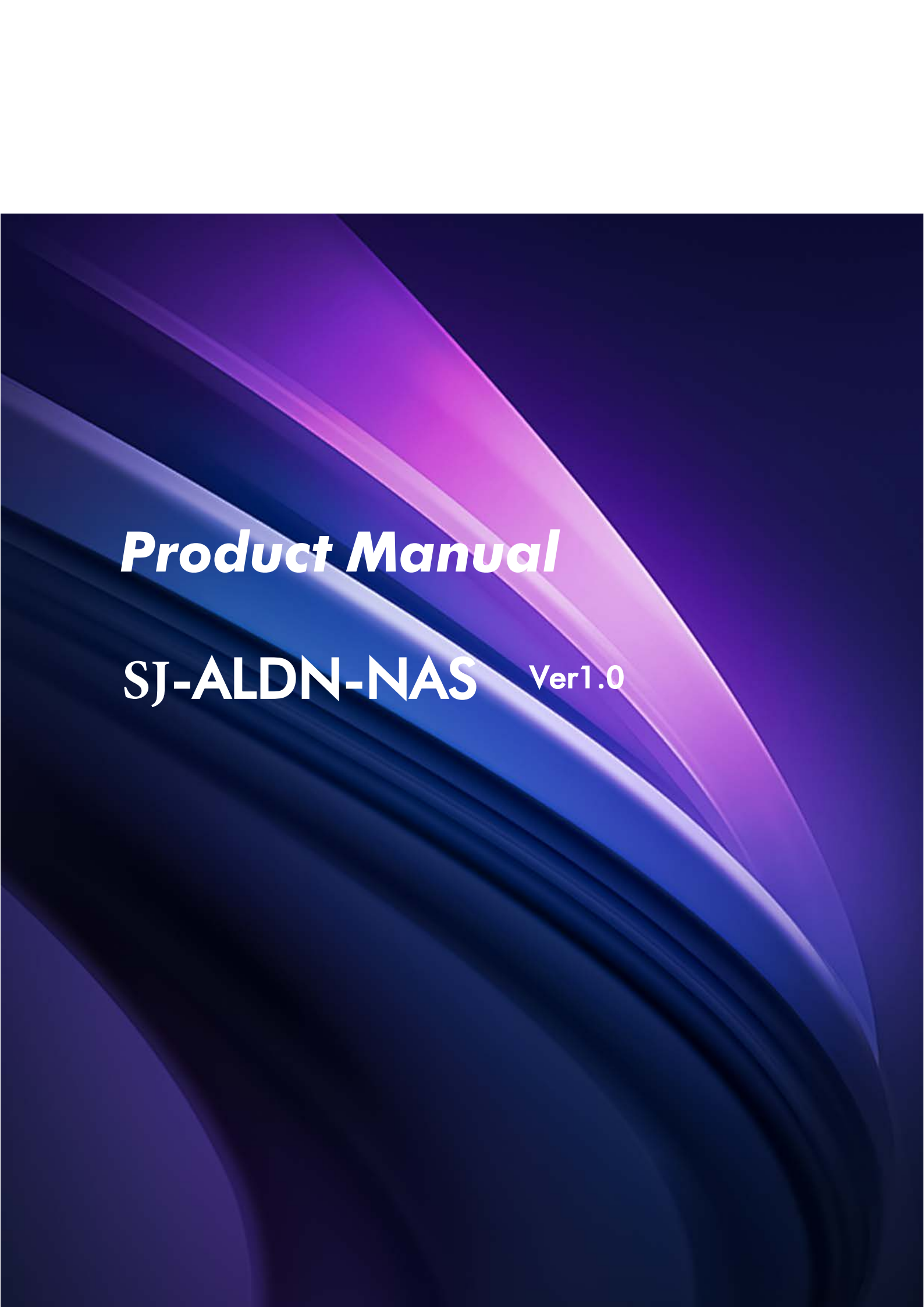




Product Manual

SJ-ALDN-NAS Ver1.0

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Before purchasing the product, please consult the dealer to confirm if the product's performance meets your needs.

