

# **Open Frame 15.6” Series**

## **OPC-15W3**

### **Quick Reference Guide**

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**1<sup>st</sup> Ed – 23 August 2012**

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# 1. Getting Started

## 1.1 Safety Precautions

### Warning!



Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

### Caution!



Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

## 1.2 Packing List

- 1 x OPC-15W3 Series Open Frame PC
- 1 x Quick Reference Guide
- 1 x DVD-ROM (For all drivers)
- Other major components include the followings:
  - 1 x 19V/65W AC-DC Adapter
  - 1 x Power Cord
  - 2 x Screws (for hard disk drive bracket)
  - 1 x Sponge (to paste on hard disk drive)



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If any of the above items is damaged or missing, contact your retailer.

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## 1.3 System Specifications

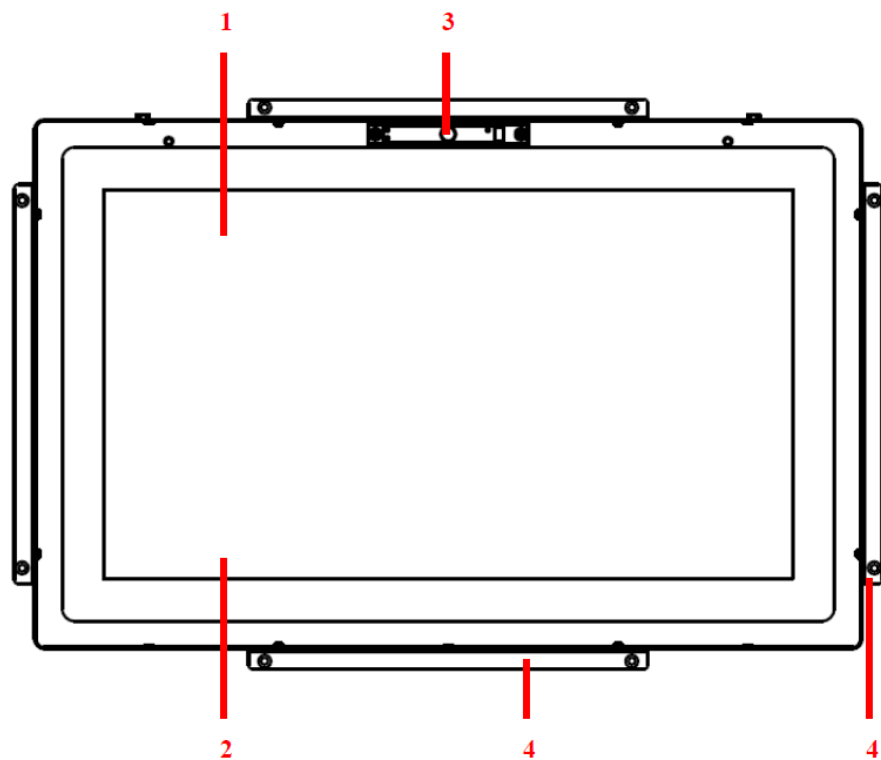
<b>Model</b>	<b>OPC-15W3</b>
<b>System Type</b>	Open Frame All-In-One System
<b>Display</b>	15.6" TFT-LCD 1920x1080 Resolutions LED Backlight 300 cd/m <sup>2</sup> White Luminance 500:1 Contrast Ratio
<b>Touch Screen</b>	Projected Capacitive Touch 10-Point Multi-touch EETI Controller
<b>Main System</b>	Customized 945GSE Main board
<b>- Processor</b>	Intel® Atom™ N270 Processor
<b>- Chipsets</b>	Mobile Intel® 945GSE Express Chipset
<b>- Memory</b>	Dual channel DDR2 533/667MHz Two SODIMM sockets Maximum 4GB Capacity
<b>- Audio</b>	Realtek® ALC888 Audio CODEC
<b>- Ethernet</b>	Intel® 82574L Gigabit Ethernet Controller
<b>- Storage</b>	2.5" SATA Hard Disk Drive Bay CF Socket
<b>I/O Interface</b>	1 * RJ-45 1 * DVI 1 * HDMI 4 * USB 2.0 (Type-A Female) 1 * Earphone 1 * Microphone
<b>Optional I/O Interface</b>	2 * RJ-45 4 * USB 2.0 (Type-A Female) 1 * RS-232 1 * RS-232/422/485
<b>Optional Peripherals</b>	1 * 1.3M Camera or 2.0M Auto Focus Camera
<b>Speakers</b>	2 * 2W Speakers
<b>Mounting</b>	VESA 75 (M6)
<b>Power Requirement</b>	12-19V Wide Range DC Input / Optional 12-24V Wide Range DC Input
<b>Power Consumption</b>	19V@1.15A , 26.98W
<b>Accessory</b>	19V 65W Adapter
<b>Operating Temperature</b>	0 ~40C (System Fanless)

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<b>Storage Temperature</b>	-20~70C
<b>Chassis Material</b>	SECC with Nickel Coating Treatment
<b>Weight</b>	4.53Kgs
<b>OS Support</b>	Windows XP & Windows XP Embedded (Not Multi-touch) Windows 7 & Windows Embedded 7 (10-Point Multi-touch)

