

WTP-9G66

Industrial Panel PC



V1.0

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Version Change History

Date	Version	Description	Remark
2021/4/12	1.0	First release	IVY

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FCC Class B

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 18 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses and can radiate radio frequency energy. If not installed and used in accordance with this user manual, it may cause harmful interference to radio communications.

Note that even when this equipment is installed and used in accordance with this user manual, there is still no guarantee that interference will not occur. If this equipment is believed to be causing harmful interference to radio or television reception, this can be determined by turning the equipment on and off. If interference is occurring, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Warning:

Any changes or modifications made to the equipment which are not expressly approved by the relevant standards authority could void your authority to operate the equipment.

To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth.

Do not modify this equipment without authorization of the manufacturer.

Safety Instructions

Intended use

The WTP-9G66 is intended to serve as an industrial monitor which is designed for general purpose for industrial environment.

Intended User profile

The equipment is intended for infant or adults by profession Health care professionals.

Greeting & Setup

Thank you for purchasing the WTP-9G66 unit. We wish that this unit will be durable and reliable in providing your industrial application needs. Please follow the instructions below to ensure the unit continues to have high performance.

Unpacking

After opening the carton, there will be a industrial panel PC unit with an accessory box. Examine the contents to see if there are damages to the unit and if all accessories are present.

Setting up

Please read this manual carefully and remember to keep this manual for future reference.

Safety Instructions & Cleaning

The unit has undergone various tests in order to comply with safety standards. Inappropriate use of the open frame unit may be dangerous. Please remember to follow the instructions below to insure your safety during the installation and operating process.

Transporting & Placement of unit

1. When moving the unit on a cart; be very cautious. Quick stops, excessive forces and uneven surfaces may cause the cart to overturn thus risking the unit to fall to the ground.
2. If the industrial panel PC unit does fall to the ground, immediately turn the power off and disconnect cords. Then contact a service technician for repairs. Continual use of

the unit may result cause a fire or electric shock. Also, do not repair the unit on your own.

3. Having two or more people transporting the display unit is recommended. In addition, when installing the unit by suspending it also requires two or more people.
4. Before suspending the unit, make sure the material used for suspension is sturdy and stable. If not properly suspended, the display unit may fall and cause serious injury to people standing nearby as well as to the unit itself.
5. If you wish to mount the display unit, remember to use only the mounting hardware recommended by the manufacturer.

Electrical and Power Source Related

1. This industrial panel PC unit must operate on a power source as shown on the specification label. If you are not sure what type of power supply used in the area, consult your dealer or local power supplier.
2. The power cords must not be damaged. Applied pressure, added heat, and tugging may damage the power cord.
3. The power cord must be routed properly when setup takes place. We advise that this aspect measure is to prevent people from stepping on the cords or while the unit is suspended to prevent flying objects from getting tangled with the unit.
4. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.
5. Do not overload the AC outlets or extension cords. Electrical shocks or fires may occur from overloading.
6. Do not touch the power source during a thunderstorm.
7. If your hands are wet, do not touch the plug.
8. Use your thumb and index finger, grip firmly on the power cord to disconnect from the electrical socket. By pulling the power cord, may result in damaging it.
9. If the unit is not going to be in use for an extended period of time, remember to disconnect the unit.

10. The industrial panel PC unit uses voltage between 100-240VAC. Connect the unit to a power source with the same numerical value as shown. Please use only the power cord provided by the dealer to ensure safety and EMC compliance.

Various Factors of Environment

1. Do not insert objects into the openings.
2. Do not have liquids seep into the internal areas of the industrial panel PC unit.
3. Having liquids seep in or inserting objects into the unit may result in electric shocks from taking and/or short circuiting the internal parts.
4. Do not place the industrial panel PC unit in the presence of high moisture areas.
5. Do not install the industrial panel PC unit in a wet environment.
6. Do not place near unit near heat generating sources.
7. Do not place the unit in a location where it will come in contact with fumes or steam.
8. Remember to keep the industrial panel PC unit away from the presence of dust.
9. If water has flow in or seep in, immediately disconnect the open frame unit. Then contact a service technician for repairs.

Ventilation Spacing

1. Do not cover or block the openings on the top and back sides of the display unit. Inadequate ventilation may cause overheating thus reducing the lifespan of the unit.
2. Unless proper ventilation is present, do not place unit in an enclosed area; such as a built-in shelf. Keep a minimum distance of 10 cm between the display unit and wall.

Operating principle

- A Industrial Panel PC has four main components: the arithmetic logic unit (ALU), the control unit, the memory,

and the input and output devices (collectively termed I/O). These parts are interconnected by buses, often made of groups of wires.

- The control unit, ALU, and registers are collectively known as a central processing unit (CPU).
- Inside each of these parts are thousands to trillions of small electrical circuits which can be turned off or on by means of an electronic switch. Each circuit represents a bit (binary digit) of information so that when the circuit is on it represents a "1", and when off it represents a "0" (in positive logic representation). The circuits are arranged in logic gates so that one or more of the circuits may control the state of one or more of the other circuits.

Cleaning the unit

1. Remember to turn off the power source and to unplug the cord from the outlet before cleaning the unit.
2. Carefully dismount the unit or bring the unit down from suspension to clean.
3. Please use a dry soft cloth to clean the unit.
4. Take a dry cloth and wipe the unit dry. Remember to avoid having liquids seep into the internal components and areas of the industrial panel PC unit.

Error message / Troubleshooting

No power	<ol style="list-style-type: none">1. Connect the AC adapter to the computer, and then plug it into an AC outlet.2. Turn on the computer.
----------	---

Servicing, Repairing, Maintenance & Safety Checks

1. If the unit is not functioning properly, observe the performance level of the display closely to determine what type of servicing is needed.

2. Do not attempt to repair the industrial panel PC unit on your own. Disassembling the cover exposes users' to high voltages and other dangerous conditions. Notify and request a qualified service technician for servicing the unit.
3. To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth.
4. If any of the following situations occur turn the power source off and unplug the unit. Then contact a qualified service technician.
 - (a) A liquid was spilled on the unit or objects have fallen into the unit.
 - (b) The unit is soaked with liquids.
 - (c) The unit is dropped or damaged.
 - (d) If smoke or strange odor is flowing out of the operating unit.
 - (e) If the power cord or plug is damaged.
 - (f) When the functions of the unit are dysfunctional.
5. When replacement parts are needed for the industrial panel PC unit, make sure service technicians use replacement parts specified by the manufacturer, or those with the same characteristics and performance as the original parts. If unauthorized parts are used it may result in starting a fire, electrical shock and/or other dangers.



EU-wide legislation, as implemented in each Member State, requires that waste electrical and electronic products carrying the mark (left) must be disposed of separately from normal household waste. This includes monitors and electrical accessories, such as signal cables or power cords. When you need to dispose of your display products, please follow the guidance of your local authority, or ask the shop where you purchased the product, or if applicable, follow any agreements made between yourself.

The mark on electrical and electronic products only applies to the current European Union Member States.

Caution:

DO NOT LEAVE THIS EQUIPMENT IN AN UNCONTROLLED ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS BELOW -20° C (-4° F) OR ABOVE 60° C (140° F). THIS MAY DAMAGE THE EQUIPMENT.

This equipment shall not be used in life support systems.

The user is not to touch SIP/SOPs and the patient at the same time.

Caution – Use suitable mounting apparatus to avoid risk of injury.

Caution - Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions. (If battery pack is not used for 1 month, it is recommended to remove the battery pack from equipment.)

The sound pressure level at the operator's position according to IEC 704-1:1982 is no more than 70dB (A).

- A) Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked "Hospital Only" or "Hospital Grade".
- B) Use a power cord that matches the voltage of the power outlet, which has been approved and complies with the safety standard of your particular country.
- C) Caution: This adapter is a forming part of the industrial device

Contact information:

Wincomm Corporation

3F, No.14, Prosperity Road II, Science-Based Industrial Park,
Hsinchu, Taiwan 300, R.O.C

TEL: (886) 3 5780000

E-Mail: sales_support@wincomm.com.tw

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Introduction

Product Description

The WTP-9G66 Industrial Panel PC is based on Intel® 8th Generation Core i7/i5 CPU, it accommodates one 2.5" SATA III hard disk drive, one M.2 SATA SSD and up to 32GB DDR4 SODIMM.

The high brightness LCD, Fanless solution, integrated multimedia functions and extensive expansion options make them the perfect platform upon which to build comprehensive lifestyle computing applications.

The WTP-9G66 includes all the features of a powerful computer into a slim and attractive chassis.

The WTP-9G66 is compact, Giga LAN and selectable WLAN network compatible PC with full safety and industrial approval and features to control a dedicated system with a wide variety of applications. Combining the WTP-9G66 into your system can achieve both cost-saving and efficient improvements.

Common applications and Electronic Industrial Record. The WTP-9G66 are definitely your perfect choices.

Package list

Before you begin installing your Industrial Station, please make sure that the following items have been shipped:

- The WTP-9G66 Industrial Panel PC unit
- User's manual, chipset drivers
- Power Adapter x 1
- Power cord –US type, or other type in UK, EU...etc.

