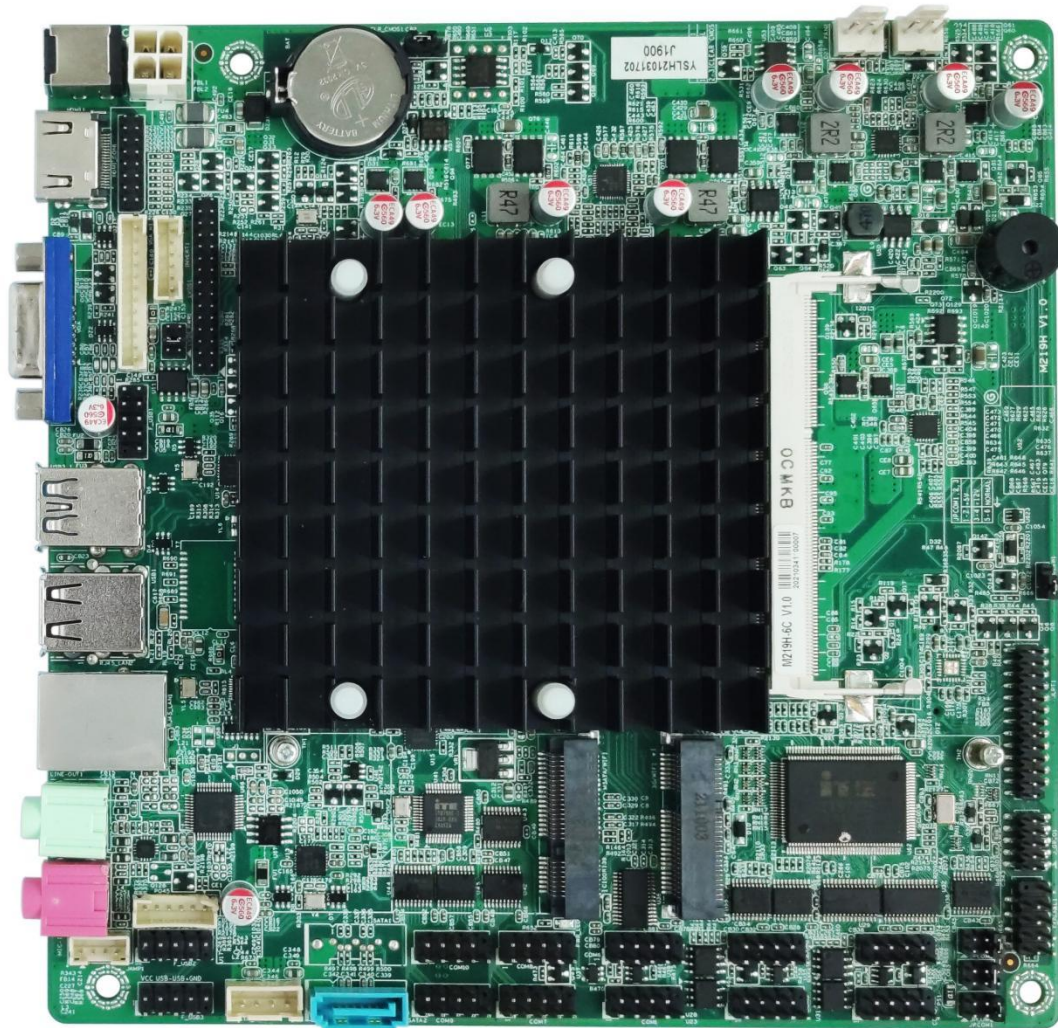


# ELSKY M218H M219H V1.0 Specification

