## Introduction:

NANO8F/NANO9F is high speed, fanless motherboard. It is mainly used in financial, retail, medical, all-in-one machines, advertising machines, industrial computers and other fields.

## Main features of the motherboard:

- 1. You can choose J1800 or J1900 processor, they use Intel Bay trail SOC chip set;
- 2. The motherboard supports 1\*DDR3 1333/1600 low voltage(1.35V) memory, supports Max.RAM 8GB;
- 3. The motherboard has on-board VGA,LVDS pin,it supports dual screens display;
- 4. LVDS supports lightness adjustment;
- 5. It has on-board 2\*COM pins, supports to take the electric 5V/12V from COM, also supports 1\*RS485;
- 6. It has on-board 1\*Mini PCI-E, supports WIFI, 3G, 1\*MSATA, also supports MSATA hard disk;
- 7. It has on-board ON/OFF button, supports to use patch cord of hardware to "Power On";
- 8. It also has 1\*SATA2.0 hard disk interface, you can also choose 2\*1000Mbps RJ45 network ports.

NANO8F motherboard series:		(J1800 CP	U)
Model	LAN	USB2.0	USB3.0
NANO8F	1	6	2
NANO8F-2L	2	4	2
Other options:Fan or Fanless			

NANO9F motherboard series:		(J1900 CF	PU)
Model	LAN	USB2.0	USB3.0
NANO9F	1	6	2
NANO9F-2L	2	4	2
Other options:Fan or Fanless			

Supporting these Intel processors:							
Motherboard	Processor	Intel	Code Name	Cores		Processor Base	Max. Turbo
Model	Number	Brand			Threads	Frequency	Frequency
						(GHz)	(GHz)
NANO8F	J1800	Celeron	Bay Trail	2	2	2.41	2.58(Burst
		Celeion	Day ITali	۷		2.41	Frequency)
NANO9F	J1900	Celeron	Bay Trail	4	4	2	2.42(Burst
		Celefoli	Day ITali	4	4	2	Frequency)

	NANO8F/NANO9F Motherboard Spec.		
Form Factor(Size)	NANO-ITX,(L*W)120mm*120mm		
Processor	Supporting Intel Celeron J1800/J1900 processor.		
Chip Set	Intel Bay trail SOC chip set		
Memory	1* SO-DDR3 1333/1600M low voltage(1.35V) memory channel, supports Max.RAM 8GB.		
Graphics Card	Integrating Intel HD Graphic GPU;		
	Supporting Dynamic Memory Allocation(DVMT);		
	Supporting HDMI,VGA,LVDS display interfaces,built-in dual channels 24bit LVDS pin		
	header;		
	Supporting dual screens display.		
Hard Disk(Storage)	1*SATA2.0, 1*MSATA interfaces, Max. transmission rate 3.0 Gbps.		
Network Card	1*Realtek 8111F 1000Mbps RJ45 LAN port, supports Wake on LAN(WOL).		
Audio	Integrating Realtek ALC662 HD digital audio decoder;		
	Supporting Line-out, MIC-in interfaces;		
	It has on-board front pin;		
	It also has on-board 5W power amplifier.		
I/O Expansion	6*USB2.0 , 2*USB3.0 .		
	2*RS232 COM , 1*RS485, supports to take the electric 5V/12V from COM.		
System Monitor	Supporting CPU temperature monitor, fan speed, system temperature.		
/ Watch dog			
Expansion Bus	1*Mini PCI-E slot, it supports WIFI/3G,1*MSATA interfaces.		
BIOS	AMI BIOS, support read only; Power switch, timer switch, remote switch equipment		
	Intelligent identification.		
Operating System	Windows 7(64bit,32bit), Windows 8, Windows 10, Linux.		
	The motherboard doesn't support Windows XP.		
Operating	Working temperature: -10 $^{\circ}$ C $^{\circ}$ 60 $^{\circ}$ C;		
Environment	Relative humidity:5%~95%,non-condensation.		
Power Supply	DC 12V 5A power adapter		
Chassis	NANO18,NANO19		

## **Hardware Features:**

Network description		
Network Card Chip	Realtek RTL8111F	
Function	10/100/1000Mbps self-adaptive, supports PXE boot and remote wake on Internet.	
Interface Type	RJ45	
Network card's	Self-defined	
light definition		