OFP-W2700-PCI86
OFP-W2700-PCI50
OFP-W2700-PCV16

Open Frame Panel PC

User's Manual

Version 1.0
(September 2025)

iBASE

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Compliance

CE

This product may cause radio interference in which case users may be required totake adequate measures.

FC

This product has been tested and found to comply with the limits for a Class B device, pursuant to Part 15 of the FCC Rules. These limits are designed to providereasonable protection against harmful interference in a residential installation. Thisequipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with manufacturer's instructions, may cause harmful interference to radio communications.

Operation is subject to the following two conditions:

- This product may not cause harmful interference
- This product must accept any interference received including interference that may cause undesired operation.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment causes harmful interference to radio or television reception which can be determined by turning the equipment off and on, you may correct the interference by one ormore of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the distributor or an experienced radio/TV technician for help.

WEEE

This product must not be disposed of as normal household waste, in accordance with the EU directive of for waste electrical and electronic equipment (WEEE - 2012/19/EU). Instead, it should be disposed of by returning it to a municipal recycling collection point. Check local regulations for disposal of electronic products.

Green IBASE

This product complies with RoHS 2 restrictions, which prohibit the use of certain hazardous substances in electrical and electronic equipment. The following substances must not exceed the specified concentrations:

- Hexavalent chromium: 1,000 ppm
- Poly-brominated biphenyls (PBBs): 1,000 ppm
- Poly-brominated diphenyl ethers (PBDEs): 1,000 ppm
- Cadmium: 100 ppm
- Mercury: 1,000 ppm
- Lead: 1,000 ppm
- Bis(2-ethylhexyl) phthalate (DEHP): 1,000 ppm
- Butyl benzyl phthalate (BBP): 1,000 ppm
- Dibutyl phthalate (DBP): 1,000 ppm
- Diisobutyl phthalate (DIBP): 1,000 ppm

Important Safety Information

Carefully read the precautions before using the device.

Environmental conditions:

- Put the device horizontally on a stable and solid surface during installation into prevent it from falling and causing serious damage.
- Leave plenty of space around the device for ventilation.
- Use this product in environments with ambient temperatures between 0˚C and 40˚C.
- DO NOT LEAVE THIS DEVICE IN AN ENVIRONMENT WHERE THE STORAGE TEMPERATURE MAY BE BELOW -20° C OR ABOVE 60° C. To prevent from damage, ensure the device operates in a controlled environment.
- Keep the device away from humidity to avoid fog or condensation from accumulating on the inner surface of the panel.

Care for your IBASE products:

- Before cleaning the device, turn it off and unplug all cables to eliminate any residual electrical current.
- Use neutral cleaning agents or diluted alcohol to clean the device chassis with a cloth. Then wipe the chassis with a dry cloth.
- Use a computer vacuum cleaner to remove dust and prevent clogging of the air vent or slots.

WARNING

Attention during use:

- Do not use this product near water.
- Do not spill water or any other liquids on your device.
- Do not place heavy objects on the top of the device.
- Operate this device from the type of power indicated on the marking label. If youare not sure of the type of power available, consult your distributor or local power company.
- Ensure to use the correct power supply voltage.
- Do not walk on the power cord or allow anything to rest on it.
- If you use an extension cord, make sure that the total ampere rating of the product plugged into the extension cord does not exceed its limits.

Avoid Disassembly

Disassembly, modification, or any attempt at repair could generate hazards and cause damage to the device, even bodily injury or property damage, and will void anywarranty on the product.

CAUTION

Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Warranty Policy

- **IBASE standard products:**

  24-month (2-year) warranty from the date of shipment. If the date of shipment cannot be ascertained, the product serial numbers can be used to determine the approximate shipping date.

- **3rd-party parts:**

  12-month (1-year) warranty from delivery for the 3rd-party parts that are not manufactured by IBASE, such as CPU, CPU cooler, memory, storage devices, power adapter, panel and touch screen.

* Products, however, that fail due to misuse, accident, improper installation or unauthorized repair shall be treated as out of warranty and customers shall be billed for repair and shipping charges.