Features

- Intel® 8th Generation Core i7/i5 CPU
- Res or P-Cap Touch with IP69K Design
- Vpro Support by CPU
- CE, FCC, VCCI Class B Passed
- Optional Cable Gland for External I.O.
- Special Inspection of 100% Waterproof Guarantee

Specifications

Hardware Specifications

Display	15" 450 nits 1024 x 768 TFT LCD 19" 350 nits 1280X 1024 TFT LCD 21.5" 250 nits 1920 x 1080 TFT LCD 24" 250nits 1920 x 1080 TFT LCD
CPU Support	Intel® 8th Gen (Whiskey lake-U) Core™ MCP Processor
Disk Drive Space	1 x M.2 (KEY M, 2242/2260/2280) with SATA3 for SSD 1 x SATA3
Expansion	1 x M.2 (KEY E, 2230) for Wireless
I/O	USB – 2.0 x 4 COM - RS232/RS422/RS485 x 2 LAN - RJ-45 x 1 (Gigabit Ethernet) Audio - 3.5mm phone jack connector * 2 (Line-out, and Mic-in) Video output - HDMI 2.0a x 1, DP 1.2 x 1

LCD Specifications

Display Type	15"
Max. Resolution	1024x768 XGA
Contrast Ratio	800:1
Pixel Pitch (um)	0.297(H) × 0.297(V)
Luminance (cd/m2)	450
Viewing Angle	160°(H)
	160°(V)

Display Type	21.5"
Max. Resolution	1920x1080 Full HD
Contrast Ratio	1000:1
Pixel Pitch (um)	248.25 (H)×248.25(V)
Luminance (cd/m2)	250
Viewing Angle	170°(H)
	160°(V)

Display Type	19"
Max. Resolution	1280x1024 SXGA
Contrast Ratio	1000:1
Pixel Pitch (um)	294 (H)×294(V)
Luminance (cd/m2)	350
Viewing Angle	170°(H)
	160°(V)

Display Type	23.8
Max. Resolution	1920x1080 Full HD
Contrast Ratio	3000:1
Pixel Pitch (um)	274.5 (H)×274.5(V)
Luminance (cd/m2)	250
Viewing Angle	178°(H)
	178°(V)

Power Adapter Specifications

Power	Close-frame
MFR	Sinpro
Input Rating	AC 100 ~ 277 V, 47 ~ 63 Hz
Output Rating	DC 24V/5A (MAX 120W)
MTBF	100K hrs operation at 25°C
Classification	Power by Class I certified power adapter. No applied part.
Mode of operation	Continuous operation
System input rating	DC 24V, 5A

Mechanical Specifications

Architecture	Close-frame
Front Bezel	PCT touch screen or RES touch screen With stainless (304)
Color	Sliver
Mounting / Holder	VESA 100X100 mm
Dimension (WxHxD)	15" - 398 x 309.5 x 58 (mm) 19" - 458 x 386 x 64 (mm) 21.5" - 557 x 348.5 x 58.5 (mm) 24" - 626.6 x 396.1 x 64.0 (mm)
Net Weight	15" - 8.4 kg (w/o power adapter) 19" - 11.5 kg (w/o power adapter) 21.5" - 12 kg (w/o power adapter) 24" - 14.8 kg (w/o power adapter)
Packing Filler	PE

Environmental Specifications

Temperature	Operating: 0°C to 40°C by HDD 0°C to 50°C by SSD Storage, Transportation: -20°C to 60°C (-4°F ~ 140°F)
Vibration	Operating: 15g/0.53 oz, 11 ms, half sine wave Non-operating: 50g/1.76 oz, 11 ms, half sine wave
Shock	Operating: 5 ~ 17 Hz , Amplitude : 0.117 ~ 500Hz , Acceleration : 1.0G Non-operating: 10~55Hz/0.15g, 55~500Hz/2.0g

Altitudes	Operational: up to 3000 m (9842 feet) Shipping: up to 12192 m (40000 feet)
Pressure	700 – 1060 hPa (Operation) 186 – 1060 hPa (Storage) 186 – 1060 hPa (Transportation)
EMI / Safety	CE / FCC / VCCI Class B
IP	IP69K
Noise	Fanless

Touch Screen

P.cap Touch

Type	Full flat projective capacitive touch panel
Interface	Controller with USB interface, 5V
Hardness	$\geq 7H$
Light Transmission	$\geq 86\%$
Life Time	100M times

Res touch

Type	Full flat resistive touch panel
Interface	Controller with USB interface, 5V
Hardness	$\geq 3H$
Light Transmission	$80\% \pm 5\%$
Life Time	35M times

Getting Started

System Set Up

The following is a summary of the steps in setting up the system for use.

- (1). You can fix the system to a mounting fixture using the screw holes on the sides of the system.
- (2). Make any required external connections such as the display, keyboard, and LAN.
- (3). Plug the appropriate end of the power cord into the power connector on the rear of the system and the plug to an electrical outlet.
- (4). ***Waiting for 3 seconds*** then press the power switch on the front panel of the system once to turn on the system power.
- (5). If necessary, run the BIOS SETUP programs to configure the system.

Caution:

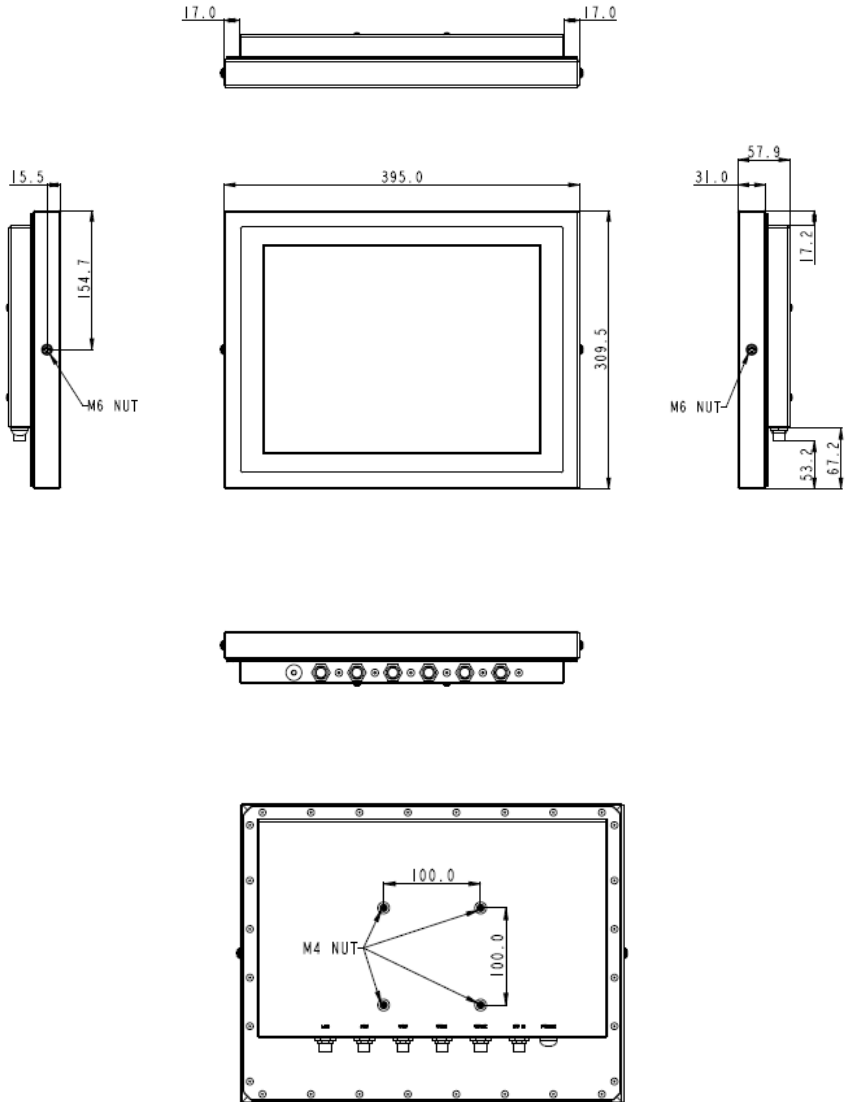
In order to boot up system from USB-CD/DVD drive, please connect USB-CD/DVD drive, turn on computer power, keep on pressing "F11" key, go into BIOS quick boot menu, select "USB-CD ROM", WAIT FOR 20 SECONDS, then press enter, system OS will boot up from USB-CD/DVD drive directly.

Notice:

The installation is only to be carried out by manufacturer trained and authorized personnel.

