

## X86 Motherboard

Model	J1900B	J1900	J4125	J4125B	J6412	I-6th/7th	I-8th/10th		
Items	1.LAN: J1900B (LVDS)/J1900B(EDP) 2.LAN: J1900B (LVDS)/J1900B(EDP)	2.LAN: J1900B (LVDS)/J1900B(EDP)	2.LAN: J4125(LVDS)/J4125(EDP)	2.LAN: J4125B(LVDS)/J4125B(EDP)	2.LAN: J6412(LVDS)/J6412(EDP)	3-6100U (LVDS/EDP), i5-6200U (LVDS/EDP),i5-7200U (LVDS/EDP), i7-6500U (LVDS/EDP),i7-7500U (LVDS/EDP)	3-8140U(LVDS/EDP),i3-1010U(LVDS/EDP) i5-8265U(LVDS/EDP),i5-10200U(LVDS/EDP) i7-8565U(LVDS/EDP),i7-10500U(LVDS/EDP)		
architecture	Performan proces sor	OS	WIN7/10 Ubuntu14.04.6/16.04.7/18.04.5/18.04.6/20.04.1/20.04.3/20.04.4/22.04 Centos7.4/7.8/7.9 Redhat7.4 Debian11.6 UnfedInformation Desktop Operating System(EDP motherboard)	WIN7/10 Ubuntu14.04.6/16.04.7/18.04.5/18.04.6/20.04.1/20.04.3/20.04.4/22.04 Centos7.4/7.8/7.9 Redhat7.4 Debian11.6 UnfedInformation Desktop Operating System(EDP motherboard)	WIN7/10 Ubuntu14.04.6/16.04.7/18.04.5/18.04.6/20.04.1/20.04.3/20.04.4/22.04 Centos7.4/7.8/7.9 Redhat7.4 Debian11.6 UnfedInformation Desktop Operating System	WIN7/10 Ubuntu14.04.6/16.04.7/18.04.5/18.04.6/20.04.1/20.04.3/20.04.4/22.04 Centos7.4/7.8/7.9 Redhat7.4 Debian11.6 UnfedInformation Desktop Operating System	WIN7/10 Ubuntu14.04.6/16.04.7/18.04.5/18.04.6/20.04.1/20.04.3/20.04.4/22.04 Centos7.4/7.8/7.9 Redhat7.4 Debian11.6 UnfedInformation Desktop Operating System		
		CPU	Intel Celeron (Celeron) J1900,4-core/4-wire,mainfrequency2.00 GHzmaximum Rulfrequency2.4GHz	Intel Celeron (Celeron) J1900,4-core/4-wire,mainfrequency2.00 GHzmaximum Rulfrequency2.4GHz	Intel Celeron (Celeron) J4125,4-core/4-wire,mainfrequency2.00 GHzmaximum Rulfrequency2.7GHz	Intel Celeron (Celeron) J4125,4-core/4-wire,mainfrequency2.00 GHzmaximum Rulfrequency2.7GHz	Intel Celeron (Celeron) J6412,4-core/4-wire,mainfrequency2.00 GHzmaximum Rulfrequency2.6GHz	+CoreX-13 (8140U) mainfrequency: 2.3GHz, highest core frequency: 3.9GHz,dualcore 4-wirethread +CoreX-15 (10100U) mainfrequency: 2.1GHz, highest core frequency: 4.5GHz,dualcore 4-wirethread +CoreX-15 (7200U) mainfrequency: 1.6GHz, highest core frequency: 3.1GHz,dualcore 4-wirethread +CoreX-15 (6500U) mainfrequency: 2.5GHz, highest core 6T: Intel Iris Graphics 520 6T: Intel Iris Graphics 620	+CoreX-13 (8140U) mainfrequency: 2.3GHz, highest core frequency: 3.9GHz,dualcore 4-wirethread +CoreX-15 (10100U) mainfrequency: 2.1GHz, highest core frequency: 4.5GHz,dualcore 4-wirethread +CoreX-15 (7200U) mainfrequency: 1.6GHz, highest core frequency: 3.1GHz,dualcore 4-wirethread +CoreX-15 (6500U) mainfrequency: 2.5GHz, highest core 6T: Intel Iris Graphics 520 6T: Intel Iris Graphics 620
		GPU	Intel HD Graphics	Intel HD Graphics	Intel UHD Graphics 600	Intel UHD Graphics 600	Intel UHD Graphics 16 EU	adopt Intel Bay trail SOC chipset	adopt Intel Bay trail SOC chipset
		chipset	/	/	/	/	/	Support DDR4-2133, 1* SO-DIMM Slot, Up to 32GB	Support DDR4-2133, 1* SO-DIMM Slot, Up to 64GB
		SATA	1* SATA3.0	1* SATA3.0	1* SATA3.0	1* SATA3.0	1* SATA3.0	1* SATA3.0	1* SATA3.0
		MSATA	1*MSATA	1*MSATA	1*MSATA	1*MSATA	1*MSATA	1*MSATA	1*MSATA
		M.2	/	/	/	/	/	1* M.2	1* M.2
		Hard Disk	/	/	/	/	/	1* M.2	1* M.2
