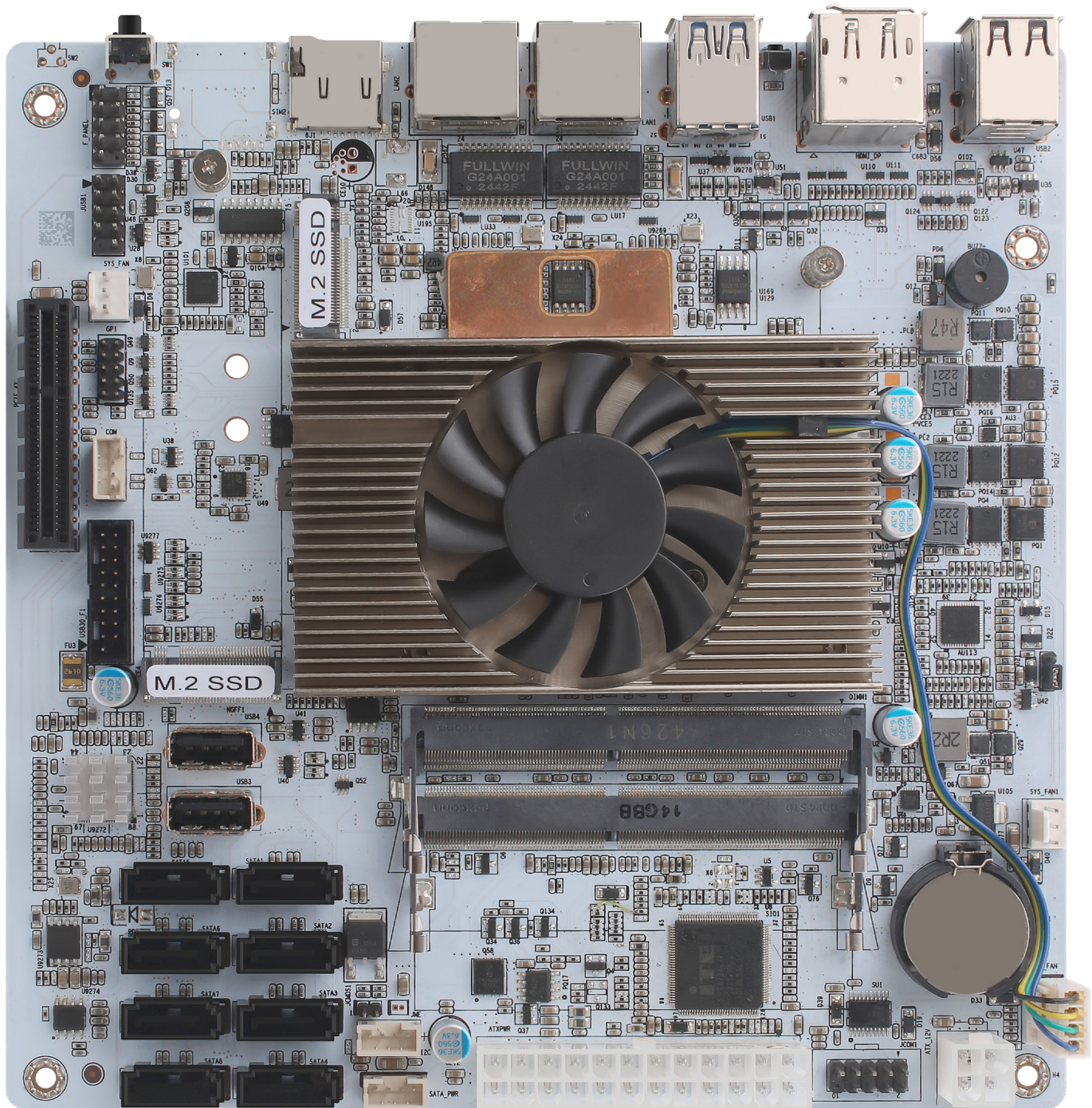

CW-NAS-WL Series Motherboard

User Manual
Product specification

Supports intel[®] Whiskey Lake/Comet Lake Celeron/
Pentium/core i3 /i5 /i7 Series Processors

Release Version: V1.0



Contents

1.Model & Precautions	2
1.1Model.....	2
1.2Precautions.....	2
2.Specifications	3
3.Parameter.....	4
4.Jumpers / Connectors /Pins	5
5.Definition of Jumpers /Connectors / Pins	7
6.BIOS Setup	9

1.Model & Precautions

1.1Model

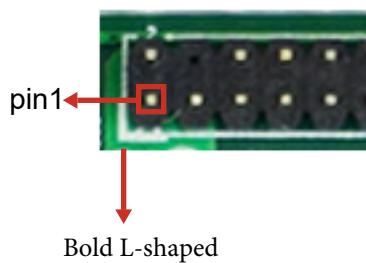
Model	Chipset	SATA	LAN	USB	Mini PCI-E	DP	HDMI	PCIE	TF
CW-NAS-WL	i5 8265U/i5 10210U	8	2	10	2*M.2	1	1	1	1

1.2 Precautions

1.Different functions on the motherboard can be selected using jumpers on the header pins.

