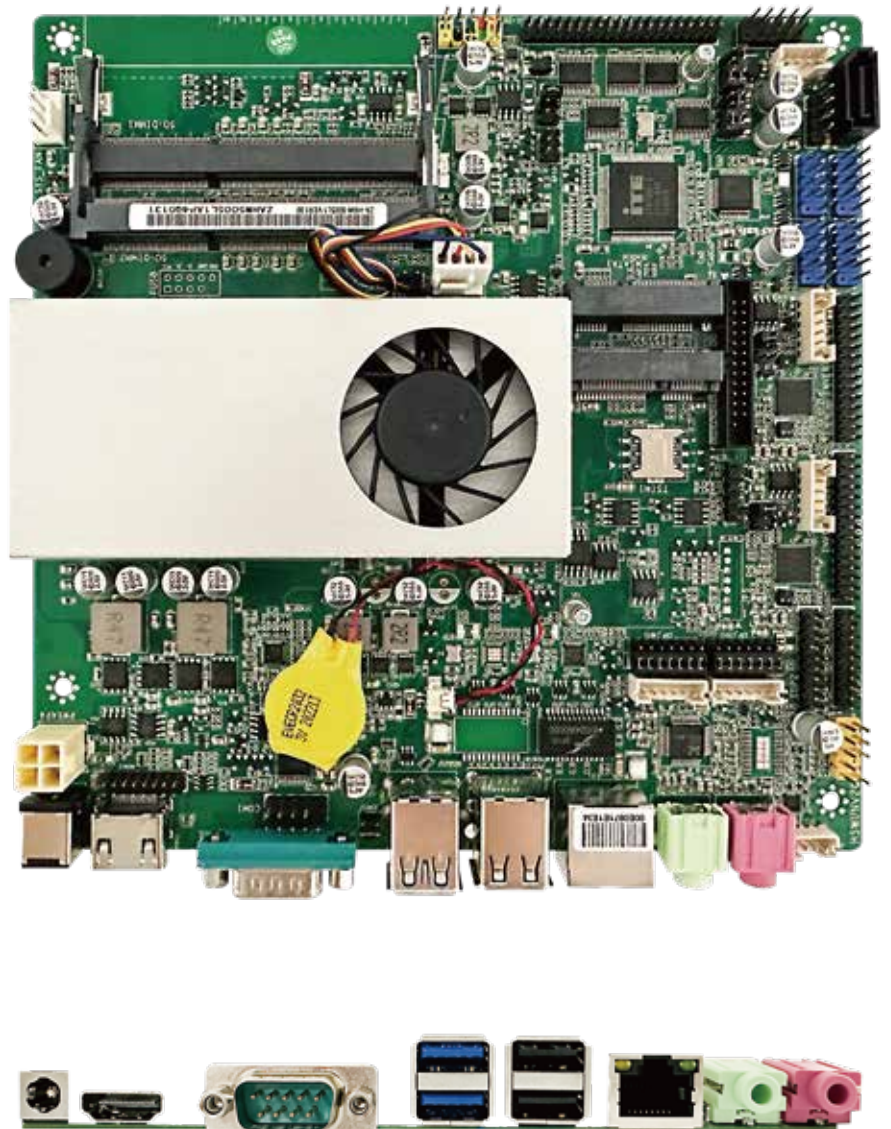


ZA-HW5005L1 Mainboard

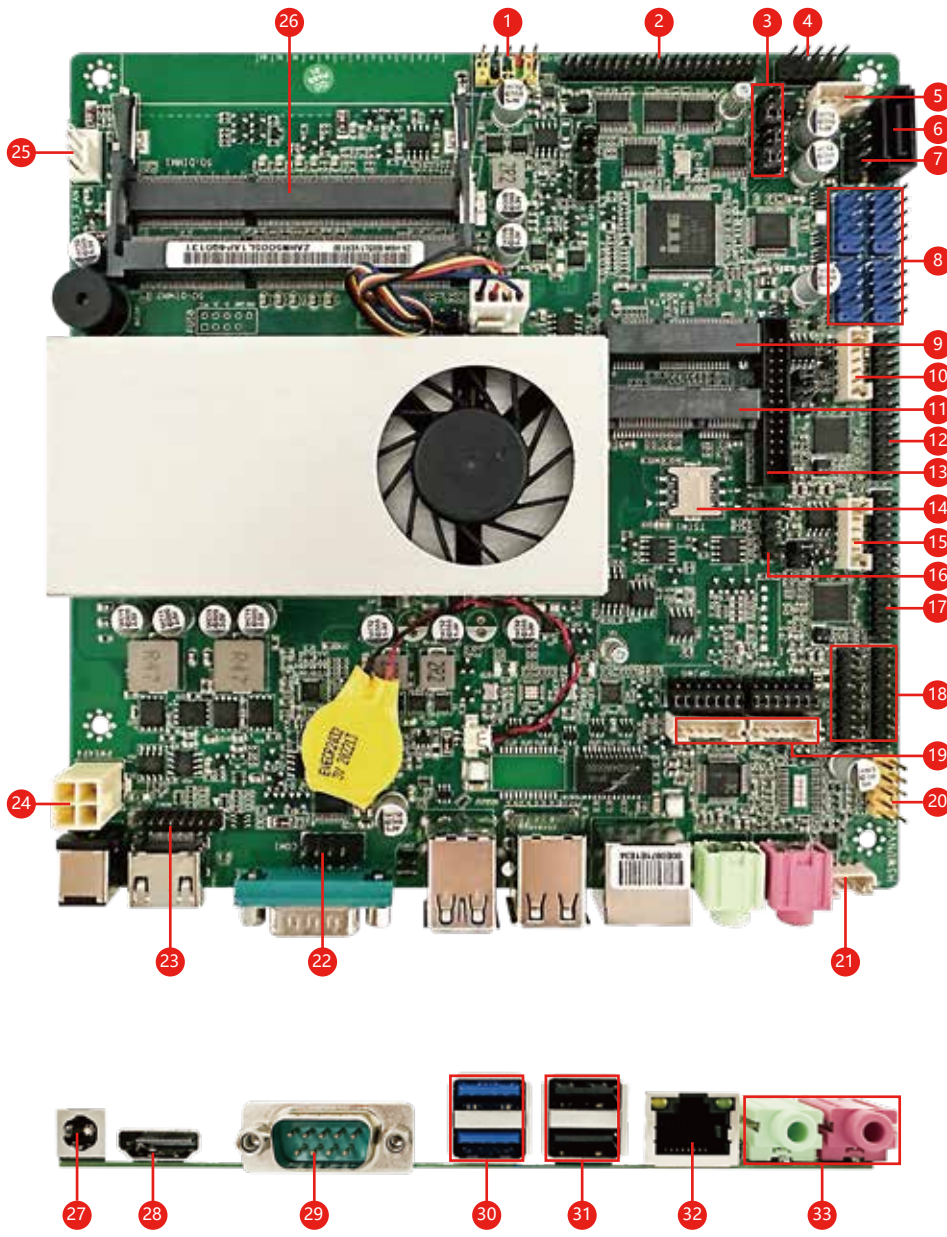
Product characteristics:

- Intel® Core™ i3-5005U CPU
- Support 2*EDP/2*LVDS/1*HDMI Displays the output
- Support 13*USB
(2*USB3.0 interface/2*USB2.0 interface/
9*USB2.0 Pin)