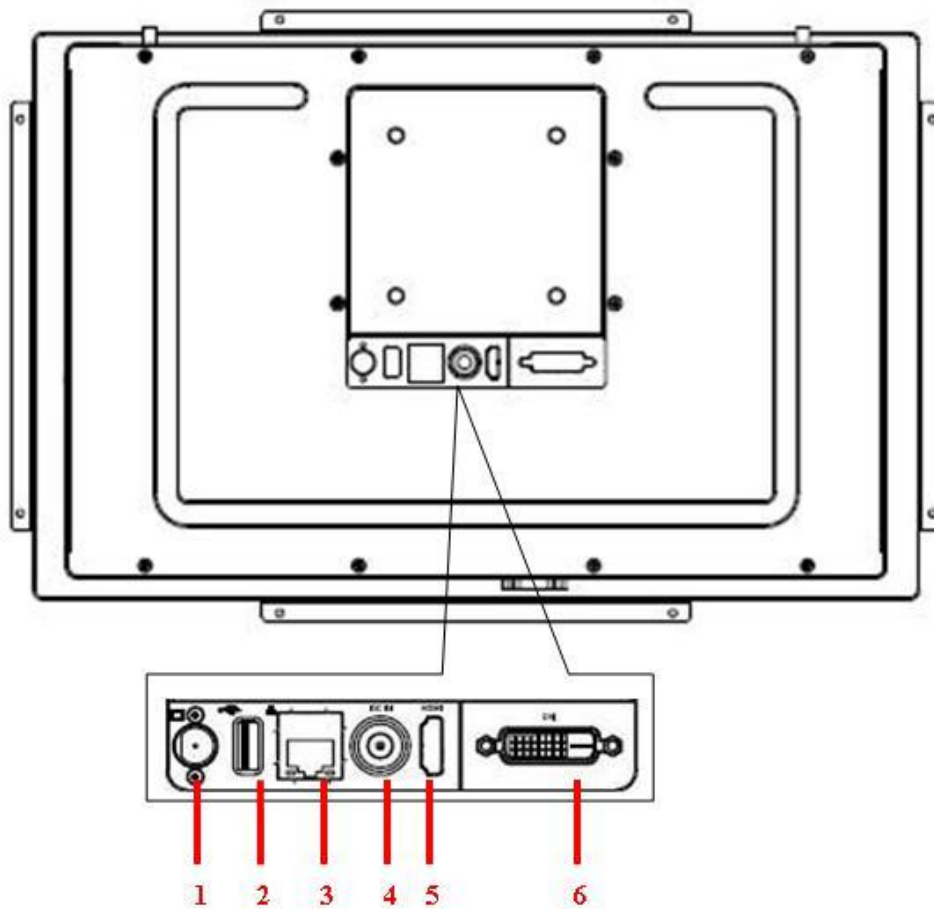
1.4 System Overview

1.4.1 Front View



Functions	Descriptions	Note
1. 15.6” LCD	16:9 1920x1080 display	
2. 15.6” PCAP Touch Screen	Multi-touch touch screen	
3. Camera	1.3M / 2.0M Camera	Optional
4. Mounting Brackets	4 mounting brackets	Customizable

## 1.4.2 Rear IO View

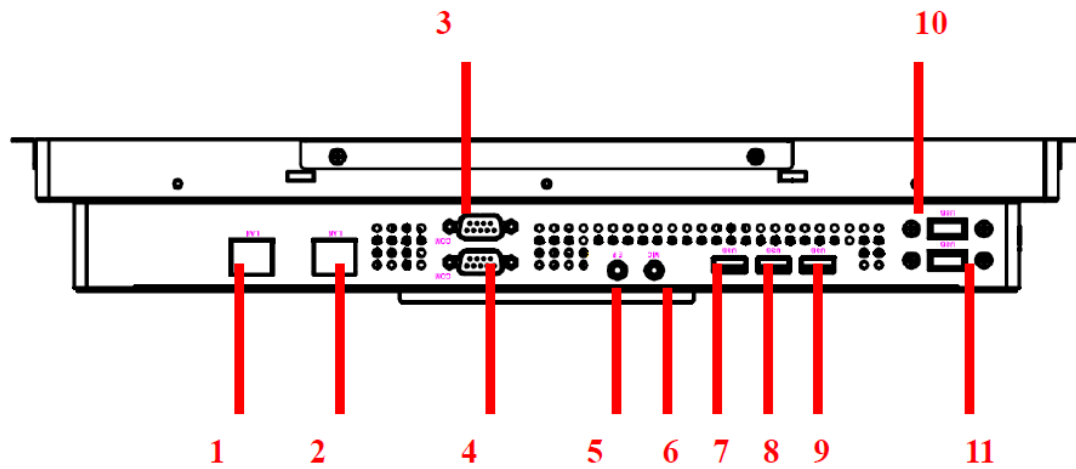


## Connectors

Label	Function	Note
1. TV	TV Antenna Connector	Optional
2. USB	USB 2.0 Type-A Female Connector	
3. LAN	RJ-45 Connector	
4. DC	DC Ø5.5x Ø 2.5x9.5 mm Power Input Jack	
5. HDMI	HDMI Output	
6. DVI-I	DVI-I Output	

