

## USB 2.0 Port(s)

- Standard ports for older USB accessories
- (Such as Keyboards, Mice, USB Drives, etc.)

## USB 3.0 Port(s)

- Standard USB ports for Faster, high-speed devices.
- (I.e, External SSDs, USB flash drives.)
- Supports data transfers up to 5 Gbps

## USB 3.0 Controller

- Hardware inside Pi that manages the USB 3.0 Ports
- Handles data communication between those devices in the port and the CPU

## LPDDR4 SDRAM

- Functions as the Pi's main system memory.
- Holds OS, Runs Applications, and stores data.

## 4-pole 3.5mm Audio & Composite Video

- Combined analog audio and composite video output
- Supports stereo audio, video, and ground. (4 pole)

## CSI Camera Connector

- Interface that connects official Raspberry Pi camera modules
- Enables the capturing of photos and video with the camera hardware

## Secondary Micro HDMI

- One of two Micro HDMI ports on the Pi
- Enables the output of video or audio to an external display

## Main Micro HDMI

- Primary Micro HDMI port for connecting to a display

## USB-C 3A/5V

- Power input port for the Pi
- Provides 5 volts up to 3 amps for the board and accessories. (3A/5V)

## MicroSD Card Slot

- Storage interface for the Pi's OS and Files
- The Pi uses microSD cards for booting and storage

## DSI Display Connector

- Display Serial Interface port to connect the official Pi touchscreen display.

## Broadcom CPU

- CPU powering the Pi
- Handles all computing tasks and runs the OS

## Wifi/Bluetooth Module

- Wireless communication chip that connects the Pi to Wi-Fi and Bluetooth
- Enables the connection of Bluetooth devices and wireless networking.

#### GPIO Header

- General Purpose Input/Output pins
- Used to connect sensors, LEDs, motors, and other electronics

#### Gigabit Controller

- Network controller managing Gigabit Ethernet port
- Allows wired network connection

#### POE Header

- Power over Ethernet header
- Enables the connection of a separate POE HAT (powers the pi using enabled networks via Ethernet cable)

#### Gigabit Ethernet Port

- RJ45 port for wired network connectivity