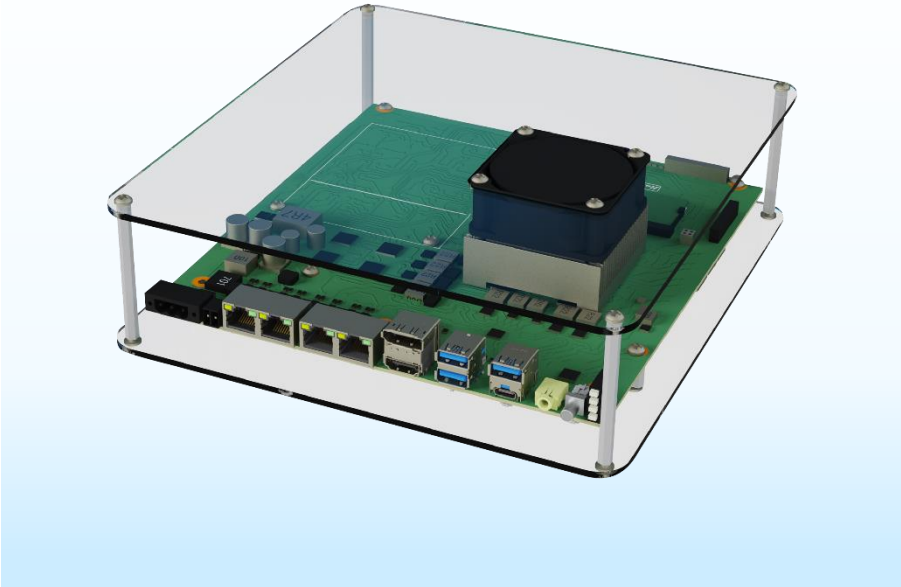


DK-2500

Features

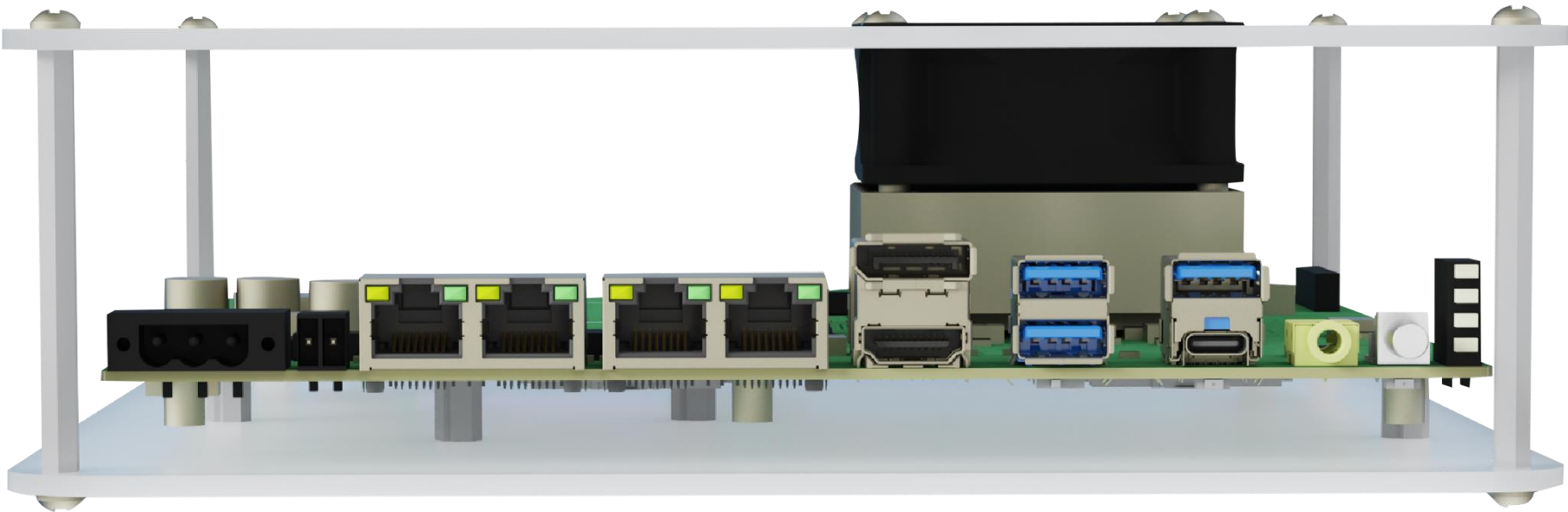
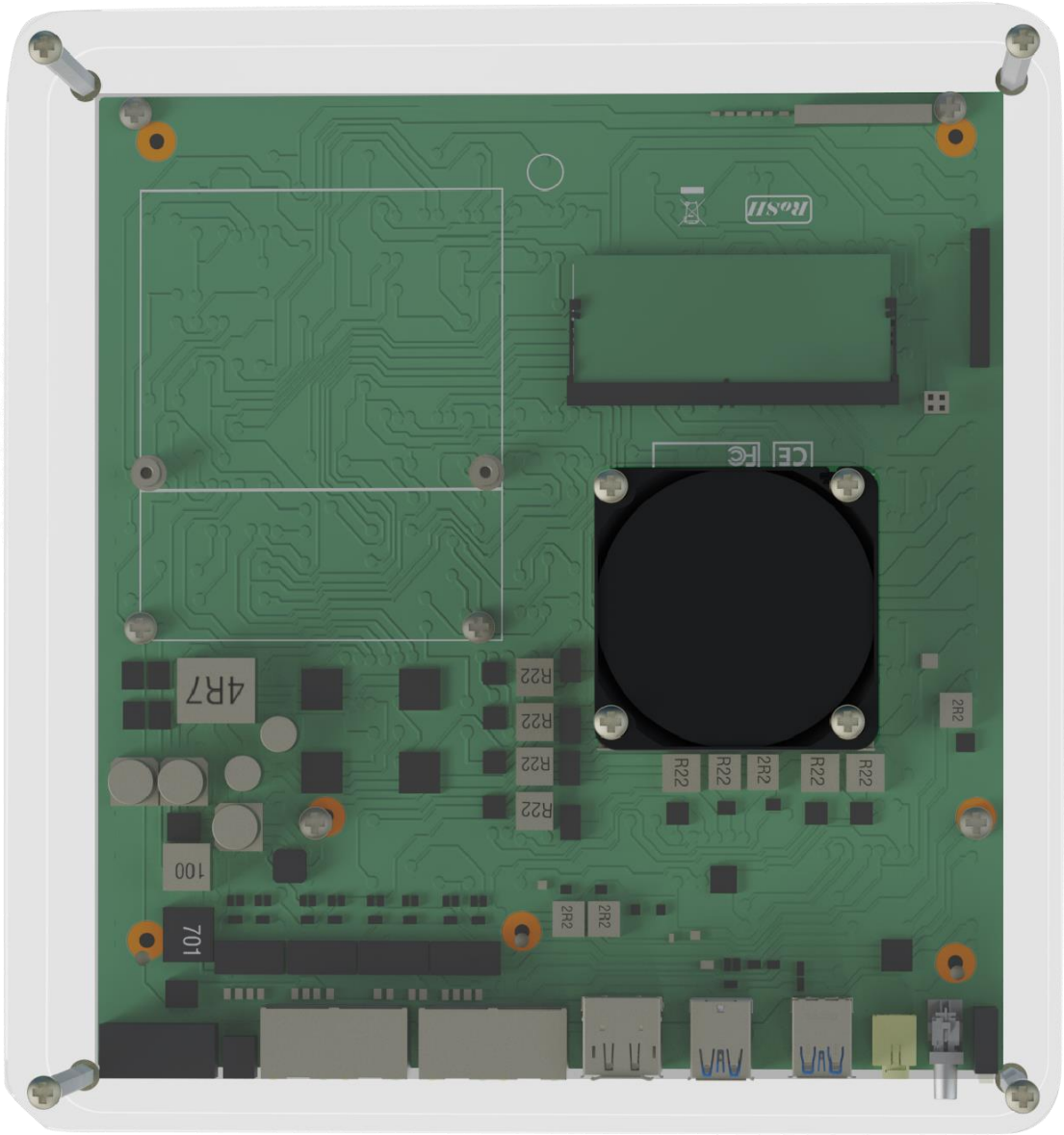
- Intel® Core™ Ultra 5 Processor 225U
- 16G SO-DIMM DDR5
- 128G SSD
- Display: DP, HDMI, eDP/LVDS
- 4 GbE LAN (Intel® Ethernet Controller I210-AT)
- 4 USB3.2
- 40-Pin JTAG Support GPIO,PWM,UART,I2C,I2S,GSPI
- Support 4G/5G, Wi-Fi module expansion
- Onboard TPM2.0
- 24V DC-in
- 200 x 215mm (L x W)
- Windows 10/11, ubuntu 20.04/22.04



