

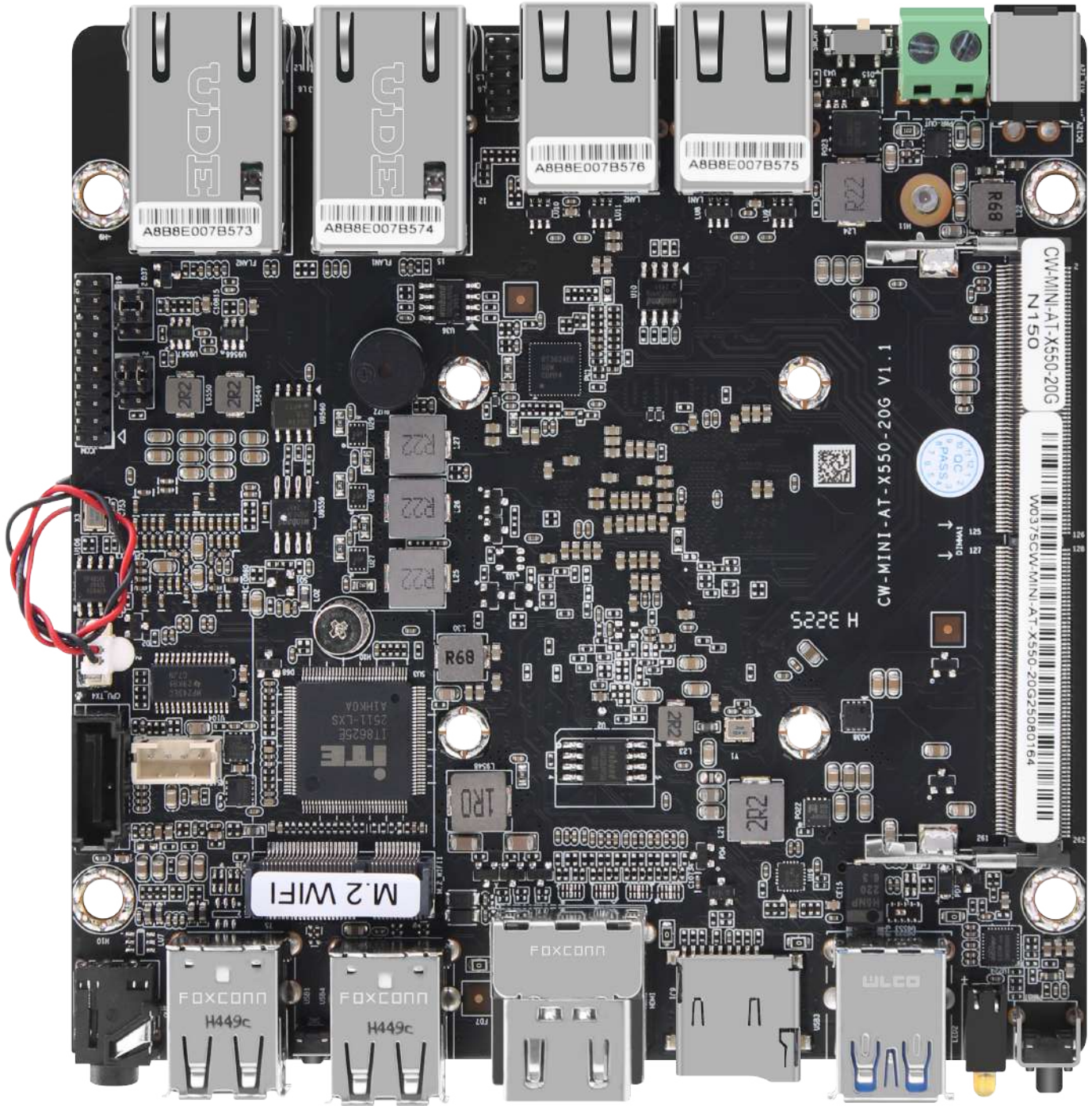


CW-S7 Pro-X550-20G

Motherboard Pin Definition Manual

Support Intel Twin Lake
N150/n355 CPU Series

Release Version:V1.1



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1. Model and Precautions

1.1 Model

Model	Chipset	COM	LAN	USB	M.2	Tpey-C	HDMI	RJ45 10G	TF
CW-S7 Pro-X550-20G	N150/N355	2	2	5	2	1	2	2	1

1.2 Precautions

- ★ Perform operations in a well-lit, dry, and stable working environment.
- ★ Ensure that the power plug is disconnected before starting any operation.
- ★ Before taking the motherboard out of the anti-static bag, make sure you have discharged static electricity by touching any grounded safety device or by using an anti-static wrist strap.
- ★ Unless necessary, avoid touching any components or circuits on the motherboard. During installation, hold the motherboard by its edges; do not bend or press on the motherboard.
- ★ After installing the motherboard, clean any leftover parts inside the case, as they may cause short circuits or damage other equipment.
- ★ Keep the system away from high temperatures, high humidity, and areas with water.
- ★ Turn the machine on and off properly; do not unplug the power directly from the motherboard, as this may cause system damage.