2.Identifying Pin 1

★Usually, Pin 1 is indicated by the silkscreen marking a bold “L” on the header.



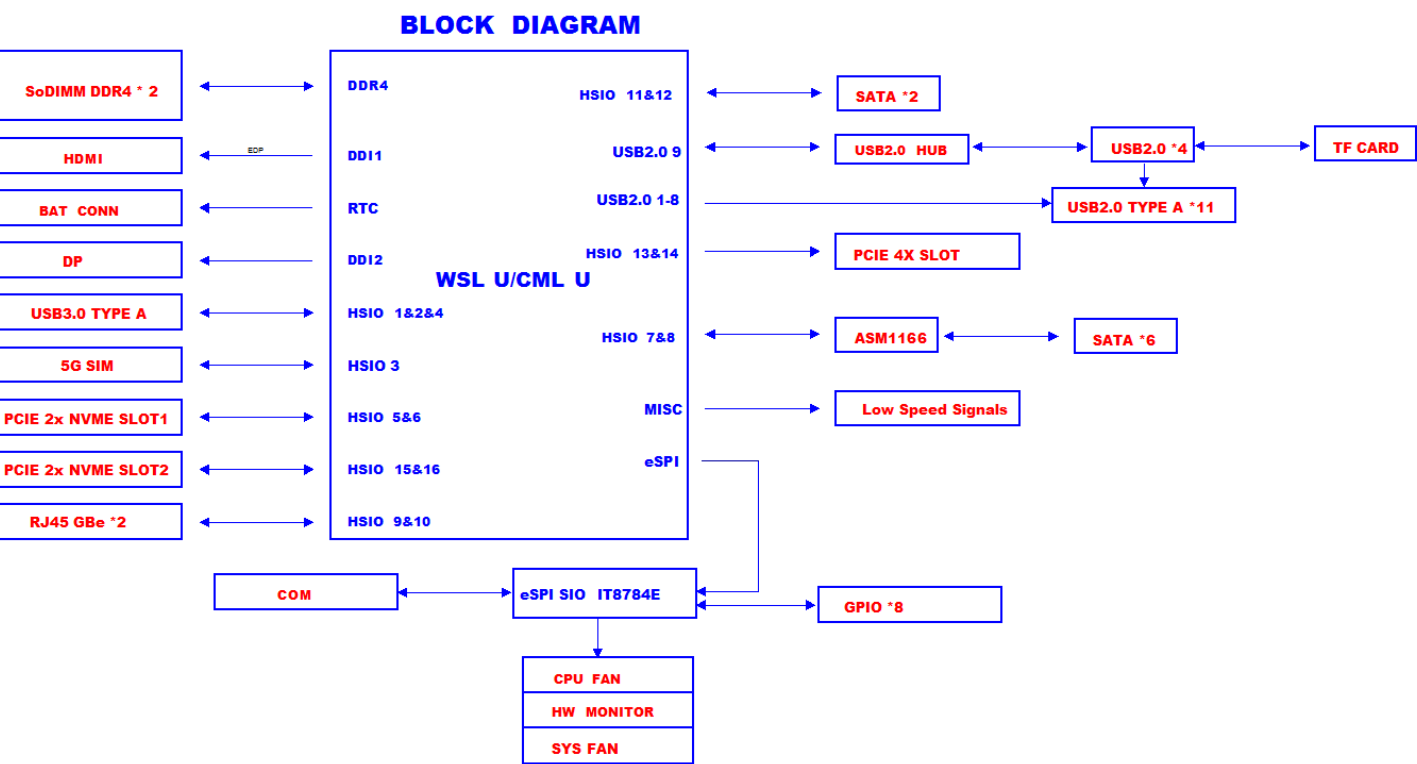
★ On the backside of the PCB, the pin located at the corner of the header corresponds to Pin 1.



