

Manual for Q1900G4 Nano Motherboard v1.1**Catalogue**

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I、Product Description

1. Brief Introduction

Q1900G4 is a Nano-ITX motherboard designed based on the Intel Baytrail Platform, with the size of 120mm x120mm.

2. Version Specification

Version NO.	Motherboard NO.	QTY of Network Card	QTY of USB Ports
V1.1	Q1XXG4-P	4	4

3. Characteristics & Performances

1) Great reliability

With the adoption of the Baytrail ultra-low power consumption processor and switching mode power supply, Q1900G4 motherboard can provide stable, sufficient and efficient power. The stability of the motherboard is further guaranteed with the switching mode of power supply applied in memory, too. All of the external devices of the motherboard is composed of some anti-static and jam-proof components which ensured the operation of a stable and efficient system.

2) High Performance

It considerably increases performance of the platform by employing the Baytrail chipset of Intel and SATA3.0

3) Full Support of BIOS

Support Diskless booting and Wake on LAN

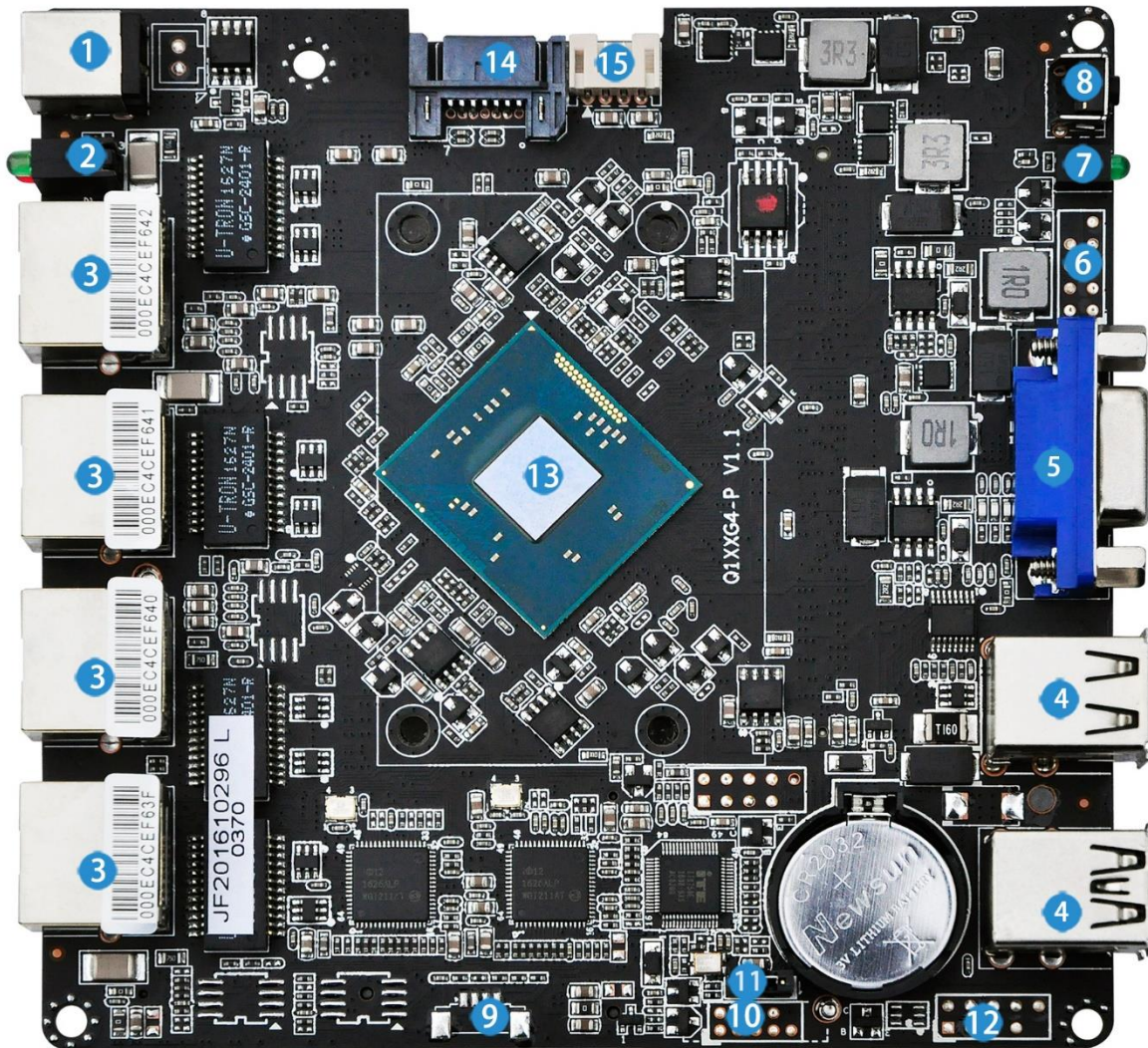
4) Working Condition

Working Temperature : -10°C ~ 50°C

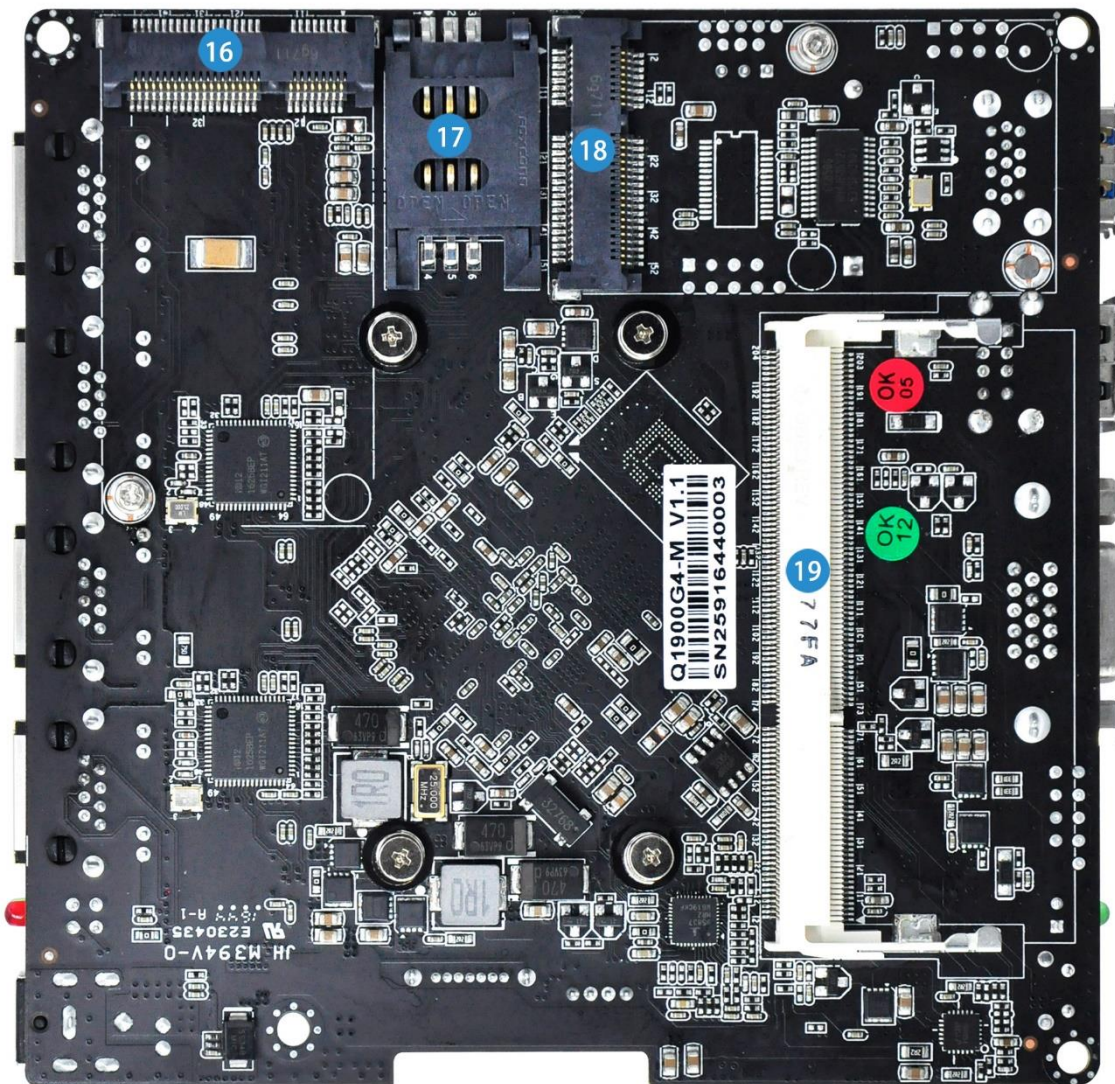
Working Humidity : 5% ~ 95% (Non-gel)

II、Product Overview

1. Front View



2. Back View



3. Connectors and Headers

Pin#	Description	Signal Name
1	12V DC in connector	
2	HDD led/Power led	
3	4 * Lan connector	
4	3* USB 2.0 ports, 1* USB 3.0 port	
5	VGA connector	
6	Front panel audio header (optional)	
7	Power led	
8	Power button	
9	CPU fan header (optional)	
10	RS232 header (optional)	
11	Automatically boot jumper	
12	USB header (optional)	
13	Processor	
14	SATA 3.0 Port	
15	SATA power connector	
16	Mini PCI Express connector for MSATA SSD	
17	SIM card socket	
18	Mini PCI Express connector for WIFI(Only for USB signal)	
19	DDR3L SO-DIMM socket	

III、 Detailed Description of Connection Ports

1. Power Input Port

Increased reliability with intensive electrical socket outlet.

