do it manually. With guided partitioning you will still have a chance later to review and customise the results.

If you choose guided partitioning for an entire disk, you will next be asked which disk should be used.

Partitioning method:

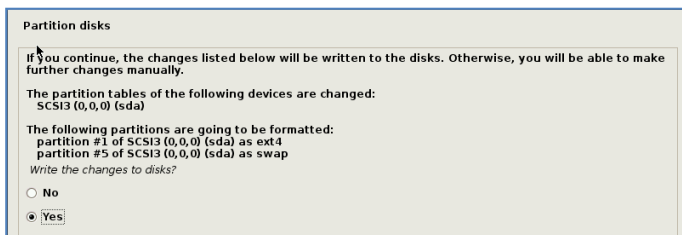
**Guided - use entire disk**

Guided - use entire disk and set up LVM

Guided - use entire disk and set up encrypted LVM

Manual

- Select "Yes" to create the partition.



Partition disks

If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.

The partition tables of the following devices are changed:

SCSI3 (0,0,0) (sda)

The following partitions are going to be formatted:

partition #1 of SCSI3 (0,0,0) (sda) as ext4

partition #5 of SCSI3 (0,0,0) (sda) as swap

Write the changes to disks?

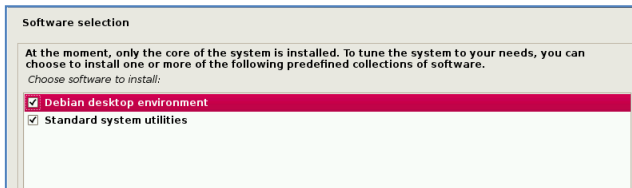
☐ No

☒ Yes

- Then the system would keep asking you few questions for configuration, suggestions were attached as follow.
- Then the system would keep popping out questions for configuration, suggestions as below:

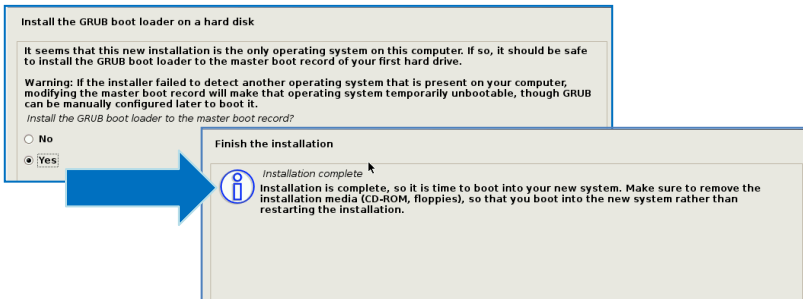
#### For Software selection:

Please remark both the Debian desktop environment and standard system utilities, then click to continue. It would start the package installation, and around hundred packages would be installed, after installation completed, the next indication message would pop up.



#### For Install the GRUB boot loader on a hard disk:

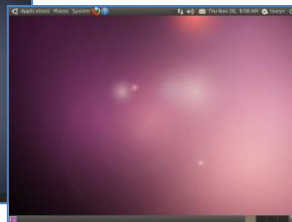
Answer YES to complete the installation as last procedure.



- When it's completed, the disc tray will eject with pop-up message, press continue to restart and be ready to enjoy the new system!



The Debian7.0

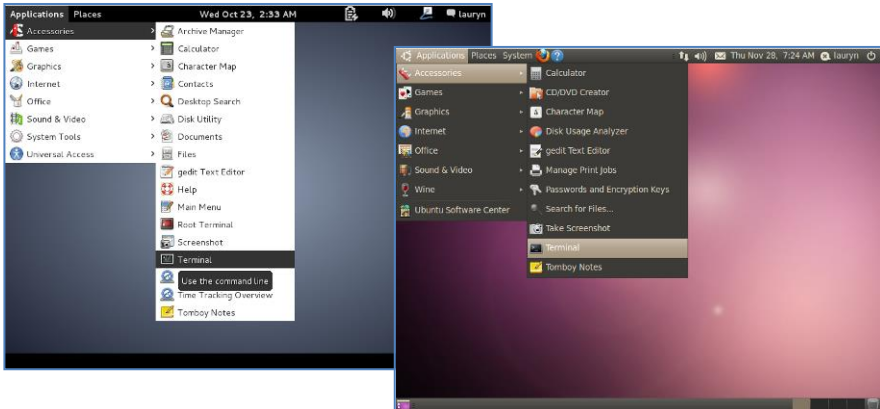


The Ubuntu10.04

## 2. Kernel and graphic driver installation

Install the Kernel Package (Console mode)

