PROTECH SYSTEMS
It's the right choice

SP-6558/ SP-6550

Quick Reference Guide
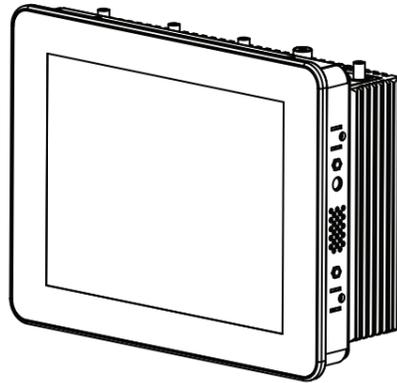
Ver. Q1

Specification

System

CPU Type	Intel® Celeron® N3350 2C, 2.4GHz
	Intel® Pentium® N4200 4C, 2.5GHz
	Intel® Atom® x7 E3950 4C, 2.0GHz
Memory Support	1 x DDR3L 1600/1867 SO-DIMM socket (up to 8 GB)
Drive Bay	1 x 2.5" SATAIII HDD or SSD drive space
Power Supply	DC In 9~36V
Operating System	Windows 10 IoT Enterprise LTSB 2016 64bit / Ubuntu16.04 LTS
Weight / Dimensions	**SP-6558**: 2.5kg / 224.4(W) x 176.4(H) x 76mm(D)
	SP-6550: 3.0kg / 259.6(W) x 216(H) x 73.6mm(D)
Certificate	FCC/CE

I/O Ports

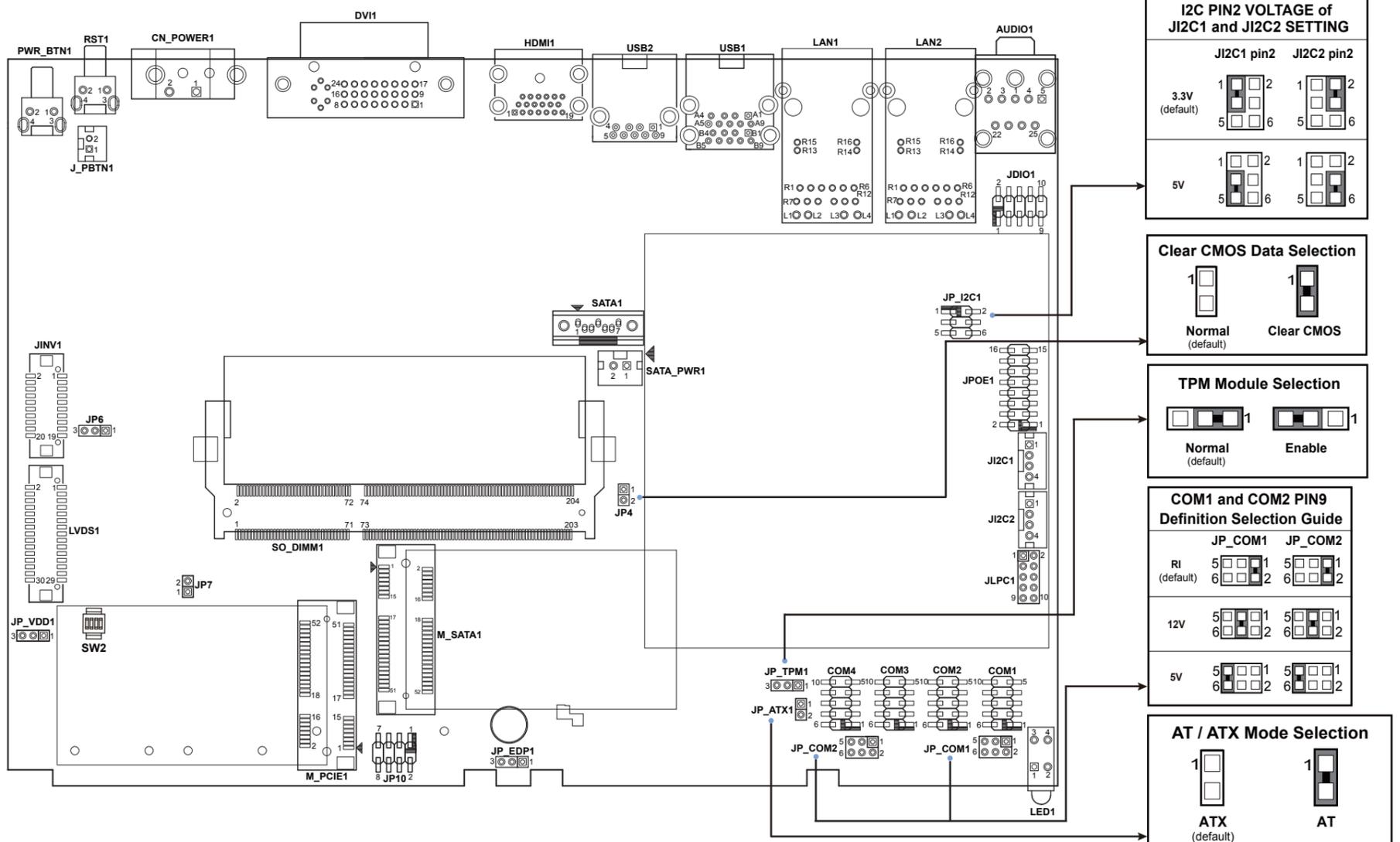|	
Display	1 x HDMI (up to 4K), 1 x DVI-D
USB	3 x USB 3.0
Serial Ports	COM1/2 for RS-232/422/485 selectable under BIOS 5V/12V/RI selectable by jumper
Antenna Holes	4 x antenna holes
Drive Bay	1 x 2.5" SATAIII HDD or SSD drive space
Expansion Slots	1 x Full-sized Mini PCIe(mSATA or 3G/4G card with USB 2.0 signals)
	1 x Full-sized Mini PCIe(PCIe or 3G/4G card with USB 2.0 signals)
	1 x SD slot / 2 x SIM slots
LAN	2 x LANs with PoE (IEEE 802.3af) as option, Wake-On-LAN, PXE LAN 1: Intel® I210IT / LAN 2: Intel® I210IT
Audio	1 x Line Out / 1 x Mic In
Power On/Off	1 x power button, 1 x remote switch
LED	2 x PoE LED indicators
I²C	1 x I²C port