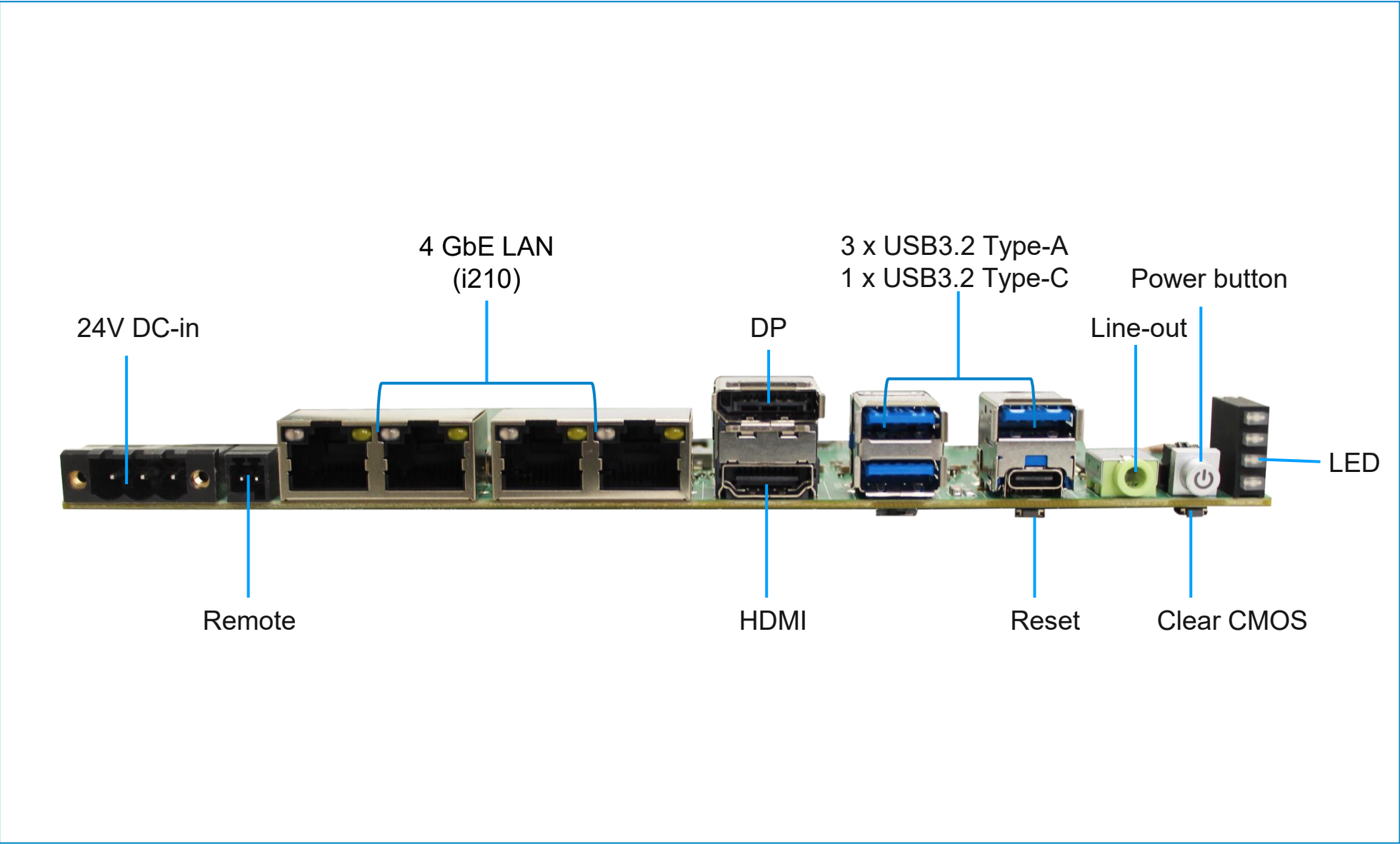
Specifications

Items		Descriptions
Processor System	CPU	Intel® Core™ Ultra 5 Processor 225U
	TDP	15W
	BIOS	AMI 256Mbit SPI Flash
Memory	Technology	Dual channel DDR5 SO-DIMM
	Capacity	2*8GB
Storage	SSD	1 x M.2 2280 M-Key 128G SSD
Graphics	GPU	Intel® Graphics
External I/O	DP	1 x DP1.4a resolution up to 4096 x 2160x 36bpp @60Hz
	HDMI	1 x HDMI2.1 resolution up to 4096 x 2304 @ 60Hz
	Ethernet	4 x Intel i210 GbE LAN
	USB 3.0	4 x USB3.2 (1 x USB Type-C , 3 x USB Type-A)
	Audio	1 x Line-out
	Power Input Connector	1 x 3 PIN Phoenix terminal
Expandable I/O	LCD	1 x eDP1.4b resolution up to 4096 x 2304 @ 60Hz; Or LVDS single channel 18/24-bit, resolution up 1920x1200
	CPU FAN	1 x CPU FAN
	SYS FAN	1 x SYS FAN
	SMBus	1 x SMBus
	JTAG	1 x 40 contact pin (1*PWM 1*UART 1*I2C 1*I2S 1*GSPI)
