

# SPC-1509

15" Intel® Atom™ SoC Processor E3845 Fanless Stainless Steel Chassis Touch Panel PC with Full IP-65

## Quick Reference Guide

5<sup>th</sup> Ed – 12 March 2019

### Copyright Notice

Copyright © 2019 Avalue Technology Inc., ALL RIGHTS RESERVED.

## 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.

(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

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 TO RADIO COMMUNICATIONS.

OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

## A Message to the Customer

### ***Avalue Customer Services***

Each and every Avalue's product is built to the most exacting specifications to ensure reliable performance in the harsh and demanding conditions typical of industrial environments. Whether your new Avalue device is destined for the laboratory or the factory floor, you can be assured that your product will provide the reliability and ease of operation for which the name Avalue has come to be known.

Your satisfaction is our primary concern. Here is a guide to Avalue's customer services. To ensure you get the full benefit of our services, please follow the instructions below carefully.

### ***Technical Support***

We want you to get the maximum performance from your products. So if you run into technical difficulties, we are here to help. For the most frequently asked questions, you can easily find answers in your product documentation. These answers are normally a lot more detailed than the ones we can give over the phone. So please consult the user's manual first.

To receive the latest version of the user's manual; please visit our Web site at:

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

# Content

<b>1. Getting Started .....</b>	<b>4</b>
1.1 Safety Precautions .....	4
1.2 Packing List.....	4
1.3 System Specifications .....	5
1.4 System Overview .....	7
1.4.1 Front View.....	7
1.4.2 Rear View .....	8
1.5 System Dimensions .....	9

# 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 SPC-1509 Panel PC
- 1 x Power Adapter
- 1 x DC-in extended cable
- 1 x USB + LAN + COM External Cable 2000cm
- 1 x Power Cord

### Note:

User must use waterproof type connector and cable when connect to I/O ports including DC jack, RJ45, COM and USB port.



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

## 1.3 System Specifications

<b>Component</b>	
<b>Mother Board</b>	EBM-BYT
<b>CPU</b>	Onboard Intel® Atom Quad-Core E3845 1.91GHz with Integrated Chipset
<b>Memory</b>	1 x 204-Pin DDR3L 1333MHz SO-DIMM Up to 8GB
<b>Power Supply</b>	+12V ~ +26V
<b>Adapter</b>	AC/DC Adapter 100~240V 50~60Hz, 24V/2.5A
<b>System Fan</b>	Fan-less
<b>Speaker</b>	2 x 5W
<b>Wireless LAN</b>	Optional USB/MPCle WiFi module
<b>Operating System</b>	Win7/Win8/Linux
<b>Storage</b>	
<b>Hard Disk Drive</b>	1 x 2.5" Drive Bay
<b>Other Storage Device</b>	1 x CompactFlash Type I/II Socket
<b>Panel</b>	
<b>LCD Panel</b>	15" 4:3 XGA 1024 x 768 LED panel
<b>LCD Control Board</b>	LCD Built-in Inverter
<b>B/L Inverter/Converter</b>	LCD Built-in LED Backlight
<b>Touch Screen</b>	5 wires resistive
<b>Touch Controller</b>	Onboard USB touch (EETI)
<b>External I/O</b>	
<b>Serial Port</b>	1 x RS-232 (TX/RX only)
<b>USB Port</b>	3 x USB 2.0 Port
<b>LAN Port</b>	2 x RJ-45
<b>Wireless LAN Antenna</b>	2 x antenna (Optional)
<b>Indicator Light</b>	LED for Power, HDD
<b>Expansion Slots</b>	1x Mini PCIe support mSATA 1x Mini PCIe support SIM card
<b>Mechanical</b>	
<b>Power Type</b>	+12V~ +26V
<b>Power Connector Type</b>	Lockable DC Jack
<b>Dimension</b>	371 x 308 x 63.6 mm
<b>Weight</b>	6.42 Kgs
<b>Color</b>	Front & Rear Panel Silver
<b>Fan-less</b>	Full System Fan-less
<b>Reliability</b>	

## SPC-1509

<b>EMI Test</b>	CE, FCC Class A
<b>Dust and Rain Test</b>	Full IP-65
<b>Vibration Test</b>	With SSD/mSATA : 1.5Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 30min/axis
<b>Mechanical Shock Test</b>	With CF/SSD : 10Grms, IEC 60068-2-27, Half Sine, 11ms
<b>Drop Test</b>	EC-60068-2-32 (96.5cm)
<b>Operating Temperature</b>	0 ~ 40°C (32 ~ 104°F)
<b>Operating Humidity</b>	5% ~ 90% Relative Humidity, Non-condensing
<b>Storage Temperature</b>	-10 ~ 60°C (14 ~ 140°F)

