

ADLN100AV10 Mainboard

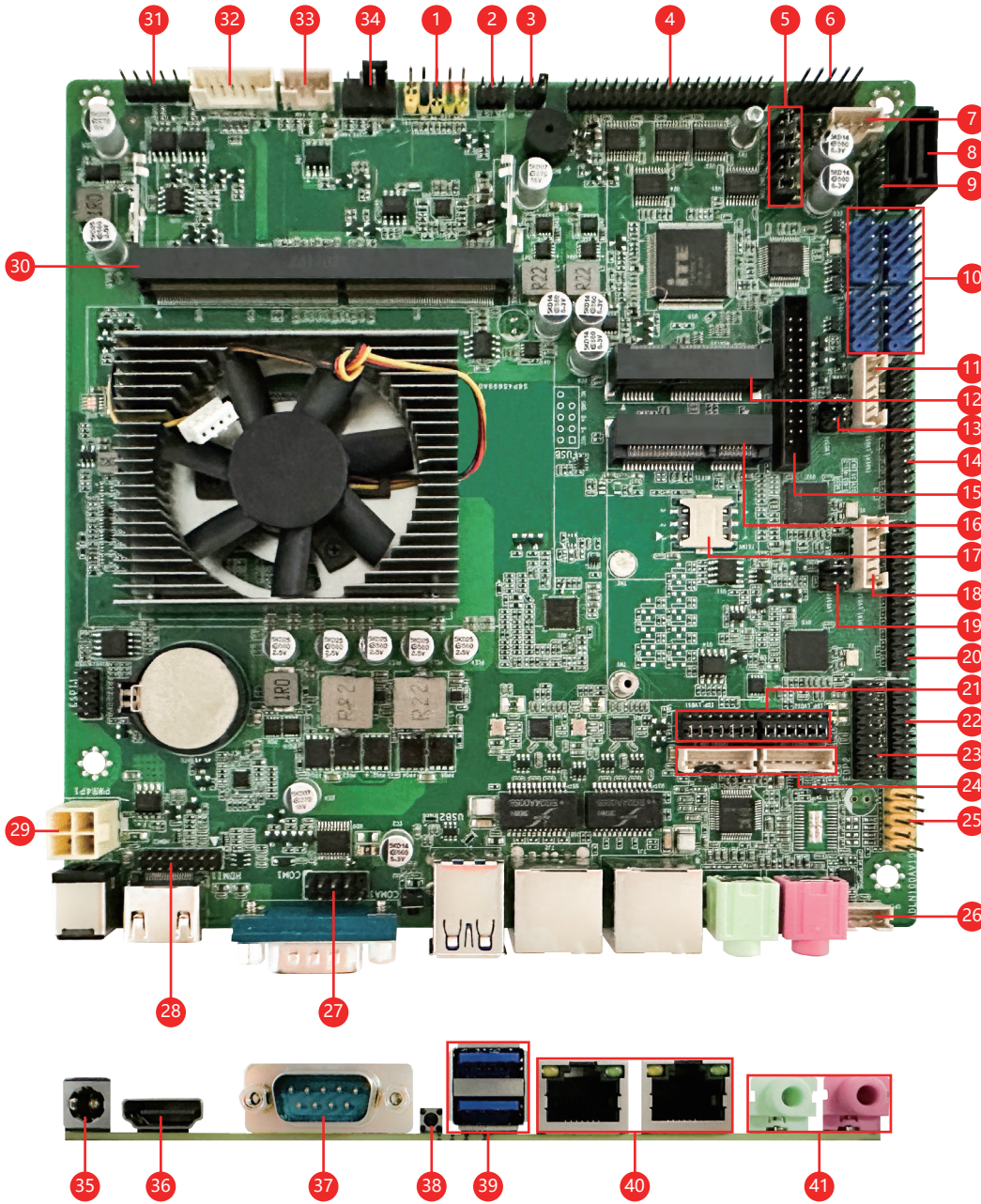
Product characteristics:

- Support Alder Lake-N CPU
- Support 11个USB (9*USB2.0 Pin/ 2*USB3.0 interface)
- Support 2*LAN(Realtek 8111H,1000Mbps/ 100Mbps/10Mbps Ethernet Controller)
- Support 2*EDP/2*LVDS/1*HDMI Displays the output



ADLN100AV10 Motherboard Specifications

Size	170mm*170mm
CPU	Alder Lake-N CPU
RAM	Support 1*DDR4 3200MT/s Max support 16GB
BIOS	AMIBIOS 128Mbit Flash
Internal I/O	1*Front panel Pin 1*GPIO Pin 1*FUN Jumper 1*COM3-6 Pin 2*COM_FUN Jumper 2*COM1-2 Pin 1*JSATA Power supply interface 1*SATA Data interface 5*FUSB2.0 Pin(Support 9*USB2.0 interface) 2*INVERT_LVDS1-2 Pin 2*LVDS1-2 Jumper 2*LVDS1-2 Pin 1*LPT Pin 2*EDP_LVDS1-2 Pin 2*EDP1-2 Pin 1*CFPA1 Pin 1*SPEAKT Pin 1*COM Pin 1*HDMI1 Pin 1*4PIN Power outlets 1*J485 Pin 1*JPS Pin 1*CPU_FAN Pin 1*SYS_FAN Pin
Rear I/O	1*DC 12V interface 1*HDMI interface 1*COM interface 2*USB3.0 interface 2*LAN interface 2*AUDIO interface (1*LINE OUT、1*MIC)
LAN	2*Realtek 8111H,1000Mbps/100Mbps/10Mbps Ethernet Controller
Expansion slot	1*MINI PICE Slot(MSATA)/1*MINI PICE Slot(WIFI)
Operating System	Windows10/11, Linux



1	Front panel Pin
2	GPIO Pin
3	FUN Jumper
4	COM3-6 Pin
5	COM_FUN Jumper
6	COM2 Pin
7	JSATA Power supply interface
8	SATA Data interface
9	FUSB2.0 Pin
10	FUSB2.0 Pin
11	INVERT_LVDS1 Pin
12	MINI PICE Slot(MSATA)
13	LVDSP1 Jumper
14	LVDS1 Pin
15	LPT Pin
16	MINI PICE slot(WIFI)
17	TSIM Card slots
18	INVERT_LVDS2 Pin
19	LVDSP1 Jumper
20	LVDS2 Pin
21	EDP_LVDS1-2 Pin
22	EDP1 Pin
23	EDP2 Pin

24	INVERT_EDP1-2 Pin	33	CPU_FAN Pin
25	CFPA1 Pin	34	SYS_FAN Pin
26	SPEAKT Pin	35	DC 12V interface
27	COM1 Pin	36	HDMI interface
28	HDMI1 Pin	37	COM interface
29	4PIN Power outlets	38	JCMOS button
30	DDR4 Memory slots	39	USB3.0 interface
31	J485 Pin	40	LAN interface
32	JPS Pin	41	AUDIO interface (1*LINE OUT、1*MIC)

ADLN100AV10 Mainboard Definition

(1) Front panel Pin

Location	Pin	Definition	Pin	Definition
FP1 (2.54mm)	1	3.3V	2	Power LED
	3	Hard Disk Drive LED	4	GND
	5	Reset Switch	6	Power Switch
	7	GND	8	GND
	9	NC		

(2) GPIO Pin

Location	Pin	Definition	Pin	Definition
GPIO (2mm)	1	GP37	2	3.3V
	3	GP36	4	5V
	5	GND	6	12V