Display

LCD	**SP-6558**: 8.4" TFT LCD(LED) Resolution SVGA 800 x 600
	SP-6550: 10.4" TFT LCD(LED) Resolution SVGA 800 x 600
Touchscreen	5-wire resistive touchscreen or projected capacitive touchscreen (USB interface)

Environment

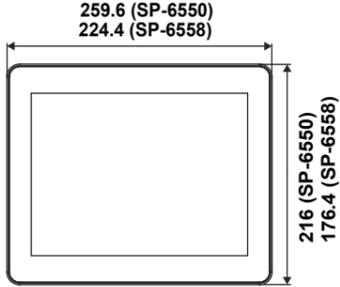|	
Operating Temp. (with airflow)	**HDD:** 0°C ~ 40°C / SSD: 0°C ~ 45°C
	Wide Temperature SSD:
	0°C ~ 50°C SSD (without PoE and for N3350, N4200 only)
	0°C ~ 45°C SSD (with PoE and for N3350, N4200 only)
	-20°C ~ 50°C SSD (without PoE and for E3950 only)
	-20°C ~ 45°C SSD (with PoE and for E3950 only)
Storage Temp.	-30°C ~ 60°C (-22°F ~ 140°F)
Humidity	20% ~ 95%

Jumper Setting

CAUTION! Danger of explosion may occur if the battery is replaced incorrectly. Replace batteries only with the same or equivalent type recommended by the manufacturer. Dispose the used batteries according to the manufacturer's instructions.
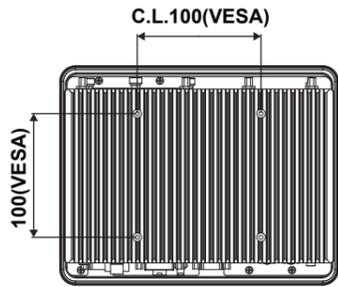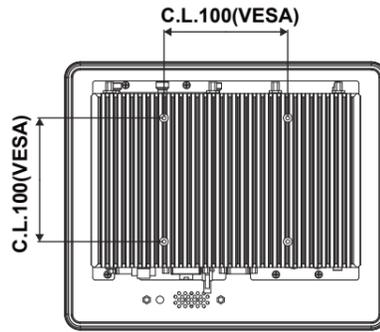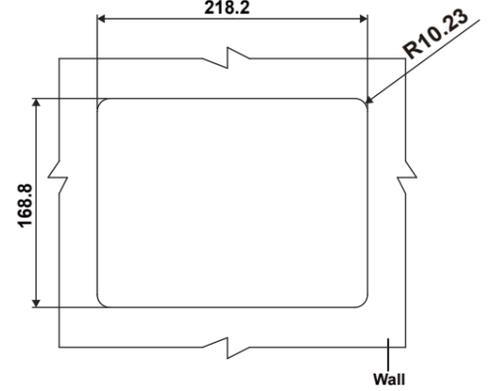
System Overview

(Unit: mm)

Front View

259.6 (SP-6550)
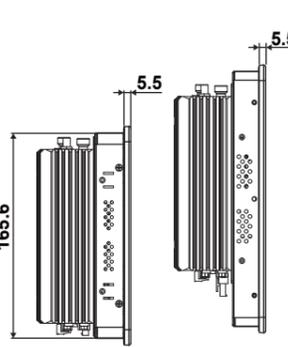224.4 (SP-6558)

216 (SP-6550)
176.4 (SP-6558)

Rear View (SP-6558)

C.L.100(VESA)

100(VESA)

Rear View (SP-6550)

C.L.100(VESA)

C.L.100(VESA)

Wall Mount Cut-out Dimensions
SP-6558

218.2

R10.23

168.8

Wall

Left Side View
SP-6558   SP-6550

5.5

5.5

165.6

Right Side View
SP-6558   SP-6550

76

30.1

73.6

20.2

140.6

206

Rear I/O View

Reset Button
DC IN 9~36V
DVI-D
HDMI
USB Connector
LAN1
LAN2

Power Button
COM Connector

Mic In
Line Out

I²C
Remote Switch
COM Connector

Top View
SP-6558

217.5

SP-6550

249.6
217.5

26.6
73.6

SP-6550

253

R8.5

209.4
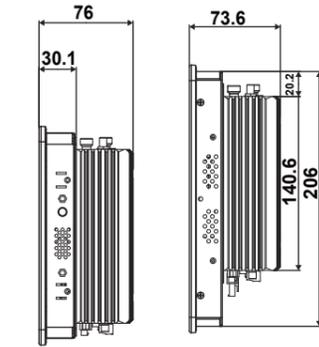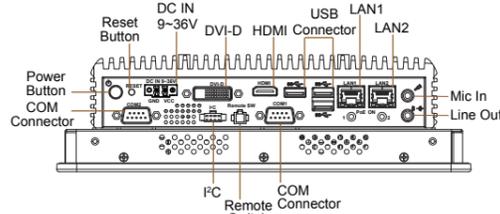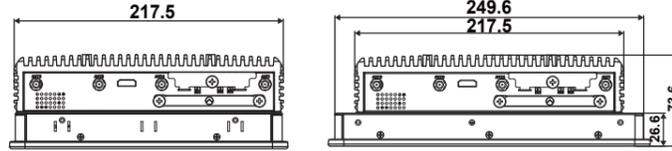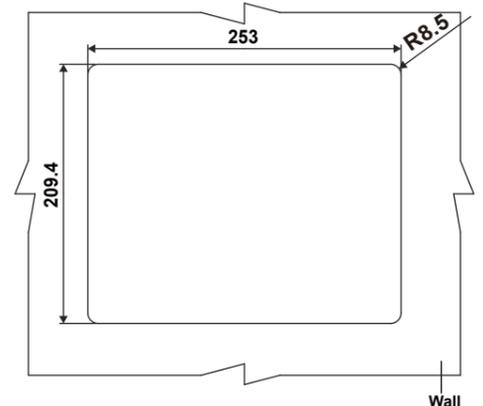
Wall