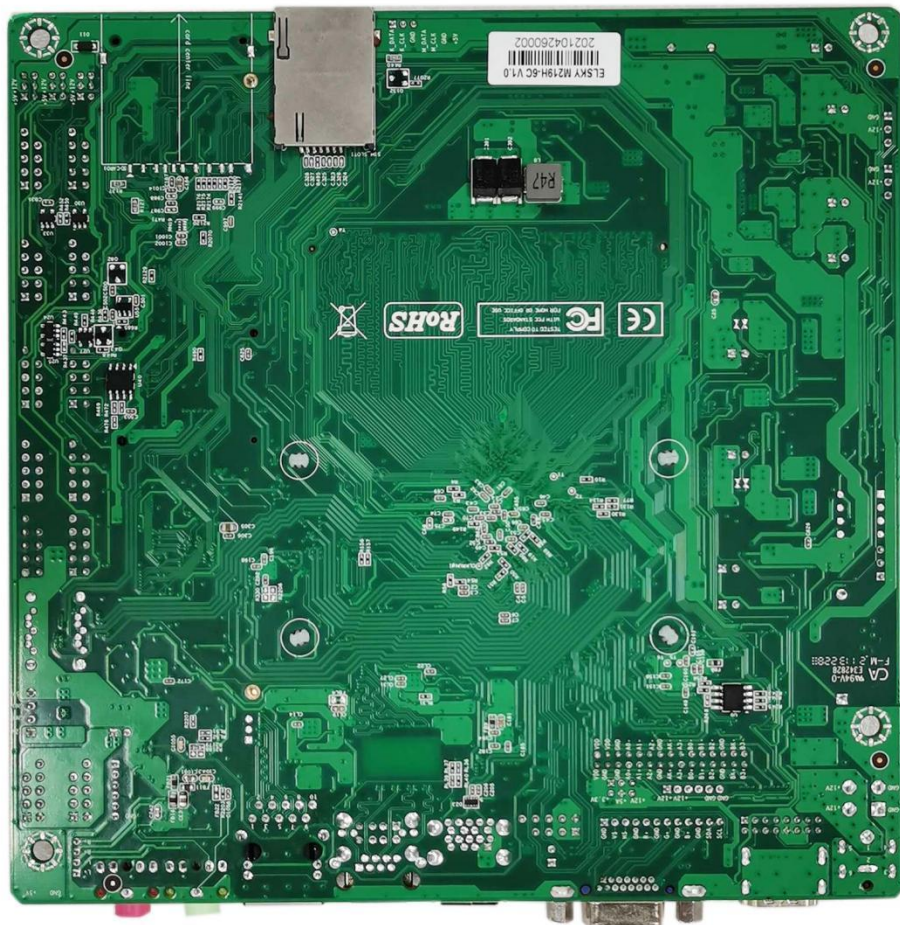
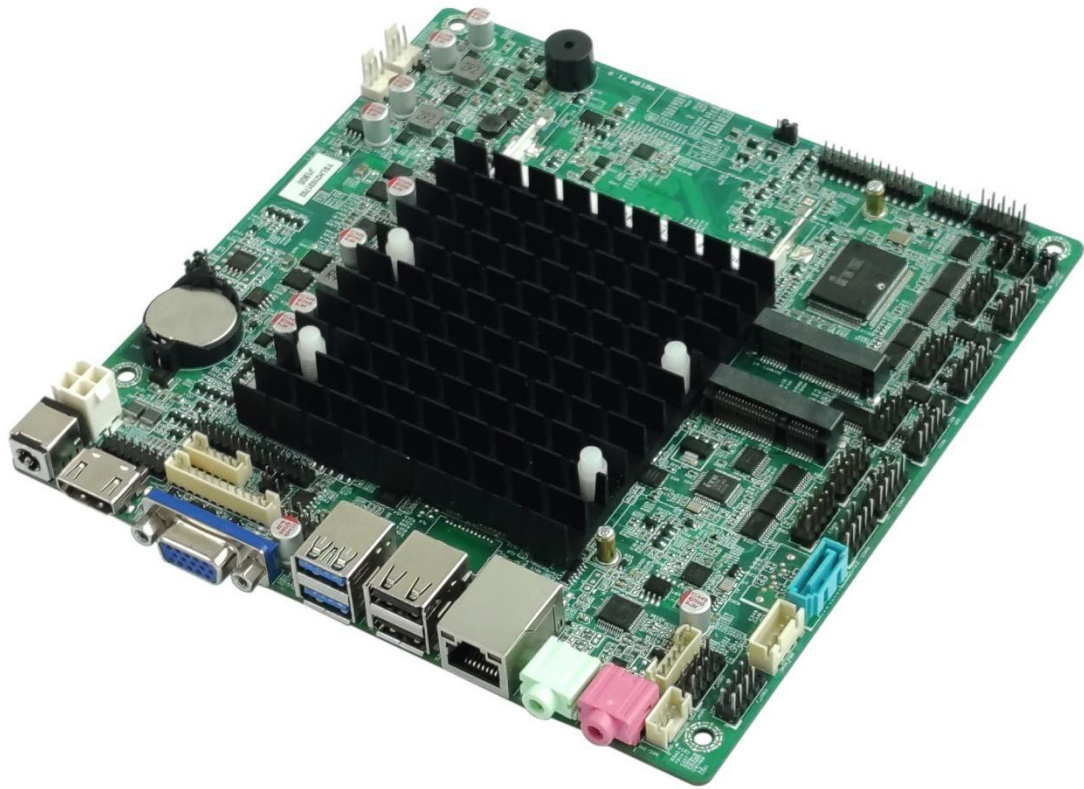