(4) COM3-6 Pin

Location	Pin	Definition	Pin	Definition
COM36 (2mm)	1	3DCD	2	3SIN
	3	3SOUT	4	3DTR
	5	GND	6	3DSR
	7	3RTS	8	3CTS
	9	3RI	10	NC
	11	4DCD	12	4SIN
	13	4SOUT	14	4DTR
	15	GND	16	4DSR
	17	4RTS	18	4CTS
	19	4RI	20	NC
	21	5DCD	22	5SIN
	23	5SOUT	24	5DTR
	25	GND	26	5DSR
	27	5RTS	28	5CTS
	29	5RI	30	NC
	31	6DCD	32	6SIN
	33	6SOUT	34	6DTR
	35	GND	36	6DSR
	37	6RTS	38	6CTS
	39	6RI	40	NC

(3)FUN1 Jumper

Location	Pin	Definition	Pin	Definition	NOTE
FUN1 (2mm)	1	RI	2	Normal	此插针的功能为COM2供电选择,默认为不供电即跳帽置(1-2)
	3	RI	4	5V	
	5	RI	6	12V	

(5)COM2_FUN Jumper

Definition				
COM2_FUN	RS232	5-7	6-8	2-4
	RS485	1-2	3-4	5-6

(5)COM3_FUN Jumper

Definition				
COM3_FUN	RS232	5-7	6-8	2-4
	RS485	1-2	3-4	5-6

(6/27) COM1-2 Pin

Location	Pin	Definition	Pin	Definition
COM1 (2.54mm)	1	NDCDA	2	NSINA
	3	NSOUTA	4	NDTRA
	5	GND	6	NDSRA
	7	NRTSA	8	NCTSA
	9	NR1A		

Location	Pin	Definition	Pin	Definition
COM2 (2.54mm)	1	2DCD	2	2SIN
	3	2SOUT	4	2DTR
	5	GND	6	2DSR
	7	2RTS	8	2CTS
	9	2RI		

(9/10) FUSB1-5 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
FUSB2 (2.54mm)	1	5V_RUN
	2	FDM7
	3	FDP7
	4	GND

Location	Pin	Definition	Pin	Definition
FUSB3 (2.54mm)	1	5V_RUN	2	5V_RUN
	3	FDM1	4	FDM2
	5	FDP1	6	FDP2
	7	GND	8	GND
	9	NC	10	GND

Location	Pin	Definition	Pin	Definition
FUSB4 (2.54mm)	1	5V_RUN	2	5V_RUN
	3	FDM3	4	FDM4
	5	FDP3	6	FDP4
	7	GND	8	GND
	9	NC	10	GND

Location	Pin	Definition	Pin	Definition
FUSB5 (2.54mm)	1	5V_RUN	2	5V_RUN
	3	FDM5	4	FDM6
	5	FDP5	6	FDP6
	7	GND	8	GND
	9	NC	10	GND

(11/18) INVERT_LVDS1-2 Pin

Location	Pin	Definition	Pin	Definition
LVDS1 (2mm)	1	VDDLVD	2	VDDLVD
	3	VDDLVD	4	GND
	5	GND	6	LVDS_DP
	7	LVDS_DATA_0N	8	LVDS_DATA_0P
	9	LVDS_DATA_1N	10	LVDS_DATA_1P
	11	LVDS_DATA_2N	12	LVDS_DATA_2P
	13	GND	14	GND
	15	LVDS_CLKN	16	LVDS_CLKP
	17	LVDS_DATA_3N	18	LVDS_DATA_3P
	19	LVDS1_DATA_0N	20	LVDS1_DATA_0P
	21	LVDS1_DATA_1N	22	LVDS1_DATA_1P
	23	LVDS1_DATA_2N	24	LVDS1_DATA_2P
	25	GND	26	GND
	27	LVDS1_CLKN	28	LVDS1_CLKP
	29	LVDS1_DATA_3N	30	LVDS1_DATA_3P

Location	Pin	Definition
INVERT_LVDS1	1	GND
	2	GND
	3	BL_ADJ
	4	BKLT-EN
	5	+12V
	6	+12V

Location	Pin	Definition	Pin	Definition
LVDSP1 (2mm)	1	3.3V_RUN	2	LVDS1_POWER
	3	5V_RUN	4	LVDS1_POWER
	5	12V_RUN	6	LVDS1_POWER