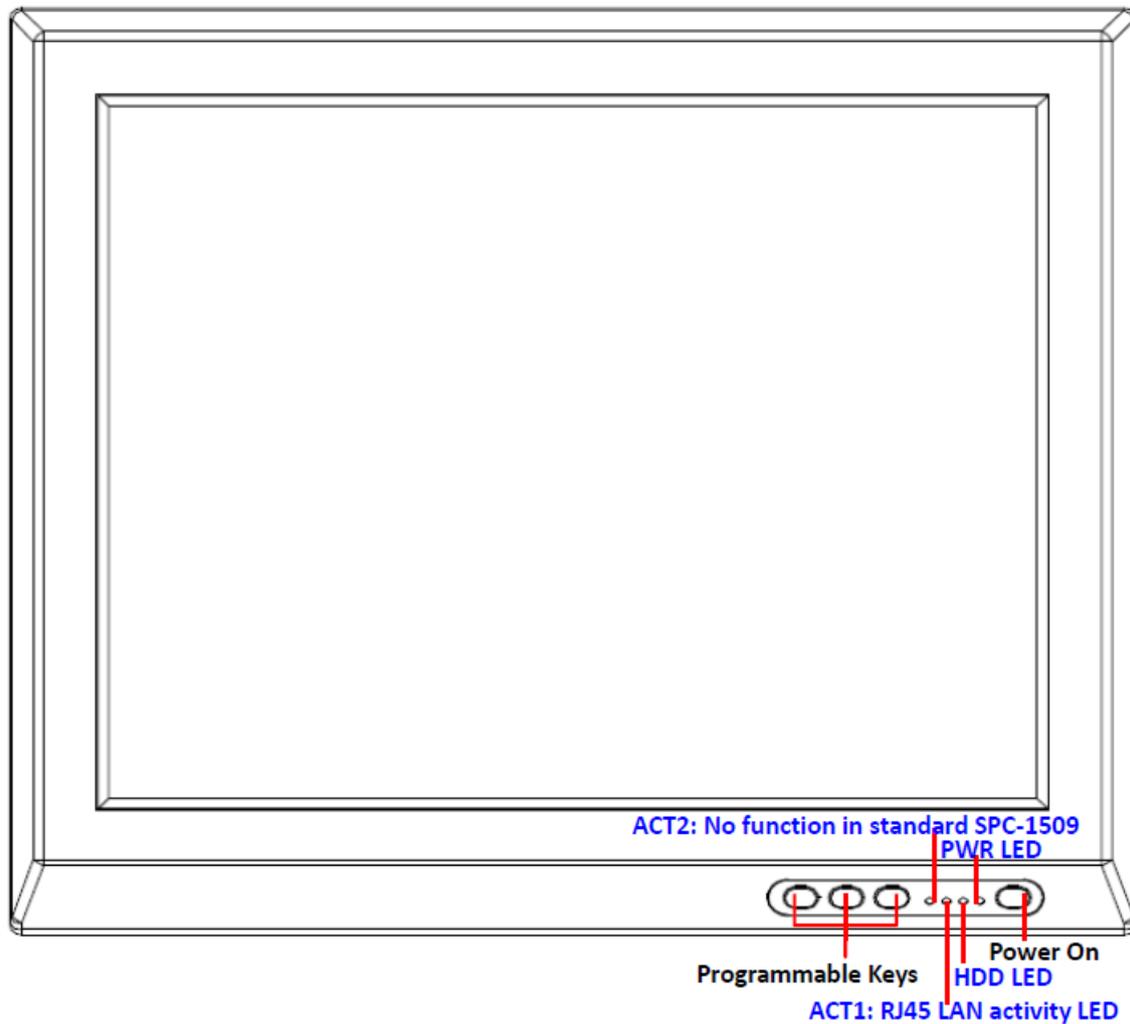


### Note:

1. For thermal concern, turbo boost feature of SPC true flat rear case SKUs with INTEL J1900 processor has been turned off in BIOS default setting.
2. Specifications are subject to change without notice.