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### 1.4.3 Bottom IO View

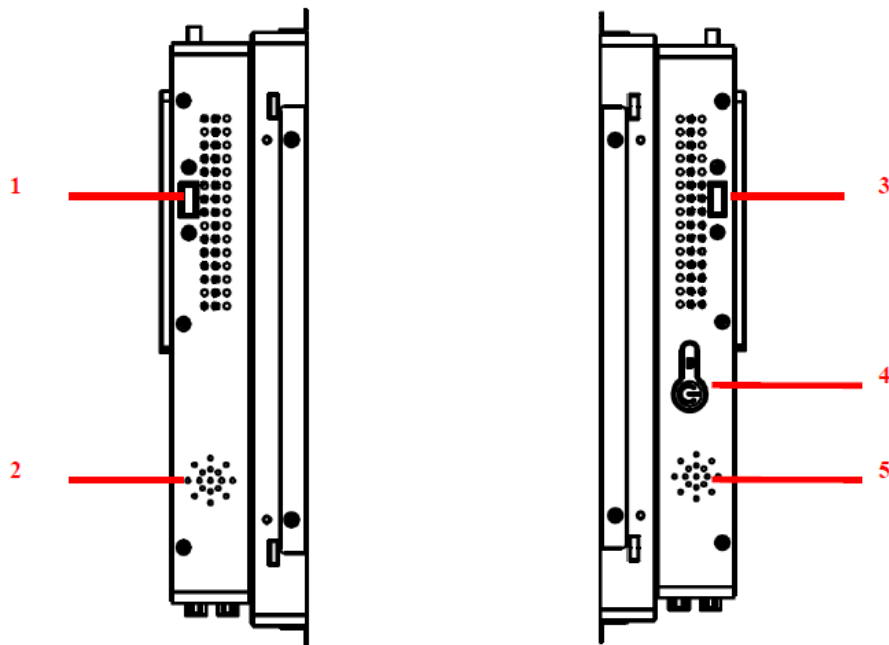


#### Connectors

Label	Function	Note
1~2. LAN	Extra LAN (RJ-45) through add-on card	Optional
3. COM	RS-232 (DB9)	Optional
4. COM	RS-232/422/485 (DB9)	Optional
5. EP	Earphone 3.5mm Jack	
6. MIC	Microphone 3.5mm Jack	
7~9. USB	Type-A Female Connector	
10~11.USB	Type-A Female Connector	Optional



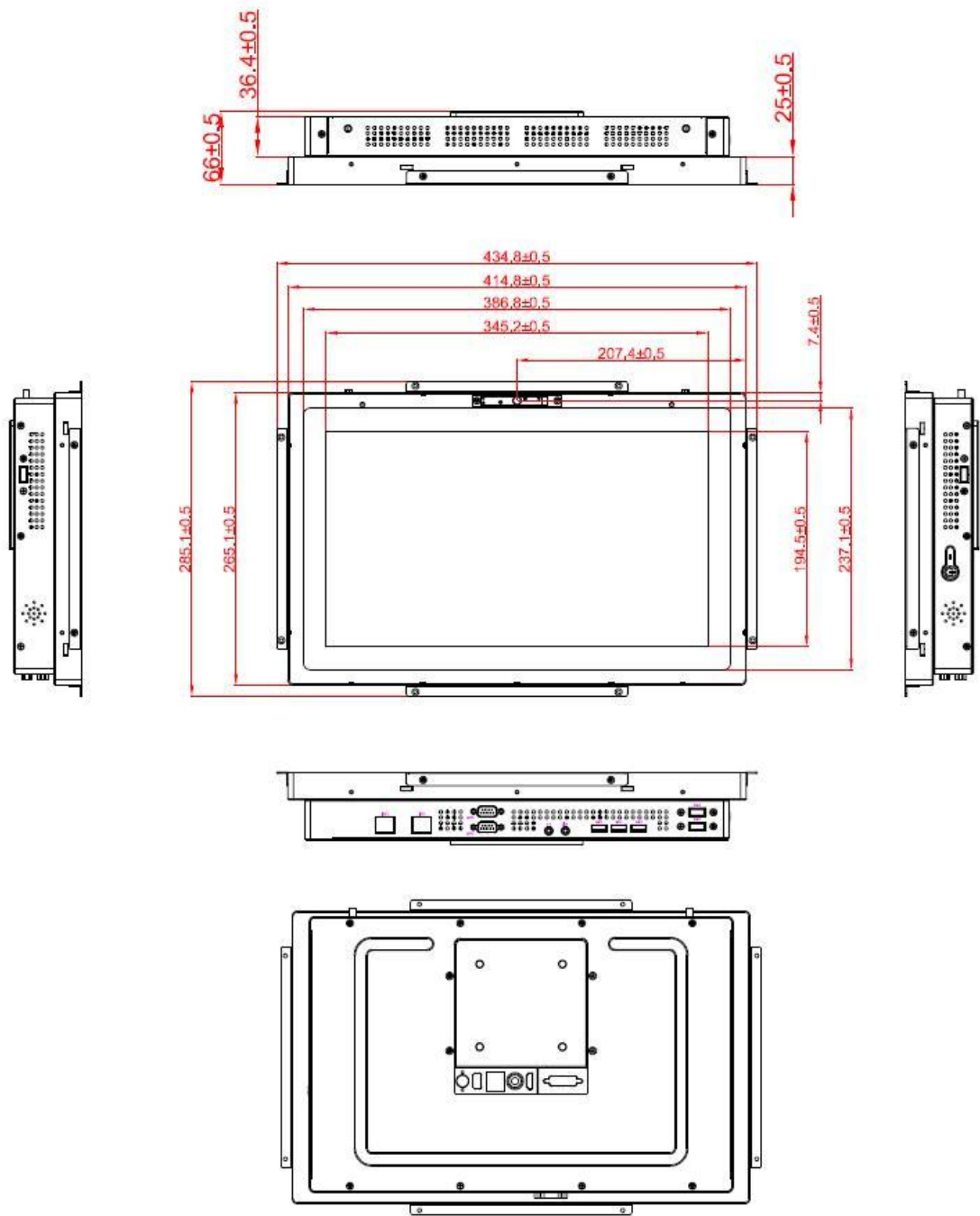
## 1.4.4 Side IO



### Connectors

Label	Function	Note
1. USB	Right Side Type-A Female Connector	Optional
2. SPK	Right Channel 2W System Speaker	
3. USB	Left Side Type-A Female Connector	Optional
4. PWR	Power button with green LED indicator	
5. SPK	Left Channel 2W System Speaker	

1.5 System Dimensions



Dimensions (mm)	Descriptions
434.8 x 285.1 x 66	System dimension with mounting brackets
414.8 x 265.1 x 66	System dimension without mounting brackets
345.2 x 194.5	Display / Touch screen active area