Technical Support & Services

1. Visit the IBASE website at www.ibase.com.tw to find the latest information aboutthe product.
2. If you need any assistance from your distributor or sales representative concerning problems that you may have encountered, please prepare the following information:

   - Product model name
   - Product serial number
   - Detailed description of the problem
   - Error messages in text or in screenshots if there is any
   - The arrangement of the peripherals
   - Software used (such as OS and application software, including the version numbers)

3. For repair service, please apply for an RMA number by visiting the IBASE website. For any assistance, please contact your distributor or sales representative.

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Chapter 1
General Information

The information provided in this chapter includes:

- Features
- Packing List
- Specifications
- Dimensions

1.1 Introduction to OFP Series

The OFP-W2700-PC series comprises open-frame, fanless panel PCs with optional colored frames, flat bezel designs, and easily accessible storage spaces. These devices are upgradeable, making them ideal for industrial and factory automation applications. They are available with different processing options: Intel® ATOM® X7-E3950 (OFP-W2700-PCI50), Intel® Core™ i7-8665UE (OFP-W2700-PCI86), and AMD® Ryzen™ V1605B (OFP-W2700-PCV16).

(Photo of OFP-W2700-PC)

1.2 Features

- Fanless, modular, flat bezel open frame design
- Easily accessible storage space
- IP65-rated front bezel, 4GB DDR memory, 64GB (default)
- 4x USB 3.0, 2x GbE
- Supports Windows 10, 64-bit; Linux Kernel 4+
- Optional colored frame and power adaptor

1.3 Packing List

Your product package should include the item listed below. If the item is missing, please contact the distributor or dealer from whom you purchased the product.

- OFP-W2700-PC x 1

1.4 Specifications

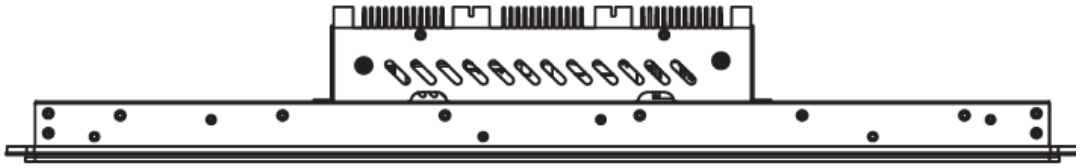
Product Name	OFP-W2700-PCI50	OFP-W2700-PCI86	OFP-W2700-PCV16
Display & Touch Screen			
Display Size	27” TFT-LCD		
Max. Resolution	1920x1080		
Luminance (cd/m²)	250 Option 1,000		
Contrast	1:1000		
Max. Color	16.7M		
View Angle (H°/V°)	178/178		
Backlight Lifetime(hrs)	30,000		
Touch Type	Projected Capacitive		
Touch Interface	USB		
Light Transmission(%)	89		
Point of Touch	10		
I/O Interface			
USB 3.0	4		
USB 2.0	0		
RS-232/422/485 (BIOS Selectable)	1 (DSUB9)		
RS-232	Optional		
LAN	2x GbE		
Additional Graphics	1x HDMI, 1x DP		
Audio	None		
Digital I/O	Optional		
Power Connector	1x 3-pin terminal block		
Power Button	1x 2-pin terminal block for remote		
Mechanical			
Dimensions (mm)	660.77 x 421.66 x 98		
Net Weight (kg)	14.6		