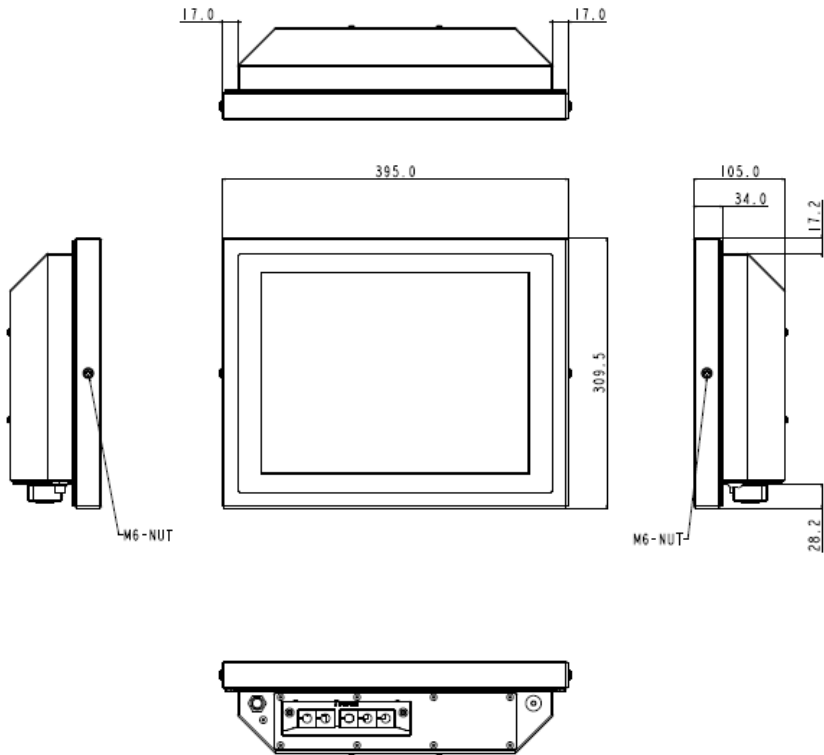
Dimension

WTP-9G66-15 standard



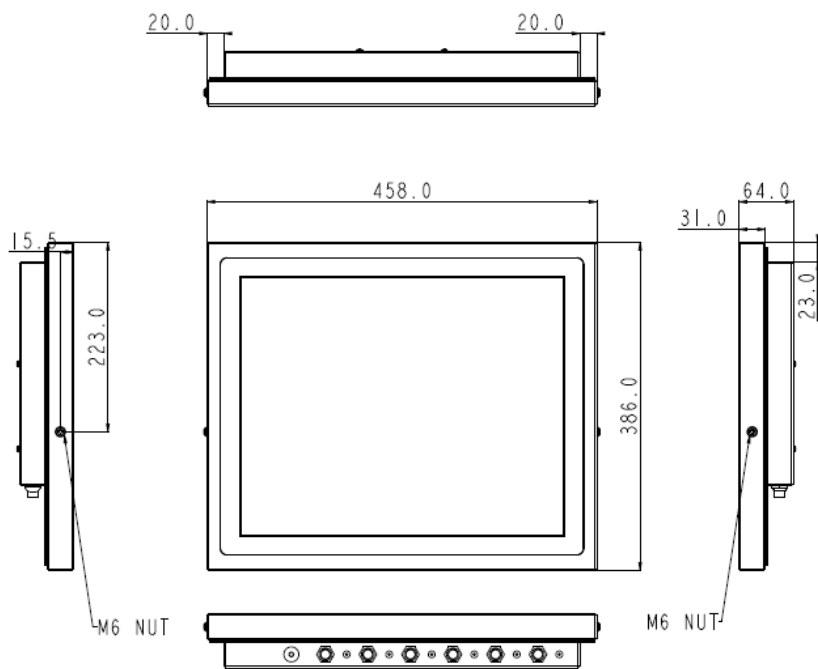
Dimension

WTP-9G66-15 Cable Gland



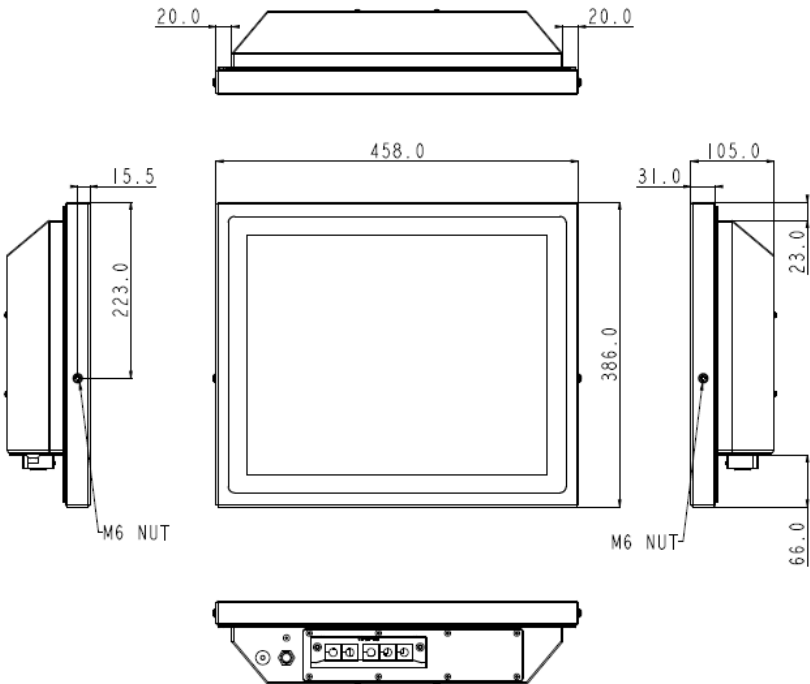
Dimension

WTP-9G66-19 standard



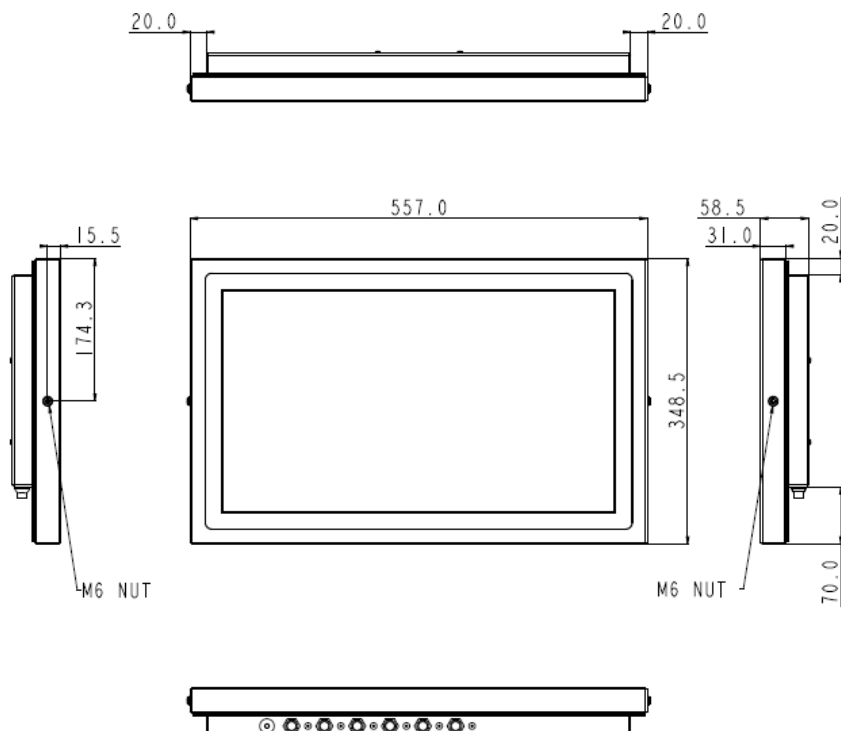
Dimension

WTP-9G66-19 Cable Gland



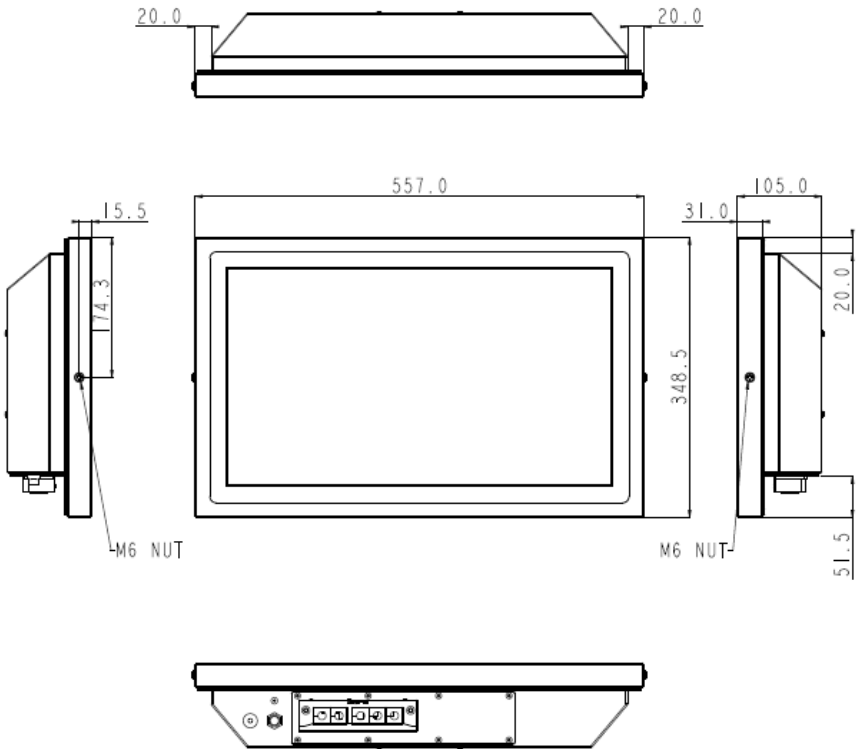
Dimension

WTP-9G66-22 standard



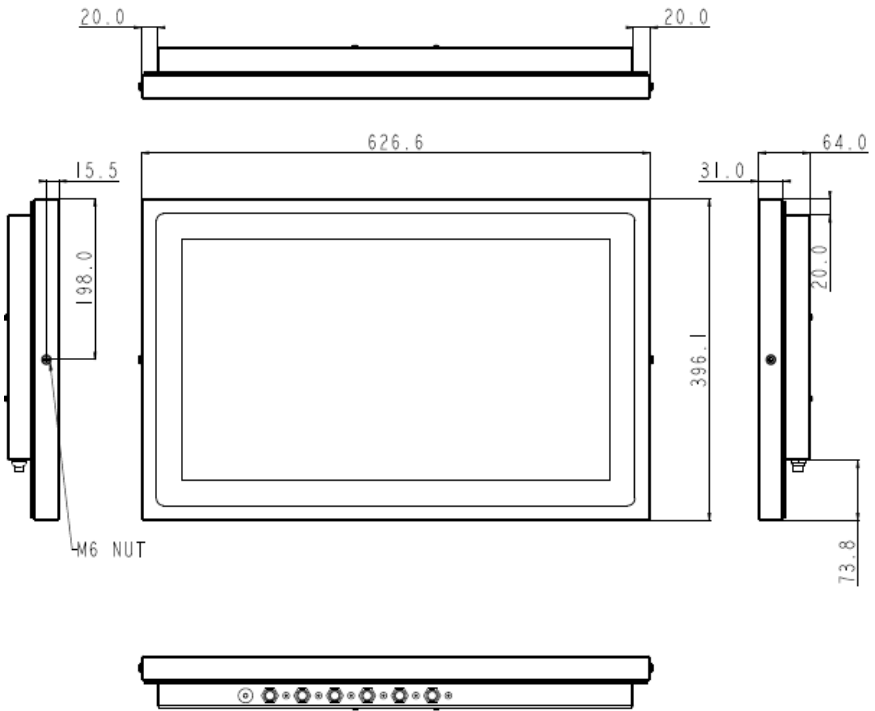
Dimension

WTP-9G66-22 Cable Gland



Dimension

WTP-9G66-24

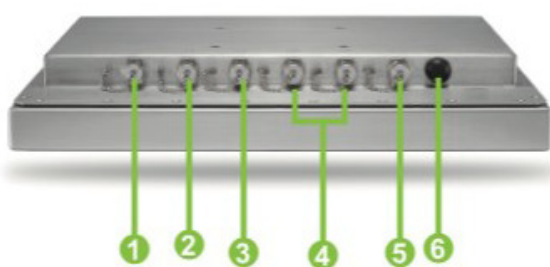


System View

Front View



I/O parts

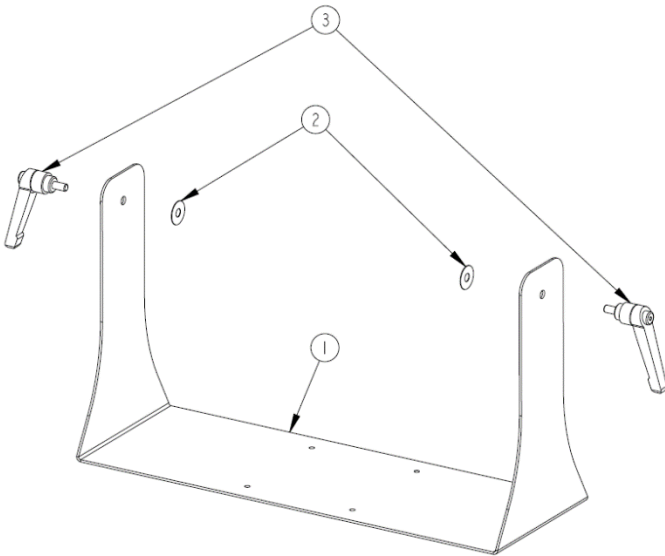


- 1 Giga LAN
- 2 USB 1/2
- 3 USB 3/4