## 2. Hardware Configuration

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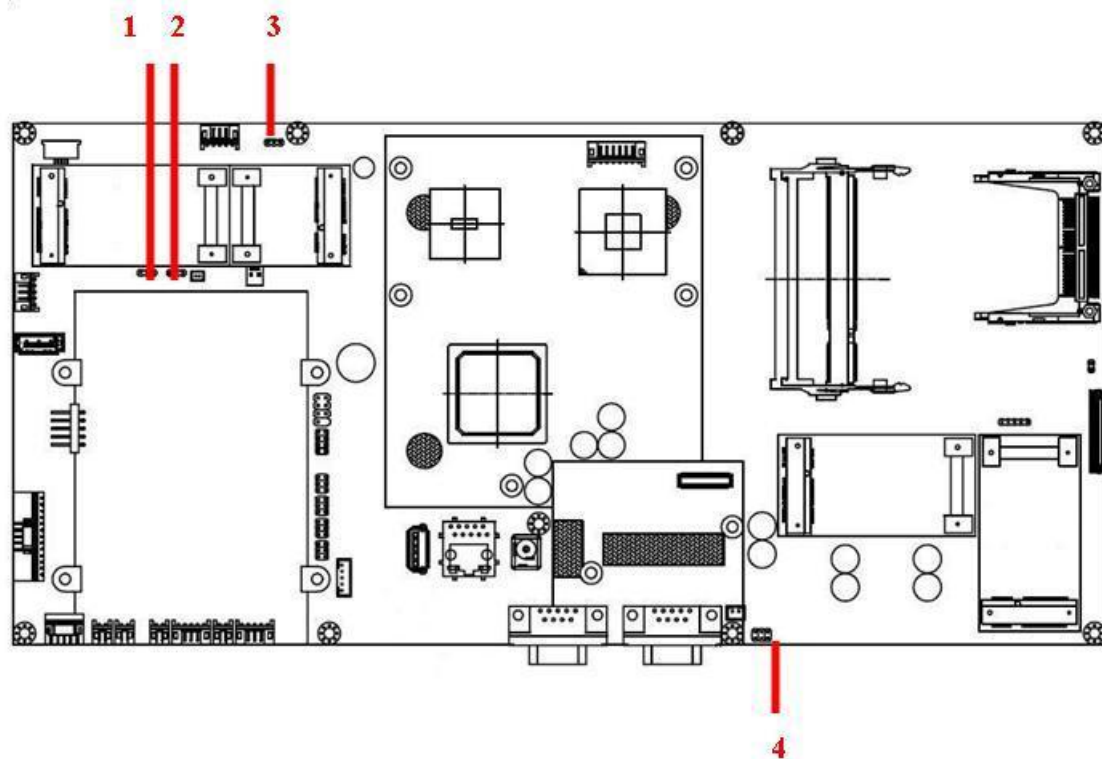


**Note:** If you need more information, please visit our website:

<http://www.avalue.com.tw>

## 2.1 Jumper and Connector Setting

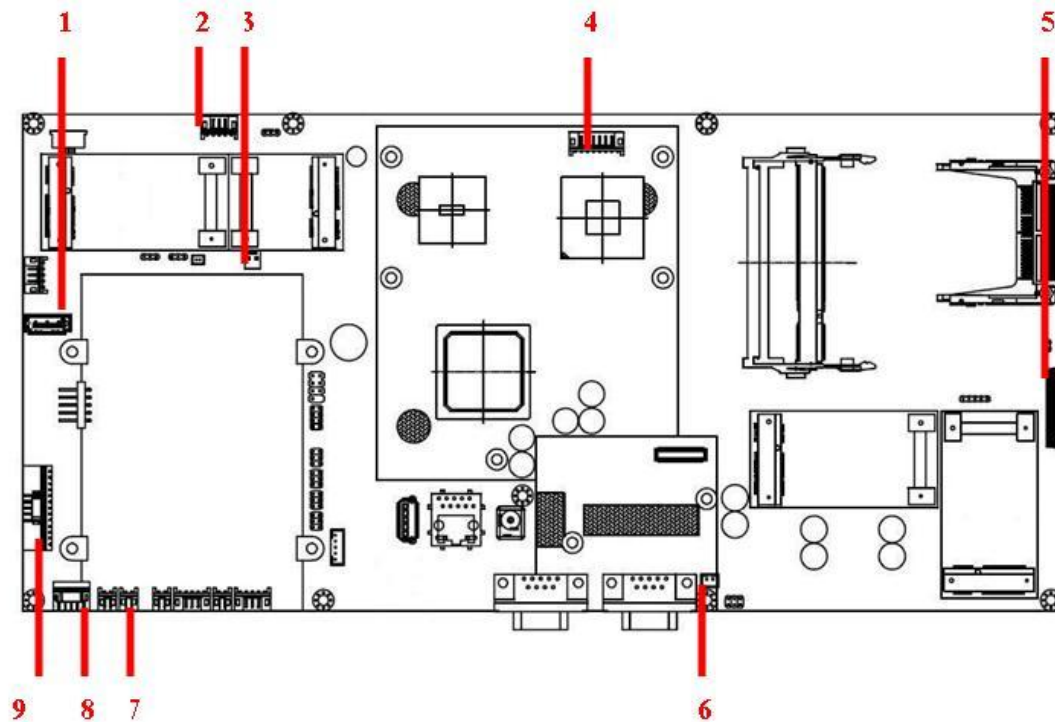
### 2.1.1 Jumper Setting



Item No	Label	Function
1	JAT1	Power Mode 1-2 : AT Mode 2-3: ATX Mode (Factory Default)
2	JCMOS1	CMOS Clear 1-2: Normal (Factory Default) 2-3: Clear CMOS
3	JWIFI(PWR)	JWIFIA1 Socket Power Choices 2-3: 3.3V (Factory Default) 1-2: 5V
4	JRISW1	Serial Port RI Pin Setting (For COM2 ONLY) 1-2: RI (Factory Default) 3-4: +12V 5-6: +5V

\* Jumpers/Pin Headers not mentioned in the above table but appearing on the board are for technical staff use ONLY. Do not use these jumpers/pin headers without consulting us first.

