

# ATX06 Specification

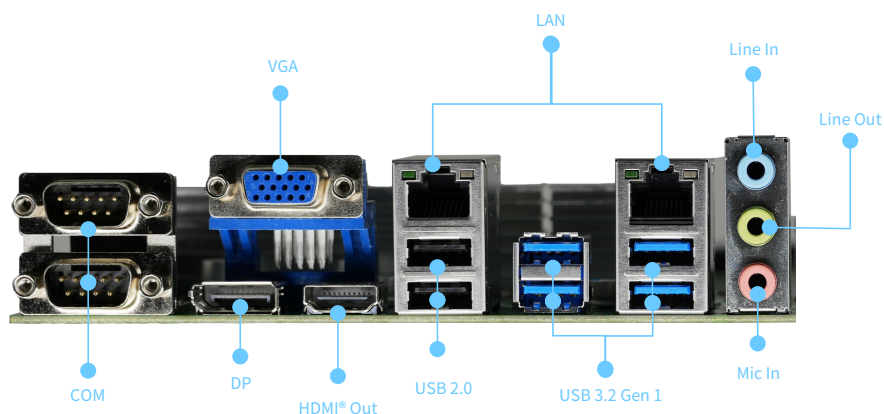


## Overview

Decenta ATX06 is a standard ATX form factor motherboard, which is built on Intel® Z390/Q370/B360 chipset. It has multiple expansion slots and rich I/O interfaces, making it widely used in Industrial automation, embedded systems, communication equipment, industrial servers and other scenarios.

- Intel® LGA 1151 Socket: Ready for 9<sup>th</sup>/8<sup>th</sup> gen Core™ i9/i7/i5/i3 & Pentium®/Celeron® processor
- Support 4x DDR4 2666MT/s U-DIMM, Dual Channel, up to 128GB
- Support VGA/HDMI®/DP/eDP Quad-display
- 1x M.2 E-Key 2230 Slot for Wi-Fi module, Support Wi-Fi 6E & Bluetooth 5.3
- 1x M.2 M-Key 2242/2280 Slot for SSD
- 2x PCIe 3.0 X16 Slots(Support 1x16 or 2x8 mode), 3x PCIe 3.0 X4 Slots(X4 Signal), 2x PCI Slots
- Support TPM 2.0 encryption technology