	RTC Battery	1 x RTC Battery
	M.2 E-Key	1 x M.2 2230 E-Key (Wi-Fi/BT)
	M.2 B-Key	1 x M.2 3042/3052 B-Key (4G/5G)
	SIM	1 x NANO SIM
	BTB Connector (CON)	CON1 : 4 COM/3 PCIe/2 USB3.0/1 USB2.0; CON2 : 4 PCIe/GPIO
LED & Switch	LED	SATA, Memory, User-defined 1, User-defined 2
	Power Button	1 x Power button
	Remote Switch	1 x Remote
	Clear CMOS	1 x Clear CMOS
	Reset	1 x Reset
Others	Watchdog	65536 lever, 0~65535 sec
	TPM	Onboard TPM2.0 (Optional)
Power Supply	Power Input	24V±10% DC
	Power Management	AT/ATX
	Max.Consumption	60W
Environment	Operating Temperature	0 ~ 60 °C (32~140°F)
	Storage Temperature	-40~85 °C (-40~185°F)
	Operating Humidity	95% @ 40 °C(Non-Condensing)
	Storage Humidity	95% @ 60 °C(Non-Condensing)
Physical Characteristics	Dimension	200 x 215mm (L x W)
OS	OS	Windows 10/11, centos 8, ubuntu 20.04/22.04