### 2.1.2 Connector Setting

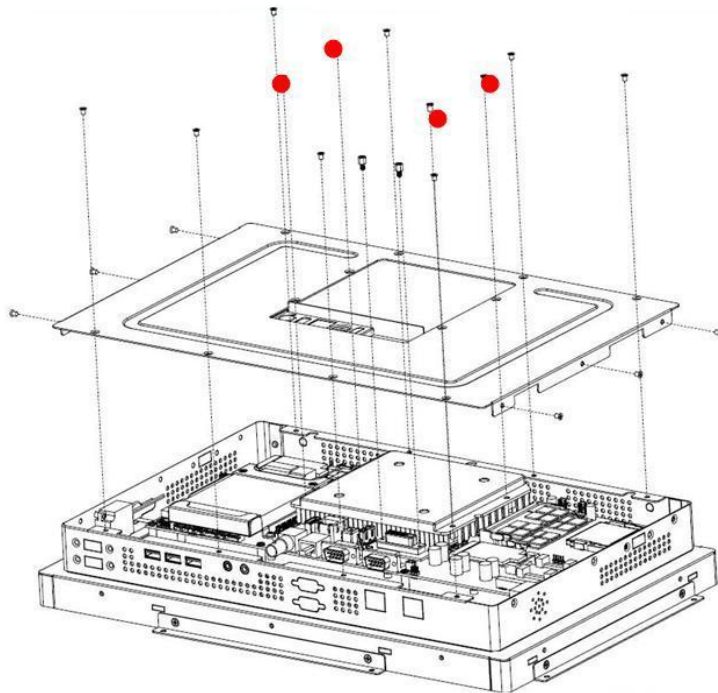


Item No	Label	Function
1	JSATA1	SATA data signal
2	JWEB1	USB signal & 5V power to optional camera
3	JSATAPWR1	+5V
4	JIC1	USB signal & 5V power to PCAP touch screen
5	JLVDS1	For LCD signal and power
6	JSPK2	For right channel speaker
7	JSPK1	For left channel speaker
8	JFRONT1	For power switch
9	JSIDEOUT1	For USB/MIC/EP board

\* Jumpers/Pin Headers not mentioned in the above table but appearing on the board are for technical staff use ONLY. Do not use these jumpers/pin headers without consulting us first.

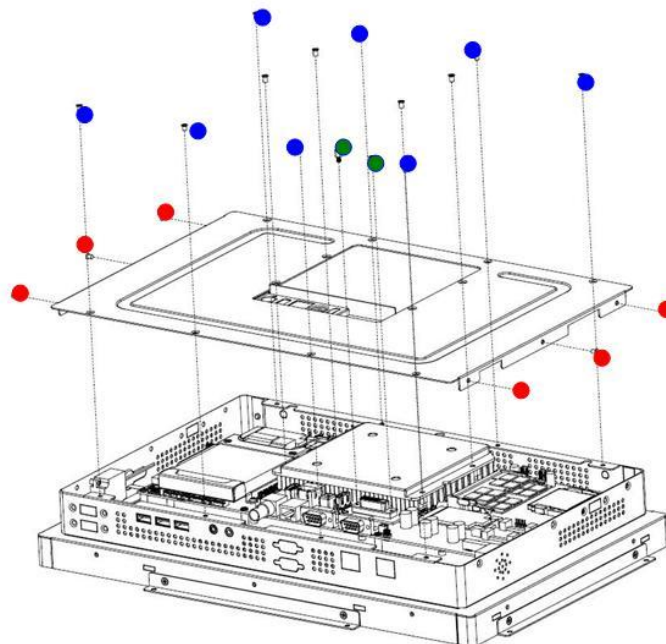
## 2.2 Hard Disk, Memory & Expansion Cards Installation

### 2.2.1 Remove Top Cover



**Step 1.** Remove 4 screws (red dots) from the heat sink.\*

\*These 4 screws are different from all others screws in the system. Do not mix these 4 screws with others.



**Step 2.** Remove 2 screws (green dots) from the DVI connector.

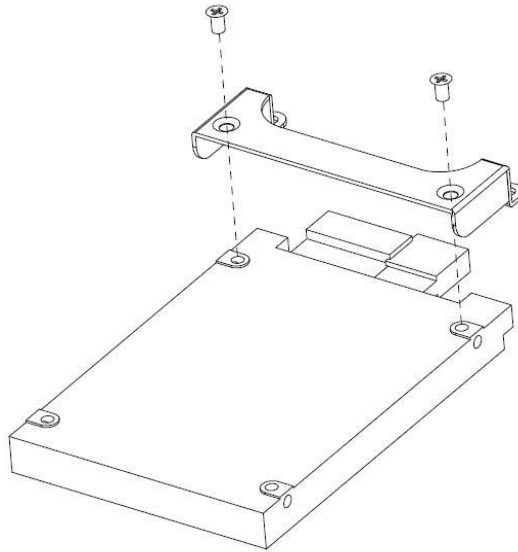
**Step 3.** Remove 6 screws (red dots) from the top of the chassis.