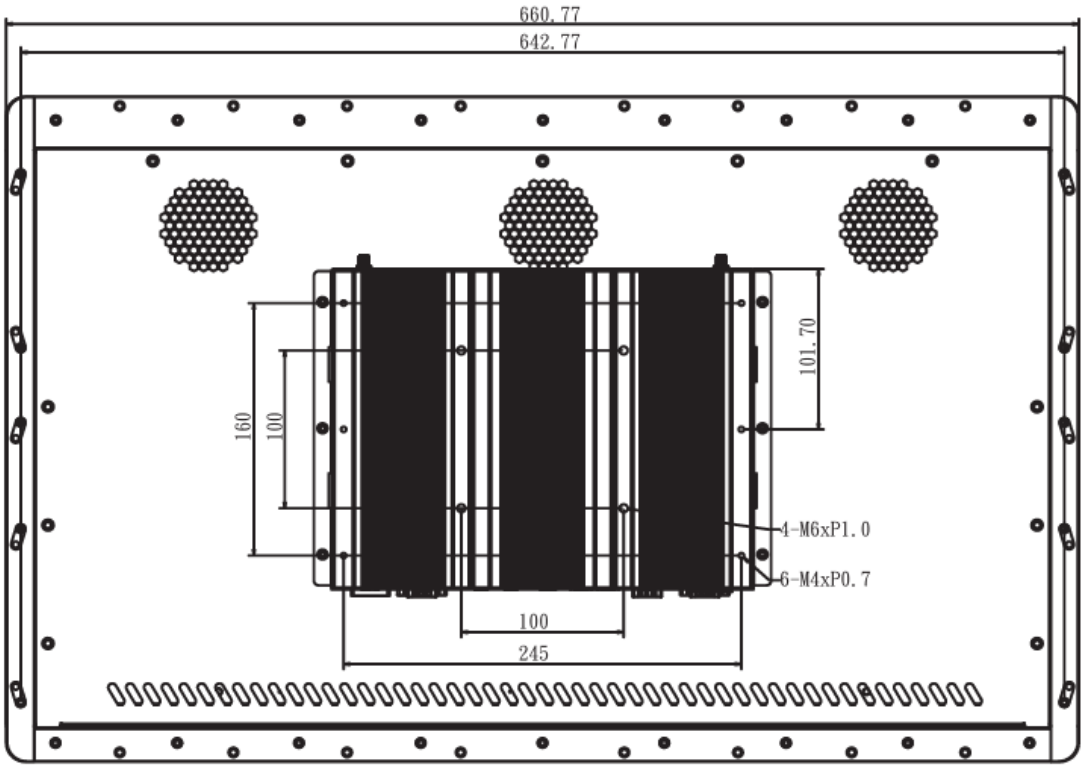
System			
Product Name	OFP-W2700-PCI50	OFP-W2700-PCI86	OFP-W2700-PCV16
Processor	Intel® ATOM® X7-E3950	Intel® Core i7-8665UE	AMD® RYZEN® V1000 V1605B
Memory	Max. 8GB, default 4GB	Max. 8GB, default 4GB	Max. 32GB, default 4GB
Thermal Design	Fanless 3x fan for IR cut off solution (Reserved)		
Membrane Control	N/A		
Built-in Speaker/Mic	N/A		
Expansion			
Internal Expansion Bus	2x Mini PCI-E (1x full-size, 1x half-size)	1x m.2 2280 Key-M 1x m.2 2230 Key-E	1x m.2 2280 Key-M 1x m.2 2230 Key-E
Expansion Slot	None		
Wireless	Optional		
Storage Space			
HDD	1 x 2.5” SATA HDD, default 64G SSD		
Removable	N/A		
Power			
Power Input Range	12V~24V DC	9V~24V DC	12V~24V DC
Construction			
Chassis Material	SGCC		
Color (Front /Back)	Raw SGCC		
IP Rating	Front side with IP65		
Mounting	Open frame design		
Environment			
Operating Temperature	-10°C ~ 50°C		
Storage Temperature	-20 ~ 70 °C		
Storage Humidity	10 ~ 90% (non-condensing) at 40 °C		
Certification	N/A		
Supported O.S.	Windows 10, 64-bit; Linux Kernel 4+		

All specifications are subject to change without prior notice.

