⚠ Warning

- Only qualified service personnel should install and service this product to avoid injury.

- Observe all ESD procedures during installation to avoid damaging the equipment.

❶ Preparing tools

Unpack the equipment and make sure the following tools are available and delivered contents are correct before you begin the installation procedure.

1-1. User-provided tools
 • Anti-static wrist wrap

1-2. Packing List

Item	Description	Quantity
01	POC‑40 series system	1
02	Drivers & utilities disc	1
03	3-pin pluggable terminal block	1
04	DIN-rail mount clip	1
05	Screw package	1

❷ POC-40 Series Front Panel
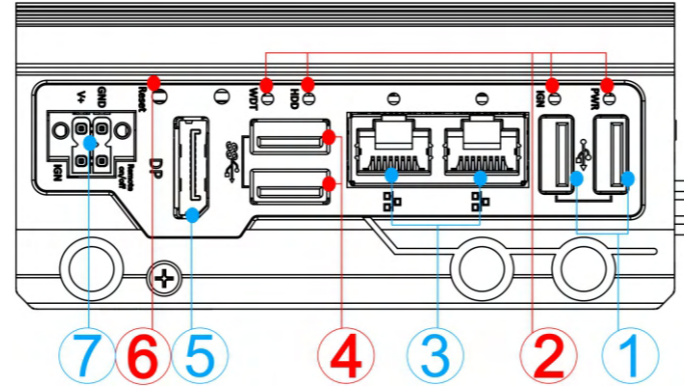
| No.	Item	Description
1	USB 2.0 port	The USB 2.0 ports offer up to 480Mbit/s bandwidth and are backward compatible with USB 1.1/ 1.0.
2	System status LED	Four system LEDs, Power (PWR), Ignition control (IGN), Hard Disk Drive (HDD) and Watchdog Timer (WDT).
3	GbE port	The Ethernet port offers up to 1Gb/s transfer bandwidth
4	USB 3.1 Gen1 port	The USB 3.1 Gen1 ports support up to 5Gbit/s data transfer bandwidth and are backward compatible with USB 2.0/ 1.1/ 1.0.
5	DisplayPort	The dual DisplayPort ports can support up to 4096 x 2160 @ 30Hz resolution each.
6	Reset button	Use this button to manually reset the system.
7	4-pin terminal block (DC/ ignition input)	Compatible with DC power input from 12 to 20V, the terminal block can also be used for ignition signal input.
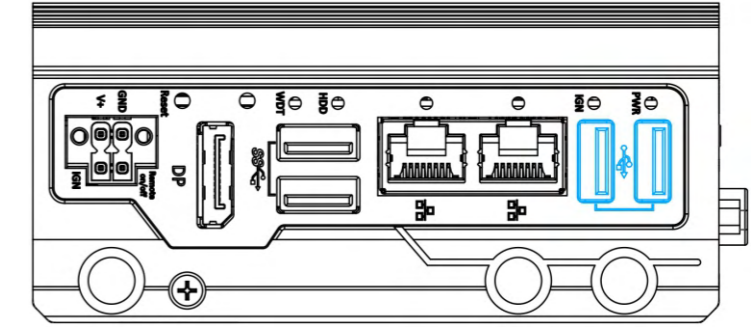
❸ USB2.0 Port

The USB2.0 ports are implemented via native xHCI (eXtensible Host Controller Interface) and are backward compatible with USB 1.1 and USB 1.0 devices. Legacy USB support is also provided so you can use USB keyboard/ mouse in DOS environment.

xHCI driver is supported natively in Windows 10, therefore you do not need to install xHCI driver to utilize USB functions.
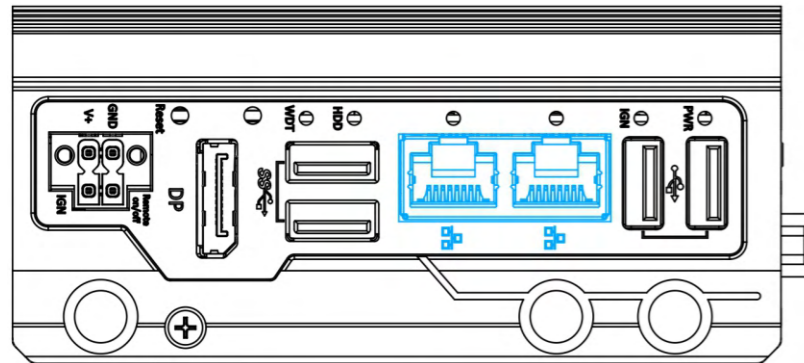
❹ Gb Ethernet Port

The system offers two Gigabit Ethernet ports using Intel® I210 GbE controller. When plugged in and connected via the Ethernet cable, the LED on the RJ45 connector indicate connection status.