		LVDS	2x15dual row pin holder,single/dual LVDS interface,supporting single/dual 8bit,capable of directly driving 50/75Hz LCD screen	2x15dual row pin holder,single/dual LVDS interface,supporting single/dual 8bit,capable of directly driving 50/75Hz LCD screen	2x15dual row pin holder,single/dual LVDS interface,supporting single/dual 8bit,capable of directly driving 50/75Hz LCD screen	2x15dual row pin holder,single/dual LVDS interface,supporting single/dual 8bit,capable of directly driving 50/75Hz LCD screen	2x15dual row pin holder,single/dual LVDS interface,supporting single/dual 8bit,capable of directly driving 50/75Hz LCD screen	2x15dual row pin holder,single/dual LVDS interface,supporting single/dual 8bit,capable of directly driving 50/75Hz LCD screen	2x15dual row pin holder,single/dual LVDS interface,supporting single/dual 8bit,capable of directly driving 50/75Hz LCD screen
		EDP	support 2560x1600@60fps output	support 2560x1600@60fps output	support 2560x1600@60fps output	support 2560x1600@60fps output	support 2560x1600@60fps output	support 2560x1600@60fps output	support 2560x1600@60fps output
		HDMI 2.0 output	4K resolution 4096/3840*2160@60Hz	4K resolution 4096/3840*2160@60Hz	4K resolution 4096/3840*2160@60Hz	4K resolution 4096/3840*2160@60Hz	4K resolution 4096/3840*2160@60Hz	4K resolution 4096/3840*2160@60Hz	4K resolution 4096/3840*2160@60Hz
		VG	support resolution 1920*1080@60Hz	support resolution 1920*1080@60Hz	support resolution 1920*1080@60Hz	support resolution 1920*1080@60Hz	support resolution 1920*1080@60Hz	support resolution 1920*1080@60Hz	support resolution 1920*1080@60Hz
USB	1*LAN/2*LAN optional, 10M/100M/1000M adaptive Ethernet	2*10M/100M/1000M adaptive Ethernet	2*10M/100M/1000M adaptive Ethernet	2*10M/100M/1000M adaptive Ethernet	2*10M/100M/1000M adaptive Ethernet	2*10M/100M/1000M adaptive Ethernet	2*10M/100M/1000M adaptive Ethernet		
RJ45 (LAN)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)		
4G	/	/	/	/	/	/	/		
5G	/	/	/	/	/	/	/		
WIFI	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)		
Bluetooth	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)	1*MINI PCIe support WIFI/3G/4G/Bluetoothmodule(etheroption)		
speaker	4Pin Seat support8Ohm 5W	Built-in dual channel 4R/10W/or8R/5W/dual channel power amplifier	Built-in dual channel 4R/10W/or8R/5W/dual channel power amplifier	Built-in dual channel 4R/10W/or8R/5W/dual channel power amplifier	Built-in dual channel 4R/10W/or8R/5W/dual channel power amplifier	Built-in dual channel 4R/10W/or8R/5W/dual channel power amplifier	Built-in dual channel 4R/10W/or8R/5W/dual channel power amplifier		
mic	support	support	support	support	support	support	support		
audio	1*AUDIO support audio output	1*3.5mm 4-section audio input/output	1*3.5mm 4-section audio input/output	1*3.5mm 4-section audio input/output	1*3.5mm 4-section audio input/output	1*3.5mm 4-section audio input/output	1*3.5mm 4-section audio input/output		
USB 2.0	4*USB2.0 ( shore wire USB2.0*2 inside plus USB2.0*4)	4*USB2.0 ( shore wire USB2.0*2 inside plus USB2.0*4)	4*USB2.0 ( shore wire USB2.0*2 inside plus USB2.0*4)	4*USB2.0 ( shore wire USB2.0*2 inside plus USB2.0*4)	4*USB2.0 ( shore wire USB2.0*2 inside plus USB2.0*4)	4*USB2.0 ( shore wire USB2.0*2 inside plus USB2.0*4)	4*USB2.0 ( shore wire USB2.0*2 inside plus USB2.0*4)		
USB 3.0	2*USB3.0 ( shore wire USB3.0*2)	2*USB3.0 ( shore wire USB3.0*2)	2*USB3.0 ( shore wire USB3.0*2)	2*USB3.0 ( shore wire USB3.0*2)	2*USB3.0 ( shore wire USB3.0*2)	2*USB3.0 ( shore wire USB3.0*2)	2*USB3.0 ( shore wire USB3.0*2)		
