

ATX01 Specification

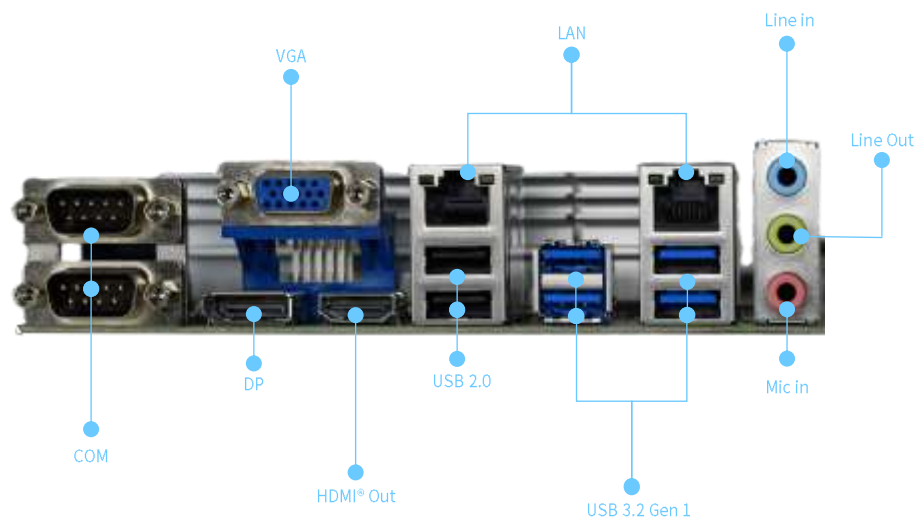


Overview

Decenta ATX01 is a standard ATX form factor motherboard, which is built on Intel® Q670 chipset. It performs well in industrial control and automation applications that require high-performance computing and scalability, such as Industrial automation, embedded systems, communication equipment, industrial servers and other scenarios.

- Intel® LGA1700 Socket: Ready for 15th/14th/13th/12th gen Core™ i9/i7/i5/i3 & Pentium®/Celeron® processor
- Support 4 x DDR5 5600/4800MT/s UDIMM, Dual Channel, up to 128GB
- Support VGA/HDMI®/DP Tri-display
- 1x M.2 E-Key 2230 Slot, 2x M.2 M-Key 2242/2280 Slots
- 2x PCIe 5.0 X16 Slots(Support 1x16 or 2x8 mode), 2x PCIe 4.0 X4 Slots, 1x PCIe 3.0 X4 Slot, 2x PCI Slots
- Support TPM 2.0, Watchdog

I/O Overview



Specifications

Model			M23-RPLS-ATX01
Processor			Support Intel® 14 th /13 th /12 th gen & Ultra Core™ i9/i7/i5/i3 & Pentium®/Celeron® processor, LGA1700, TDP 125W
Chipset			Intel® Q670, TDP 6W
Power Phase			8+1+1Phase-switching voltage regulator *Monitors for CPU Cores, Chipset Voltages, Memory
Memory	Type		4 x DDR5 5600*/4800MT/s U-DIMM, Dual Channel
	Capacity		Max.128GB
Graphic	Controller		Intel® UHD Graphics
	Connector		VGA/HDMI®/DP
Network	Ethernet	Controller	1x Intel® i219V(Co-lay with Intel® i219 LM) & 1x Intel® i210 1x Intel® i226V, Reserved
		Connector	1GbE RJ45
	Wi-Fi		1x M.2 E-Key 2230 Slot for Wi-Fi 6E + BT 5.3, Support PCIe 3.0 & CNVi Signal
Audio	Controller		Realtek ALC897
Storage	SSD		M.2_1: M-Key 2242/2280 Slot, Support PCIe 4.0 X4(NVMe) mode, Reserved M.2_2: M-Key 2242/2280 Slot, Support PCIe 4.0 X4(NVMe) & SATA 3.0 mode
	SATA		4
Expansion	PCIe		2x PCIe 5.0 X16 Slots(Support 1x 16 or 2x8 mode) 2x PCIe 4.0 X4 Slots 1x PCIe 3.0 X4 Slot
	PCI		2
I/O	Rear	LAN	2x RJ45
		VGA	1, with resolution of 1920 x 1200 @60Hz
		HDMI® Out	1, with resolution of 4K@60Hz
		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	2 x RS232, Header 2x RS232/422/485, 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 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 + 1x 4Pin 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 Header
		AAFP	1x 2*5(10-1) Pin Front Panel Audio Header
		System Panel Header	1x 2*5 (10-1) Pin Header
		Buzzer	1
		Speaker	1x 4Pin Header, Reserved
		ME Lock Jumper	1x 3Pin Jumper
		Watchdog	1x 3Pin Header, Reserved
		SPDIF_Out Header	1x (4-1)Pin Header

Specifications

Model			M23-RPLS-ATX01
I/O	Internal	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 Temination 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 Disable/Enable Select Jumper
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
Feature	dTPM		V2.0
	Watchdog Timer		Programmable 1 ~ 255 sec
Power			Standard ATX PSU
OS			Win 10/Win 11/Linux(ubuntu)
Bios			Insyde
Dimensions			304.8mm x 244mm
Accessory			2x M.2 Screws 1x I/O Shield 2x 430mm SATA Cables
Remark			* DDR5-5600MT/s support pending ecosystem readiness of memory modules and Intel validation

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.