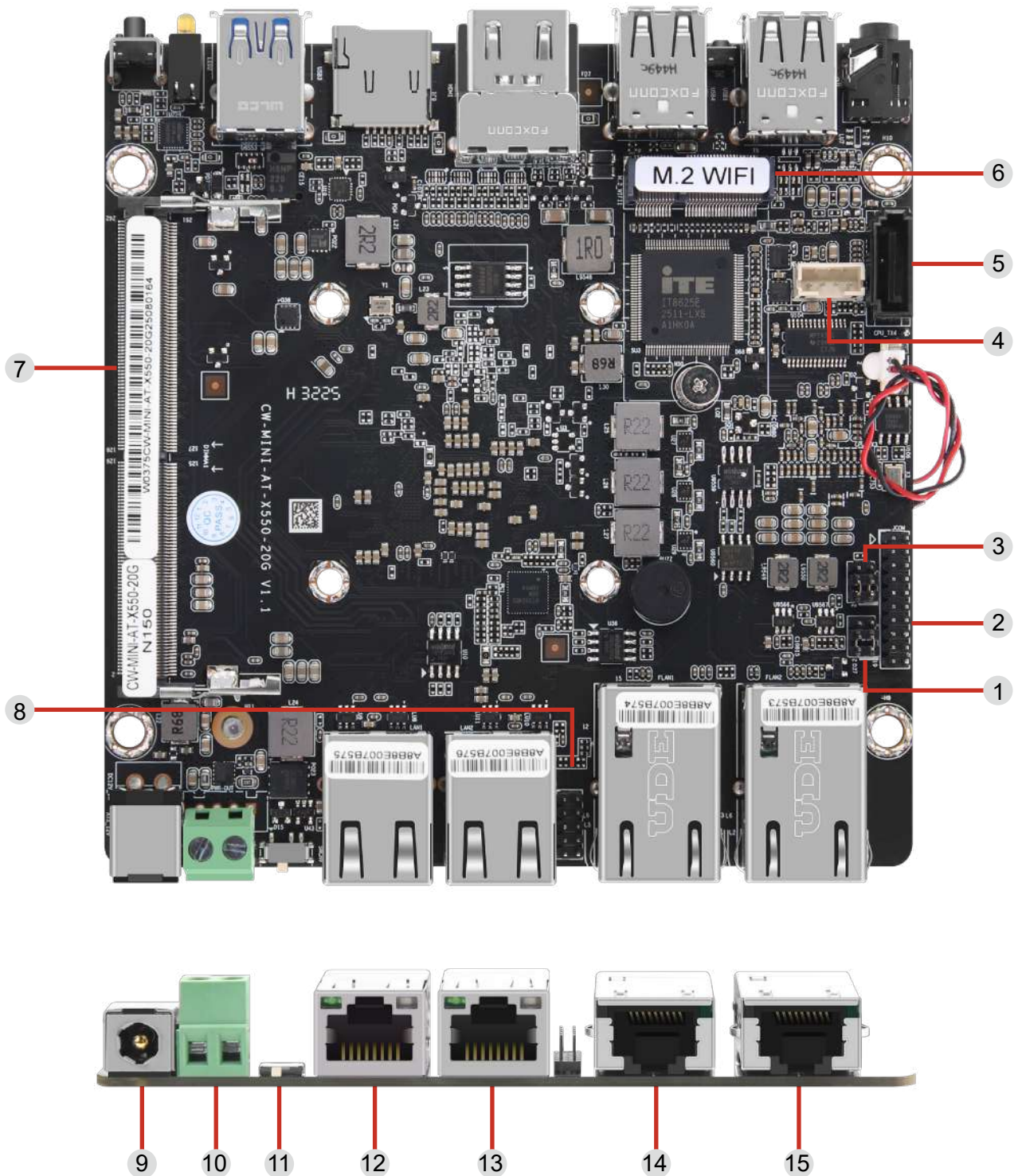
1.3 BIOS Settings

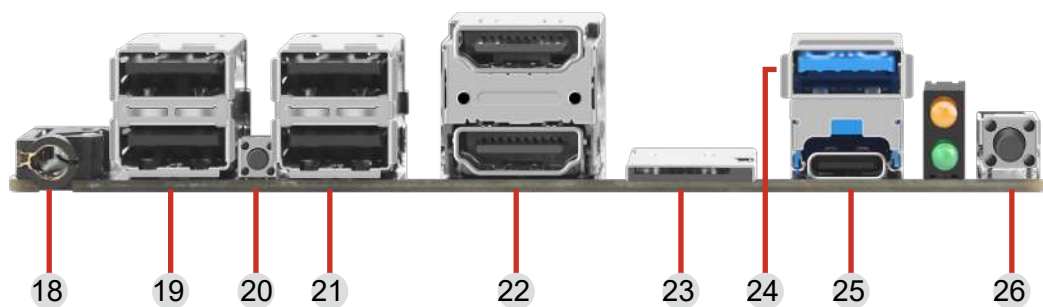
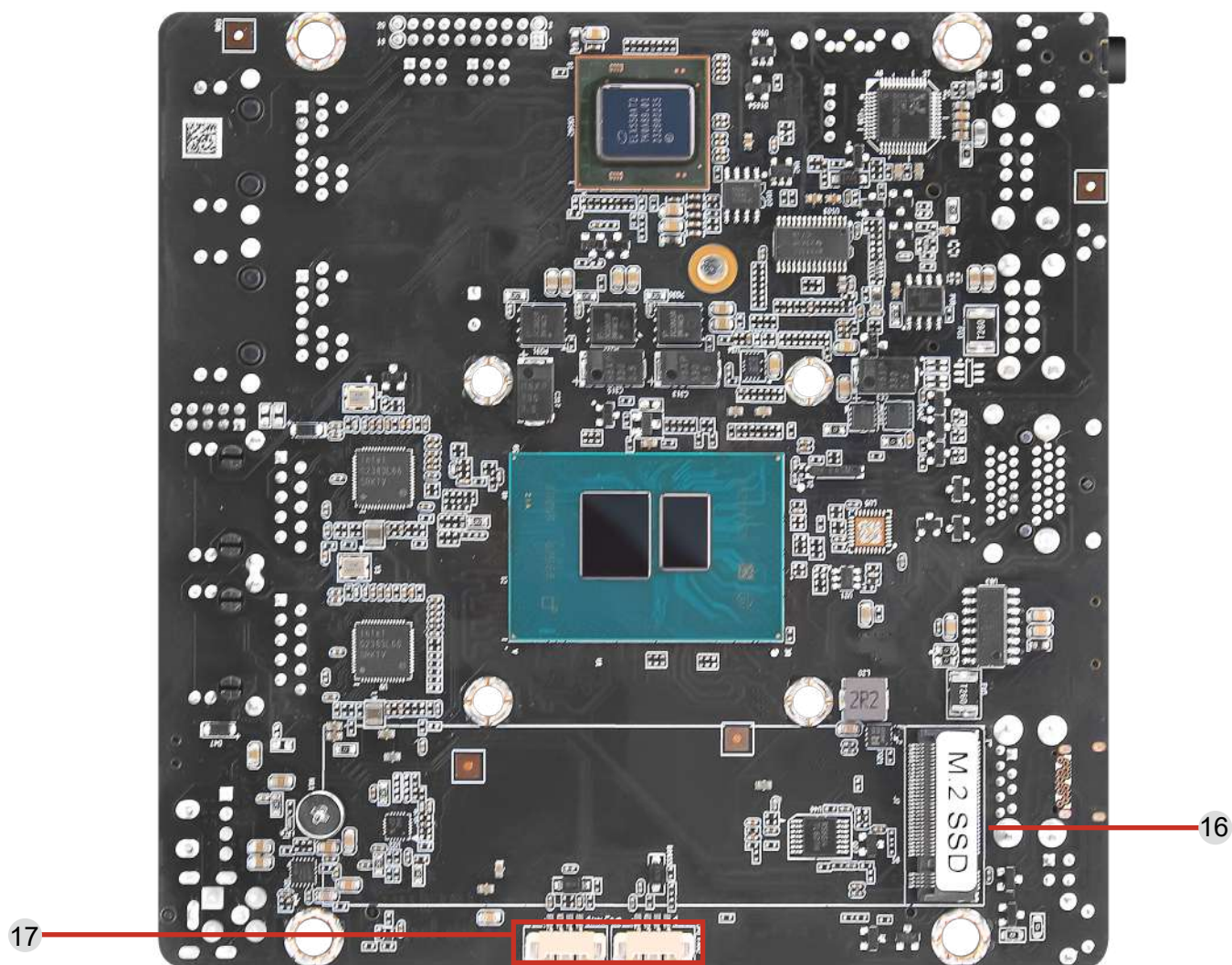
- ★ CWWK S7 Pro 10GbE Firewall Mini PC
- ★ Power Adapter
- ★ SATA Adapter Cable
- ★ Fan Adapter Cable