- 4 COM x 2
- 5 DC-in
- 6 Power on/off

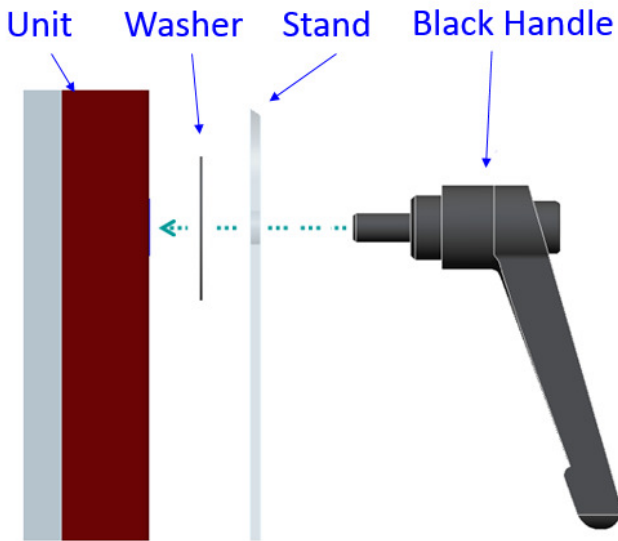
Mounting instruction

Step 1. Please check out the following parts before assemble.

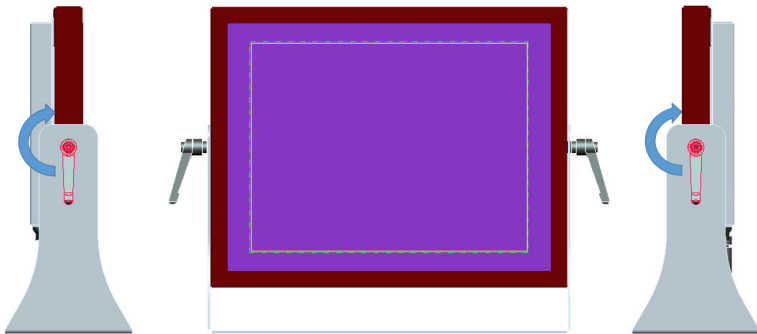
No.	Item	Quantity
1	Table Stand	1
2	Black Silicone Washer	2
3	Black Handle	2

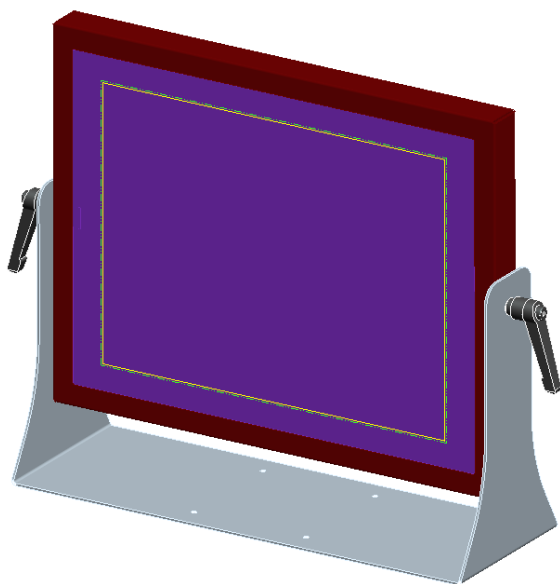


Step 2. Please follow the picture diagrams to assemble.
Explode View



1. Step 3. Please tighten the black handle in a clockwise direction.

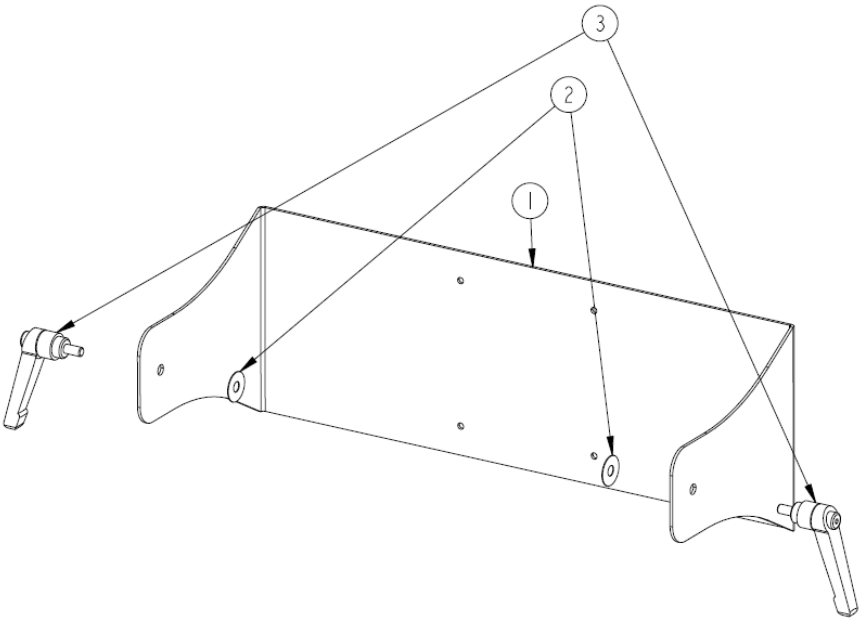




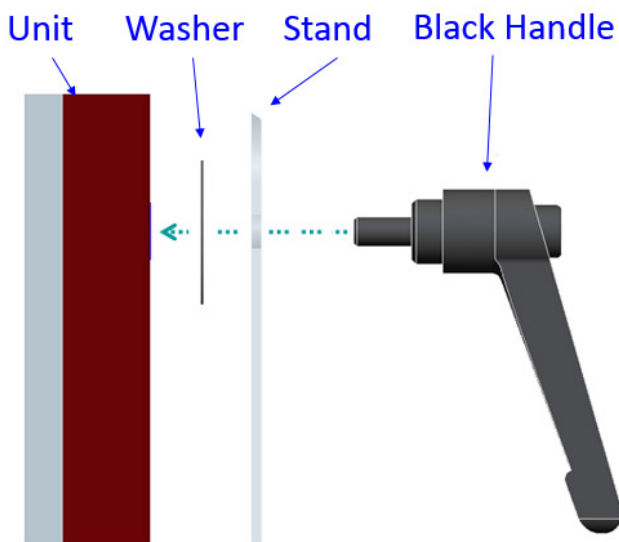
Wall Mount Stand Assemble Instruction

Step 1. Please check out the following parts before assemble.