Active/Link LED

| LED Color	Status	Description
Orange	Off	Ethernet port is disconnected
	On	Ethernet port is connected and no data transmission
	Flashing	Ethernet port is connected and data is transmitting/receiving

❺ USB3.1 Gen1
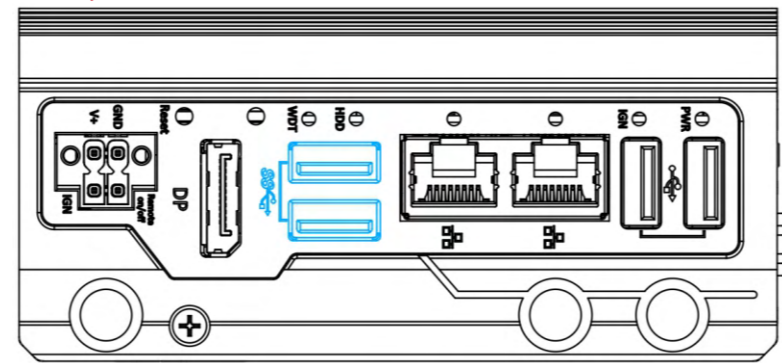
The system offers two USB 3.0 (SuperSpeed USB) ports on its front panel. They are implemented by native xHCI (eXtensible Host Controller Interface) controller and are backward compatible with USB 2.0, USB 1.1 and USB 1.0 devices. Legacy USB support is also provided so you can use USB keyboard/mouse in DOS environment.

xHCI driver is supported natively in Windows 10, therefore you do not need to install xHCI driver in prior to utilize USB function.

❻ System Status LED
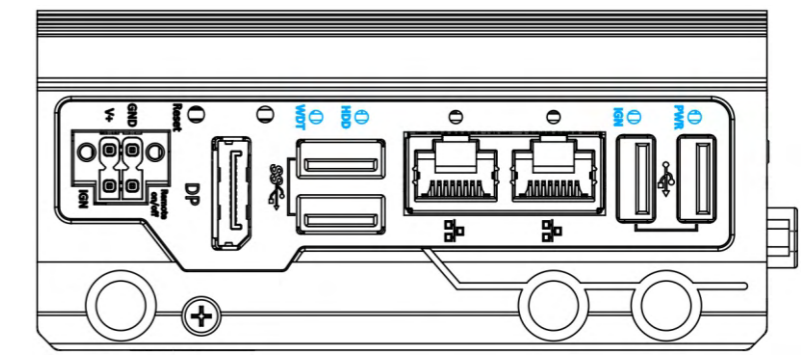
There are four LED indicators on the front panel: PWR, HDD, WDT and IGN. The descriptions of these four LEDs are listed in the following table.

Indicator	Color	Description
PWR	Green	Power indicator, lid when system is on
IGN	Green	This LED is used to indicate ignition signal status (lid when IGN signal is applied).
HDD	Red	Hard drive indicator, flashing when SATA HDD is active
WDT	Yellow	Watchdog timer indicator, flashing when watchdog timer has started
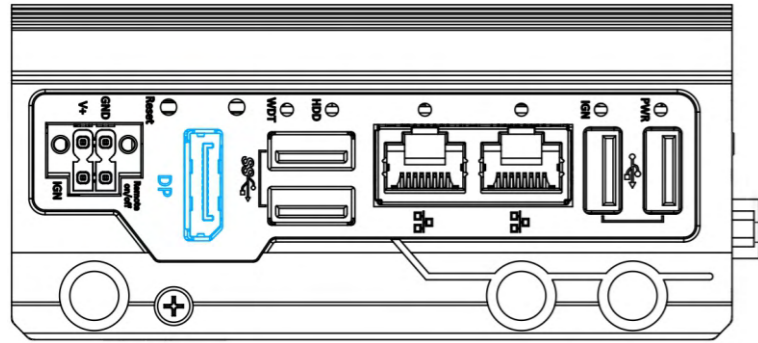
❼ DisplayPort