Product Image



Interface



Ordering Information

Part Number	CPU	Processor Base Power	Max. Frequency	Core	Thread	GbE	DP	HDMI	USB3.0	JTAG	M.2	DC-Input
DK2500-U001	225U	15W	4.8 GHz	12	14	4	1	1	4	40-PIN	2	24V DC

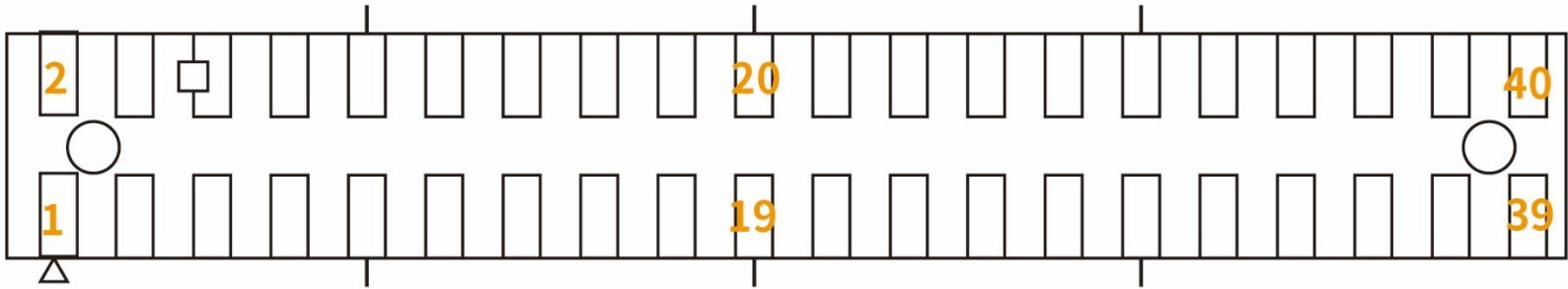
Optional Accessories

Part Number	Description
MF0A000000000057	WIFI+BT module M.2 2230 CNVi WiFi5 2.4G/5G 2x2 9560.NGWG.NV 957715 Intel
MF0A000000000078	WIFI+BT module M.2 2230 CNVi WiFi6 2.4G/5G 2x2 AX201.NGWG Intel
MF0A000000000042	5G LTE module, M.2 RM520NGLEA512F-M20-SGASA, Worldwide
MF0A000000000036	4G LTE module, M.2 EM05CEFC-128-SGAS, China
MF0A000000000066	5G LTE module, M.2 RM500UCNVEA512F-D10-SNADA EMEA/Asia-Pacific

Packing List

Part Number	Description	Quantity
-	DK-2500 Dev.Kit	1
ZM0A0000000000254	Power Adapter	1
KE0A000000000004	Round head screws	4
ZM0A000000000020	Three-plug power cord	1

JTAG Interface Pin Definition



PIN	SIGNAL	PIN	SIGNAL
1	3.3V	2	5V
3	I2C1_DAT/GPIO1	4	5V
5	I2C1 CLK/GPIO2	6	GND
7	GPIO3	8	UART TX(SIO)
9	GND	10	UART RX(SIO)
11	RTS(SIO)	12	I2S BCLK/ GPIO18
13	GPIO5	14	GND
15	GPIO6	16	GPIO19
17	1.8V	18	GPIO20
19	GSPI_MOSI	20	GND
21	GSPI_MISO	22	GPIO21
23	GSPI_CLK	24	GSPICS0/GPIO22
25	GND	26	GPIO23
27	I2C0_DAT / GPIO10	28	I2C0_CLK/GPIO24
29	GPIO11	30	GND
31	GPIO12	32	PWM0 / GPIO25
33	GPIO13	34	GND
35	I2S_SYNC/GPIO14	36	CTS(SIO)
37	GPIO15	38	I2S SDI/ GPIO27
39	GND	40	I2S SDO/GPIO28