**With 1\*LAN:**



**With 2\*LAN:**





## Ordering Information:

M218H Series								
Model	Intel CPU	LAN	COM	USB2.0	USB3.0	SSD	Memory	DC Power
M218H-2C	J1800	1	2	9	1	1*MSATA 1*SATA	1*NB-DDR3 8G(MAX)	+12V
M218H-2L2C		2		7	1			
M218H-4C		1	4	9	1			
M218H-2L4C		2		7	1			
M218H-6C		1	6	9	1			
M218H-2L6C		2		7	1			
M218H-10C		1	10	9	1			
M218H-2L10C		2		7	1			

M219H Series								
Model	Intel CPU	LAN	COM	USB2.0	USB3.0	SSD	Memory	DC Power
M219H-2C	J1900	1	2	9	1	1*MSATA 1*SATA	1*NB-DDR3 8G(MAX)	+12V
M219H-2L2C		2		7	1			
M219H-4C		1	4	9	1			
M219H-2L4C		2		7	1			
M219H-6C		1	6	9	1			
M219H-2L6C		2		7	1			
M219H-10C		1	10	9	1			
M219H-2L10C		2		7	1			

M229H Series								
Model	Intel CPU	LAN	COM	USB2.0	USB3.0	SSD	Memory	DC Power
M229H-2C	J2900	1	2	9	1	1*MSATA 1*SATA	1*NB-DDR3 8G(MAX)	+12V
M229H-2L2C		2		7	1			
M229H-4C		1	4	9	1			
M229H-2L4C		2		7	1			
M229H-6C		1	6	9	1			
M229H-2L6C		2		7	1			
M229H-10C		1	10	9	1			
M229H-2L10C		2		7	1			

M218H,M219H,M229H motherboards support Intel ATOM Bay Trail processor(FCBGA1170):					
CPU Model	Brand	Base Frequency (GHz)	Burst Frequency (GHz)	TDP (W)	CPU Graphics
J1800	Celeron	Dual cores, 2.41	2.58	10	Intel HD Graphics (1080P,2k,FHD)
J1900		Quad Cores, 2.0	2.42		
J2900	Pentium	Quad Cores, 2.41	2.66		

**Important notice:**

- (1) HDMI, VGA, LVDS/EDP1 support single display,dual display copy/expansion,single display under DOS.
- (2) The LVDS,EDP pins cannot exist at the same time.By default,the motherboard supports LVDS,does not support EDP. If you need EDP,please tell us in advance.
- (3) By default,the Mini PCI-E slot supports PCIE,USB signals.
- (4) By default,the MSATA slot supports SATA,USB signals.  
The MSATA slot supports changing the SATA signal to the PCIE signal.Please note that the SATA signal will not exist after the change.If you need PCIE signal,please tell us to change the signal in advance.
- (5) The USB signal of the MSATA,USB signal of the SD card cannot exist at the same time.  
By default,the MSATA has USB signal,the SD card has not USB signal.
- (6) The motherboard only supports 1\*USB3.0 port.In the blue USB interface,the above is the USB2.0 interface,and the bottom is the USB3.0 interface.The black USB interfaces are USB2.0 ports.
- (7)
- ◆ A power: After turning off the motherboard, the USB pins/interfaces are still with electricity.
  - ◆ S power: After turning off the motherboard, the USB pins/interfaces have no electricity.
- By default,the USB interfaces and pins have S power,support to change to with A power.  
If you need A power,please tell us in advance.
- (8) The motherboard supports optional 2\*COM,4\*COM,6\*COM,10\*COM.  
By default,all COM pins support RS232.  
The COM3,COM4 support optional RS232/422/485 through BIOS setting.  
The COM6 supports optional RS232/485 through BIOS setting.
- (9) The 9th pin of COM1/2/3 supports output optional 0V,5V,12V by JPCOM1/2/3 jumper pin setting.  
By default,the COM1/2/3 have 0V.
- (10) The motherboard supports another version without COM pins.This version only supports Power On function by AUTO-SW jumper pin setting.  
The motherboard with COM version only supports Power On function by BIOS setting.
- (11) By default,the motherboard supports 1\*LAN port.Support to change to 2\*LAN.If you need 2\*LAN,please tell us in advance.  
The LAN does not support POE.

(12) By default,the motherboard is fanless,can choose with fan version.If you need fan,please tell us in advance.

(13) All product specifications are subject to change without notice.