- For Debian7.0, you can skip this procedure for kernel installation; Because system could work with default kernel version (3.2.0).
- Clicking the icon of the terminal from the application. And download the kernel 2.6.32-21 from below link then to store the kernel package.

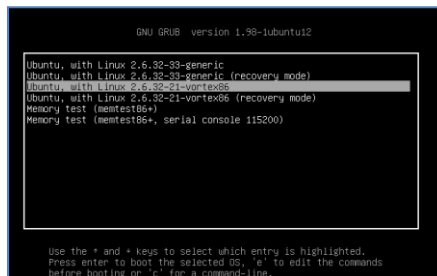


- Follow the instructions to complete the kernel installation, get into the folder that kernel file stored, and switching as the root before command executed.

```
# dpkg -i linux-image-2.6.32-21-vortex86_2.6.32-21.32_i386.deb
```

Kernel Package (click [2.6.32-21-Vortex86](#))

- When download completed, restart the system and to choose the kernel 2.6.34.10 to boot when GRUB boot loader was loaded. You can keep pressing the key "Shift" when the system from booting, then the boot loader would show the option of kernel for you. Then find the "Ubuntu, With Linux 2.6.32-21-vortex86" to execute.



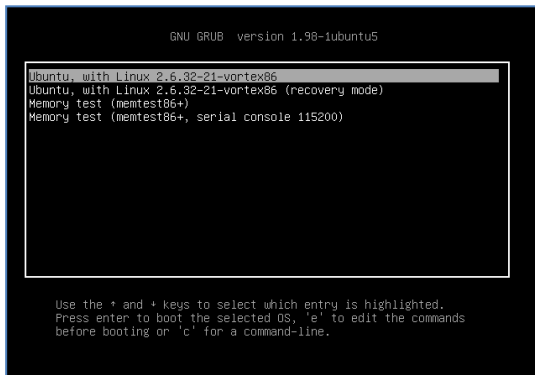
- Or you can remove the default kernel 2.6.32-??-generic that be arranged as a higher priority than the kernel we installed for the EBOX-3350EX platform, with the instruction below through the terminal.
- First, check what version be installed as default in the system:

```
# grep -w linux-image-2.6.32 /var/log/dpkg.log
```

- To find the last two numbers as location of question marks that the system shows on screen "linux-image-2.6.32-??"
- Then execute it with the correct numbers that you found in previous, and to replace the question mark with correct version numbers shown below.

```
# apt-get remove linux-image-2.6.32-??-generic
```

- Then you would see only one kernel on the GRUB list.



## Install the VGA driver (Console mode)

- Switch to console mode by pressing key <Ctrl> + <Alt> + <F1>, then copy the VGA driver rdc\_drv.so to the driver folder /usr/lib/xor/modules/drivers/, before that, you can download the drivers as below for Debian7 and Ubuntu10.04 individually.