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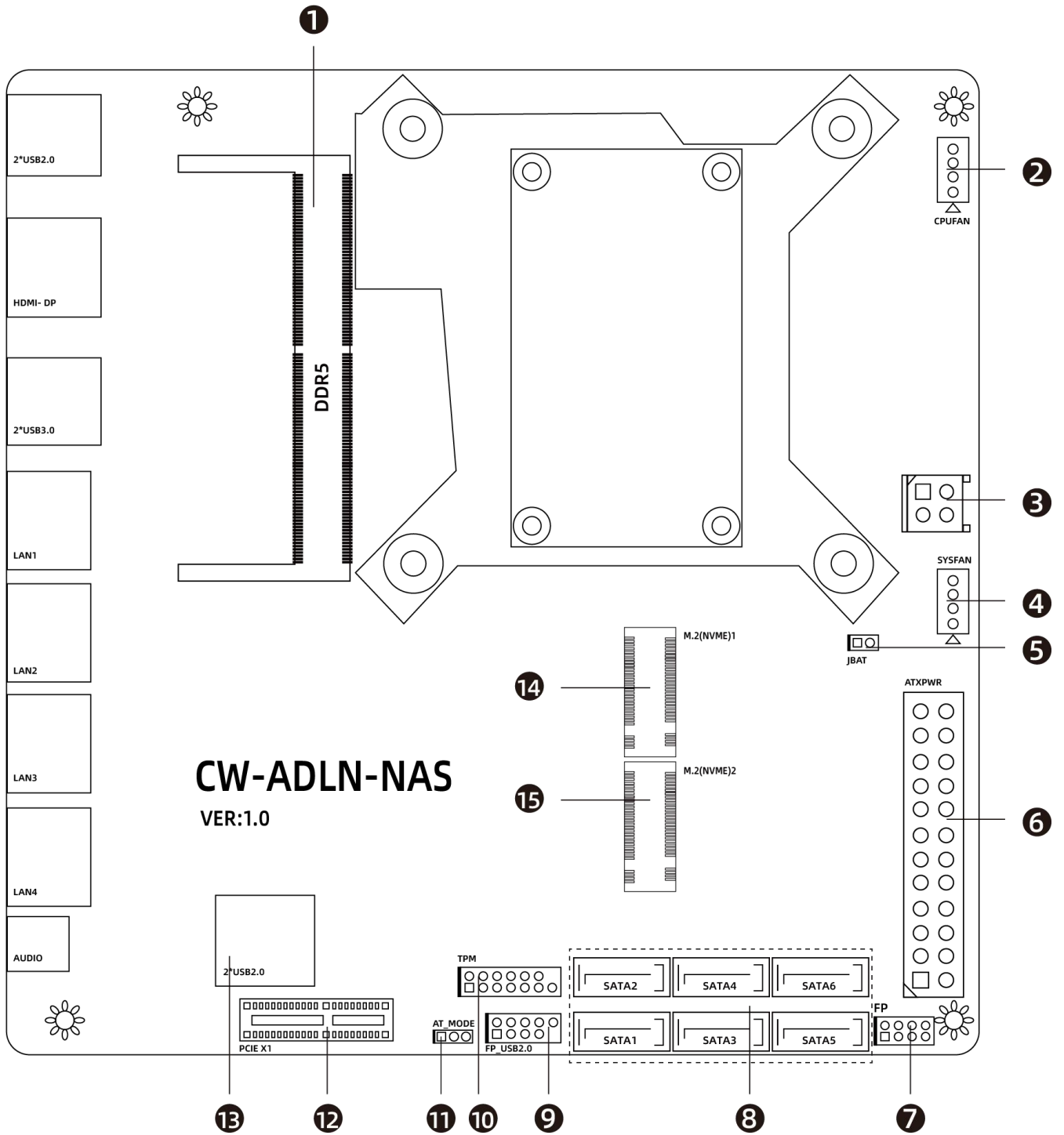
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Chapter 1: Product Introduction