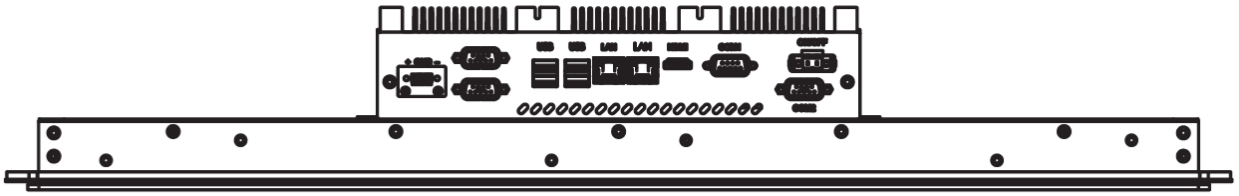
1.5 Dimensions

Unit: mm
Dimensions: 660.77 x 421.66 x 98

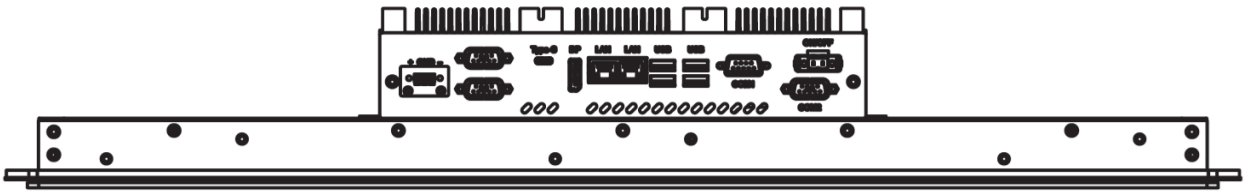




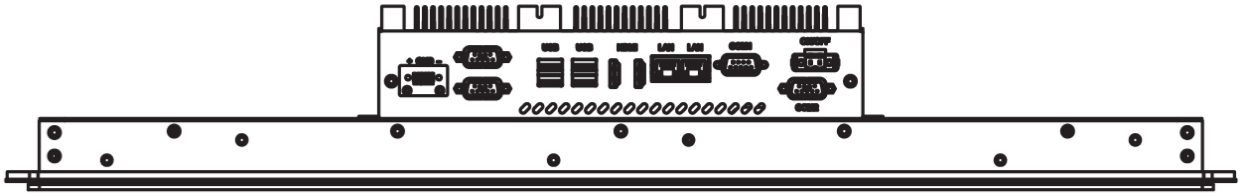
1.6 I/O Side View of the OFP Series



OFP-W2700-PCI50



OFP-W2700-PCI86



OFP-W2700-PCV16

NOTE:

The OFP-W2700-PCI50 open frame panel PC usesthe IB818 embedded board.

The OFP-W2700-PCI86 open frame panel PC usesthe IB919 embedded board.

The OFP-W2700-PCV16 open frame panel PC usesthe IB918 embedded board.

Both the OFP-W2700-PC series are using the sameheat sink and SATA drive installation method.

Chapter 2
Hardware Configuration

The information provided in this chapter includes:

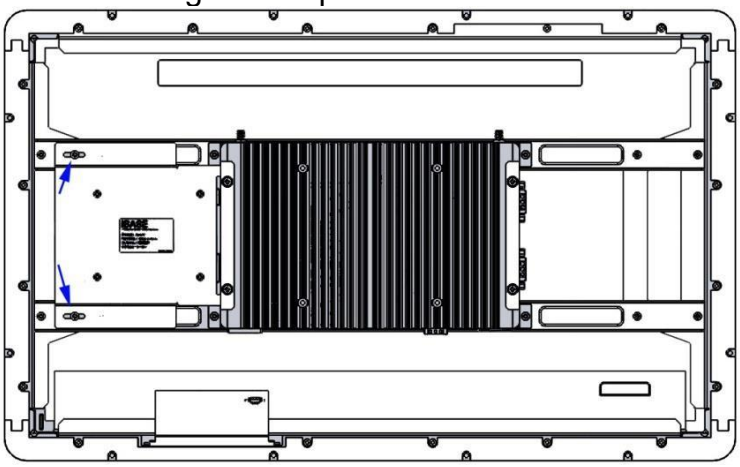
- Installations
- Jumpers and Connectors

2.1 Installations

Avoid device disassembly: Disassembly, modification, or any attempt at repair could generate hazards and cause damage to the device, injury, or property damage,and will void any warranty. If you need to make any changes to the device, be sure tounplug the power cord and have qualified engineers or technicians do it.