The Ubuntu10.04 Xorg Version is **1.7.6**

The Debian 7.0 Xorg Version is **1.12.4**

VGA Driver (click [M2012\\_R0.04](#) to download) for Ubuntu 10.04

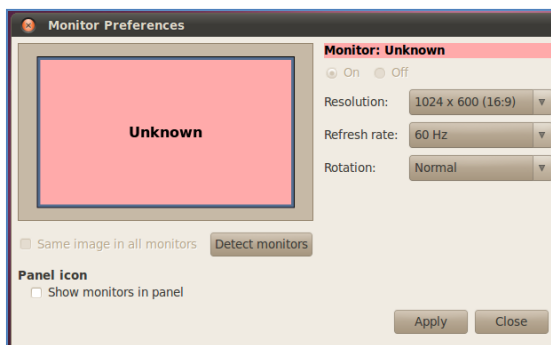
VGA Driver (click [M2012\\_T0.0.9.1](#) to download) for Debian 7.0

- Follow instruction below to execute.

```
#/etc/init.d/gdm stop
#X --configure
#cp /root/xorg.conf.new /etc/X11/xorg.conf
#/etc/init.d/gdm restart
```

※Please click [xorg.conf](#) to download for your system, if the display is out of range.

- Reboot and make sure all the display is normal then set the resolution as requested.



The supported resolutions:

1024x768 (4:3)

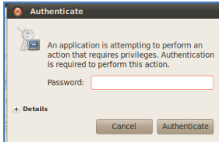
800x600 (4:3)

640x480 (4:3)

## 4. The system configuration

### Enable the Auto login System / Administration / Login Screen

1. Execute the utility “Login Screen” and enter the password to process it.

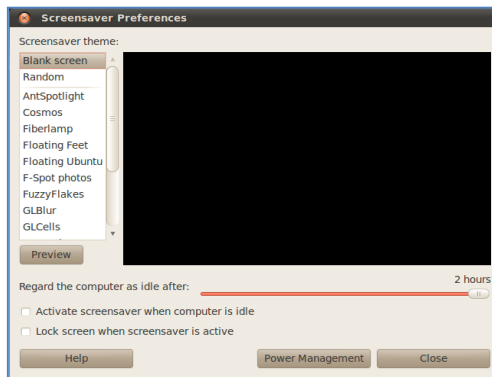


2. Set the Log in as “user account” automatically.



### Disable the power saving mode when system idle, System / Preference / Screensaver

Unmarked the option “Active the screensaver when computer is idle”.



Now, it is a workable Linux system for your EBOX-3350EX Series.



# ***Chapter4***



# Technical Specification

| Model Type         |         | 3350EX                                                            | 3350EX-AP | 3350EX-C2                      | 3350EX-C2AP |
|--------------------|---------|-------------------------------------------------------------------|-----------|--------------------------------|-------------|
| Processor          |         | Vortex86EX (400MHz)                                               |           |                                |             |
| BIOS               |         | SeaBIOS                                                           |           |                                |             |
| Memory             |         | Onboard 512MB DDR3                                                |           |                                |             |
| VGA                |         | Integrated A9160 PCIe VGA Chip/ D-sub 15-pin                      |           |                                |             |
| Maximum Resolution |         | 1024 x 768 pixels                                                 |           |                                |             |
| Ethernet           |         | 10/100 Mbps LAN x 1 (RJ-45 connector, Built-in PXE diskless boot) |           |                                |             |
| USB 2.0            |         | External: 2 ports (Front x 1, Rear x 1)                           |           |                                |             |
| Audio              |         | Mic in and Line out                                               |           |                                |             |
| I/O                | SD slot | 1x                                                                |           |                                |             |
|                    | RS-232  | N/A                                                               |           | 2x                             |             |
| Auto Power On      |         | N/A                                                               | Yes       | N/A                            | Yes         |
| Power              |         | DC +5V@2A                                                         |           |                                |             |
| Dimensions         |         | 95 x 95 x 20mm                                                    |           | 95 x 95 x 35mm                 |             |
| Unit Net Weight    |         | 277g                                                              |           | 350g                           |             |
| Operation Temp.    |         | 5 ~ 50℃                                                           |           |                                |             |
| Certifications     |         | CE, FCC, VCCI                                                     |           |                                |             |
| Optional           |         | Internal SD Card slot                                             |           |                                |             |
| Note               |         | N/A                                                               |           | RS-232 COM ports in Full 9-pin |             |

## Note:

1. SD Slot x 1 (Bootable but hot-swappable not support).
2. "AP" indicated Auto Power On supported feature, system will turned on automatically after power adapter is plug on.