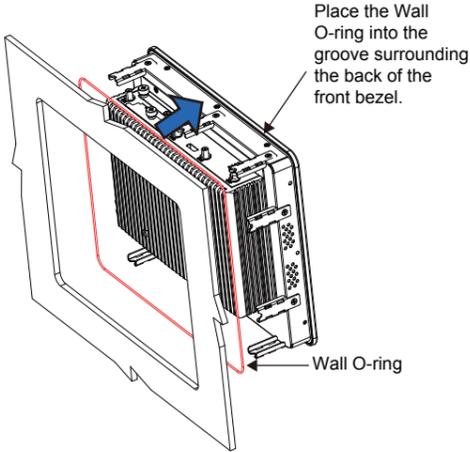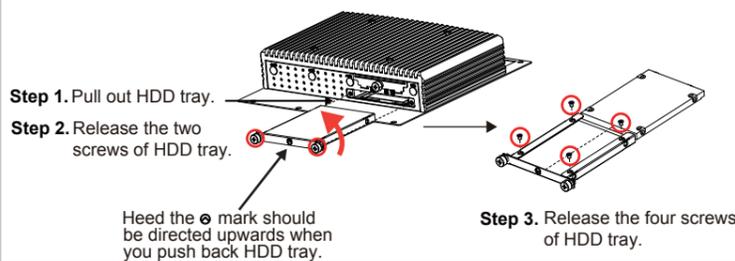
Quick Setup

Installing Wall O-ring

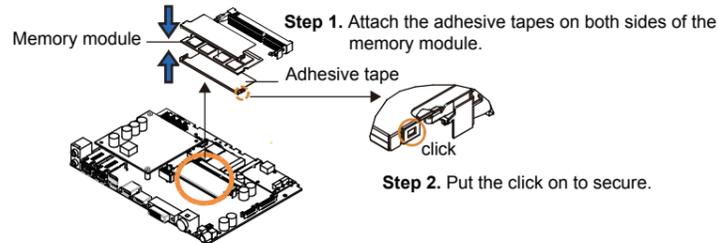**Step 1.** Place the Wall O-ring into the groove surrounding on the back of the front bezel properly.

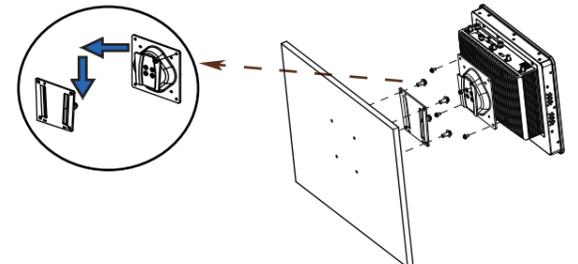Place the Wall O-ring into the groove surrounding the back of the front bezel.

Wall O-ring

HDD Easy Maintenance

Step 1. Pull out HDD tray.

Step 2. Release the two screws of HDD tray.

Heed the ⊖ mark should be directed upwards when you push back HDD tray.

Step 3. Release the four screws of HDD tray.

HDD & Memory & VESA Mount Accessories

HDD Tray Screw

M3 x 5 mm Screw x 4

Memory Heatsink

Memory Heatsink x 2

VESA Mount

VESA Mount Kit x 1

Installing Memory Heatsink

Memory module

Adhesive tape

Step 1. Attach the adhesive tapes on both sides of the memory module.