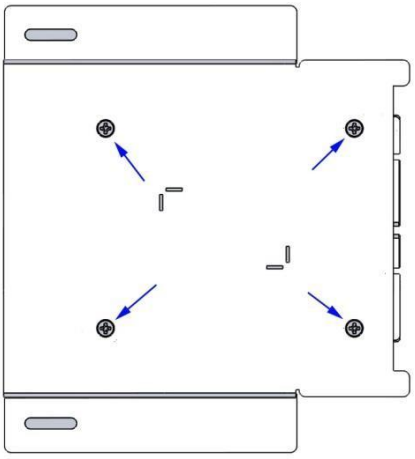
2.1.1 SSD / HDD Replacement

1. To remove the HDD tray, remove the two screws locking the tray as indicated by the two arrows and push the tray away from the embedded system towards the edge of the panel.



OFP-2101-PC

2. To remove HDD from the HDD tray, remove the 4 screws that are securing the HDD to the tray.

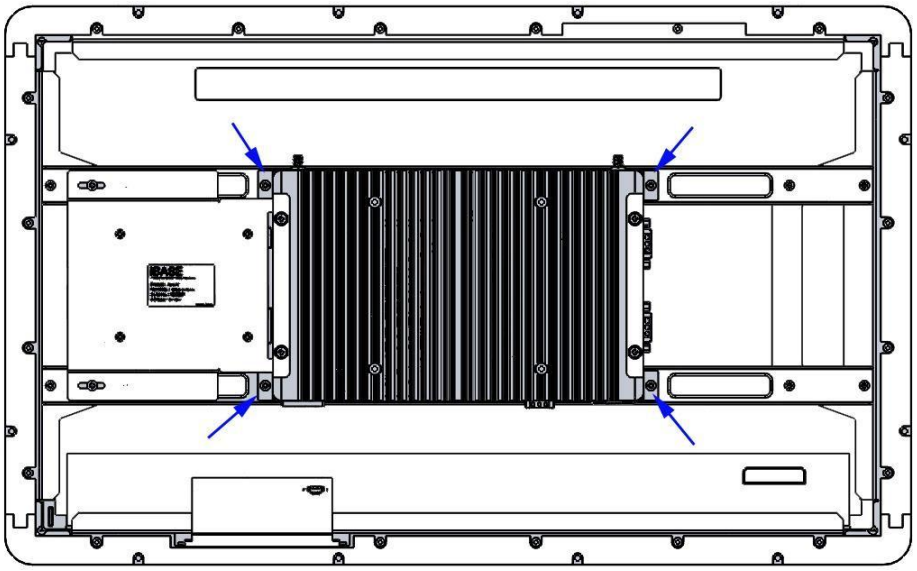


HDD Tray of OFP-W2700-PC

2.1.2 Memory Replacement

To replace or install memory modules, perform the following steps.

3. Remove the 4 screws that are securing the embedded PC to the panelPC, as shown by the arrows below.

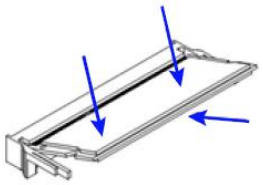


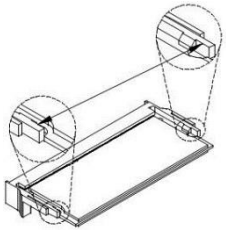
OFP-W2700-PC

NOTE:

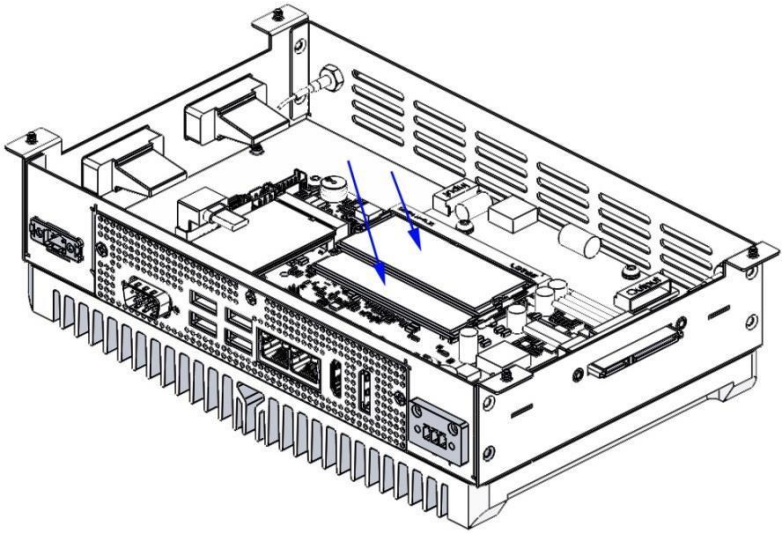
1. The OFP series panel PCs has a default 4GB memory on board.

4. Locate the memory slot and align the key of the memory module with thaton the memory slot. Insert the module slantwise and gently push the module straight down until the clips of the slot close to hold the module inplace when the module touches the bottom of the slot.
5. Remove the memory modules by using your fingers to press down on the two-side clips that hold each module in place.





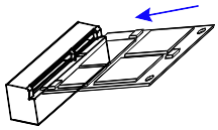
Pleaser reference OFP-W2700-PC memory location.



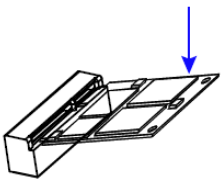
2.1.3 Mini-PCIe Installation

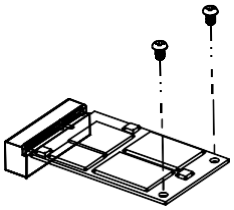
To replace or install a mini-PCIe card, perform the following steps after removing the rear cover.

1. Locate the mini-PCIe slot, align the key of the card to the interface, and insert the card slantwise.



2. Push the card down and fix it with the supplied flat head screw.



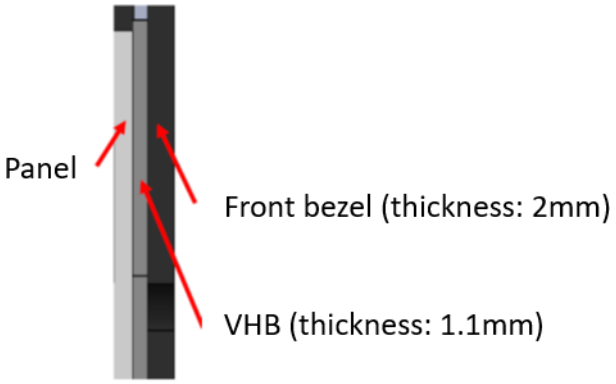


2.1.4 Front bezel design suggestion

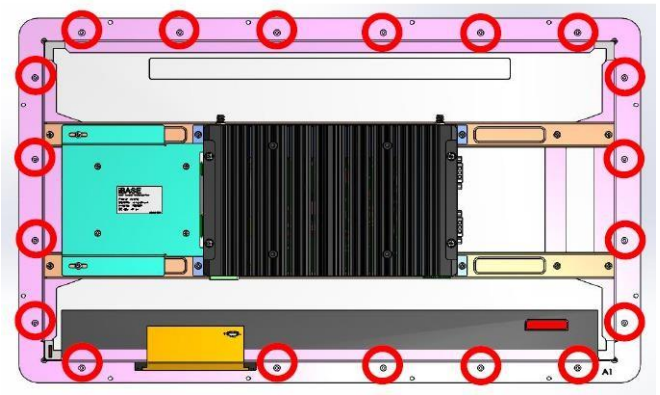
To design or install front bezel, please refer the following two suggestions.