1.1、Motherboard Specifications

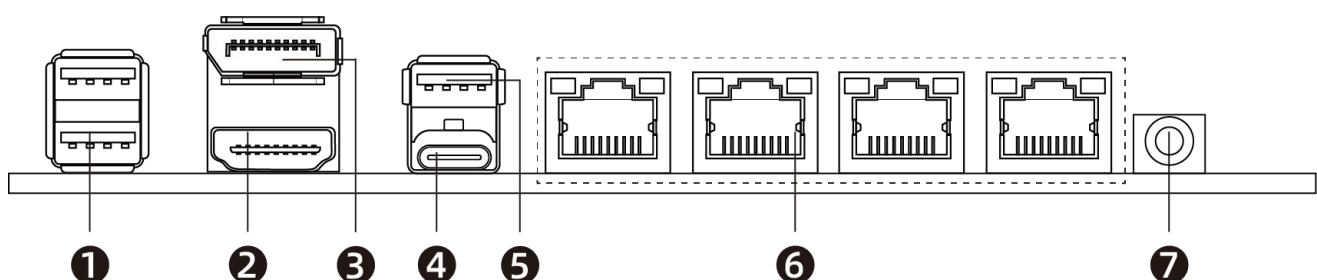
Processor/Chipset	Intel Alder Lake-N N100 N305 CPU
Memory	1* DDR5 4800MT/s slot, supports up to 48GB
Network	4* Intel i226 2.5G LAN ports
Display	1* HDMI, 1* DP, 1* TYPE-C, supports synchronous or asynchronous display
Storage	6*SATA3.0, 2* M.2(NVME)
I/O Ports	1*HDMI 1*DP 4* Intel i226 2.5G LAN ports 1*TYPE-C 2*USB3.0 2*USB2.0 1*AUDIO
Internal I/O Ports	2*FP_USB2.0 (headers) 2*USB2.0 2*M.2(NVME) 6*SATA3.0 1*FP 1*TPM 1*CPUFAN 1*SYSFAN
Watchdog Timer	0-255 seconds, system reset
Power Supply	ATX 24PIN + 4PN powered
Temperature	Storage temperature: -20°C - 70°C Operating temperature: -20°C - 60°C
Size	170mm*170mm

1.2 Motherboard Layout



Motherboard Layout Interface Description		
1	DDR5	4800MT/s memory slot, supports up to 16GB
2	CPUFAN	CPU cooling fan connector
3	ATX12V	ATX 4-pin power connector
4	SYSFAN	System fan connector
5	JBAT	JBAT
6	ATXPWR	ATX 24-pin power
7	FP	Switch
8	6*SATA	6*SATA 3.0 connectors for solid-state storage
9	FP_USB2.0	2*USB2.0 (pin header)
10	TPM	Encryption module
11	AT_MODE	AT_MODE
12	PCIE	PCIe X1 slot, cannot be used simultaneously with M.2_2
13	2*USB2.0	2*internal USB 2.0 connectors
14	M.2_1	M.2_1 slot, supports NVMe protocol
15	M.2_2	M.2_2 slot, supports NVMe protocol, cannot be used simultaneously with PCIe X1

1.2、I/O Port



I/O Port Description		
1	2*USB	2*USB2.0 ports
2	1*HDMI	HDMI high-definition display output
3	1*DP	DisplayPort high-definition display output
4	TYPE-C	Supports Type-C display and USB 3.0 functionality
5	USB3.0	USB 3.0 port
6	4*LAN	4*2.5G i226 Ethernet ports
7	AUDIO	Audio interface

Chapter 2: Installation

Safety Notes:

Do not tear off the motherboard's serial number or dealer warranty stickers, as this may affect warranty terms.

- Always turn off and unplug the power before installing or removing the motherboard and other hardware.
- When handling the motherboard, avoid touching metal parts to prevent short circuits.
- It is best to wear an anti-static wristband when handling the motherboard, CPU, or memory.

