



MPC-SPC22W

21.5" LED/LCD Touch Screen Panel PC
Fanless Intel® Core™ E3845 QuadCore CPU
Rugged Embedded Computer for All-Weather Conditions

Quick Reference Guide

1ST Ed –4 December 2015

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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

Marine PC Customer Services

Each and every Marine PC product is built to the most exacting specifications to ensure reliable performance in the harsh and demanding conditions typical of industrial environments. Wherever your new Marine PC device is destined to be installed, you can be assured that your product will provide the reliability and ease of operation for which the name Marine PC has come to be known.

Your satisfaction is our primary concern. Here is a guide to Marine PC'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.marinepc.com>

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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 MPC-SPC22W Panel PC
- 1 x DVD-ROM contains the following:
 - User's Manual (this manual in PDF file)
 - Ethernet driver and utilities
 - VGA drivers and utilities
 - Audio drivers and utilities
 - Wi-Fi drivers and utilities
 - Touch controller drivers and utilities
- 1 x Power Adapter
- 1 x DC-in extended cable

Note:

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

1.3 System Specifications

| Panel | |
|--------------------|---|
| Model | SPC-22W9 |
| LCD Size | 22"W, 16:10 |
| Resolution | 1680 x 1050, WSXGA |
| Pixel Pitch | 0.282mm (H) x 0.282mm (V) |
| Luminance | 250cd/m ² |
| Contrast Ratio | 1000 |
| Viewing Angle | 80 (U), 80 (D), 85 (L), 85 (R) |
| Response Time | 5ms |
| Backlight | LED |
| Touch Screen | 5-wire Resistive |
| Light Transmission | 80% |
| Touch Interface | USB Touch Control Board EETI |
| System | |
| Board | EBM-BYT |
| CPU | Onboard Intel® Atom Quad-Core E3845 1.91GHz with Integrated Chipset |
| I/O Chip | E/C IT8528E |
| System Memory | One 204-pin DDR3L SODIMM Socket Supports Up to 8GB DDR3L 1066/1333 SDRAM |
| SSD | One CompactFlash Type I/ II Socket (Support optional InnoDisk CF-SATA) |
| Hard Driver Bay | One 2.5" SATA HDD |
| Watchdog Timer | H/W Reset, 1sec. ~ 65535sec./1sec.step |
| H/W Status Monitor | Monitoring system temperature, voltage, and cooling fan status. Auto throttling control when CPU overheats |
| Expansion | 1 x mPCIe with SIM Slot, 1 x mPCIe Supports mSATA |
| Rear I/O | |
| Serial Port | 1 x RS-232 |
| Ethernet | 1 x RJ-45 |
| USB | 3 x USB 2.0 |

| | |
|-------------------------------------|--|
| Speaker | 2 x 5W |
| Display | |
| Chipset | Intel Bay Trail SoC Integrated Graphics |
| Resolution | HDMI 1.4a resolutions up to 1920x1200@ 60 24bpp |
| Audio | |
| AC97 Codec | Realtek ALC892 supports 5.1-CH Audio |
| Ethernet | |
| LAN Chip | Intel® I210IT Gigabit LAN, Optional Dual LAN |
| Ethernet Interface | 10/100/1000 Base-Tx Fast Ethernet compatible |
| Environment & Mechanical | |
| Color | Front & Rear Panel Silver |
| Mounting | Wall/Stand/VESA 75 mm x 75 mm |
| System Power Requirement | +12 ~ 26V |
| Power Adapter | Input: 100 ~ 240 Vac/ 50 ~ 60 Hz Output: 24V/2.5A 60W |
| Power Type | AT/ATX |
| Operating Temperature | 0 ~ 40°C |
| Storage Temperature | -10 ~ 60°C |
| Relative Humidity | 5% ~ 90% Relative Humidity, Non-condensing |
| Dimensions (W x D x H) | 546mm x 378mm x 69mm |
| Weight | 9 Kgs |

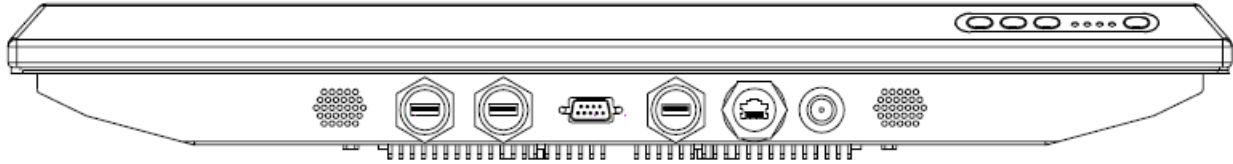


Note:

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 Rear View

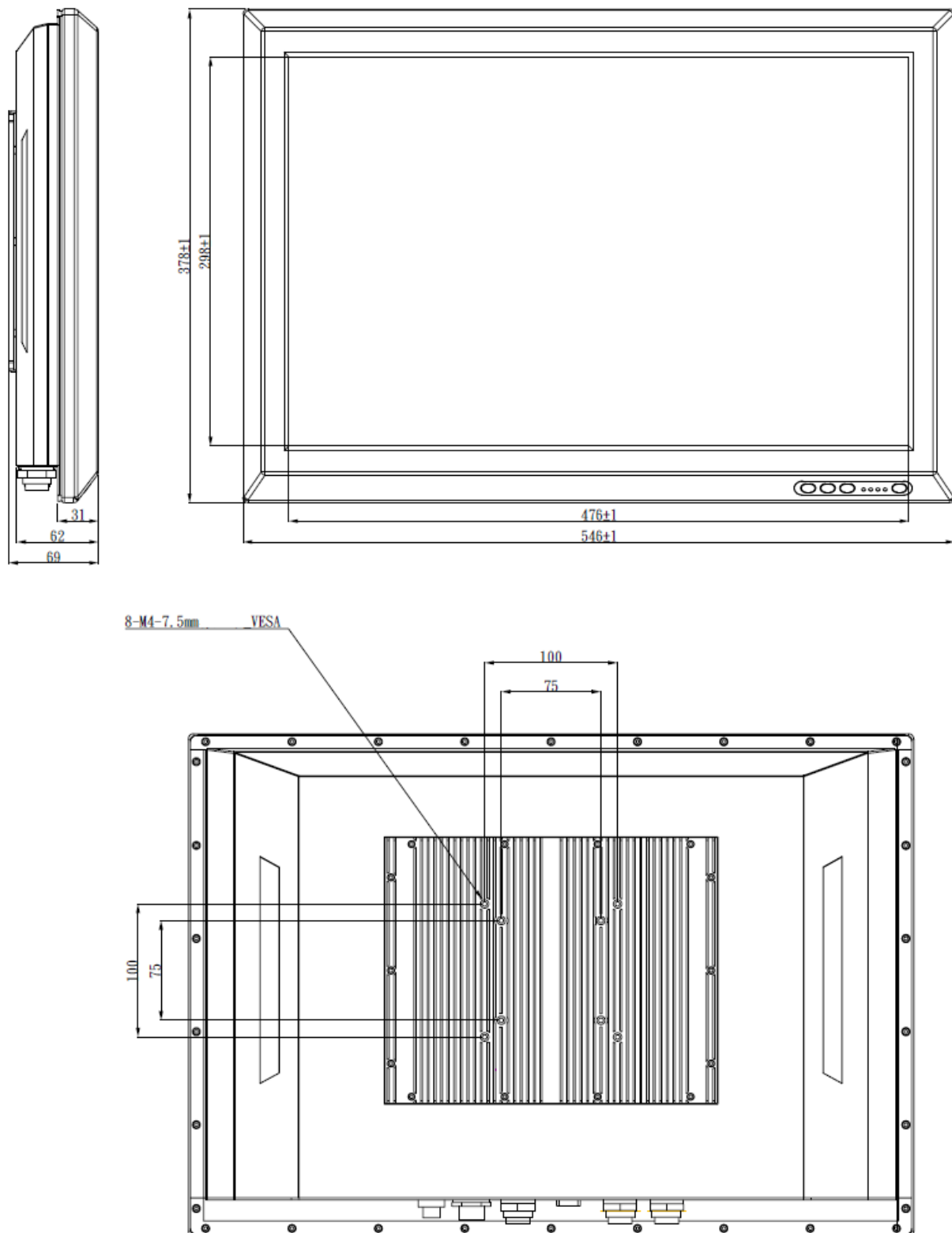


Connectors

| Label | Function | Note |
|----------|----------------------------------|------|
| Membrane | Power & 3 programmable buttons | |
| USB | Waterproof USB 2.0 connector x 3 | |
| LAN | Waterproof RJ-45 connector | |
| COM | Waterproof DB-9 connector | |
| DC-IN | Waterproof DC Power-in connector | |

1.5 System Dimensions

1.5.1 Front, rear and side view



(Unit: mm)