2.1.4.1 One-way fixed design

1. The recommended thickness of front bezel and double sided tape is as follows.



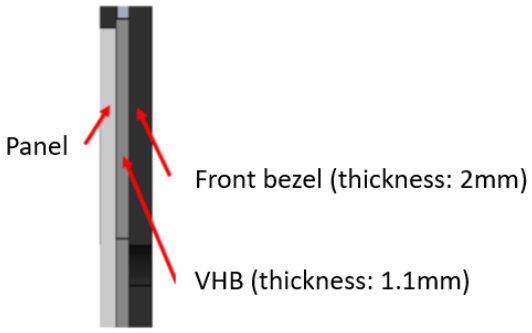
2. Fixed OFP system and front bezel from rear side to front side using M3 screws.



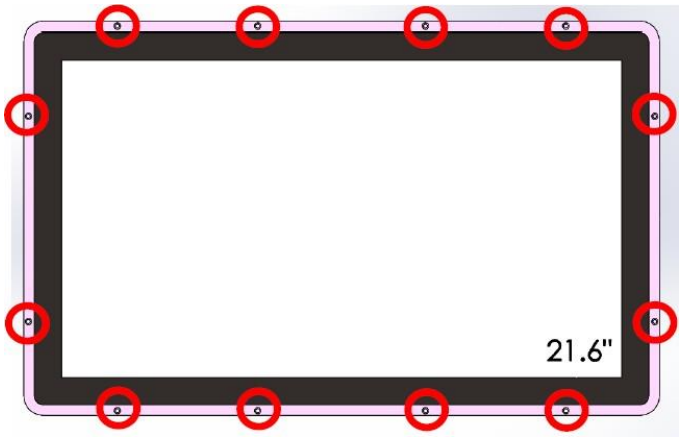
OFP-W2700-PC (M3 Screw)

2.1.4.2 Two-way fixed design

1. The recommended thickness of front bezel and double sided tape is as follows.



2. Fixed OFP system and front bezel from rear side to front side or front sideto rear side using M3 screws.

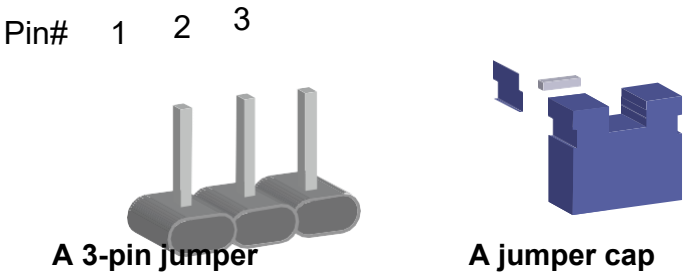


OFP-W2700-PC (M3 Screw)

2.2 Setting the Jumpers

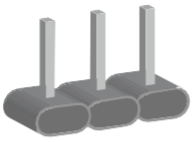
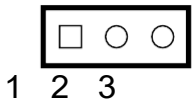
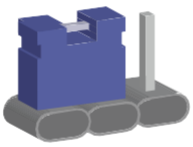
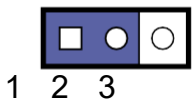
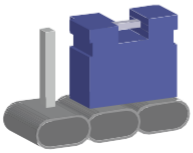
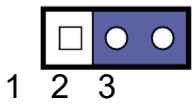
Configure the jumpers according to the settings required to be able to use the featuresneeded for your application. If you are unsure about the optimal configuration, contact your supplier for assistance.

Jumpers are short conductors made up of mutiple metal pins mounted on a non-conductive base on the circuit board. Jumper caps are used tohave the functions and features enabled or disabled. If a jumper has 3 pins, you can connect either PIN1 to PIN2 or PIN2 to PIN3 by shorting with the jumper cap.



A 3-pin jumper **A jumper cap**

Refer to the illustration below to set the jumpers.

Pin closed	Oblique view	Illustration
Open		
1-2		
2-3		

When two pins of a jumper are encased in a jumper cap, this jumper is **closed**, i.e. turned **On**.

When a jumper cap is removed from two jumper pins, this jumper is **open**, i.e. turned **Off**.