## I/O Overview



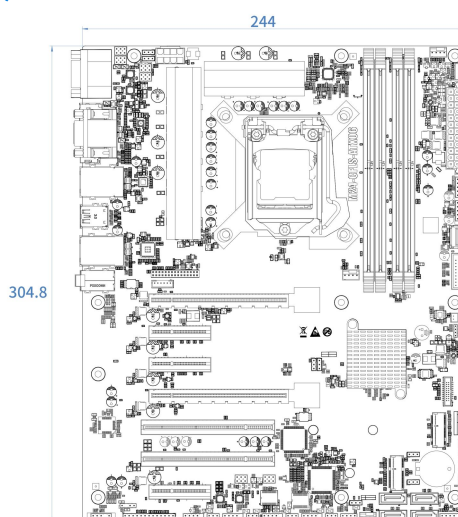
# Specifications

| Model          |            |                          | M24-CFLS-ATX06                                                                                                         |                                                                     |
|----------------|------------|--------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| SKU            |            |                          | SKU1(Default)                                                                                                          | SKU2                                                                |
| Processor      |            |                          | Support Intel® 9 <sup>th</sup> /8 <sup>th</sup> gen Core™ i9/i7/i5/i3 & Pentium®/Celeron® processor, LGA 1151, TDP 95W |                                                                     |
| Chipset        |            |                          | Intel® Z390/Q370, TDP 6W                                                                                               | Intel® Z390/B360, TDP 6W                                            |
| Power Phase    |            |                          | 4(2+2)+1+1Phase-switching voltage regulator<br>*Monitors for CPU Cores, Chipset Voltages, Memory                       |                                                                     |
| Memory         | Type       |                          | 4x DDR4 2666MT/s U-DIMM Memory, Dual Channel                                                                           |                                                                     |
|                | Capacity   |                          | Max.128GB                                                                                                              |                                                                     |
| Graphic        | Controller |                          | Intel® UHD Graphics 630                                                                                                |                                                                     |
|                | Connector  |                          | VGA/HDMI®/DP/eDP                                                                                                       |                                                                     |
| Network        | Ethernet   | Controller               | 1x Intel® i219V, Co-lay with Intel® i219LM<br>1x Intel® i210                                                           |                                                                     |
|                |            | Connector                | 1GbE RJ45                                                                                                              |                                                                     |
|                | Wi-Fi      |                          | 1x M.2 E-Key 2230 Slot for Wi-Fi 6E & BT5.3, with PCIe 3.0 & CNVi mode                                                 |                                                                     |
| Audio          | Controller |                          | Realtek ALC897                                                                                                         |                                                                     |
| Storage        | SSD        |                          | 1x M.2 M-Key 2242/2280 Slot, Support PCIe 3.0 X4(NVMe) & SATA mode                                                     | 1x M.2 M-Key 2242/2280 Slot, Support SATA mode                      |
|                | SATA       |                          | 4                                                                                                                      |                                                                     |
| Expansion Slot | PCIe       |                          | 2x PCIe 3.0 X16 Slots(Support 1x16 or 2x8 mode)<br>3x PCIe 3.0 X4 Slots(X4 Signal)                                     | 1x PCIe 3.0 X16 Slot(X16 Signal)<br>2x PCIe 3.0 X4 Slots(X4 Signal) |
|                | PCI        |                          | 2                                                                                                                      |                                                                     |
| I/O            | Rear       | LAN                      | 2x RJ45                                                                                                                |                                                                     |
|                |            | VGA                      | 1, with resolution of 1920 x 1200 @60Hz                                                                                |                                                                     |
|                |            | HDMI® Out                | 1, with resolution of 4K@30Hz                                                                                          |                                                                     |
|                |            | DP                       | 1, with resolution of 4K@60Hz                                                                                          |                                                                     |
|                |            | USB 3.2 Gen 1            | 4                                                                                                                      |                                                                     |
|                |            | USB 2.0                  | 2                                                                                                                      |                                                                     |
|                |            | COM                      | 2x DB9 (RS232/422/485)                                                                                                 |                                                                     |
|                |            | Mic in                   | 1                                                                                                                      |                                                                     |
|                |            | Line in                  | 1                                                                                                                      |                                                                     |
|                |            | Line out                 | 1                                                                                                                      |                                                                     |
|                | Internal   | LED                      | 1x P_LED_Green(Solid Green)                                                                                            |                                                                     |
|                |            | COM                      | 2x RS232, Header<br>2x RS232/422/485, Header                                                                           |                                                                     |
|                |            | eDP                      | 1x 30(2*15)Pin Header, with resolution of 4K@60Hz                                                                      |                                                                     |
|                |            | eDP BL                   | 1x 6Pin Header                                                                                                         |                                                                     |
|                |            | USB 3.2 Gen 1            | 2 via (20-1)Pin Header                                                                                                 |                                                                     |
|                |            | USB 2.0                  | 4 via 2x (10-1)Pin Header, 2 is reserved<br>1 via Connector for security dongle                                        | 2 via 1x (10-1)Pin Header<br>1 via Connector for security dongle    |
|                |            | LPT/GPIO Header          | 1x 2*13(26-1)Pin header/ 8-bit (4 in, 4 out) Default GPIO 3.3V                                                         |                                                                     |
|                |            | Power Connector          | 1x 24Pin ATX + 1x 8Pin ATX                                                                                             |                                                                     |
|                |            | CPU Fan                  | 1x 4Pin Header                                                                                                         |                                                                     |
|                |            | Chassis Fan              | 3x 4Pin Chassis Fan Headers                                                                                            |                                                                     |
|                |            | Chassis Intrusion Header | 1x (4-1)Pin Header                                                                                                     |                                                                     |
|                |            | ATX/AT Mode Jumper       | 1x 3Pin Jumper                                                                                                         |                                                                     |
|                |            | AAFP                     | 1x 2*5(10-1) Pin Front Panel Audio Header                                                                              |                                                                     |

# Specifications

| Model          |             |                                     | M24-CFLS-ATX06                                         |
|----------------|-------------|-------------------------------------|--------------------------------------------------------|
| I/O            | Internal    | System Panel Header                 | 1x 2*5(10-1) Pin Header                                |
|                |             | Buzzer                              | 1                                                      |
|                |             | ME Lock Jumper                      | 1x 3Pin Jumper                                         |
|                |             | SPDIF_Out Header                    | 1x (4-1)Pin Header                                     |
|                |             | PS/2 KB/MS Header                   | 1x 2*4(8)Pin Header                                    |
|                |             | COM Setting jumper(5V/12V/RI)       | 6x 6Pin Jumper                                         |
|                |             | COM(RS232/422/485) Select Jumper    | 4x 6pin Jumper                                         |
|                |             | RS485/422 Termination Select Jumper | 4x 3Pin Jumper                                         |
|                |             | Power On Wafer                      | 1x 2Pin Header, Reserved                               |
|                |             | SMBus Wafer                         | 1x 4Pin Header, Reserved                               |
|                |             | CLRTC                               | 1x 3Pin Header                                         |
|                |             | TPM                                 | 1x 2*10(20-1)Pin Header                                |
|                |             | PCI CLK Select Jumper               | 1x 66MHz Disbale/Enable Select Jumper                  |
|                |             | Feature                             | dTPM                                                   |
| Watchdog Timer |             |                                     | Programmable 1 ~ 255 sec                               |
| Environment    | Temperature | Operating                           | 0 ~ 60 °C                                              |
|                |             | Non-operating                       | -40 ~ 85 °C                                            |
|                | Humidity    | Operating                           | 95%@ 40 °C RH non-condensing                           |
|                |             | Non-operating                       | 95% @ 60 °C RH non-condensing                          |
| Power          |             |                                     | Standard ATX PSU                                       |
| OS             |             |                                     | Win 10/Win 11/Linux(ubuntu)                            |
| Bios           |             |                                     | Insyde                                                 |
| Dimensions     |             |                                     | 304.8mm x 244 mm                                       |
| Accessory      |             |                                     | 2x M.2 Screws<br>1x I/O Shield<br>2x 430mm SATA Cables |

## Dimensions (Unit: mm)



\*Specifications and information contained in this document are furnished for informational use only, and are subject to change at any time without notice, and should not be construed as a commitment by Decenta.