2.2.Specifications

Model	CW-S7 Pro-X550-20G
CPU	Intel [®] Twin Lake N150/355 Processor Series
RAM	Supports DDR5-4800MHz, 1 × SO-DIMM memory slot, 1.1V, up to 32GB
Storage	1 × SATA 3.0, 1 × M.2 (Key-M, 2280, PCIe x1 NVMe)
Display	2*HDMI
Expansion	1 × M.2 (Key-E, 2230, supports Wi-Fi/BT), Includes a default adapter board for conversion to M.2 NVMe slot
Audio	Realtek ALC897 7.1-channel HDA codec, supports MIC and line-out ports
LAN	2 × Intel I226-V Gigabit Ethernet chips, 2 × Intel X550 10GbE ports
USB	1 × USB 3.0 (on rear I/O), 4 × USB 2.0 (on rear I/O), 1 × Type-C
COM	2 × COM Pin headers (switchable between RS232/RS485)
I/O	1 × SATA_POWER pin 1 × PWR-OUT pin 1 × GPIO pin 1 × JC14 pin 2 × CPU-FAN1 pins 1 × JC13 pin 1 × JCOM pin
Power	DC12V(2.5 55*25)
OS	Windows / Linux / FreeBSD / OpenBSD
BIOS	AMI UEFI BIOS
OT / OH	0–60°C, 5%–95% non-condensing
N/O Temp / N/O Hum	-40–80°C, 5%–95% non-condensing
PCB Appearance	Industrial black coating
PCB Dimensions	120mm X 120mm

3. Jumpers / Ports / Pins





Jumpers / Ports / Pins			
1	JC13 Pin	17	CPU-FAN Pin
2	JCOM Pin	18	AUDIO port
3	JC14 Pin	19	USB2.0 port
4	SATA-PWR Pin	20	CLR-CMOS button
5	SATA slot	21	USB2.0 port
6	M.2 WIFI slot	22	Dual HDMI port
7	SO-DIMM slot	23	TF slot
8	GPIO Pin	24	USB3.0 port
9	DC12V	25	TYPE-C port
10	PWR-OUT Pin	26	ON/OFF
11	Power-On DIP Switch	27	
12	2.5G LAN1	28	
13	2.5G LAN2	29	
14	10G LAN1	30	
15	10G FLAN2	31	
16	M.2 SSD slot	32	

4.Jumper / Header Pin Definitions

JC13 Pin

Position	Header	pin	Function	pin	Function
1	JC13 Pin	1	SIN_B	2	SOUT_B
		3	SIN_B_J	4	SOUT_B_J
		5	TX485+_COM2	6	TX485-_COM2

JCOM Pin (2.0mm pitch)

Position	Header	pin	Function	pin	Function
2	JCOM Pin	1	DCDA#	2	SIN_A_J
		3	SOUT_A_J	4	DTRA#
		5	GND	6	DSRA#
		7	RTSA#	8	CTSA#
		9	RIA#	10	/
		11	SOUT_B_J	12	SOUT_B_J
		13	RTSB#	14	CTS_B
		15	/	16	/
		17	GND	18	GND
		19	PWR_BTN#	20	RSTBTN

JC14 Pin

Position	Header	pin	Function	pin	Function
3	JC14 Pin	1	SIN_A	2	SOUT_A
		3	SIN_A_J	4	SOUT_A_J
		5	TX485+_COM1	6	TX485-_COM1

SATA_PWR Pin (2.0mm pitch)

Position	Header	pin	Function	pin	Function
4	SATA_PWR Pin	1	+5V	2	GND
		3	GND	4	+12V

GPIO1 Pin (2.0mm pitch)

Position	Header	pin	Function	pin	Function
5	GPIO1 Pin	1	PD0	2	PD4
		3	PD1	4	PD5
		5	PD2	6	PD6
		7	PD3	8	PD7
		9	GND	10	3P3V_NIA

PWR-OUT Pin

Position	Header	pin	Function	pin	Function
10	PWR-OUT Pin	1	GND	2	12V

CPU-FAN Fan Pin (1.25mm pitch)

Position	Header	pin	Function	pin	Function
17	CPU-FAN Fan Pin (1.25mm pitch)	1	FAN_CTL2	2	FAN_TAC2
		3	+12S	4	GND

5. BIOS Settings

BIOS Function Keys	Description
DEL	Enter BIOS
→←	Left/Right Arrow Move between screens
↑ ↓	Up/Down Arrow Move between items
Enter	Select the highlighted item and enter its submenu
+/-	Change the selected option or adjust values
F9	Load optimized default settings
F10	Save and exit
ESC	Exit

【END】

For any other matters not covered, please consult your sales representative.