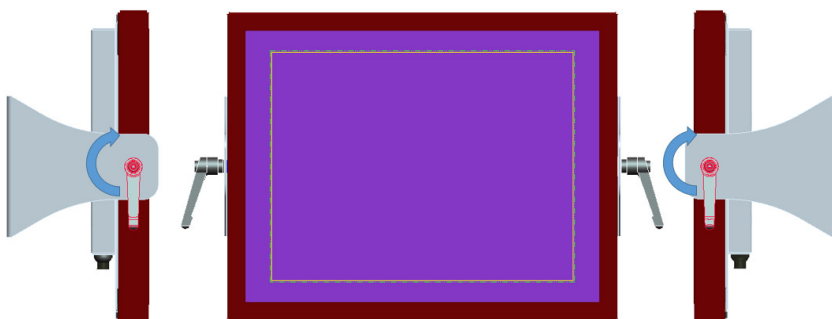
No.	Item	Quantity
1	Wall Mount Stand	1
2	Black Silicone Washer	2
3	Black Handle	2

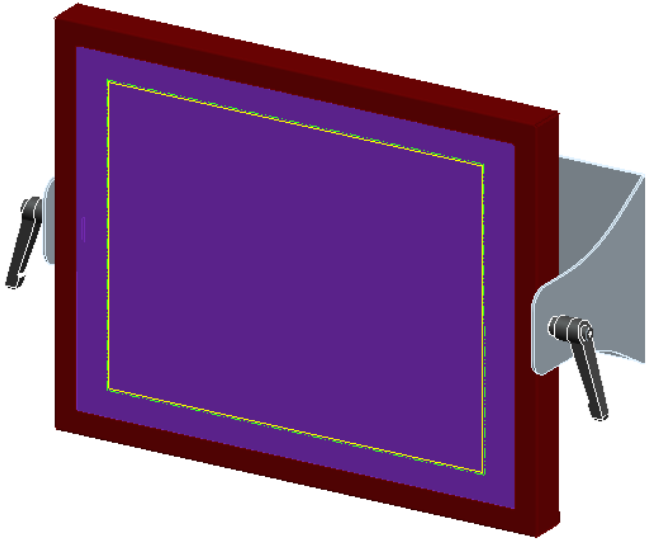


Step 2. Please follow the picture diagrams to assemble.
Explode View

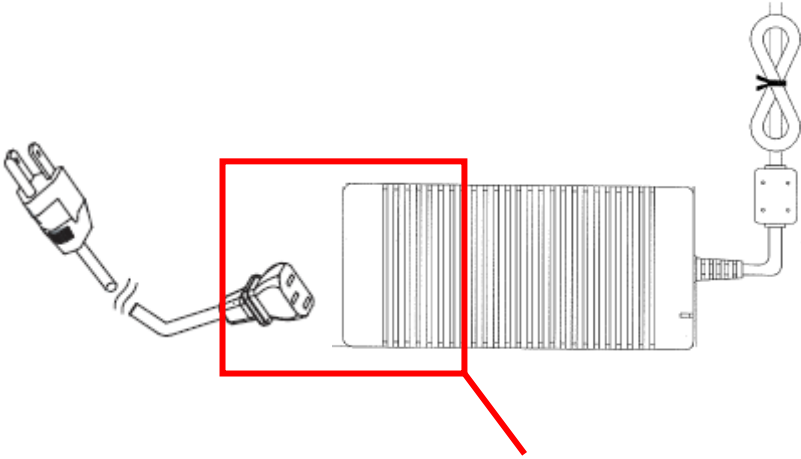


Step 3. Please tighten the black handle in a clockwise direction.





Disconnect Device



Unplug the power cord from the power adapter jack to disconnect the device.

Turn off the system:

Turning off WTP-9G66 properly is important for system reliability.

1. On the start menu, click "Shut down" and select "OK"

BIOS Setup

BIOS Introduction

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

BIOS Setup

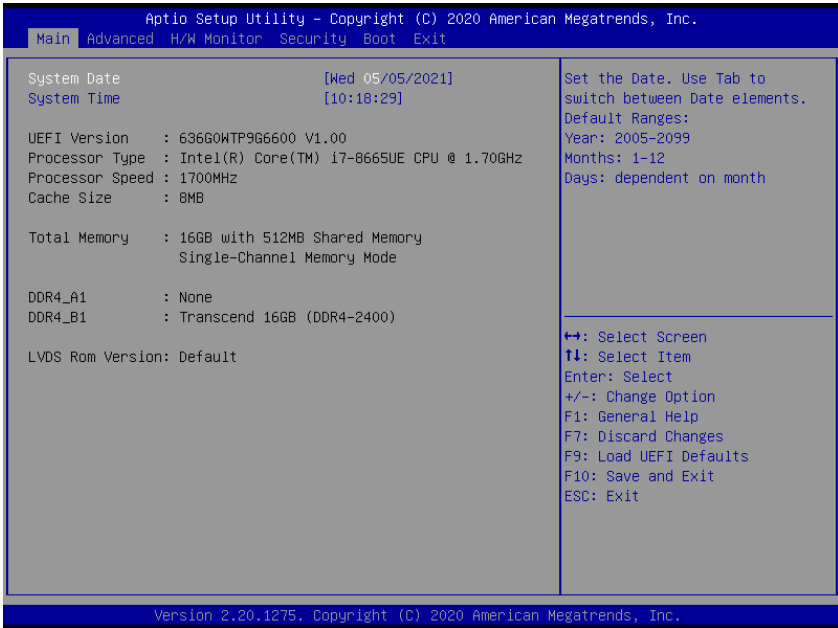
The AMI BIOS provides a Setup utility program for specifying the system configurations and settings. The BIOS ROM of the system stores the Setup utility. When you turn on the computer, the AMI BIOS is immediately activated. Pressing the key immediately allows you to enter the Setup utility. If you are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

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

When you enter the Setup utility, the Main Menu screen will appear on the screen. The Main Menu allows you to select from various setup functions and exit choices.

Main



This section provides information on the BIOS information, Embedded controller information and Battery information

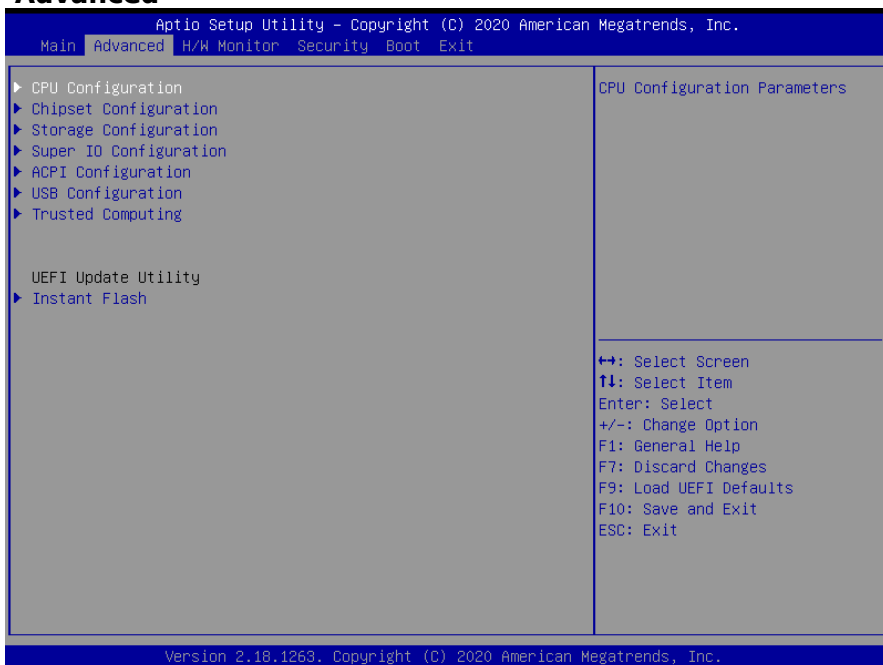
System Date

Set the system date. Use the <Tab> key to switch between data elements.