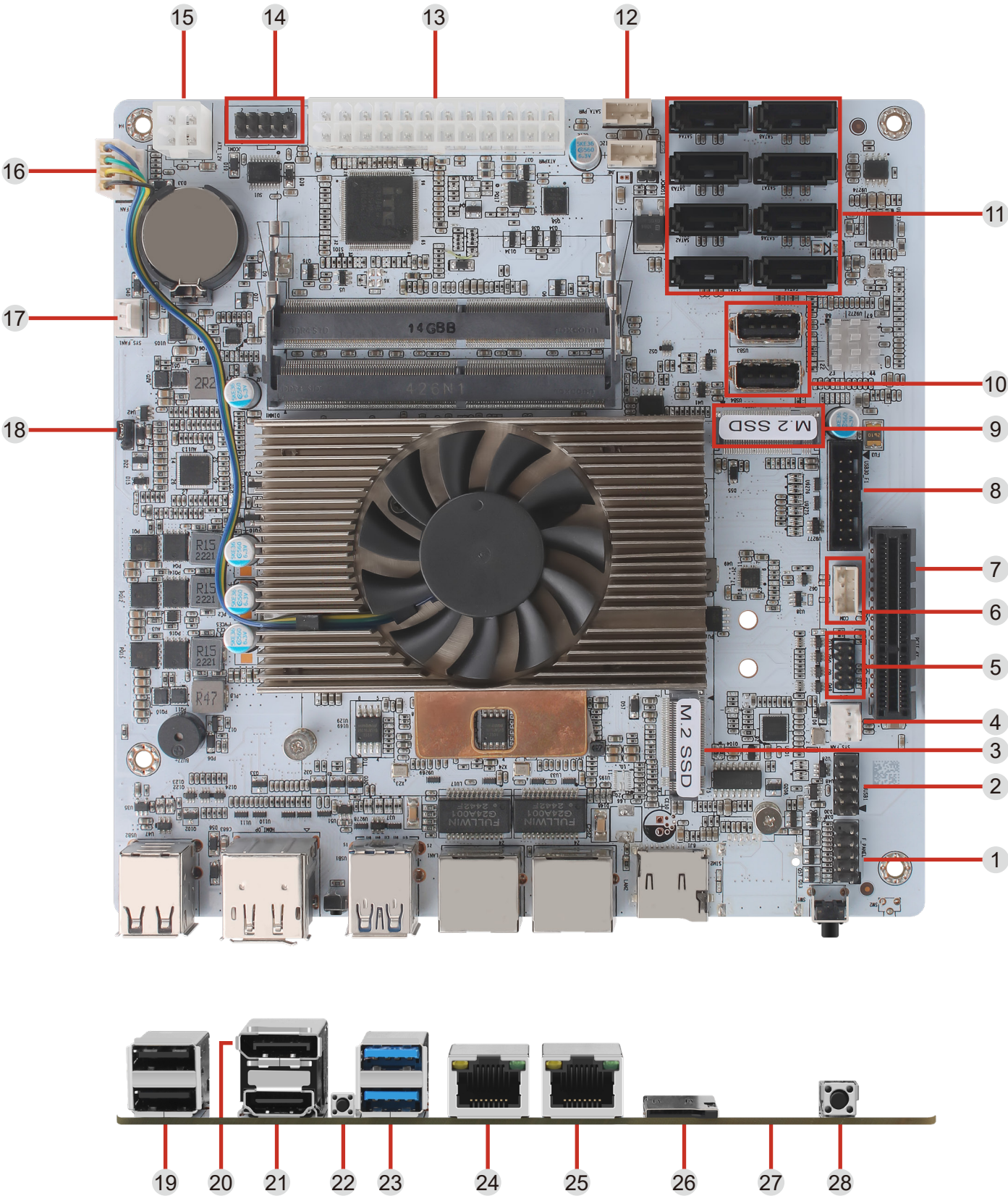
2.Specifications

Model	CW-NAS-WL
CPU	Intel® Whiskey Lake/Comet Lake Pentium/coreI3 /i5 /I7 Series Processors
Menmoy	Support DDR4L-2400MHz, 2*SO-DIMM RAM Slot 1.2V Singal up to 32GB
Storage	2*M.2(Key-M, 2280, PCIe x2) , 8*SATA3.0
Lan	2*Intel I226-VGigabit LAN Chips
Display	1*DP 1*HDMI
TF Card	1*TF card on board edge
PCIE	1*PCIE X4 (X2 signal)
USB Port	1*USB3.0 (on rear I/O, top) 3*USB2.0 (on rear I/O) 2*USB2.0 headers , 2*USB3.0 headers ,2*USB2.0 vertical headers
Onboard I/O	1*F_PANEL Header 1*JUSB1 Header 2*SYS_FAN Header 1*AT-ATX Header 1*SATA_PWR Header 1*F_PANEL Header 1*CPU-FAN1 Header 2*USB2.0 Header 2*USB3.0 Header 1*GPIO Header
Rear I/O	USB2.0, DP+HDMI, USB3.0, LAN1, LAN2,TF, SIM, SW1
Temperature	Operating Temperature: 0 ~ 55°C Storage Temperature: -20 ~ 75°C Humidity: 0 ~ 95% RH, non-condensing
System	Windows 10,Linux
BIOS	AMI UEFI BIOS
Power	ATX Power supply
Size	170MM*170MM