NOTE

此插针的功能为LVDS1供电选择
 1. 请务必注意所使用的LVDS屏幕的电压。如果接入电压高于屏幕所允许的电压，可能会导致屏幕损坏。在连接屏幕之前，请确保电压匹配，以免造成不必要的损失。
 2. 跳帽默认放置于 (1-2) ,即3.3V电压

Location	Pin	Definition	Pin	Definition
LVDS2 (2mm)	1	VDDLVD	2	VDDLVD
	3	VDDLVD	4	GND
	5	GND	6	LVDS_DP
	7	LVDS_DATA_0N	8	LVDS_DATA_0P
	9	LVDS_DATA_1N	10	LVDS_DATA_1P
	11	LVDS_DATA_2N	12	LVDS_DATA_2P
	13	GND	14	GND
	15	LVDS_CLKN	16	LVDS_CLKP
	17	LVDS_DATA_3N	18	LVDS_DATA_3P
	19	LVDS1_DATA_0N	20	LVDS1_DATA_0P
	21	LVDS1_DATA_1N	22	LVDS1_DATA_1P
	23	LVDS1_DATA_2N	24	LVDS1_DATA_2P
	25	GND	26	GND
	27	LVDS1_CLKN	28	LVDS1_CLKP
	29	LVDS1_DATA_3N	30	LVDS1_DATA_3P

Location	Pin	Definition
INVERT_LVDS2	1	GND
	2	GND
	3	BL_ADJ
	4	BKLT-EN
	5	+12V
	6	+12V

Location	Pin	Definition	Pin	Definition
LVDS1 (2mm)	1	3.3V_RUN	2	LVDS1_POWER
	3	5V_RUN	4	LVDS1_POWER
	5	12V_RUN	6	LVDS1_POWER
NOTE				
此插针的功能为LVDS1供电选择 1.请务必注意所使用的LVDS屏幕的电压。如果接入电压高于屏幕所允许的电压，可能会导致屏幕损坏。在连接屏幕之前，请确保电压匹配，以免造成不必要的损失。 2.跳帽默认放置于 (1-2) ,即3.3V电压				

(15) LPT Pin

Location	Pin	Definition	Pin	Definition
LPT (2mm)	1	P_STB_R	2	P_AFD_R
	3	P_PD0_R	4	ERR-
	5	P_PD1_R	6	P_INIT_R
	7	P_PD2_R	8	P_SLIN_R
	9	P_PD3_R	10	GND
	11	P_PD4_R	12	GND
	13	P_PD5_R	14	GND
	15	P_PD6_R	16	GND
	17	P_PD7_R	18	GND
	19	ACK-	20	GND
	21	BUSY	22	GND
	23	PE	24	GND
	25	SLCT	26	NC

(21)EDP_LVDS1-2 Pin

Location	Pin	Definition	Pin	Definition	Pin	Definition	NOTE
EDP_LVDS1 (2mm)	1	EDP_CONN_AUXN	2	EDP_AUXN	2	EDP_LVDS_AUXN	此插针用于在LVDS1和eDP1信号之间进行选择。若需要使用eDP信号, 请将跳帽置于左侧, 即 (1-2) 区域。相反, 若需要使用LVDS信号, 请将跳帽置于右侧, 即 (2-3) 区域。
	4	EDP_CONN_AUXP	5	EDP_AUXP	5	EDP_LVDS_AUXP	
	7	EDP_CONN_TXP0	8	EDP_TXP0	8	EDP_LVDS_TXP0	
	10	EDP_CONN_TXN0	11	EDP_TXN0	11	EDP_LVDS_TXN0	
	13	EDP_CONN_TXP1	14	EDP_TXP1	14	EDP_LVDS_TXP1	
	16	EDP_CONN_TXN1	17	EDP_TXN1	17	EDP_LVDS_TXN1	
	19	EDP_CONN_HPDP	20	EDP_HPDP	20	EDP_LVDS_HPDP	