## Motherboard Specifications

Form Factor	Thin Mini-itx	
Physical Dimension	170*170*21mm(L*W*H)	
Processor	Support Intel Celeron dual cores 2.41GHz J1800 CPU; Support Intel Celeron quad cores 2.0GHz J1900 CPU; Support Intel Pentium quad cores 2.41GHz J2900 CPU.	
Chipset	Intel Bay trail SOC Chipset	
Memory	1*SODIMM slot	NB-DDR3 1333/1600MHz 1.35V Memory slot,up to 8GB RAM.
Power Supply	1*DC_JACK	DC port size:5.5*2.5MM;Support DC 12V;
	1*DC_PWR	The motherboard full load power consumption is about 25W; Recommend 12V 5A / 7A / 10A power adapter.
Display Function	Integrated Intel HD Graphics in CPU; Support single display,dual display copy/expansion,single display under DOS.	
	1*VGA DB15 interface	Support resolution 1920*1080@60Hz
	1*VGA_H1 pin	Support resolution 1920*1080@60Hz (12Pin,1*12Pin,2.0mm)
	1*HDMI 1.4 interface	Support resolution 1920*1080@60Hz
	1*HDMI_CON pin	Support resolution 1920*1080@60Hz (16Pin,2*8Pin,2.0mm)
	1*LVDS pin	Support resolution 1920*1080@60Hz (30Pin,2*15Pin,2.0mm)
	1*LVDS_PWR pin	LVDS voltage control pin (6Pin,2*3Pin,2.0mm)
	1*INVERT pin	LVDS backlight switch control pin (6Pin,1*6Pin,2.0mm)
	<b>Support LVDS(Default); The LVDS,EDP pins cannot exist at the same time.If you need EDP pin,please tell us in advance.</b>	
Ethernet	1/2*LAN interface	Realtek RTL8111GF Gigabit NIC chip; Support Wake on LAN,PXE diskless boot function; Option 2*LAN.
	1*MINI_PCIE interface	Support optional WIFI/3G/4G/Bluetooth module.
Storage	1*SATA interface	SATA2.0 hard disk interface
	1*MSATA interface	(MSATA)Mini SATA2.0 SSD slot
	1*SATA_PWR pin	It is hard disk power supply pin and can take the 5V,12V electricity. (4Pin,1*4Pin,2.54mm)
HD Audio	Integrated Cmedia HS-100B FULL SPEED HD AUDIO USB Chipset	
	1*LINE_OUT interface	Support Audio output(Green color)
	1*MIC_IN interface	Support Microphone input(Red color)
	1*JAMP pin	This is the amplifier pin. It supports 8 Ω 5W speaker dual channel output. (4Pin,1*4Pin,2.0mm)

USB Function	1*USB3.0 interface	Rear standard USB3.0 interface (Blue)
	3*USB2.0 interfaces	Rear standard USB2.0 interface(Blue,black)
	1*F_USB1 pin	Front USB2.0 pin;One group has 2*USB2.0 (9Pin,2*5Pin,2.54mm)
	1*F_USB2 pin	Front USB2.0 pin;One group has 2*USB2.0 (9Pin,2*5Pin,2.54mm)
	1*F_USB3 pin	Front USB2.0 pin;One group has 2*USB2.0 (9Pin,2*5Pin,2.54mm)
Switch	1*F_PANEL pin	Switch, power supply light, hard disk light, restart pin. (9Pin,2*5Pin,2.54mm)
	1*AUTO-SW pin	Support "Power on" (3Pin,1*3Pin,2.0mm)
Other I/O	10*COM pins	Standard RS232(Default); Option RS232/422/485. (9Pin,2*5Pin,2.54mm)
	1*JPCOM1/2/3 pin	Control the 9th pin of the COM1/2/3 to choose optional 0V/5V/12V. (6Pin,2*3Pin,2.0mm)
	1*JLPT pin	Printer interface pin (25Pin,2*13Pin,2.0mm)
	1*SIM card slot	Support SIM card. A SIM card is required when using 3G/4G function.
	1*CLR_CMOS pin	Motherboard discharges,clears pin. (3Pin,1*3Pin,2.54mm)
	FAN1 pin	This CPU Fan pin. It supports temperature control. (3Pin,1*3Pin,2.54mm)
	FAN2 pin	This is system Fan pin. It is full speed and does not support temperature control. (3Pin,1*3Pin,2.54mm)
	1*J_GPIO pin	GPIO control pin (10Pin,2*5Pin,2.0mm)
Operating Environment	Operating temperature:-20°C~60°C; Working humidity:5%~95% Relative humidity, no condensation.	
BIOS	AMI BIOS;Support timing switch,remote switch,intelligently identify devices.	
Watch Dog	Watch Dog programming supports hardware reset function (256 levels, 0~255 seconds).	
Operating System	Support Windows 10,Windows 8,Windows 7,Linux,etc.	