3.Specifications



4.Jumpers / Connectors / Pins



Jumpers / Connectors / Pins			
1	F-PANEL Header	20	DP Port
2	JUSB1 Header	21	HDMI Port
3	M.2 Storage Slots NVMe x2 Signal)	22	CLR-CMOS Button
4	SYS-FAN Header	23	USB3.0 Port
5	GPIO Header	24	LAN1P ort
6	DEBUG Header	25	LAN2 Port
7	PCIE-X4 Slot	26	TFSlot
8	USB3.0 Header	27	SIM Slot
9	M.2 Storage Slots NVMe x2 Signal)	28	PWR Button
10	USB2.0 Slot	29	
11	SATA1-SATA8 Header	30	
12	SATA_PWR Header	31	
13	ATXPWR Header	32	
14	JCOM1 Header	33	
15	ATX-12V Header	34	
16	CPU-FAN Header	35	
17	SYS-FAN1 Header	36	
18	AT-ATX Header	37	
19	USB2.0 Port	38	

5.Definition of Jumpers / Connectors / Pins

F_PANEL Header(Pitch: 2.54 mm)

F_PANEL, a 10-pin header, includes power switch, reset switch, HDD LED, and power LED, allowing users to connect the system front panel functions.

Location	Interface	pin	Definition	pin	Definition
1	F_PANEL Header	1	HDDLED+	2	PWR_LED+
		3	HDDLED-	4	GND
		5	RESET GND	6	PWR_ON
		7	RESET	8	PWR_ON GND
		9	NC	10	/

JUSB1 Header(Pitch: 2.54 mm)

Location	Interface	pin	Definition	pin	Definition
2	JUSB1 Header	1	+5V	2	+5V
		3	USB1_Data-	4	USB2_Data-
		5	USB1_Data+	5	USB2_Data+
		7	GND	8	GND
		9	/	10	GND_CHASSIS

SYS-FAN Headers (Pitch: 2.54 mm)

Location	Interface	pin	Definition	pin	Definition
4 17	SYS-FAN Headers	1	GND	2	Smart Fan Voltage Control
		3	Fan Speed Monitoring		

JGPIO Haeder(Pitch: 2.54 mm)

Location	Interface	pin	Definition	pin	Definition
5	JGPIO Haeder	1	VCC5	2	GND
		3	IO_OUT1	4	IO_OUT2
		5	IO_OUT3	6	IO_OUT4
		1	IO_OUT5	2	IO_OUT6
		3	IO_OUT7	4	IO_OUT8

SATA_PWR Haeder(Pitch: 2.00 mm)

In addition to providing power to the hard drive, users can also draw power from the SATA_PWR header

Location	Interface	pin	Definition	pin	Definition
12	SATA_PWR Haeder	1	+V12S	2	GND
		3	GND	4	+5V

JCOM1Header(Pitch: 2.54 mm)

Location	Interface	pin	Definition	pin	Definition
14	JCOM1 Header	1	DCD#	2	RXD
		3	TXD	4	DTR#
		5	GND	6	DSR#
		7	RTS#	8	CTS#
		9	RI#(Hot-Plug Compatible)	10	NC

CPU-FANHeader(Pitch: 2.54 mm)

CPU_FAN: Supports connecting the CPU cooler fan to dissipate CPU heat.

Location	Interface	pin	Definition	pin	Definition
16	CPU-FAN Headers	1	GND	2	Smart Fan Voltage Control
		3	Fan Speed Monitoring	4	CONTROL

AT-ATX Haeder

AT-ATX Header: Enables automatic hardware power-on. When automatic power-on is required after a power outage, set the jumper to Pin 2-3.

Location	Interface	pin	Definition	pin	Definition
18	AT-ATX Haeder	1-2	Power-On After Power Loss	2-3	Normal State (Default)

6.BIOS Set up

Bios Function Keys	Function Description
F2	Enter BIOS
→←	Use Left/Right Arrow to select screen
↑ ↓	Use Up/Down Arrow to select item
Enter	Select the item and enter submenu
+/-	Change selection or adjust values
F12	Quick Boot
F8	Safe Mode
F9	Load Optimized Defaults
F10	Save & Exit
ESC	Exit

【END】

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