The system has a DisplayPort (DP) output which are digital display interfaces that mainly connect video source and carry audio to a display device. When connecting a DP, it can deliver up to 4K UHD (4096 x 2160 @ 60Hz) in resolution. The system is designed to support passive DP adapter/ cable. You can connect to other display devices using DP-to-HDMI cable or DP-to-DVI cable.
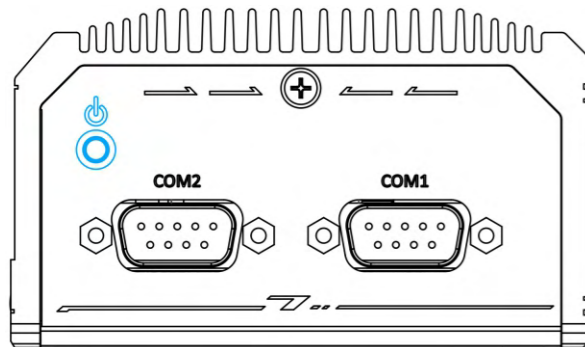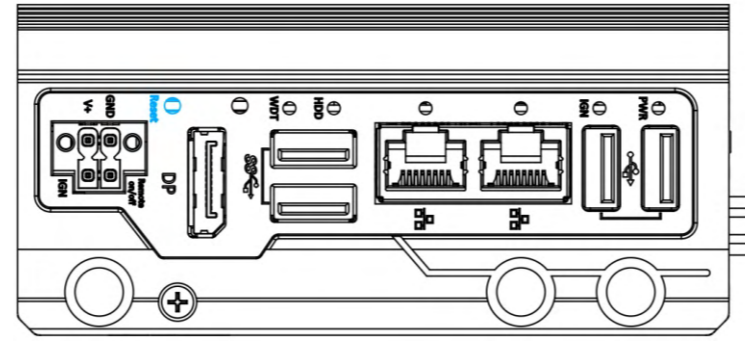

DP-to-HDMI   **DP-to-DVI**

To achieve best DisplayPort output resolution in Windows, you need to install corresponding graphics drivers

❽ Reset Button

Use to manually reset during system halt or malfunction. To reset, please use a pin-like object (eg. tip of a pen) to access the reset button.

❾ 4-pin Terminal Block

The system accepts DC power input from 12 to 20V via a 4-pin terminal block. The terminal block can also accept ignition signal input (IGN).

Warning

Please make sure the voltage of DC power is correct before you connect it to the system. Supplying a voltage over 20V will damage the system.

❿ POC-40 Top Panel

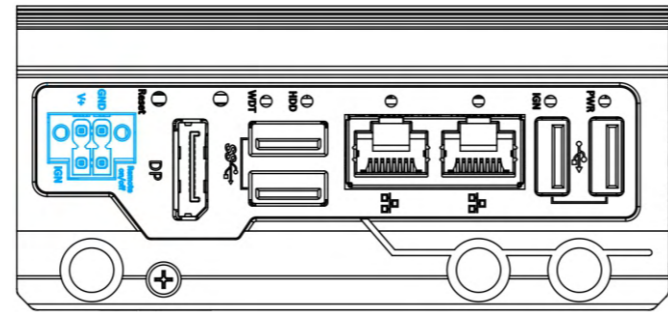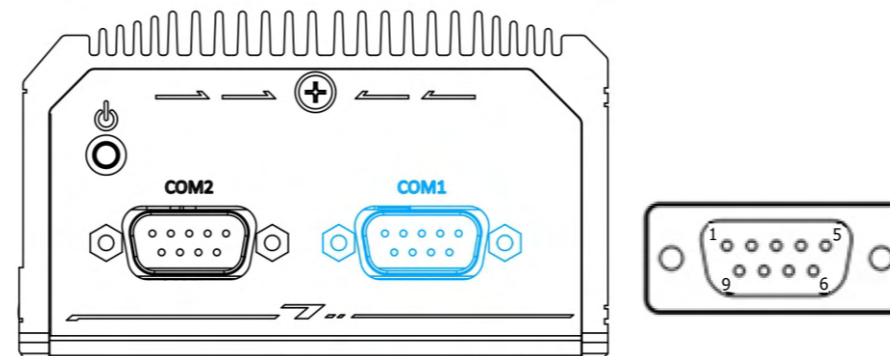| No.	Item	Description
1	Power button	Use this button to turn on or shutdown the system.
2	COM port 2	Three 3-wire RS-232 port
3	COM port 1	Software programmable RS-232/ 422/ 485 port