2.3 Jumper & Connector Locations

Please reference IB919, IB818 and IB918 Motherboard Manual

The OFP-W2700-PCI50 open frame panel PC usesthe IB818 embedded board.

https://drive.google.com/drive/folders/1ABt1zAuQ7o6P8L-7XIrBTbPkLuWRVr7-

The OFP-W2700-PCI86 open frame panel PC usesthe IB919 embedded board.

https://drive.google.com/drive/folders/1VIJxcjYsDq7O1eeD72idOw38i3ftxOWE

The OFP-W2700-PCV16 open frame panel PC usesthe IB918 embedded board.

https://drive.google.com/drive/folders/13eW7gttV3ZdA5dLo7az61yjwja09hQoT

Chapter 3
Driver Installations

The driver installation information in this chapter is for the IB919, IB818 and IB918 Motherboards.

3.1 Software Installation Utility

For driver installations, please refer to the IB919, IB818 and IB918 Motherboard Manuals.

The OFP-W2700-PCI50 open frame panel PC uses the IB818 embedded board. Please refer to:

https://drive.google.com/drive/folders/1L2VIG8xGsaWTH7bBMMG9XElQa7kFRJYq

The OFP-W2700-PCI86 open frame panel PC uses the IB919 embedded board. Please refer to:

https://drive.google.com/drive/folders/1tC1JABveBXa6cx0fsAXEfglZ04pAQU8u

The OFP-W2700-PCV16 open frame panel PC uses the IB918 embedded board. Please refer to:

https://drive.google.com/drive/folders/14pddjREULm1DP1XsTKCeG-HCxbq-PMsW

Chapter 4
BIOS Setup

This chapter describes the various settings available in the AMI BIOS that comes with the IB919, IB818 and IB918 motherboards installed in the OFP-W2700 system.

4.1 Introduction

The BIOS (Basic Input/Output System) installed in the ROM of your computer system supports Intel® processors. The BIOS provides critical low-level support for standard devices such as disk drives, serial ports and parallel ports. It also provides password protection as well as special support for detailed fine-tuning of the chipset controlling the entire system.

4.2 BIOS Setup

The BIOS provides a Setup utility program for specifying the system configurations and settings. The BIOS ROM of the system stores the Setup utility. When you turn on the computer, the BIOS is immediately activated. Press the <Del> key immediately allows you to enter the Setup utility. If youare a little bit late pressing the <Del> key, POST (Power On Self Test) will continue with its test routines, thus preventing you from invoking the Setup.

If you still need to enter Setup, restart the system by pressing the ”Reset” button or simultaneously pressing the <Ctrl>, <Alt> and <Delete> keys. You can also restart by turning the system Off and back On again.The

following message will appear on the screen:

```
Press <DEL> to Enter Setup
```

In general, press the arrow keys to highlight items, <Enter> to select, the <PgUp> and <PgDn> keys to change entries, <F1> for help, and <Esc> toquit.

When you enter the BIOS Setup utility, the *Main Menu* screen will appear onthe screen. The Main Menu allows you to select from various setup functionsand exit choices.

Warning: It is strongly recommended that you avoid making any changes tothe chipset defaults.

These defaults have been carefully chosen by both AMI and your system manufacturer to provide the absolute maximum performance and reliability. Changing the defaults could make thesystem unstable and crash in some cases.

For the BIOS Setup, please refer to the IB919, IB818 and IB918 Motherboard Manuals.

The OFP-W2700-PCI50 open-frame panel PC uses the IB818 embedded board. For more details, refer to:

https://drive.google.com/drive/folders/1ABt1zAuQ7o6P8L-7XIrBTbPkLuWRVr7-

The OFP-W2700-PCI86 open-frame panel PC uses the IB919 embedded board. For more information, refer to:

https://drive.google.com/drive/folders/1VIJxcjYsDq7O1eeD72idOw38i3ftxOWE

The OFP-W2700-PCV16 open-frame panel PC uses the IB918 embedded board. For more information, refer to:

https://drive.google.com/drive/folders/13eW7gttV3ZdA5dLo7az61yjwja09hQoT

Note: Do not change the BIOS LVDS settings, otherwise the display will be abnormal. If it is display abnormal, please try to load default in BIOS setting.