Location	Pin	Definition	Pin	Definition	Pin	Definition	NOTE
EDP_LVDS2 (2mm)	1	EDP_CONN_AUXN	2	EDP_AUXN	2	EDP_LVDS_AUXN	此插针用于在LVDS1和eDP1信号之间进行选择。若需要使用eDP信号, 请将跳帽置于左侧, 即 (1-2) 区域。相反, 若需要使用LVDS信号, 请将跳帽置于右侧, 即 (2-3) 区域。
	4	EDP_CONN_AUXP	5	EDP_AUXP	5	EDP_LVDS_AUXP	
	7	EDP_CONN_TXP0	8	EDP_TXP0	8	EDP_LVDS_TXP0	
	10	EDP_CONN_TXN0	11	EDP_TXN0	11	EDP_LVDS_TXN0	
	13	EDP_CONN_TXP1	14	EDP_TXP1	14	EDP_LVDS_TXP1	
	16	EDP_CONN_TXN1	17	EDP_TXN1	17	EDP_LVDS_TXN1	
	19	EDP_CONN_HPDP	20	EDP_HPDP	20	EDP_LVDS_HPDP	

(22/23)EDP1-2 Pin

Location	Pin	Definition	Pin	Definition
EDP1 (2mm)	1	EDP_VDD	2	EDP_VDD
	3	NC	4	
	5	GND	6	HPDET_EDP1
	7	EDP0N	8	EDP0P
	9	EDP1N	10	EDP1P
	11	NC	12	NC
	13	GND	14	GND
	15	EAUXN	16	EAUXP
	17	NC	18	NC
	19	NC	20	NC

Location	Pin	Definition
INVERT_EDP_1	1	GND
	2	GND
	3	BL_ADJ
	4	BKLT-EN
	5	+12V
	6	+12V

Location	Pin	Definition	Pin	Definition
EDP2 (2mm)	1	EDP_VDD	2	EDP_VDD
	3	NC	4	
	5	GND	6	HPDET_EDP1
	7	EDP0N	8	EDP0P
	9	EDP1N	10	EDP1P
	11	NC	12	NC
	13	GND	14	GND
	15	EAUXN	16	EAUXP
	17	NC	18	NC
	19	NC	20	NC

Location	Pin	Definition
INVERT_EDP_1	1	GND
	2	GND
	3	BL_ADJ
	4	BKLT-EN
	5	+12V
	6	+12V

(25)FPA Pin

Location	Pin	Definition	Pin	Definition
FPA1 (2.54mm)	1	P_STB_R	2	AUD_AGND
	3	P_PD0_R	4	NC
	5	P_PD1_R	6	MIC2-JD
	7	P_PD2_R	8	NC
	9	P_PD3_R	10	LINE2-JD

(26)SPEAKT Pin

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

(28)HDMI Pin

Location	Pin	Definition	Pin	Definition
HDMI (2mm)	1	DDI1_TXP0	2	HDMIC_SCL
	3	DDI1_TXN0	4	HDMIC_SDA
	5	DDI1_TXP1	6	NC
	7	DDI1_TXN1	8	HDMIC_HPD_SINK
	9	DDI1_TXP2	10	DDC_5V
	11	DDI1_TXN2	12	GND
	13	DDI1_TXP3	14	GND
	15	DDI1_TXN3	16	GND

(29)PWR Power outlets

Location	Pin	Definition	Pin	Definition
PWR4P4	1	GND	2	GND
	3	12V_STBY	4	12V_STBY

(31) J485 Pin

Location	Pin	Definition
J485	1	COM2_485+
	2	COM2_485-
	3	COM3_485+
	4	COM3_485-
	5	GND

(32)JPS Pin

Location	Pin	Definition
JPS	1	KB_DATA
	2	KB_CLK
	3	GND
	4	MS_DATA
	5	MS_CLK
	6	GND
	7	+5V

(33)CPU_FAN Pin

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

(34)SYS_FAN Pin

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

(38)JCMOS

Location	Pin	Definition
JCMOS1 (2.54mm)	1	GND
	2	RTCRST_N