12V power supply input. Suitable for power adapter (Internal: the positive pole, external: the negative pole) which has the outside diameter of 5.5mm and inside diameter of 2.5mm.

2. HDD led & Power led

HDD: Red color.

POWER: Green color.

3. 1000M LAN Port

Intel I211AT gigabit network, support diskless booting and Wake on LAN.

4. USB Ports

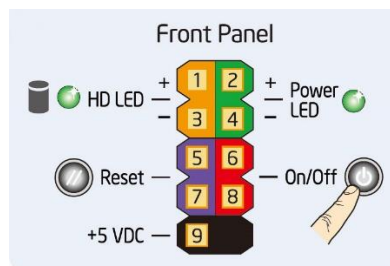
3*USB 2.0 ports, 1*USB 3.0 port

5. VGA Connector

Standard VGA port

6. Extended Pin for External Panel (Optional)

For accessing the power switch, power LED, HDD LED, reset switch.



Pin spacing : 2.54mm

7. Power led

POWER: Green color.

8. Power Switch

Power switch button

9. CPU Fan Header

For connecting fan of the CPU.

10. Serial port header (Optional)

COM1,

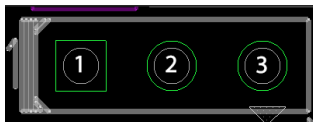


Pin#	Signal
1	GND
2	+5V
3	Detection
4	Control

Pin#	Signal	Define	Note
1	DCD	Data Carrier Detect	
2	RXD	Received Data	
3	TXD	Transmitted Data	

4	DTR	Data Terminal Ready	
5	GND	Signal Ground	
6	DSR	Data Send Ready	
7	RTS	Request to Send	
8	CTS	Clear to Send	
9	RI	Ring Indicator	

11. Automatically boot jumper



Functions	PIN#
Enable	2-3
Disable	1-2

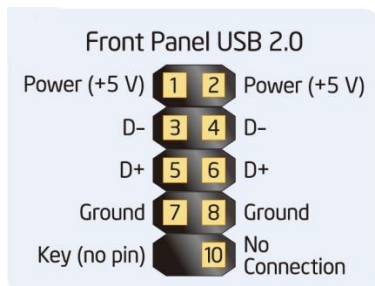
Pin spacing : 2.54mm

12. Extended USB Pin (Optional)

Pin for accessing extended USB2.0.



Pin#	Signal	Pin#	Signal
1	+5V DC	2	+5V DC
3	D-	4	D-
5	D+	6	D+
7	Ground	8	Ground
9	KEY (no pin)	10	No Connect



Pin spacing : 2.54mm

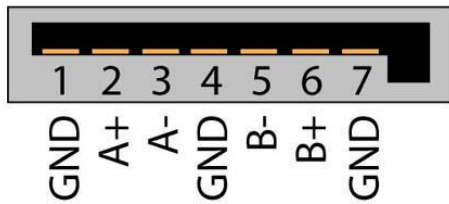
13. Intel Baytrail Processor

Support Baytrail processor

14. SATA 3.0 Port

Universal SATA3.0 port

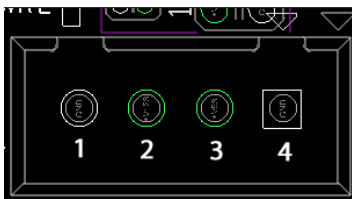
SATA Pinout - Plug



15. SATA Power Connector

Special power interface, please ask for matching wire from the distributor.

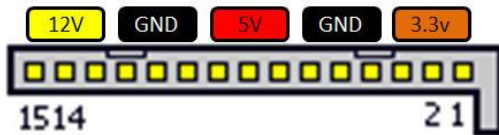
When Power adaptor is 12V, 3.5" HDD can be supported.



Pin#	1	2	3	4
Signal	Ground	+12V	+5V	GND

Pin spacing : 2.0mm

PS : Standard SATA Power Connector Definition



16. PCI Express Full-Mini Card Slot (For MSATA SSD)

Universal MINI SATA port for accessing MSATA SSD

17. SIM card slot

Coordinate with Item No. 18, the function of 3G/4G can be supported.

18. PCI Express Half-Mini Card Slot

Only for USB signal

19. Memory Slot

Only suitable for SO-DIMM of 1333 MHz or 1600 MHz (1.35V) working frequency, maximum 8 GB single-sided module.