## 1.4 System Overview

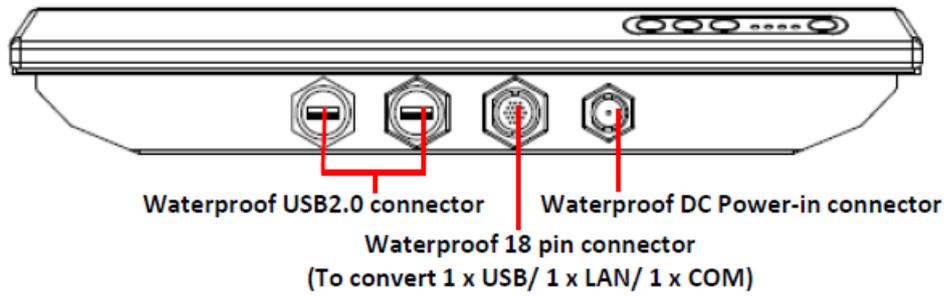
### 1.4.1 Front View



**Note:** Programmable keys are available to be programmed by the user; they are unable to work unless programmed.

# SPC-1509

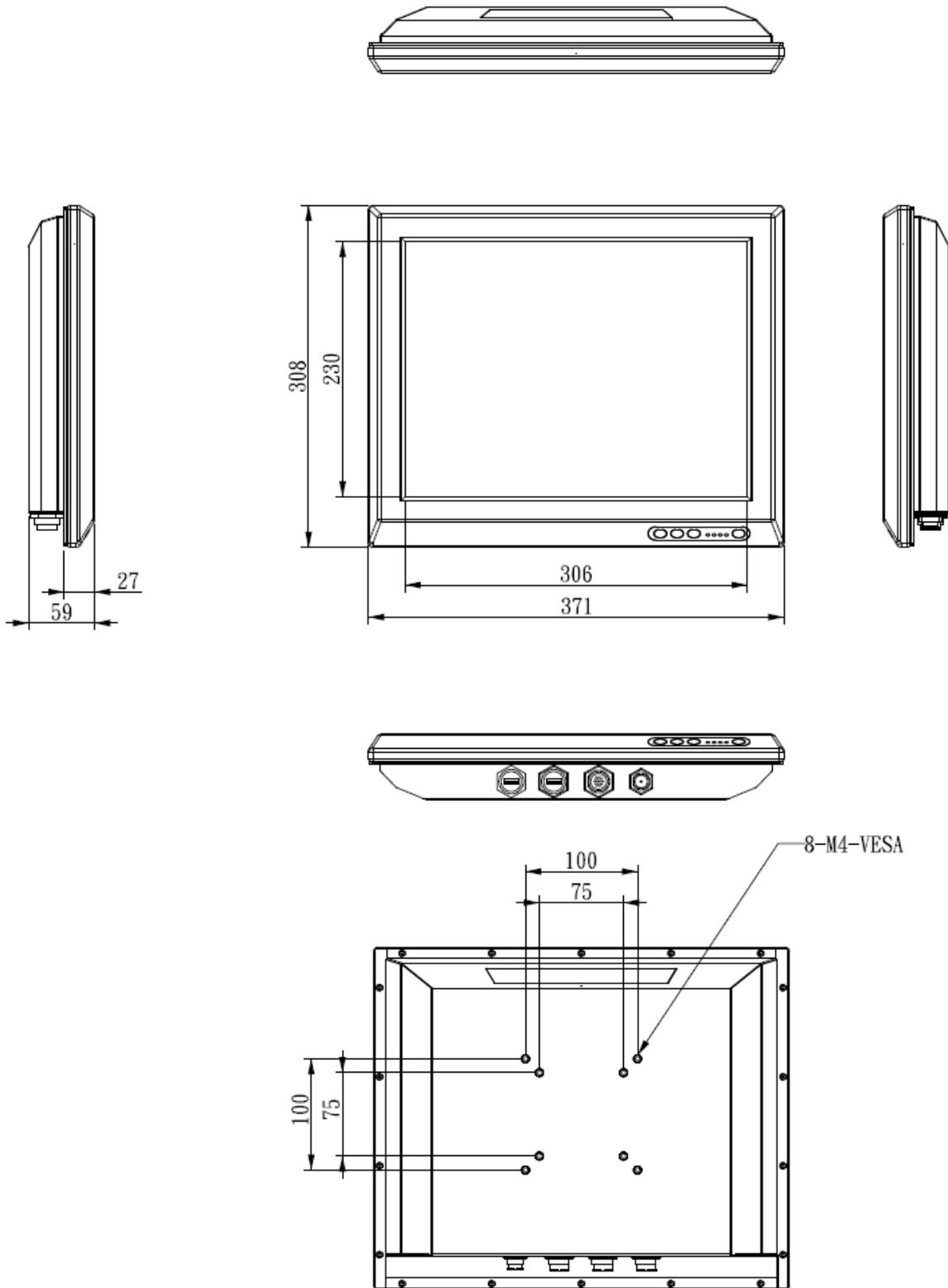
## 1.4.2 Rear View



### Connectors

Label	Function	Note
<b>Waterproof USB2.0</b>	2 x Waterproof USB2.0 connector	
<b>Waterproof 18 pin connector</b>	Waterproof 18 pin connector (to convert 1 x USB/ 1 x LAN/ 1 x COM)	
<b>Waterproof DC Power-in</b>	Waterproof DC Power-in connector	

# 1.5 System Dimensions



(Unit: mm)