**Step 4.** Remove 8 screws (blue dots) from the top of the chassis.

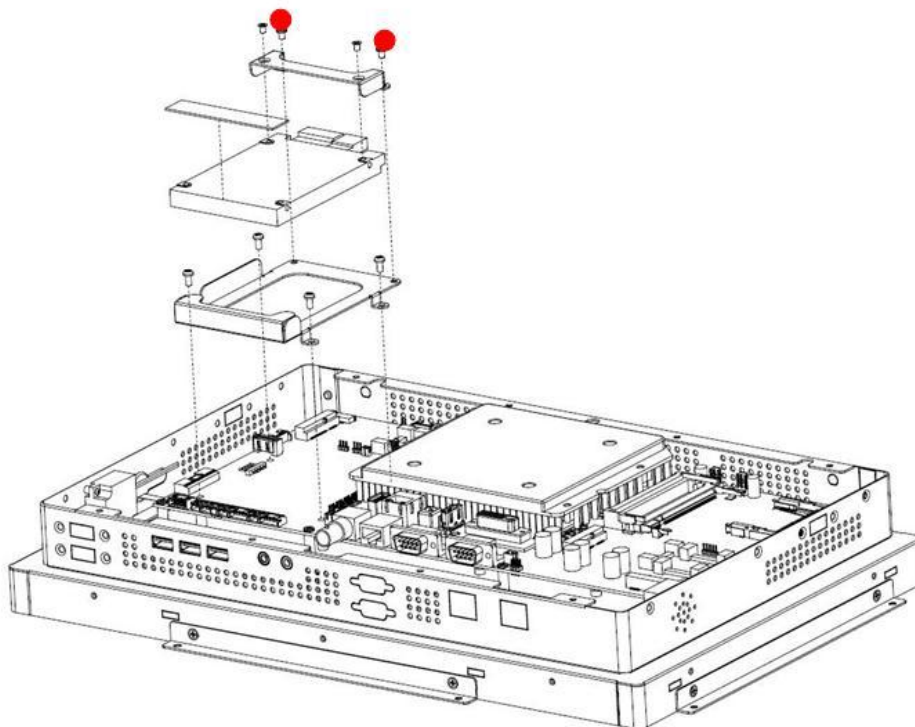
**Step 5.** Lift and remove the top cover.\*

\*Remove the top cover carefully if the TV antenna cable is attached to the TV tuner card.

### 2.2.2 Install Hard Disk Driver



**Step 1.** From the accessory bag, find the 2 screws and use them to assemble the hard disk drive with the bracket.



**Step 2.** Insert the hard disk drive into the hard disk bay.

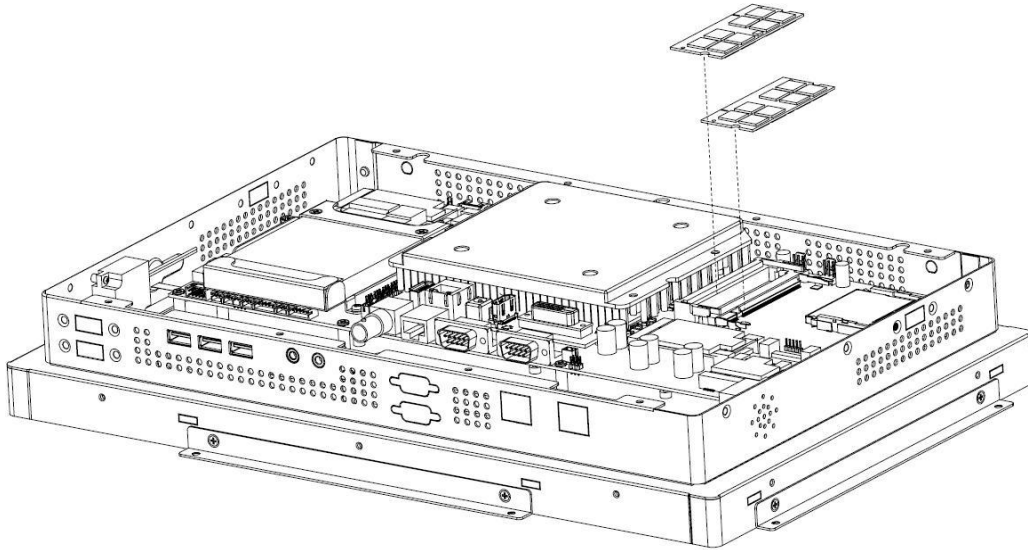
**Step 3.** Use 2 screws (red dots) to secure the hard disk drive to the hard disk bay.