## EBOX-3350EX Series Models Listing:

EBOX-3350EX: Standard Version.

EBOX-3350EX-AP: Standard Version with Auto Power On Support.

EBOX-3350EX-C2: Standard Version with RS-232 port x 2.

EBOX-3350EX-C2AP: Standard Version with RS-232 port x 2 & Auto Power On Support.

# ***Chapter 5***

# Onboard Connectors Summary

Summary Table for CPU Board

| Nbr        | Description  | Type of Connections    | Pin nbrs. |
|------------|--------------|------------------------|-----------|
| J3         | VGA          | D-Sub connector        | 15-pin    |
| J4         | DC +5V Input | Mini USB Jack          | 1-pin     |
| J5         | Line out     | Audio Jack             | 2-pin     |
| J6         | Mic in       | Audio Jack             | 2-pin     |
| J7         | USB (Front)  | USB connector          | 4-pin     |
| J10        | USB (Back)   | USB connector          | 4-pin     |
| J12        | Ethernet LAN | RJ-45                  | 8-pin     |
| J13 (Note) | COM1 port    | Box Header 5 x 2 2.0mm | 10-pin    |
| J14 (Note) | COM2 port    | Box Header 5 x 2 2.0mm | 10-pin    |

**Note:** J13 & J14 only available in EBOX-3350EX-C2/ C2AP

## ► Front Connectors Outline



EBOX-3350EX/ AP FRONT LOOK

EBOX-3350EX-C2/ C2AP FRONT LOOK



\*Models with Auto Power On feature do NOT have front Reset Button

## ► Rear Connectors Outline

### EBOX-3350EX/ AP REAR LOOK



G: USB 2.0  
H: VGA  
I: RJ-45 LAN  
J: Mini 5pin USB DC  
Power Jack

### EBOX-3350EX-C2/ C2AP REAR LOOK

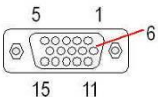


K: RS-232 port

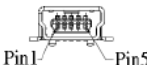
\*Available in EBOX-3350EX-C2/ 3350EX-C2AP

## Pin Assignments

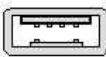
J3: VGA – 15-pin D-Sub connector

|  | Pin # | Signal Name | Pin # | Signal Name | Pin # | Signal Name |
|-----------------------------------------------------------------------------------|-------|-------------|-------|-------------|-------|-------------|
|                                                                                   | 1     | MR          | 6     | GND         | 11    | NC          |
|                                                                                   | 2     | MG          | 7     | GND         | 12    | VCC         |
|                                                                                   | 3     | MB          | 8     | GND         | 13    | HYSYNC      |
|                                                                                   | 4     | NC          | 9     | NC          | 14    | VSYSNC      |
|                                                                                   | 5     | GND         | 10    | GND         | 15    | VCC         |

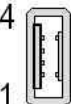
J4: Mini USB DC Power Input

|  | Pin # | Signal Name |
|-----------------------------------------------------------------------------------|-------|-------------|
|                                                                                   | 1     | +5V Input   |
|                                                                                   | 2     | Data ---    |
|                                                                                   | 3     | Data +      |
|                                                                                   | 4     | None        |
|                                                                                   | 5     | GND         |

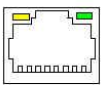
J7: USB 2.0 (180°) – 4-pin USB Type 1 connector (H)

|  | Pin # | Signal Name |
|------------------------------------------------------------------------------------|-------|-------------|
|                                                                                    | 1     | VCC         |
|                                                                                    | 2     | Data --     |
|                                                                                    | 3     | Data +      |
|                                                                                    | 4     | GND         |

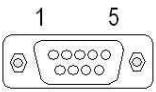
J10: USB 2.0 (90°) – 4-pin USB Type 1 connector (H)

|  | Pin # | Signal Name |
|-------------------------------------------------------------------------------------|-------|-------------|
|                                                                                     | 1     | VCC         |
|                                                                                     | 2     | Data --     |
|                                                                                     | 3     | Data +      |
|                                                                                     | 4     | GND         |