ZA-HW5005L1 Motherboard Specifications

Size	170mm*170mm
CPU	Intel® Core™ i3-5005U CPU
RAM	2*DDR3 1333/1600MHZ 204PIN SODIMM Slot
BIOS	AMIBIOS 64Mbit Flash
Internal I/O	1*Front panel Pin 1*1 drag 4 serial port pin header(COM5-COM6SupportsR485) 2*COM FUN Jumper 2*COM Pin 1*JSATA Power supply interface 1*SATA Data interface 9*USB2.0 Pin 1*Mini pcie Slot (MSATA) 2*INVERT_LVDS Pin 1*Mini pcie Slot (WIFI) 2*LVDS Pin(optional 2*EDP Pin) 1*LPT Pin 1*TISM Slot 1*JP485 Pin 2*EDP Pin 2*INVERT_EDP Pin 1*Audio Pin 1*Horn header connector(2.8W/CH) 1*HDMI Pin 1*2x2Pin Power connector 1*CPU_FAN Pin 2*DDR3 Slot
Rear I/O	1*DC 12V interface 1*HDMI interface 1*COM interface 2*USB3.0 interface 2*USB2.0 interface 1*LAN interface(optional 1*LAN interface) 1*AUDIO interface (1*LINE OUT、1*MIC)
LAN	1*Realtek 8111H,10M/100M/1000M Ethernet Controller
Expansion slot	1*Mini pcie Slot(MSATA) / 1*Mini pcie Slot(WIFI)
Operating System	Windows7/10, Linux



1	Front panel Pin
2	1 drag 4 serial port Pin
3	COM FUN Jumper
4	COM Pin
5	JSATA Power supply interface
6	SATA Data interface
7	USB2.0 Pin
8	USB2.0 Pin
9	Mini pcie Slot (MSATA)
10	INVERT_LVDS Pin
11	Mini pcie Slot (WIFI)
12	LVDS Pin(optional 2*EDP Pin)
13	LPT Pin
14	TISM Slot
15	INVERT_LVDS Pin
16	JP485 Pin
17	LVDS Pin
18	EDP Pin
19	INVERT_EDP Pin
20	Audio Pin
21	Horn header connector(2.8W/CH)
22	COM Pin
23	HDMI Pin
24	2x2Pin Power connector
25	CPU_FAN Pin
26	DDR3 Slot

27	DC 12V interface	31	USB2.0 interface
28	HDMI interface	32	LAN interface
29	COM interface	33	AUDIO interface (1*LINE OUT、1*MIC)
30	USB3.0 interface		

ZA-HW5005L1 Mainboard Definition

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		

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	

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	NRIA		

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		

Location	Pin	Definition	Pin	Definition	NOTE
FUN5 (2mm)	1	5RI	2	5RI-	此插针的功能为COM36供电选择,默认为不供电即跳帽置(1-2)
	3	5RI	4	5V_RUN	
	5	5RI	6	12V_RUN	

Location	Pin	Definition	Pin	Definition
GPIO (2mm)	1	GP23_IO	2	3V_RUN
	3	GP30_IO	4	5V_RUN
	5	GND	6	12V_RUN

Location	Pin	Definition	Pin	Definition	NOTE
COM3_FUN (2mm)	1	RTS3-	2	RTS6-EN	此插针的功能为COM3信号选择 RS232: 跳帽放置位置为(5-7)(6-8)(2-4) RS485: 跳帽放置位置为(1-2)(3-4)(5-6)
	3	SOUT3	4	SOUT6EN	
	5	SIN3	6	RS485_RXD1	
	7	NC	8	NC	

Location	Pin	Definition
JP485	1	RS485D0
	2	RS485D-0
	3	RS485D1
	4	RS485D-1
	5	GND

Location	Pin	Definition	Pin	Definition	NOTE
COM2_FUN (2mm)	1	RTS2-	2	RTS5-EN	此插针的功能为COM2信号选择 RS232: 跳帽放置位置为(5-7)(6-8)(2-4) RS485: 跳帽放置位置为(1-2)(3-4)(5-6)
	3	SOUT2	4	SOUT5EN	
	5	SIN2	6	RS485_RXD0	
	7	NC	8	NC	

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

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	VDDLVD5	2	VDDLVD5
	3	VDDLVD5	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
LVDS2 (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
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

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_HPD	20	EDP_HPD	20	EDP_LVDS_HPD	

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_HPD	20	EDP_HPD	20	EDP_LVDS_HPD	

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

Location	Pin	Definition	Pin	Definition
HDMI2 (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

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

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

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

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

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

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