**Step 4.** Connect the preloaded SATA power cable & SATA signal cable to the hard disk.

### 2.2.3 Install Memory

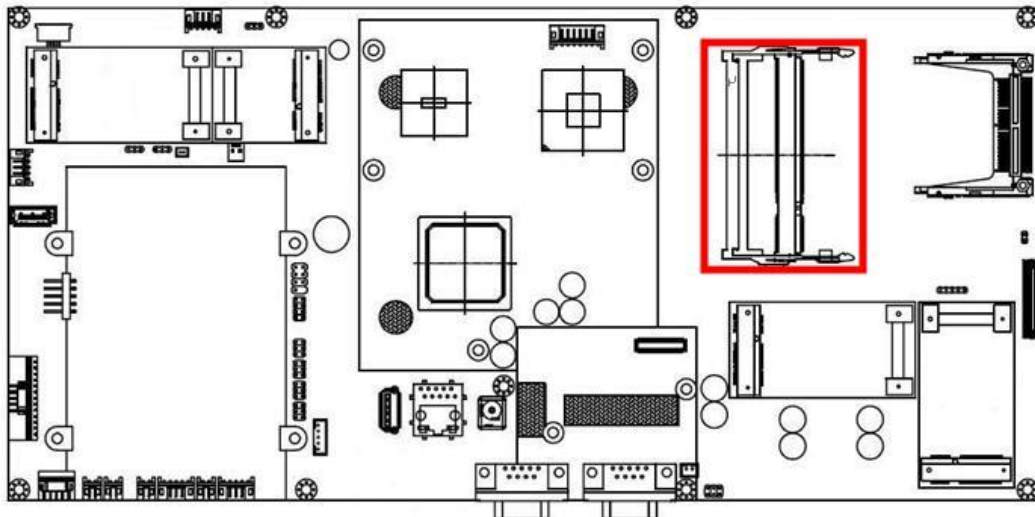


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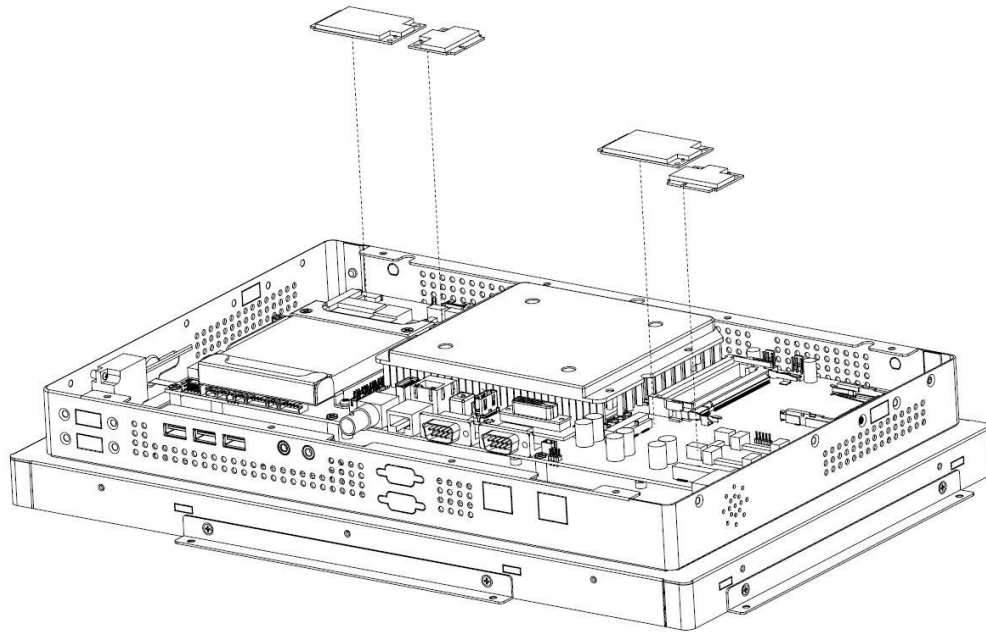
Insert DDR2 SO-DIMM memory modules into the memory sockets.

\* You can insert two 2GB DDR2 533/667 SO-DIMM modules on the memory sockets to reach the maximum support of 4GB memory.

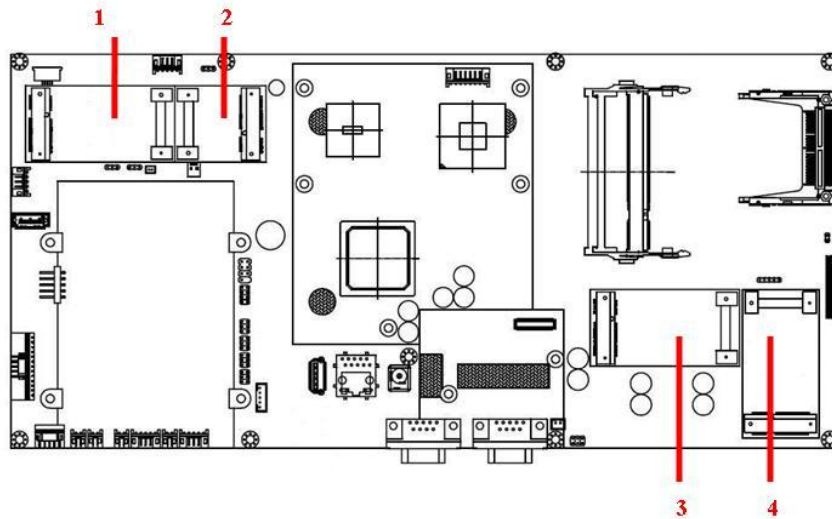




## 2.2.4 Install Expansion Card



You can use these four (4) expansion sockets with cards for your applications.

