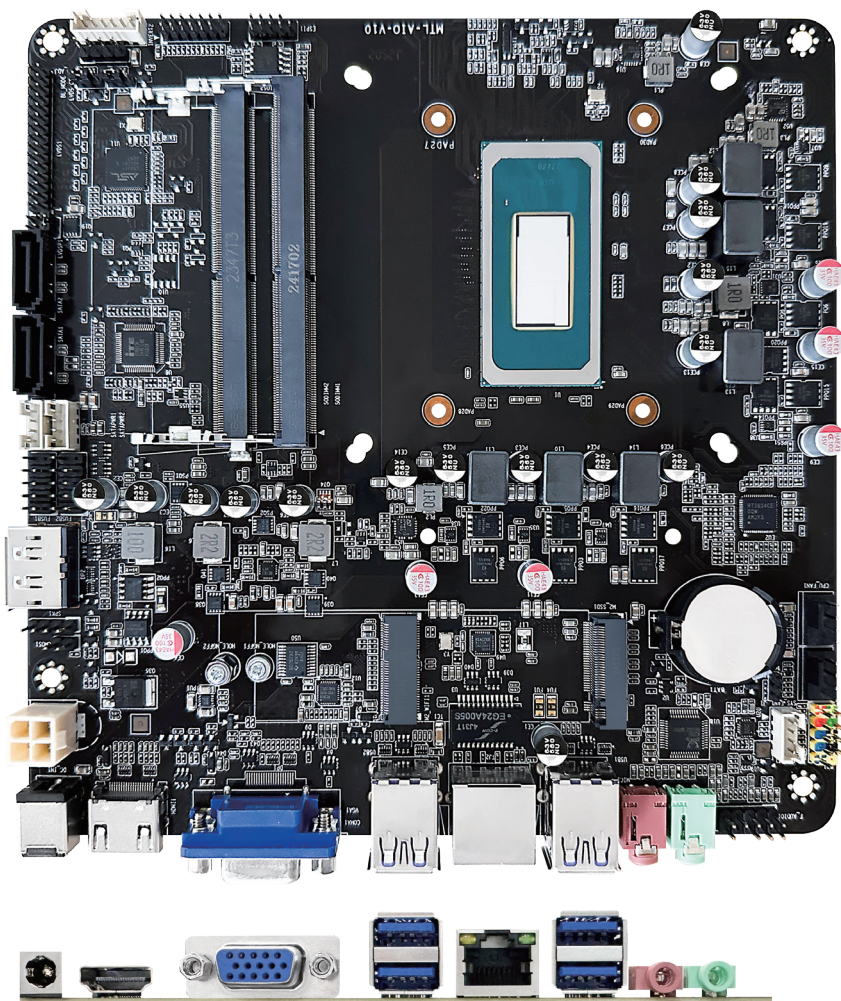


MTL_AIO_V10 Motherboard

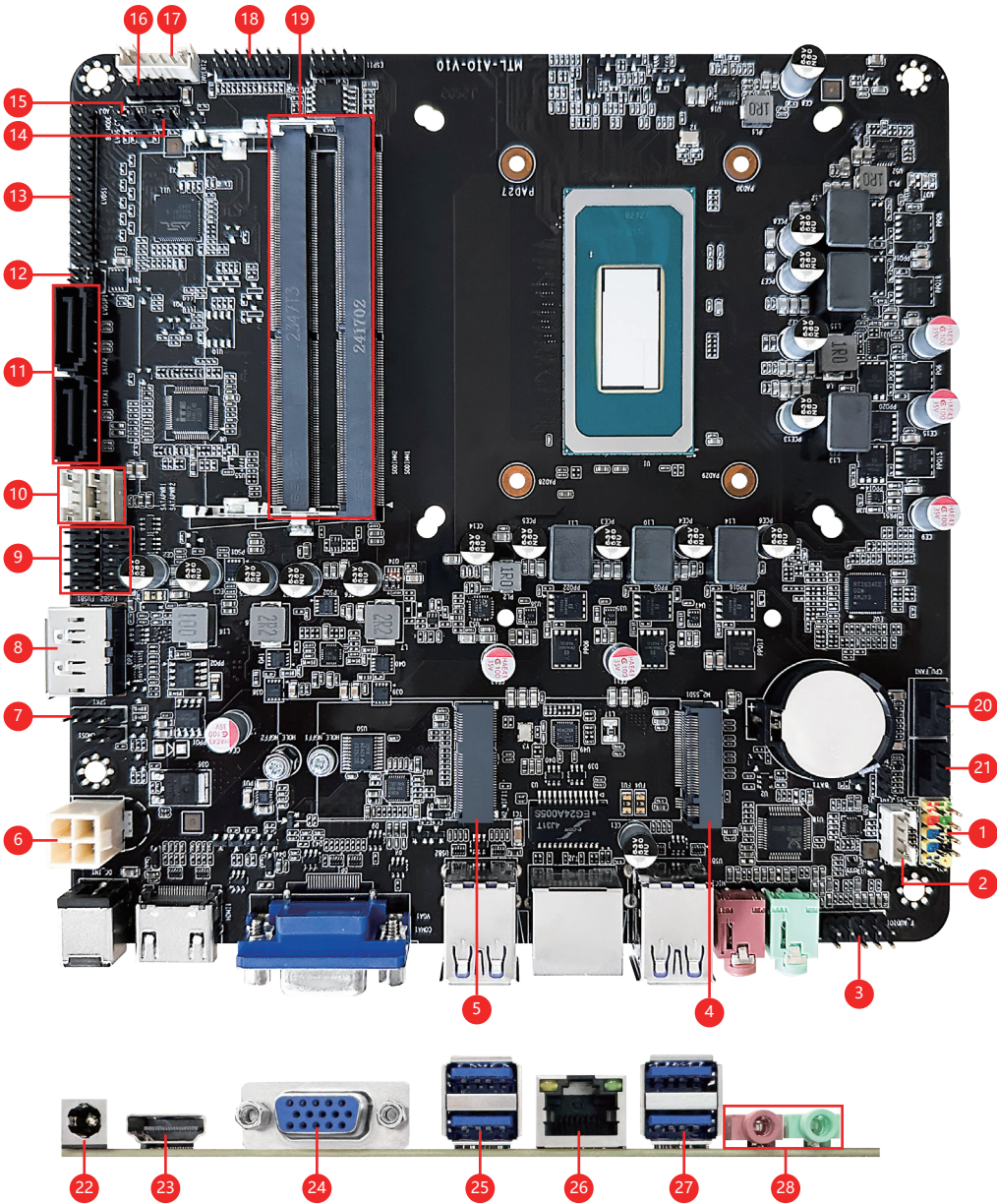
Product characteristics:

- Support Intel Meteor Lake-H/U Core™ Ultra 5/Core™ Ultra 7/Core™ Ultra 9 CPU
- Support 8*USB (4*USB2.0 Pin /4*USB3.0 interface)
- Support 1*LAN(Realtek 8111H 1Gbps/100Mbps/10Mbps Ethernet Controller)



MTL_AIO_V10 Motherboard Specifications

Size	170mm*170mm
CPU	Support Intel Meteor Lake-H/U Core™ Ultra 5/Core™ Ultra 7/Core™ Ultra 9 CPU
RAM	Support 2*DDR5 Maximum support 64GB
BIOS	AMIBIOS 256Mbit Flash
Internal I/O	1*Front panel Pin 1*SPEAKT1 Pin 1*F_AUDIO Pin 1*4Pin Power outlet 1*SPK1 Pin 2*FUSB1-2 Pin(Support 4*USB2.0 interface) 2*JSATA Power supply interface(1-2) 2*SATA Data interface(1-2) 1*LVDSP1 Jumper 1*LVDS1 Pin 1*LVDS_CTL Jumper 1*BL_MODE Jumper 1*LED_ADJ Pin 1*INVERT Pin 1*JTPM Pin 1*CPU_FAN Pin 1*SYS_FAN Pin
Rear I/O	1*DP interface 1*DC 12V-19V interface 1*HDMI interface 1*VGA interface (Optional DP/COM/VGA Choose one of three) 4*USB3.0 interface 1*LAN interface 2*AUDIO interface (1*MIC、1*LINE OUT)
LAN	1*Realtek 8111H 1Gbps/100Mbps/10Mbps Ethernet Controller
Expansion slot	1*M.2 SSD PCIE4X 4.0 2280 slot / 1*M.2 WIFI slot (PCIE/CNVI)
Operating System	Windows10/11, Linux



