

WAFER-MTL

Embedded board, 3.5" SBC

Quick Installation Guide

Version 1.00

June, 2026

Features

- 3.5 SBC supports Intel® Mobile Meteor Lake-U on-board processor.
- Support 4800MHz DDR5 SO-DIMM, up to 48GB.
- Quadruple independent displays DP, HDMI, iDPM and USB4.
- High speed I/O interface for USB4, USB 3.2 Gen 2, SATA 6Gb/s.
- Support M.2 B key and M.2 E key for expansion.

Packing List

- 1 x WAFER-MTL single board computer
- 1 x SATA with power cable kit
- 1 x QIG (Quick Installation Guide)

Jumpers & Connectors

J_CMOS1: Clear CMOS jumper	
PIN NO.	DESCRIPTION
NC	Keep CMOS setup (normal operation)
Press Button	Clear CMOS setup

J_ATX_AT1: AT/ATX Power Mode Setting	
PIN NO.	DESCRIPTION
A-B (Right)	ATX Power Mode (default)
B-C (Left)	AT Power Mode

ME_FLASH1: Flash descriptor security override Connector	
PIN NO.	DESCRIPTION
1	Pull high 2.2Kohm
2	HDA_CODEC_SDO

BAT1: Battery with cable Connector	
PIN NO.	DESCRIPTION
1	VBATT
2	GND

F_PANEL1: External Switches and Indicators Panel			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	PM_SYSRST_R#	2	GND
3	330ohm to +V5S	4	GND
5	330ohm to +V5S	6	HDD_LED_N

SATA1: Serial ATA Connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	5	SATA_RX0-_C
2	SATA_TX0+_C	6	SATA_RX0+_C
3	SATA_TX0-_C	7	GND
4	GND	8	

SATA_PWR1: SATA Power Connector	
PIN NO.	DESCRIPTION
1	+V5S
2	GND

J_AUDIO1: Audio Source Connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	HDA_SYNC_C	2	HDA_BCLK_C
3	HDA_SDO_C	4	HDA_PCBEEP_C
5	HDA_SDI0_C	6	HDA_RST_N_C
7	+V5S	8	GND
9	+V12S	10	GND

CPU FAN1: CPU Fan Connector	
PIN NO.	DESCRIPTION
1	GND
2	+V12S_FAN
3	EC_FANIN1
4	EC_FANCTL1

JSMB1: SMBUS Connector	
PIN NO.	DESCRIPTION
1	GND
2	SMB1_DATA_M12_C
3	SMB1_CLK_M12_C
4	+5V_SMBUS

PWR_BT1: Power Button Connector	
PIN NO.	DESCRIPTION
1	PWRBTN_SW#
2	GND

J_I2C1: I2C Connector	
PIN NO.	DESCRIPTION
1	GND
2	EC_SMDAT0
3	EC_SMCLK0
4	+5V

JCOM1/JCOM2: 2 x RS-232/422/485 Serial Port Connectors			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	ND CD1	6	NCT S1
2	ND SR1	7	ND TR1
3	NRX1	8	NR I1
4	NRT S1	9	GND
5	NTX1	10	

JBIOS1: BIOS update Connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	+1P8A_SPI_CON	2	SPI_CS0_SW_N
3	SPI_MISO_SW	4	SPI_CLK_SW
5	SPI_MOSI_SW	6	GND

J_DIO1: 1 x 8-bit digital I/O Connector (2x5 pin)			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	6	L_DOUT0
2	+VRUN_DIO	7	L_DIN3
3	L_DOUT3	8	L_DIN2
4	L_DOUT2	9	L_DIN1
5	L_DOUT1	10	L_DIN0

USB2_CON3: 2 x USB2.0 (2x4 pin) Pin Header			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	VCC_USB20_H	5	USB2_P1_DP_R
2	GND	6	USB2_P2_DN_R
3	USB2_P1_DN_R	7	GND
4	USB2_P2_DP_R	8	VCC_USB20_H

Get more information:

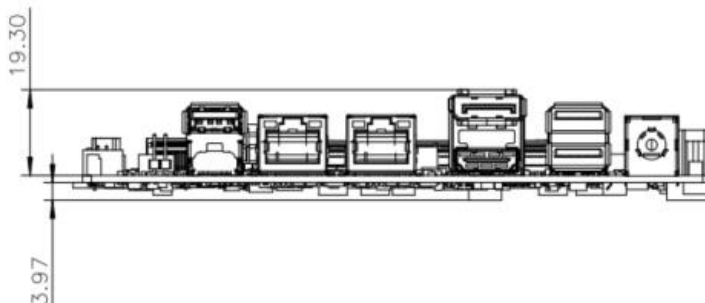
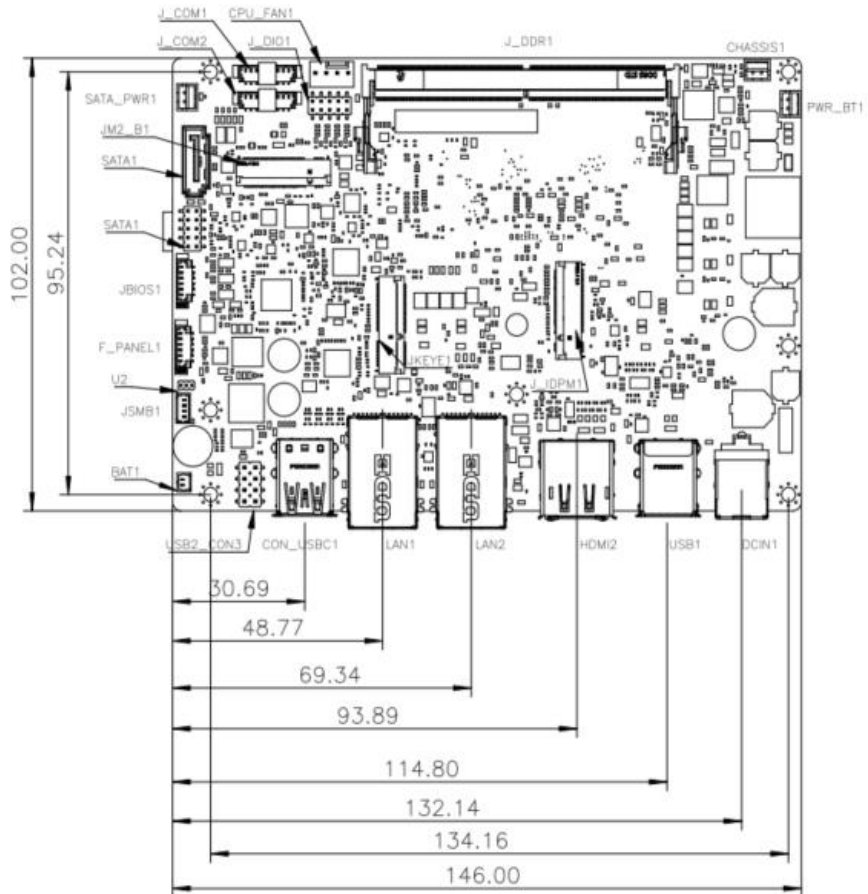


WAFER-MTL



IEI Resource Download Center

Dimensions (Unit: mm)



Safety Instructions



Warning! Read the user manual before connecting the system to the power source.

Warning! To prevent the system from overheating, do not operate it in an area that exceeds the maximum operating temperature described in the user manual.

Warning! Ultimate disposal of this product should be handled according to all national laws and regulations.

Support



IEI Support URL

http://new.ieiworld.com/tw/online_support_form

Compliance



This equipment has been tested and found to comply with specifications for CE marking. If the user modifies and/or installs other devices in the equipment, the CE conformity declaration may no longer apply.



This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



According to the requirement of the WEEE legislation, the following user information is provided to customers for all branded IEI Electronics products subject to the WEEE directive.

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

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