J12: LAN: RJ-45 connector

| <br>8    2, 1 | Pin # | Signal Name | Pin # | Signal Name |
|------------------------------------------------------------------------------------------------|-------|-------------|-------|-------------|
|                                                                                                | 1     | FTXD+       | 2     | FTXD-       |
|                                                                                                | 3     | FRXIN+      | 4     | NC          |
|                                                                                                | 5     | NC          | 6     | FRXIN-      |
|                                                                                                | 7     | NC          | 8     | NC          |

J13, J14: COM - 9-pin D-Sub connector

| <br>1    5<br>6    9 | Pin # | Signal Name | Pin # | Signal Name |
|-------------------------------------------------------------------------------------------------------|-------|-------------|-------|-------------|
|                                                                                                       | 1     | DCD         | 2     | RXD         |
|                                                                                                       | 3     | TXD         | 4     | DTR         |
|                                                                                                       | 5     | GND         | 6     | DSR         |
|                                                                                                       | 7     | RTS         | 8     | CTS         |
|                                                                                                       | 9     | RI          | --    | --          |

LEDS: POWER ON/ OFF

|  | LED Color | State    |
|-----------------------------------------------------------------------------------|-----------|----------|
|                                                                                   | Green     | Power On |

# ***Chapter 6***

# Taking Care of your EBOX

This section provides some guidelines on using EBOX-3350EX Series – Safe using, Storing and Handling.

## Storing

- ▶ Do not place EBOX-3350EX Series in a location that is subject to:
  - Heating sources, such as stove, oven, heater, radiator or air duct.
  - Direct contact from sunlight.
  - Rain or moisture area.
  - Excessive dust accumulation area.
  - High humidity place.
  - Constant or occasional mechanical movement, vibration or shock.
  - Strong magnets or magnetic fields or magnetically unshielded speakers.
  - Out of the operating temperature range from 5°C to 50°C
- ▶ Do not place other electronic device or electrical equipment near EBOX-3350EX Series. The electromagnetic field of the EBOX-3350EX Series may cause interference subjecting to malfunction.
- ▶ Provide adequate air ventilation (circulation) to prevent internal buildup of heat. Do not place EBOX-3350EX Series near the wall, behind the curtains or draperies, in between two books that block its ventilation slots. Leave a space of at least 8 inches (20cm) behind the sides and back panel of the EBOX-3350EX Series.
- ▶ Change of environmental temperature: Problems may occur when there is a sudden change of environmental temperature, or if the EBOX-3350EX Series is brought directly from a cold location to a warm one, moisture may condense inside EBOX-3350EX Series. Turn off the device, and contact your nearest dealer.
- ▶ Check the surrounding appliance(s) before using EBOX-3350EX Series. Since the EBOX-3350EX Series uses high-frequency radio signal and may interface with radio or TV reception causing interference or poor signal display. When this happens, relocate the EBOX-3350EX Series by a suitable distance away from it.
- ▶ Do not drop the EBOX-3350EX Series from working table nor place heavy objects on top of it.



## **Cleaning Your VESA PC**

- ▶ Clean the VESA PC with a soft, dry cloth or a soft cloth lightly moistened with a mild detergent solution.
- ▶ Do not use any type of abrasive pad, scouring powder, or solvent such as alcohol or benzene, as these may damage the finish of EBOX.
- ▶ When a solid object falls or a liquid spills onto the EBOX, turn off the EBOX immediately and unplug the LAN and power cables. Contact a qualified person or your dealer to check the EBOX before you use it again.
- ▶ Always disconnect the power cord from the power source before cleaning the EBOX.

# Troubleshooting

This section describes the techniques of resolving some basic problems that you encounter when using EBOX-3350EX Series. For more troubleshooting guidelines, please contact your nearest dealer for technical support.