⓫ Power Button

The power button is a non-latched switch for ATX mode on/off operation. Press to turn on the system, PWR LED should light up and to turn off, you can either issue a shutdown command in the OS, or just press the power button. In case of system halts, you can press and hold the power button for 5 seconds to force-shutdown the system. Please note that there is a 5 seconds interval between two on/off operations (i.e. once turning off the system, you will need to wait for 5 seconds to initiate another power-on operation).
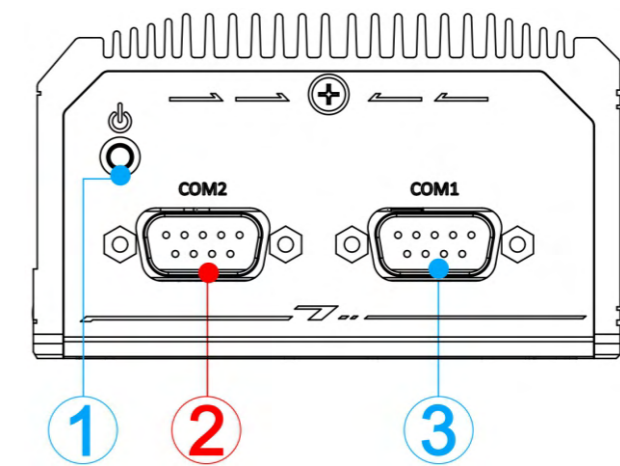
⓬ COM Port (COM1)

COM1 is a software-configurable RS-232/422/485 port via 9-pin D-Sub male connector. The operation mode, slew rate and termination of COM1 can be set in BIOS setup utility. The following table describes the pin definition of COM ports.
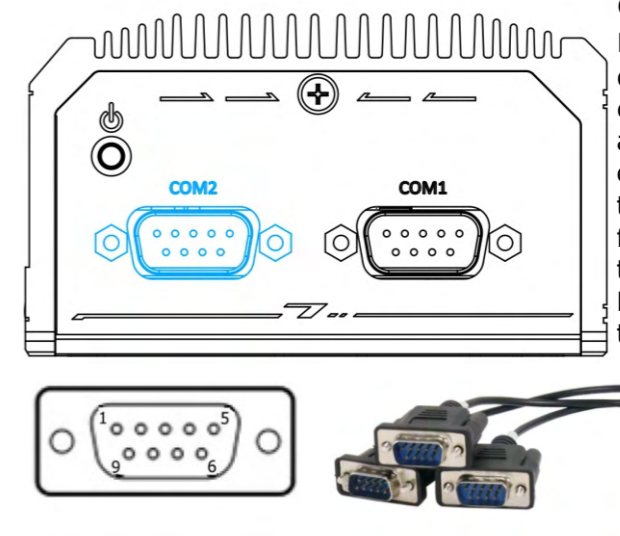
	COM1		
Pin#	RS-232 Mode	RS-422 Mode	RS-485 Mode (Two-wire 485)
1	DCD		
2	RX	422 TXD+	485 TXD+/RXD+
3	TX	422 RXD+	
4	DTR	422 RXD-	
5	GND	GND	GND
6	DSR		
7	RTS		
8	CTS	422 TXD-	485 TXD-/RXD-
9	RI		

⓭ COM Port (COM2/ COM3/ COM4)

COM2 is a 3-port 9-wire RS-232 port. You can directly connect to one external device, or use an optional 1-to-3 Y-cable to connect up to three devices. The following table describes the pin definition of the DB9 connector as well as the Y-cable.

	COM2/ 3/ 4 DB9				Y-Cable DB9	
Pin#	COM2	COM3	COM4	Pin#	COM2/ COM3/ COM4	
1				1		
2	RX			2	RX	
3	TX			3	TX	
4		TX		4		
5	GND	GND	GND	5	GND	
6		RX		6		
7			TX	7		
8			RX	8		
9				9		