System Time

Set the system time. Use the <Tab> key to switch between time elements.

Advanced



CPU Configuration

CPU Configuration parameters

Intel SpeedStep Technology

Intel SpeedStep technology allows processors to switch between multiple frequencies and voltage points for better power saving and heat dissipation.

CPU C states support

Enable CPU C States support for power saving, It is recommended to keep C3,C6 and C7 all enabled for better power saving.

VT-d

Enable/Disable CPU VT-d

Chipset Configuration

Configure Chipset settings

DRAM Frequency

DRAM Frequency

Primary Graphics Adapter

Select a primary VGA.

Share Memory

Configure the size of memory that is allocated to the integrated graphics processor when the system boots up.

Active LFP

Select eDP or LVDS to Display

Primary IGFX Boot Display

Select the Video Device which will be activated during POST. This has no effect if external graphics present. Secondary boot display selection will appear based on your selection. VGA modes will be supported only on primary display.

Onboard HD Audio

Auto/Enable/Disable onboard HD audio. Set to auto to enable on board HD audio and automatically disable it when a sound card is installed.

Front Panel

Select Front Panel Type

Onboard LAN 1

Enable or disable the onboard network interface controller.

Onboard LAN 2

Enable or disable the onboard network interface controller.

PCIE1 Link Speed

Configure PCIE1 Slot Link Speed

Deep S4/S5

Select system deep S4-S5 configuration

'Auto' will disable the deep S4-S5 configuration if RTC/LAN/USB device power on settings enabled.

Storage Configuration

Configure Storage devices.

SATA Controllers(s)

Enables/disable the SATA controllers.

SATA Mode Selection

IDE: For better compatibility.

AHCI: Supports new features that improve performance.

SATA Aggressive Link Power Management

SATA Aggressive Link Power Management allows SATA devices to enter a low power state during periods of inactivity to save power. It is only supported by AHCI mode.

Hard Disk S.M.A.R.T

S.M.A.R.T stands for self-Monitoring, Analysis, and Reporting Technology, It is a monitoring system for

computer hard disk drives to detect and report on various indicators of reliability.

SATA3_1

External SATA

Enable SATA safe removal notifications. Please note that the SATA device will be downgraded to SATA2.

Hot Plug

Enable or disable Hot Plug for this port.

M2_1:

External SATA

Enable SATA safe removal notifications. Please note that the SATA device will be downgraded to SATA2.

Hot Plug

Enable or disable Hot Plug for this port

Super IO Configuration

Configure Super IO Settings.

COM1 Configuration

Set Parameters of COM1

Serial Port

Enable or Disable Serial Port (COM)

Type Select

Set COM TYPE.

COM2 Configuration

Set Parameters of COM1

Serial Port

Enable or Disable Serial Port (COM)

COM3 Configuration

Set Parameters of COM1

Serial Port

Enable or Disable Serial Port (COM)

COM4 Configuration

Set Parameters of COM1

Serial Port

Enable or Disable Serial Port (COM)

COM5 Configuration

Set Parameters of COM1

Serial Port

Enable or Disable Serial Port (COM)

COM6 Configuration

Set Parameters of COM1

Serial Port

Enable or Disable Serial Port (COM)

COM Port IRQ Mode

Set COM port IRQ mode

Parallel Port

Select Parallel Port(LPT.LPTE) or GPIO. Enabled;LPT Disabled :
GPIO

Device mode

Change the printer Port mode

Change Settings

Select an optimal settings for Super IO Device

WDT Timeout Reset

Enable/Disable Watch Dog Timer Timeout to reset system.

ACPI Configuration

Configure ACPI Settings.

Suspend to RAM

It is recommended to select auto for ACPI S3 power saving

ACPI HPET Table

Enable the high Precision Event Timer for better
performamance

PS/2 Keyboard Power On

Allow the system to be waked up by a PS/2 Keyboard

PCIe Devices Power On

Allow the system to be waked up by a PCIe device and
enable wake on LAN

RTC Alarm Power ON

Allow the System to be waked up by the real time clock
alarm. Set it to By OS to let it be handled by your operating
system.

USB Configuration

Configure the USB support.

Legacy USB Support

Enable Legacy USB support. AUTO option disables legacy
support if no USB devices are connected. DISABLE option will
keep USB Devices available only for EFI applications.

Trusted Computing

Trusted Computing Settings.

Security Device Support

Enables or Disables BIOS support for security device. O.S. will not show Security Device. TCG EFI protocol and INT1A interface will not be available

Instant Flash

Save UEFI files in your USB storage device and run Instant Flash to update your UEFI. Please note that your USB storage device must be FAT32/16/12 or NTFS files system. Only root directory is working on NTFS drive.

H/W Monitor

Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.

Main Advanced **H/W Monitor** Security Boot Exit

Hardware Health Event Monitoring	Quiet Fan Function Control
CPU Temperature : +51 °C	
M/B Temperature : +37 °C	
CHA_FAN1 Speed : N/A	
+3V : +3.312 V	
+3VSB : +3.328 V	
+5V : +5.040 V	
VDCORE : +0.736 V	
VCCM : +1.216 V	
DC_IN : +18.848 V	
CHA_FAN1 Setting [Full On]	←→: Select Screen
Case Open Feature [Disabled]	F1: Select Item
	Enter: Select
	+/-: Change Option
	F1: General Help
	F7: Discard Changes
	F9: Load UEFI Defaults
	F10: Save and Exit
	ESC: Exit

Version 2.20.1275. Copyright (C) 2020 American Megatrends, Inc.

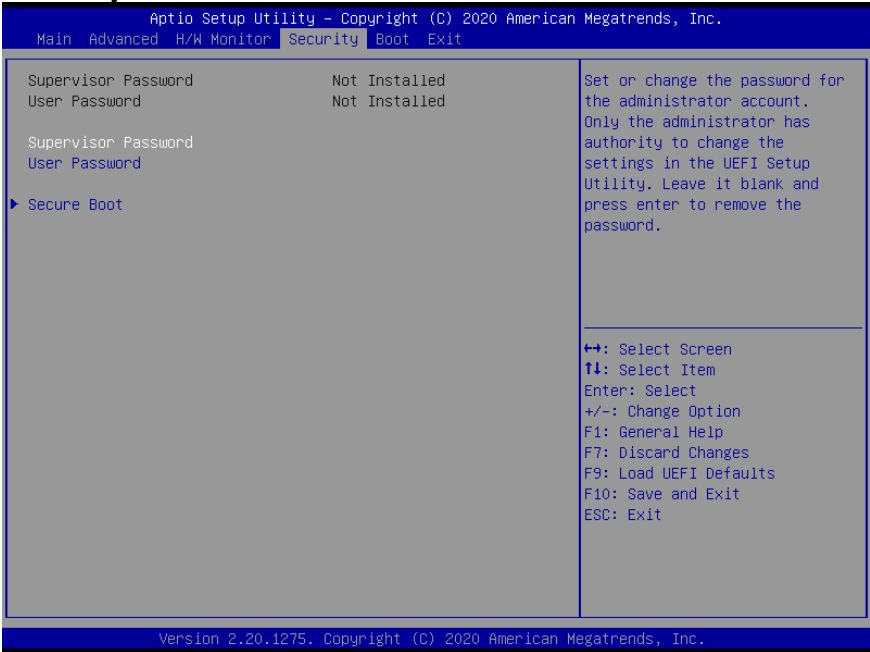
CPU_FAN1 Setting

Quiet Fan Function Control

CHA_FAN1 Setting

Quiet Fan Function Control

Security



Supervisor Password

Set or change the password for the administrator account. Only the administrator has authority to change the settings in the UEFI setup Utility. Leave it blank and press enter to remove the password

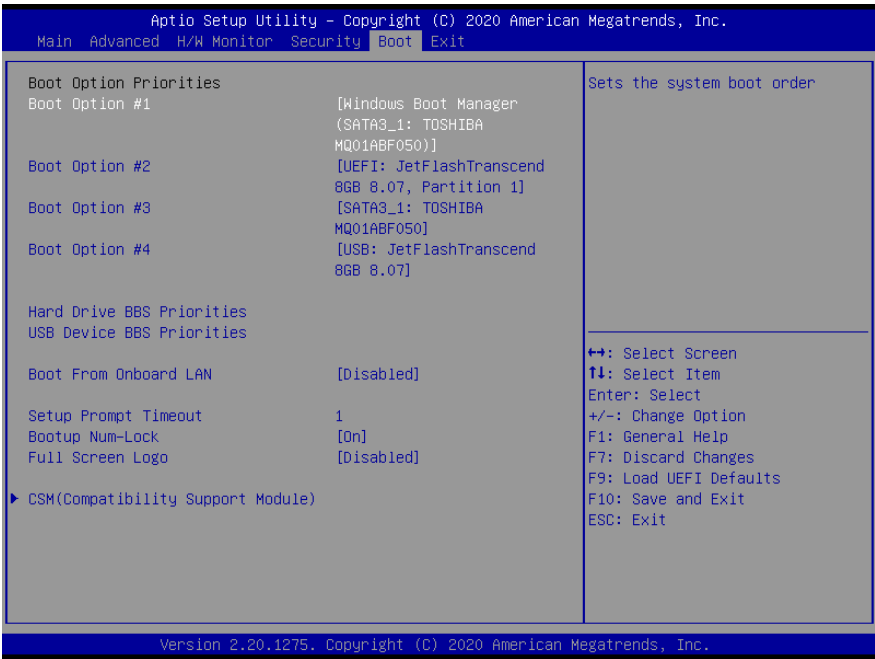
User Password

Set or change the password for the user account. Users are unable to change the settings in the UEFI Setup Utility. Leave it blank and press enter to remove the password.