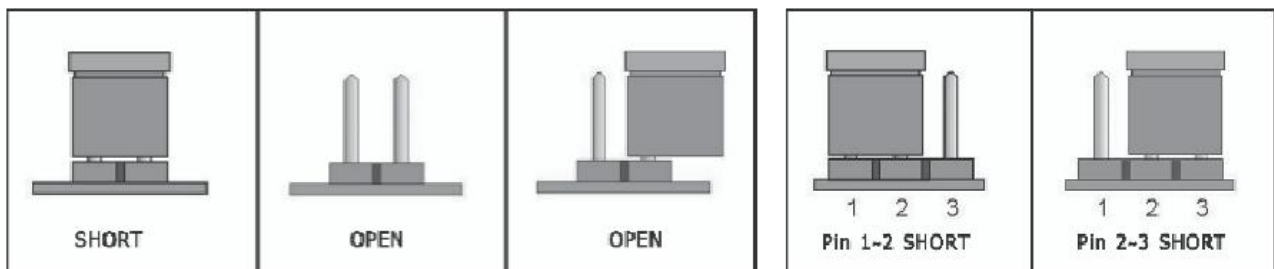
If none is available, make sure your hands are dry and touch metal to discharge static electricity first.

- Before installing the motherboard, place it on an anti-static mat or in an anti-static bag.
- Ensure that the power supply is off before removing the power plug.
- Avoid letting screws touch the motherboard circuits or components to prevent damage or malfunction.
- Make sure no screws or metal objects are left on the motherboard or inside the computer case.
- If you are unfamiliar with the installation process or encounter technical issues, please consult a professional technician.

2.1 Jumper Settings

How to Identify the 1st pin of Jumpers/Connectors:

1. Look for text markings next to the plug or socket, which might use “1” or bold lines, △, or □ symbols to indicate the first pin.
2. Check the back side of the solder pads; the □square solder pad represents the 1st pin.



2-pin header: Inserting the jumper cap onto the two pins will short them (close the circuit).

3-pin header: The jumper cap can be inserted onto pins 1-2 or pins 2-3 to short them (close the circuit).

2.2、Port Definitions

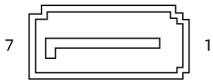
1.FP 8-Pin Definition

Pin Number	Pin	Definition	Pin	Definition
	1	PWRLED+	2	PWRLED+
	3	HDDLED+	4	HDDLED-
	5	RESETBTN#	6	PWRBTN#
	7	GND	8	GND

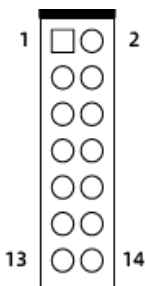
2.FP_USB21 9-Pin Definition

Pin Number	Pin	Definition	Pin	Definition
	1	VCC	2	VCC
	3	D1-	4	D2-
	5	D1+	6	D2+
	7	GND	8	GND
	9		10	GND

3.SATA 3.0 7-Pin Definition

Pin Number	Pin	Definition	Pin	Definition
	1	GND	2	SATA_TXP
	3	SATA_TXN	4	GND
	5	SATA_RXN	6	SATA_RXP
	7	GND	8	

4.TPM 14-Pin Definition

Pin Number	Pin	Definition	Pin	Definition
	1	SPI_VCC	2	PIRQA_N
	3	PLTRST-	4	SPI_CS2
	5	SPI_CS1	6	SPI_WP1-
	7	SPI_VCC	8	GND
	9	SPI_CS0_1	10	TPM_SCLK
	11	TPM_MISO	12	TPM_MOSI
	13	SPI_HOLD1	14	

5.CPUFAN 4-Pin Definition

Pin Number	Pin	Definition	Pin	Definition
	1	GND	2	+12V
	3	DET	4	PWM

6.SYSFAN 4-Pin Definition

Pin Number	Pin	Definition	Pin	Definition
	1	GND	2	+12V
	3	DET	4	PWM

7.JBAT 2-Pin Definition

Pin Number	Setting	JBAT
1 	Pin 1-2 Open	Normal working state
	Pin 1-2 Shorted	Clear CMOS content, all BIOS settings restored to factory defaults

8.AT_MODE 3-Pin Definition

Pin Number	Pin	Definition
1 	Short Pins 1-2	ATX mode
	Short Pins 2-3	AT mode

Chapter 3: Product Showcase

