

# (M)PPC-080T-BT-01

8" WVGA 16:9 Marine Panel PC  
with Intel® Atom™ E3845, 1.91GHz



## Main Features

- 16:9 8" WVGA marine panel computer
- Intel® Atom™ E3845, Quad Core, 1.91GHz
- 8" PCAP touch screen with AR coating
- 4 Gigabit EtherNet/mini DisplayPort for external monitor
- 1 USB 2.0, 1 USB 3.0
- 1 RJ45 output for RS232/422/485
- DDR3L 4GB/ M.2 SATA 128GB
- IP65 compliant front panel
- Built in 24VDC power input
- Mounting support: flush/VESA 75mm x 75mm
- IEC-60945 maritime standards compliance

## Product Overview

PPC-080T-BT-01 8-inch panel computer features the Intel® Atom™ E3845 processor with low power consumption and deliver a reliable, durable, high-performance platform of wide versatility for use in maritime and offshore environments. The panel PC has a touch screen LCD panel with 800 x 480 (WVGA) resolution and 600-nit brightness. The front panel which adopts a flush panel design and has IP65 front panel. It offers a projected-capacitive, glove-friendly multi-touch screen for outdoor applications.

PPC-080T-BT-01 has a RJ45 output for RS-232/422/485, four gigabit EtherNet LAN ports, two USB posts, and also comes with a mini DisplayPort for external monitor, allowing you to extend the screen size and reduce the total cost of system development. The PPC-080T-BT series panel computers are designed with a wide -25°C to 70°C temperature range, supports 24VDC power input and come with a minimalistic and fanless enclosure designed, and satisfy IEC-60945 maritime standards compliance.

## Specifications

### Panel

- LED size: 8", 16:9
- Resolution: WVGA 800 x 480
- Luminance: 600cd/m2
- Contrast ratio: 600
- LCD color: 16.2M
- Viewing angle: 60(U), 60(D), 70(L), 70(R)
- Backlight: LED

### Touch Screen

- Projected capacitive (flush panel type)
- Light transmission: 89%
- Interface: USB
- With AR coating

### System

- CPU: onboard Intel® Atom™ processor E3845, 1.91 GHz, 2M L2 Cache
- BIOS AMI BIOS
- System memory: 1x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 4GB DDR3L-1067/1333, non-ECC and un-buffered
- Storage device
  - 1x SATA connector, support SATA 3Gb/s and SATA 6Gb/s
  - 1x SATA M.2 connector, 128G M.2 SATA (default)
- Graphics: Intel® HD Graphics

- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Backlight control
  - Control button: increase brightness, decrease brightness, backlight on/off
  - Auto dimming function can be adjust by ambient light sensor
  - Panel backlight can be controlled by software with 45 steps, dimming range from 0% to 100%

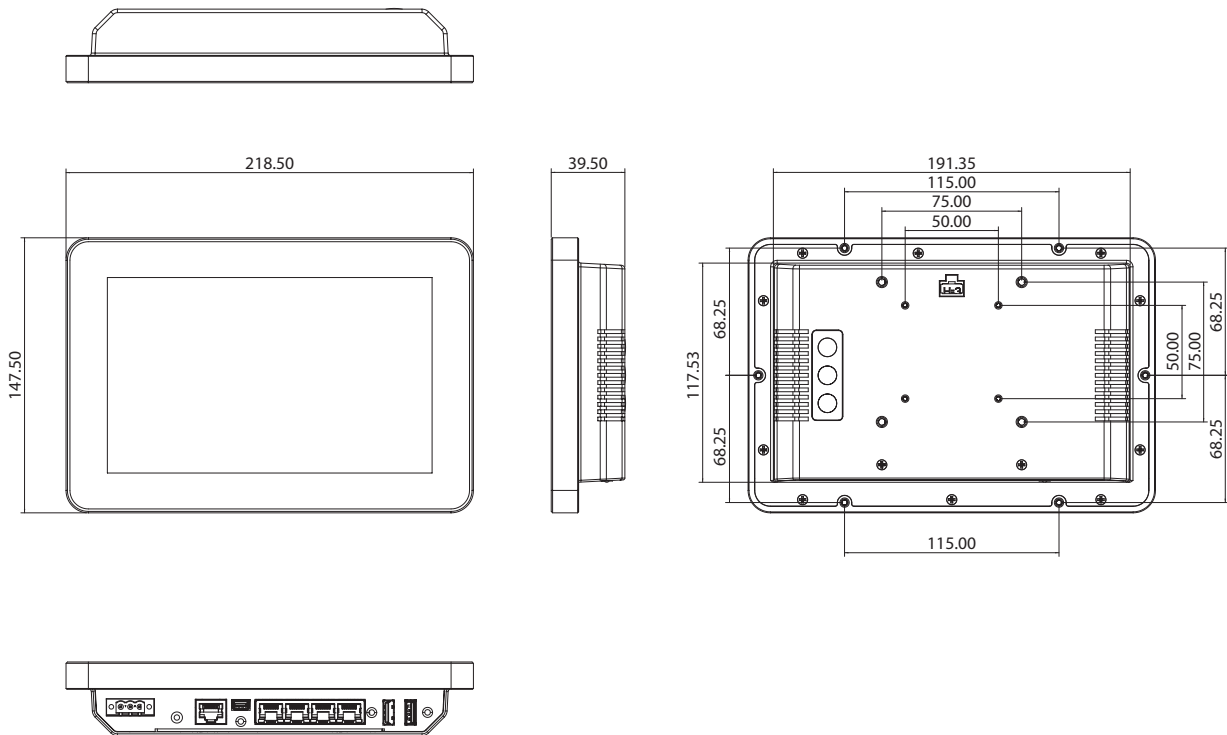
### Rear I/O

- EtherNet: 4x RJ45
- 2nd DisplayPort: 1x mini DisplayPort
- USB: 1x USB 2.0, 1x USB 3.0
- COM #1: 1x RJ45 output for RS232/422/485
- Power status LED
- DC power input connector: 3-pin Phoenix terminal blocks

### EtherNet

- LAN chip: 4x Intel® I210-IT Gigabit LAN
- EtherNet interface: 10/100/1000 Mbps
- Support wake up on LAN

## Block Diagram



### Power Requirements

- Input voltage: 24VDC
- Reverse polarity protection
- Galvanic isolated
- Power consumption: 13W to 25W

### Mechanical & Environment

- Fanless system design
- Color
  - Pantone black RAL9005, powder painting for aluminum front bezel
  - Pantone black RAL9005 for backlight button membrane
- IP protection
  - IP65 front bezel
  - IP20 back system
- Mounting: flush/VESA 75mm x 75mm
- Vibration
  - 1.15Grms @ random condition, 1~200Hz, 1.5hr/axis (operating/non-operating)
- Shock
  - IEC 68 2-27
  - 20G @ wall mount, half sine, 11ms
- Operating temperature: -25°C to 70°C
- Storage temperature: -25°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 218.5 x 147.5 x 39.5 mm
- Weight: 3 KG

### Certifications

- CE approval
- FCC Class A
- IEC-60945 maritime standards compliance

## Ordering Information

### Barebone

- **PPC-080T-BT-01 (P/N: 10M20080T00X0)**  
8" WVGA LED backlight touch panel PC, Intel® Atom™ E3845 1.91GHz, touch screen, 4GB DDR3L, 128G M.2 SATA, 1x RJ45 output for RS23/422/485, brightness adjustment buttons