## Troubleshooting Your VESA PC

### A. VESA PC does not start –

- ▶ Make sure the EBOX-3350EX Series is properly secured and plugged into a power source before it is turned on. Make sure the power indicator shows the power is on. See section 2 for more information about “EBOX-3350EX Series Overview”.
- ▶ When the EBOX-3350EX Series is plugged into a power strip or the UPS (Uninterruptible Power Supply), make sure the power strip or UPS is turned on and working normally.
- ▶ Check if your VGA or LCD monitor is properly plugged into a power source and turned on. Make sure the brightness and contrast controls are adjusted correctly. See the manual that came with your display (monitor) for details.
- ▶ Check if your power control button does not function, by removing the AC adaptor. Wait for one minute, and then reattach all power connection before pressing the power button.
- ▶ Condensation may cause the EBOX-3350EX Series to malfunction for a while. If this happens, do not use the EBOX-3350EX Series for at least one hour.
- ▶ When you have checked all the above guidelines and the EBOX-3350EX Series does not work. Remove the power adaptor from the EBOX-3350EX Series, unplug the power supply, and plug it in again. Then turn on the power.
- ▶ If you have just connected EBOX-3350EX Series to a CD/ DVD or USB Drivers, remove these peripherals. And restart to confirm that the Windows operating system starts properly. If EBOX-3350EX Series continues to display the message “Operating system not found,” and Windows does not start, please contact your nearest dealer for servicing.

### B. “Operating System Not Found” –

**A message indicating that “Operating system not found” appear when the VESA PC starts**

- ▶ Enter the BIOS setup main menu by pressing <F12> key, be sure that the correct boot drive is enabled.
- ▶ If the operating system does not start, follow these steps to initialize the BIOS:
  1. Turn off the EBOX-3350EX Series unit.
  2. Remove any peripheral devices connected to the EBOX.
  3. Restart the EBOX-3350 Series Unit.
  4. Press <F12> to enter **BIOS Setup main menu** window.
  5. Select the boot up storage (SD Card or the USB drive).

# ***Chapter 7***

# Terms and Conditions

## Warranty

The warranty terms for EBOX-3350EX Series are twelve (12) months from the shipped month. During the warranty period, DMP Electronics Will repair replace the product covered under this limited warranty.

## Service and Support

DMP Electronics Inc. provides the technical support for hardware problems with your system throughout the warranty period. The technical support service is limited to configuration and operation of EBOX-3350EX Series sold by DMP Electronics Inc. The technical support service does not offer software tutoring or training.

## Return Merchandise Authorization (RMA) policy

If the DMP staff or dealer determines that a part is defective. Purchaser must call our technical support service to obtain an RMA number before attempting to return any part. Please refer to your nearest dealer for :

To obtain an RMA number, Purchaser must follow procedures as below :

1. Complete the DMP Electronics Inc. standard RMA Form and fax back to the RMA Department.
2. The RMA Number must be used within 7 DAYS.
3. The RMA Number must be shown clearly on your shipping label.
4. DMP Electronics Inc. must receive all Returns before a replacement will be sent.
5. The repair cost depends on the parts, the damage reasons, and whether under warranty period...etc. The Seller will charge the Purchaser in a reasonable price.
6. A copy of the invoice for the RMA product(s) will also be shipped to Purchaser.
7. The freight of return to DMP Electronics Inc. is charged to the Purchaser's account and accompanied by an RMA number. Any Returns with freight collect will be refused and returned to you. After Repairing, the cost of freight will be paid by Seller.
8. DMP Electronics Inc. must receive all returned goods within the warranty period.

## Shipping Policy

The Purchaser must pre-pay shipping for any defective system or parts returned under the warranty. DMP Electronics Inc. shall not be liable for risk of loss or damage during shipment of your returned system or parts if you fail to insure the shipment.

All products must be shipped back to DMP Electronics Inc. in original or equivalent packaging. DMP Electronics Inc. will ship the repaired or replacement product(s) to the Purchaser by freight prepaid. Purchaser assumes the risk of loss. DMP Electronics Inc. shall not be responsible for failure of the delivery service to make on-time delivery.