Secure Boot

Enable to support Windows 8 secure boot.

Boot



Boot Option #1

Sets the system boot order

Boot Option #2

Sets the system boot order

Boot Option #3

Sets the system boot order

Boot Option #4

Sets the system boot order

Hard Drive BBS Priorities

Set the order of the legacy devices in this group

USB Drive BBS Priorities

Set the order of the legacy devices in this group

Boot From Onboard LAN

Allow the system to be waked up by the onboard LAN.

Setup Prompt Timeout

Configure the number of seconds to wait for the setup hot key .

Bootup Num-Lock

Select whether Num Lock should be turned on or off when the system boots up.

Full Screen Logo

Enable to display the boot logo or disable to show normal POST messages

CSM(Compatibility Support Module)

OpRom execution, boot options filter, etc.

CSM

Enable to launch the Compatibility Support Module. If you are using Windows 8 64-bit UEFI and all of your devices support UEFI, you may also disable CSM for faster boot speed..

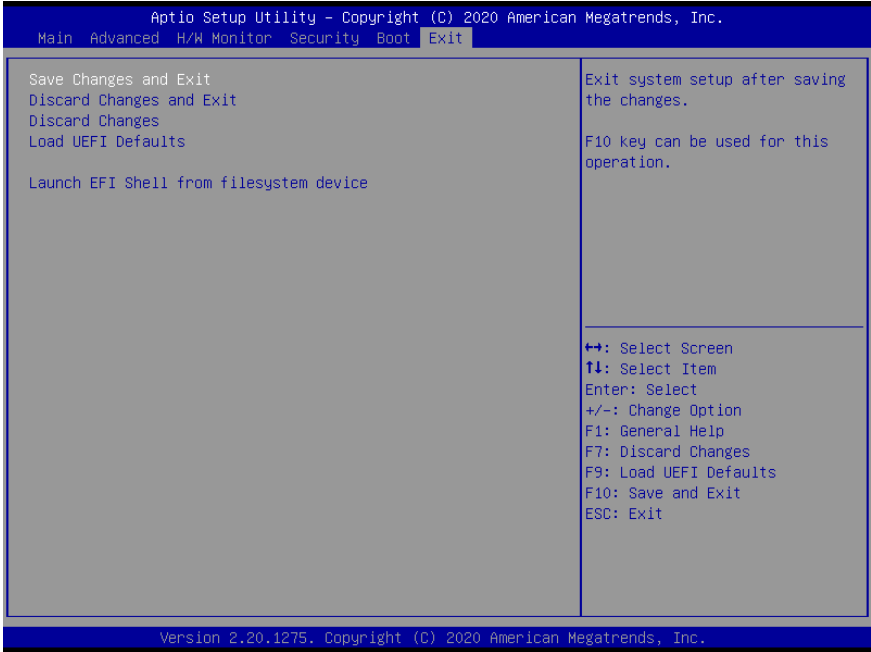
Launch PXE OpROM policy

Select UEFI only to run those that support UEFI option ROM only. Select Legacy only to run those that support legacy option ROM only. Select Do not launch to not execute both legacy and UEFI option ROM.

Launch Video OpROM policy

Select UEFI only to run those that support UEFI option ROM only. Select Legacy only to run those that support legacy option ROM only. Select Do not launch to not execute both legacy and UEFI option ROM.

Save & Exit



Save Changes and Exit

Exit system setup after saving the changes. F10 key can be used for this operation.

Discard Changes and Exit

Exit system setup without saving any changes. ESC key can be used for this operation.

Discard Changes

Discard Changes done so far to any of the setup options. F7 key can be used for this operation..

Load UEFI Defaults

Load UEFI Default values for all the setup questions. F9 key can be used for this operation..

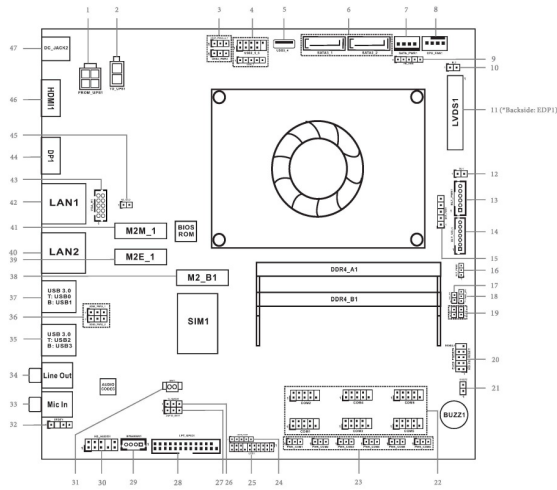
Launch EFI Shell from filesystem device

Attempts to Launch EFI Shell application (Shell.efi). from one of the available filesystem devices.

Appendix

A. Jumper settings and Connectors

Jumpers and Headers Setting Guide



- 1: 4-Pin ATX Power Connector
(Input 12V or 19-28V)
1-2 : GND
3-4 : DC Input



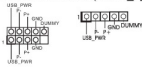
- 2: 2-pin UPS Module Power Input Connector
Pin1 : GND
Pin2 : DC Input



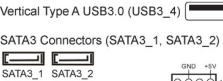
- 3: USB Power Setting Jumpers
(USB2_PWR5_6_7
(For USB2_5_6 and USB2_7))
(USB3_PWR4 (For USB3_4))
1-2 : +5V
2-3 : +5VSB



- 4: USB2.0 Headers (USB2_5_6, USB2_7)



- 5: Vertical Type A USB3.0 (USB3_4)



- 6: SATA3 Connectors (SATA3_1, SATA3_2)



- 7: SATA Power Output Connector



- 8: 4-Pin CPU Fan Connector (+12V)



- 9: Panel Power Select
(LCD_VCC) (PNI_PWR1)
1-2 : LCD_VCC : +3V
2-3 : LCD_VCC : +5V
4-5 : LCD_VCC : +12V



- 10: BL2
Open : Protect LCD_VCC
Short : No Protect LCD_VCC



- 11: LVDS Panel Connector

Pin	Signal Name	Pin	Signal Name
1	LCD_VCC	1	LCD_VCC
2	LCD_VCC	2	LVDS
3	LCD_VCC	3	LVDS
4	LCD_VCC	4	LCD_VCC
5	LVDS	5	LCD_VCC
6	LVDS	6	LCD_VCC
7	LVDS	7	LCD_VCC
8	LVDS	8	LCD_VCC
9	LVDS	9	LCD_VCC
10	LVDS	10	LCD_VCC
11	LVDS	11	LCD_VCC
12	LVDS	12	LCD_VCC
13	LVDS	13	LCD_VCC
14	LVDS	14	LCD_VCC
15	LVDS	15	LCD_VCC
16	LVDS	16	LCD_VCC
17	LVDS	17	LCD_VCC
18	LVDS	18	LCD_VCC
19	LVDS	19	LCD_VCC
20	LVDS	20	LCD_VCC
21	LVDS	21	LCD_VCC
22	LVDS	22	LCD_VCC
23	LVDS	23	LCD_VCC
24	LVDS	24	LCD_VCC
25	LVDS	25	LCD_VCC
26	LVDS	26	LCD_VCC
27	LVDS	27	LCD_VCC
28	LVDS	28	LCD_VCC
29	LVDS	29	LCD_VCC
30	LVDS	30	LCD_VCC
31	LVDS	31	LCD_VCC



- * eDP Connector
(on the Backside of PCB)



- 12: BL1
Open : Protect LCD_BLT_VCC
Short : No Protect LCD_BLT_VCC



- 13: Backlight Power Connector
(BLT_PWR1)

Pin	Signal Name
1	GND
2	LCD_BLT_VCC
3	LCD_BLT_VCC
4	LCD_BLT_VCC
5	LCD_BLT_VCC
6	LCD_BLT_VCC
7	CON_LBKLT_EN
8	CON_LBKLT_CTL
9	CON_LBKLT_CTL
10	CON_LBKLT_CTL
11	CON_LBKLT_CTL
12	CON_LBKLT_CTL
13	CON_LBKLT_CTL
14	CON_LBKLT_CTL
15	CON_LBKLT_CTL
16	CON_LBKLT_CTL
17	CON_LBKLT_CTL
18	CON_LBKLT_CTL
19	CON_LBKLT_CTL
20	CON_LBKLT_CTL
21	CON_LBKLT_CTL
22	CON_LBKLT_CTL
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26	CON_LBKLT_CTL
27	CON_LBKLT_CTL
28	CON_LBKLT_CTL
29	CON_LBKLT_CTL
30	CON_LBKLT_CTL
31	CON_LBKLT_CTL
32	CON_LBKLT_CTL
33	CON_LBKLT_CTL
34	CON_LBKLT_CTL
35	CON_LBKLT_CTL
36	CON_LBKLT_CTL
37	CON_LBKLT_CTL
38	CON_LBKLT_CTL
39	CON_LBKLT_CTL
40	CON_LBKLT_CTL