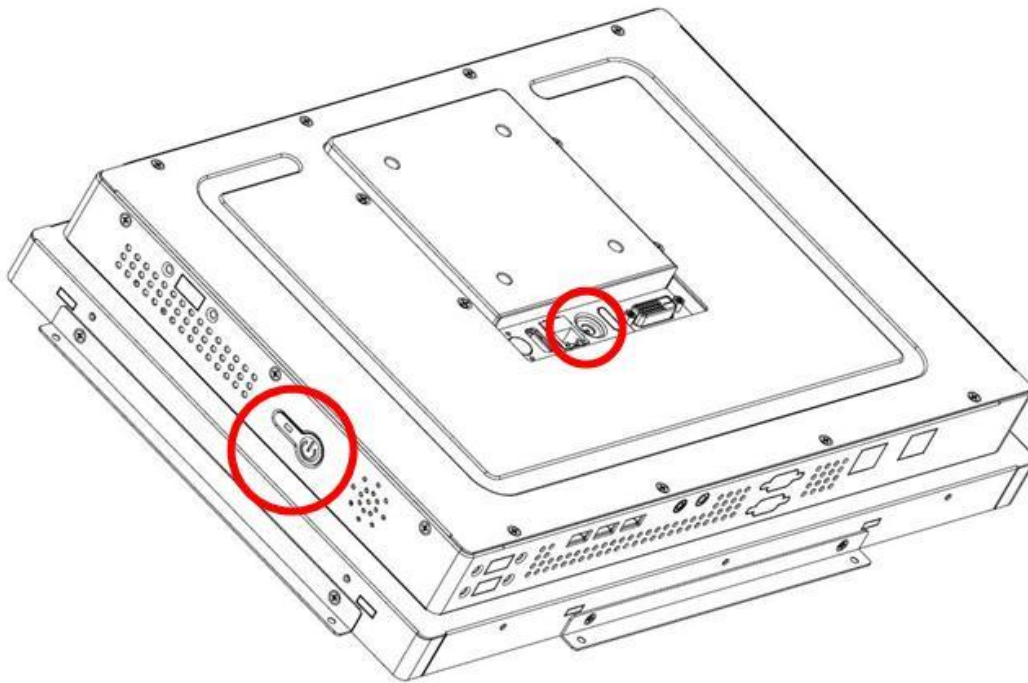


Item No	Label	Function
1	JDTVB1	Mini-PCIE (PCIE x1 & USB)
2	JWIFIA1	Mini-Card (USB ONLY)
3	JMPCIEA1	Mini-PCIE (PCIE x1 & USB)
4	JMPCIE2B	Mini-PCIE (PCIE x1 ONLY)

### 2.3 Turn on the System

**Step 1.** Plug the adapter into the DC jack.\*

**Step 2.** Press the power button on the left side of the system to turn on the system. A green led indicator will show the system is ON.



### 2.4 Enter BIOS Menu, Select Booting Devices

#### Enter BIOS Menu

- 1) Plug USB keyboard on the USB 2.0 port.
- 2) Press the "Power Button" to start the system.
- 3) Press "DEL" key when seeing the boot up screen to enter the BIOS main menu.

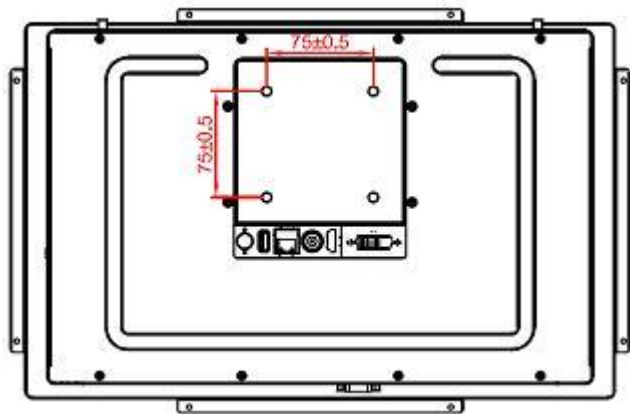
\* On the top right corner of the display, make sure you press DEL key when you see the BIOS post code reaches 75.

#### Select Booting Devices

- 1) Plug USB keyboard on the USB 2.0 port.
- 2) Press the "Power Button" to start the system.
- 3) Press "F12" key when seeing the boot up screen to enter the boot-up device dialog box.

2.5 System Integration & Mounting

(1) VESA Mount

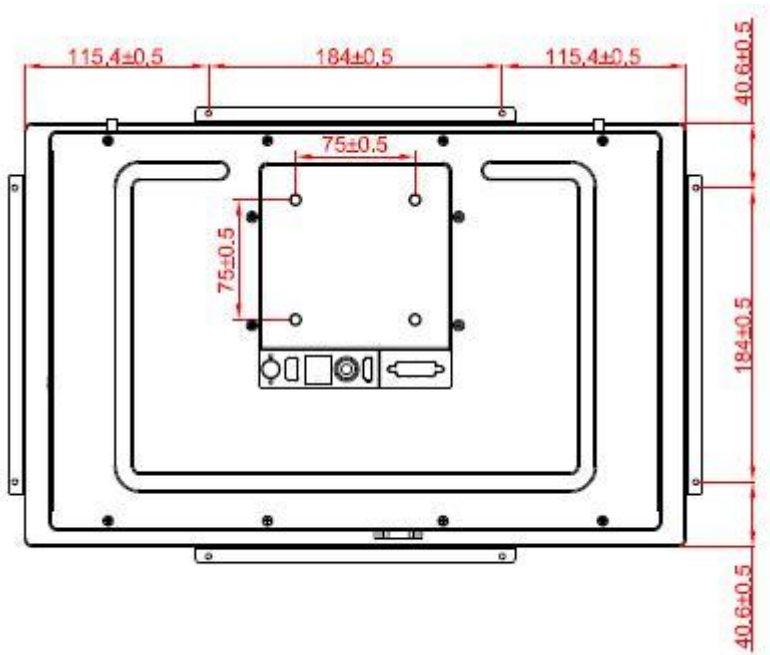


You can use VESA mounting to assemble OPC-15W3 inside the cabinet of your applications.

Suggested screws

Type of Screws	Quantity	Drawing
M6x10	4	

(2) Mounting Brackets



## Open Frame 15.6" Series

### Ordering Information

#### Standard Products

Item No	Part Number	Product Descriptions	Note
1	OPC-15W3-B1T	15.6" Full HD 1920x1080 PCAP (Multi-touch) Atom N270 Open Frame Panel PC OPC/15.6"/PCT/AtomN270/SPK	(Not include Memory/Hard Disk/Camera)

#### Expansion Options

Item No	Optional Features
1	Add 1.3M/2.0M Camera Modules
2	Add two LAN ports
3	Add 1~ 4 USB Ports
4	Add wireless module with Antenna
5	Add front bezel with/without water proof
6	Add customized mounting brackets
...	Other features not list above...

Please contact us for the above expansion options.