1	Front panel Pin
2	SPEAKT1 Pin
3	F_AUDIO Pin
4	M.2 SSD1 slot
5	M.2 WIFI1 slot
6	4Pin Power outlet
7	SPK1 Pin
8	DP interface
9	FUSB1-2 Pin
10	JSATA Power supply interface(1-2)
11	SATA Data interface(1-2)
12	LVDS1 Jumper
13	LVDS1 Pin
14	LVDS_CTL Jumper
15	BL_MODE Jumper
16	LED_ADJ Pin
17	INVERT Pin
18	JTPM Pin
19	DDR5 Memory slots
20	SYS_FAN Pin
21	CPU_FAN Pin

22	DC 12V-19V interface	26	LAN interface
23	HDMI interface	27	USB3.0 interface
24	VGA interface (Optional DP/COM/VGA Choose one of three)	28	AUDIO interface (1*MIC、1*LINE OUT)
25	USB3.0 interface		

MTL_AIO_V10 Mainboard Definition

(1) Front panel Pin

Location	Pin	Definition	Pin	Definition
FP1 (2.54mm)	1	HDD_LED+	2	POWER LED+
	3	HDD_LED-	4	POWER LED-
	5	GND	6	Power Switch
	7	Reset Switch	8	GND
	9	NC		

(2) SPEAKT1 Pin

Location	Pin	Definition
SPEAKT	1	SPKOUT_L-
	2	SPKOUT_L+
	3	SPKOUT_R-
	4	SPKOUT_R+

(3) F_AUDIO Pin

Location	Pin	Definition	Pin	Definition
AUDIO (2.54mm)	1	MIC1_L	2	GND
	3	MIC1_R	4	NC
	5	LINEOUT_R	6	MIC1_JD
	7	GND	8	
	9	LINEOUT_L	10	LINEOUT_JD

(7) SPK1 Pin

Location	Pin	Definition
SPK1	1	SPEAK+
	2	NC
	3	NC
	4	SPEAK-

(9) FUSB1-2 Pin

Location	Pin	Definition	Pin	Definition
FUSB1 (2.54mm)	1	5V_RUN	2	5V_RUN
	3	USB_PN4	4	USB_PN5
	5	USB_PP4	6	USB_PP5
	7	GND	8	GND
	9	NC	10	GND

Location	Pin	Definition	Pin	Definition
FUSB2 (2.54mm)	1	5V_RUN	2	5V_RUN
	3	USB_PN4	4	USB_PN5
	5	USB_PP4	6	USB_PP5
	7	GND	8	GND
	9	NC	10	GND

(12) LVDSP Jumper

LVDSP	
1-2	3.3V
3-4	5V
5-6	12V

(14) LVDS_CTL Jumper

Location	Pin	Definition
LVDS_CTL	1-2	Open it LVDS
	2-3	Shut down LVDS

(15) BL_MOED Jumper

Location	Pin	Definition
BL_MOED	1-2	Negative dimming
	2-3	Positive dimming

(16) LED_ADJ Jumper

Location	Pin	Definition
LED_ADJ	1	Backlight brightness+
	2	Backlight brightness-
	3	GND
	4	Backlight switch

(17) INVERT Pin

Location	Pin	Definition
INVERT	1	GND
	2	GND
	3	BL_ADJ
	4	BKLT-EN
	5	+12V
	6	+12V

(18) JTPM Pin

Location	Pin	Definition	Pin	Definition
JTPM (2.0mm)	1	NC	2	NC
	3	NC	4	+3.3V
	5	SPI_MISO	6	NC
	7	NC	8	SPI_CLK
	9	GND	10	SPI_MOSI
	11	SPI_CS	12	PLTRST
	13		14	GPP_E01

(18) CPU_FAN Pin

Location	Pin	Definition
CPU_FAN1	1	GND
	2	+12V
	3	FAN_TAC
	4	FAN_CTL

(21) SYS_FAN Pin

Location	Pin	Definition
SYS_FAN	1	GND
	2	+12V
	3	FAN_TAC22
	4	FAN_CTL22