Pin	Signal Name
1	GND
2	LCD_VCC
3	LCD_VCC
4	LCD_VCC
5	LCD_VCC
6	LCD_VCC
7	LCD_VCC
8	LCD_VCC
9	LCD_VCC
10	LCD_VCC
11	LCD_VCC
12	LCD_VCC
13	LCD_VCC
14	LCD_VCC
15	LCD_VCC
16	LCD_VCC
17	LCD_VCC
18	LCD_VCC
19	LCD_VCC
20	LCD_VCC
21	LCD_VCC
22	LCD_VCC
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26	LCD_VCC
27	LCD_VCC
28	LCD_VCC
29	LCD_VCC
30	LCD_VCC
31	LCD_VCC
32	LCD_VCC
33	LCD_VCC
34	LCD_VCC
35	LCD_VCC
36	LCD_VCC
37	LCD_VCC
38	LCD_VCC
39	LCD_VCC
40	LCD_VCC

- 14: Backlight Volume Control
(BLT_VOL1)

Pin	Signal Name
1	GND
2	BLT_DW
3	BLT_UP
4	PWRON
5	GND
6	GND
7	GND
8	GND
9	GND
10	GND
11	GND
12	GND
13	GND
14	GND
15	GND
16	GND
17	GND
18	GND
19	GND
20	GND
21	GND
22	GND
23	GND
24	GND
25	GND
26	GND
27	GND
28	GND
29	GND
30	GND
31	GND
32	GND
33	GND
34	GND
35	GND
36	GND
37	GND
38	GND
39	GND
40	GND

- 15: Backlight Power Select
(LCD_BLT_VCC) (BKT_PWR1)
1-2 : LCD_BLT_VCC : +5V
2-3 : LCD_BLT_VCC : +12V
4-5 : LCD_BLT_VCC : DC_IN



- 16: Backlight Control Level
(CON_LBKLT_CTL) (BLT_PWM1)
1-2 : eDP Control
2-3 : CH7511B Control



- 17: SIO_AT1
Open : ATX Mode
Short : AT Mode



- 18: ATX/AT Mode Select (PWR_JP1)
1-2 : AT Mode
2-3 : ATX Mode



- 19: Chassis Intrusion Headers
C1
Close : Active case open
Open : Normal
C2
Close : Normal
Open : Active case open



- 20: System Panel Header

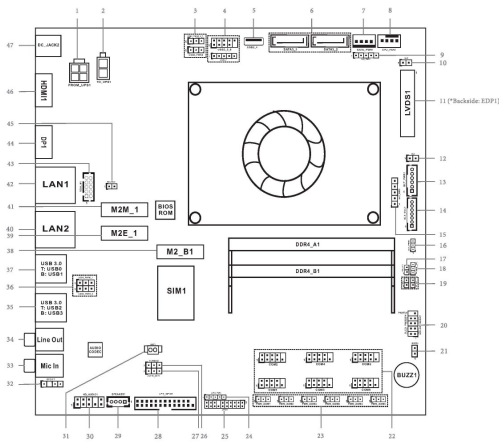


- 21: Buzzer



- 22: COM1, 2, 3, 4, 5, 6 Headers

Pin	Signal Name	Pin	Signal Name	Pin	Signal Name	Pin	Signal Name
1	RRXD	4	RTXDM	6	CSM#	8	NC
2	RRXD	4	RTXDM	6	CSM#	8	NC
3	DDCD#	3	TXAD	5	GND	7	BRTS#
4	DDCD#	3	TXAD	5	GND	7	BRTS#
5	DDCD#	3	TXAD	5	GND	7	BRTS#
6	DDCD#	3	TXAD	5	GND	7	BRTS#
7	DDCD#	3	TXAD	5	GND	7	BRTS#
8	DDCD#	3	TXAD	5	GND	7	BRTS#
9	DDCD#	3	TXAD	5	GND	7	BRTS#
10	DDCD#	3	TXAD	5	GND	7	BRTS#
11	DDCD#	3	TXAD	5	GND	7	BRTS#
12	DDCD#	3	TXAD	5	GND	7	BRTS#
13	DDCD#	3	TXAD	5	GND	7	BRTS#
14	DDCD#	3	TXAD	5	GND	7	BRTS#
15	DDCD#	3	TXAD	5	GND	7	BRTS#
16	DDCD#	3	TXAD	5	GND	7	BRTS#
17	DDCD#	3	TXAD	5	GND	7	BRTS#
18	DDCD#	3	TXAD	5	GND	7	BRTS#
19	DDCD#	3	TXAD	5	GND	7	BRTS#
20	DDCD#	3	TXAD	5	GND	7	BRTS#
21	DDCD#	3	TXAD	5	GND	7	BRTS#
22	DDCD#	3	TXAD	5	GND	7	BRTS#
23	DDCD#	3	TXAD	5	GND	7	BRTS#
24	DDCD#	3	TXAD	5	GND	7	BRTS#
25	DDCD#	3	TXAD	5	GND	7	BRTS#
26	DDCD#	3	TXAD	5	GND	7	BRTS#
27	DDCD#	3	TXAD	5	GND	7	BRTS#
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30	DDCD#	3	TXAD	5	GND	7	BRTS#
31	DDCD#	3	TXAD	5	GND	7	BRTS#
32	DDCD#	3	TXAD	5	GND	7	BRTS#
33	DDCD#	3	TXAD	5	GND	7	BRTS#
34	DDCD#	3	TXAD	5	GND	7	BRTS#
35	DDCD#	3	TXAD	5	GND	7	BRTS#
36	DDCD#	3	TXAD	5	GND	7	BRTS#
37	DDCD#	3	TXAD	5	GND	7	BRTS#
38	DDCD#	3	TXAD	5	GND	7	BRTS#
39	DDCD#	3	TXAD	5	GND	7	BRTS#
40	DDCD#	3	TXAD	5	GND	7	BRTS#



* This motherboard supports RS232C422-485 on COM1, 2 ports.
Please refer to below table for the pin definition, in addition, COM1, 2 port (RS232C422-485) can be adjusted in BIOS setup utility > Advanced Screen -> Super I/O Configuration. You may refer to our user manual for details.

COM1, 2 Ports Pin Definition		
Pin	NC232	NC422
1	DCD<	TX<
2	RIxD	ROK<
3	TXD<	TX+<
4	DTX<	RD<
5	CMO	CMO
6	DSR<	N/A
7	RTS<	N/A
8	CTS<	N/A
9	PWR<	PWR<

- 23: COM Port Pin9 PWR Setting Jumpers
 PWR_COM1 (For COM Port1)
 PWR_COM2 (For COM Port2)
 PWR_COM3 (For COM Port3)
 PWR_COM4 (For COM Port4)
 PWR_COM5 (For COM Port5)
 PWR_COM6 (For COM Port6)



- 24: Digital Input / Output Power Select (JGPIO_PWR1)

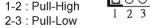


- 25: LPC Header



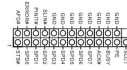
- 26: Clear CMOS Header (CLR_MOS1)
 1-2: Normal
 2-3: Clear CMOS

- 27: Digital Input / Output Default Value Setting (JGPIO_SET1)



- 28: Printer Port / GPIO Header (LPT_GPIO1)

Printer Port:

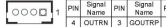


GPIO:



* If you want to use the printer port function, please short pin4 and pin5 on Digital Input / Output Power Select (JGPIO_PWR1).

- 29: 3W Audio AMP Output Wafer



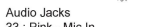
- 30: Front Panel Audio Header



- 31: Battery Connector



- 32: SPDIF Header



- Audio Jacks

- 33: Pink - Mic In

- 34: Green - Line Out

- 35: USB3.0 Ports (USB3_2_3)

- 1-2: Normal

- 2-3: Clear CMOS

- 36: USB Power Setting Jumpers (USB3_PWR0_1 (For USB3_0_1) (USB3_PWR2_3 (For USB3_2_3))

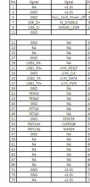
- 1-2: +5V

- 2-3: +5VSB

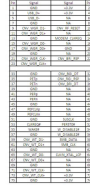
- 37: USB3.0 Ports (USB3_0_1)

M.2 Socket Pin Definition

- 38: M.2 Key-B Socket (M2_B1)



- 39: M.2 Key-E Socket (M2E_1)



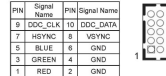
- 41: M.2 Key-M Socket (M2M_1)



- 40: RJ45 LAN Port (LAN2)

- 42: RJ45 LAN Port (LAN1)

- 43: VGA Connector (Optional)



* VGA Connector is shared with DisplayPort. If you enable one, the other one will not function.

- 44: DisplayPort (Optional)

- 45: M.2 Select

- Open : M.2 PCIe

- Short : M.2 SATA

- 46: HDMI Port

- 47: DC Jack