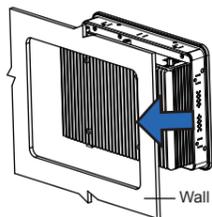**Step 2.** Put the click on to secure.
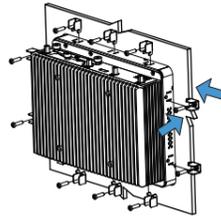
click

Installing VESA Mount

Installing Hooks For SP-6658

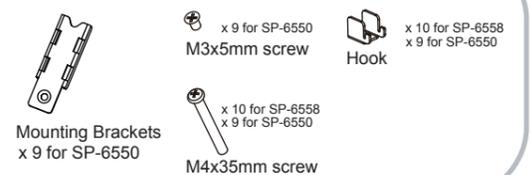**Step 1.** Install SP-6658 system on the wall firmly.

Wall

Step 2. Install 10 mounting hooks on the four sides of Panel PC and fasten the mating screws to secure firmly.
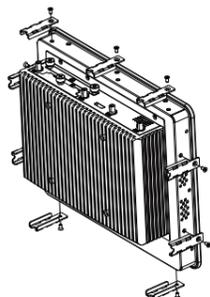
1. Install the hook.
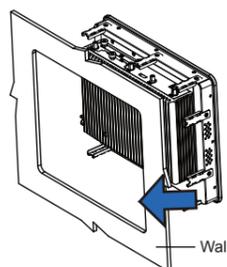2. Tighten the screw.

Hook Accessories (option)

x 9 for SP-6550
M3x5mm screw

Hook
x 10 for SP-6558
x 9 for SP-6550

Mounting Brackets
x 9 for SP-6550

x 10 for SP-6558
x 9 for SP-6550
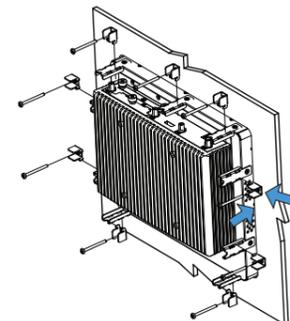M4x35mm screw

Installing Hooks For SP-6650

Step 1. Install the mounting brackets into the mounting holes on the four sides of SP-6550 using 9 x screws (M3x5mm).

Step 2. Mount SP-6550 Panel PC equipped with 9 brackets onto the wall firmly.

Wall

Step 3. Install 9 hooks onto the mounting brackets on the four sides of Panel PC and fasten the mating screws to secure firmly.

1. Install the hook.
2. Tighten the screw.

Safety Precaution

The following messages are reminders for safety on how to protect your system from damages and to extend a long life of the system.

1. Check the Cable Voltage
- The range of operating voltage should be between DC 9V and 36V. Otherwise, the system could be damaged.

2. Environmental Conditions
- Place your SP-6558 / SP-6550 on a sturdy, level surface. Be sure to allow enough space to have easy access around the system.
- Avoid extremely hot or cold place to install the system.
- Avoid exposure to sunlight for a long period of time or in an airtight space.
- Avoid the system from any heating device or using SP-6558 / SP-6550 when it's been left outdoors in a cold winter day.
- Bear in mind that the operating ambient temperature is from 0°C ~ 40°C for HDD & 0°C ~ 45°C for SSD.
- Avoid moving the system rapidly from a hot place to a cold place and vice versa because condensation may come from inside of the system.
- Placing SP-6558 / SP-6550 in strong vigrations may cause hard disk failure.
- Don't place the system close to any radio-active device in case of signal interference.

3. Handling
- Avoid putting heavy objects on top of the system.

- Do not turn the system upside down. This may cuase the hard drive to mal-function.
- If water or other liquid spills into this product, unplug the power cord immediately.

4. Good Care
- When the outside of the case is stained, remove the stain with a neutral washing agent with a dry cloth.
- Never use strong agents such as benzene and thinner to clean the system.
- If heavy stains are present, moisten a cloth with diluted neutral washing agent or with alcohol and then wipe thoroughly with a dry cloth.
- If dust has been accumulated on the outside, remove it by using a special made vacuum cleaner for computers.

CAUTION! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

WARNING! Some internal parts of the system may have high electrical voltage. And therefore we strongly recommend that qualified engineers can open and disassemble the system. Please handle LCD and Touchscreen with extra care as they are easily breakable.