RS232	0*232(including one RS232/RS422/RS485 mutual conversion)	0*232(including one RS232/RS422/RS485 mutual conversion)	0*232(including one RS232/RS422/RS485 mutual conversion)	0*232(including one RS232/RS422/RS485 mutual conversion)	0*232(including one RS232/RS422/RS485 mutual conversion)	0*232(including one RS232/RS422/RS485 mutual conversion)	0*232(including one RS232/RS422/RS485 mutual conversion)		
RS485	1*RS232/RS422/RS485 mutual conversion	1*RS232/RS422/RS485 mutual conversion	1*RS232/RS422/RS485 mutual conversion	1*RS232/RS422/RS485 mutual conversion	1*RS232/RS422/RS485 mutual conversion	1*RS232/RS422/RS485 mutual conversion	1*RS232/RS422/RS485 mutual conversion		
RS422	1*RS232/RS422/RS485 mutual conversion	1*RS232/RS422/RS485 mutual conversion	1*RS232/RS422/RS485 mutual conversion	1*RS232/RS422/RS485 mutual conversion	1*RS232/RS422/RS485 mutual conversion	1*RS232/RS422/RS485 mutual conversion	1*RS232/RS422/RS485 mutual conversion		
TTL	/	/	/	/	/	/	/		
Other I/O	GPIO	8*GPIO(customizable input/output)	8*GPIO(customizable input/output)	8*GPIO(customizable input/output)	8*GPIO(customizable input/output)	8*GPIO(customizable input/output)	8*GPIO(customizable input/output)		
	SIM slot	support, 2*slot (shore wire *1 inside *1)	support, 2*slot (shore wire *1 inside *1)	support, 2*slot (shore wire *1 inside *1)	support, 2*slot (shore wire *1 inside *1)	support, 2*slot (shore wire *1 inside *1)	support, 2*slot (shore wire *1 inside *1)		
	fan port	support	support	support	support	support	support		
turn on/turn off	support	support	support	support	support	support	support		
button	support	support	support	support	support	support	support		
IR	/	/	/	/	/	/	/		
remote control	/	/	/	/	/	/	/		
battery	support	support	support	support	support	support	support		
RTC battery	support	support	support	support	support	support	support		
pilot lamp	support	support	support	support	support	support	support		
DC power	DC 12V-36V wide voltage power supply, 5525threaded head	DC 12V-36V wide voltage power supply, 5525threaded head	DC 12V-36V wide voltage power supply, 5525threaded head	DC 12V-36V wide voltage power supply, 5525threaded head	DC 12V-36V wide voltage power supply, 5525threaded head	DC 12V-36V wide voltage power supply, 5525threaded head	DC 12V-36V wide voltage power supply, 5525threaded head		
Reverse protection	support	support	support	support	support	support	support		
power adapter	12V 5A 5525threaded	12V 5A 5525threaded	12V 5A 5525threaded	12V 5A 5525threaded	12V 5A 5525threaded	12V 5A 5525threaded	19V/4.7A 5525threaded		
PCB	160mm*110mm*22mm	160mm*110mm*22mm	160mm*110mm*22mm	160mm*110mm*22mm	160mm*110mm*22mm	160mm*110mm*22mm	160mm*110mm*22mm		
Heat dissipation	No fan cooling	No fan cooling	No fan cooling	No fan cooling	No fan cooling	with fan cooling	with fan cooling		
Watch dog	Watch dog programming,supporting hardware reset	Watch dog programming,supporting hardware reset	Watch dog programming,supporting hardware reset	Watch dog programming,supporting hardware reset	Watch dog programming,supporting hardware reset	Watch dog programming,supporting hardware reset	Watch dog programming,supporting hardware reset		
BIOS	Supports power-on,network wake-up,and timed power on/off	Supports power-on,network wake-up,and timed power on/off	Supports power-on,network wake-up,and timed power on/off	Supports power-on,network wake-up,and timed power on/off	Supports power-on,network wake-up,and timed power on/off	Supports power-on,network wake-up,and timed power on/off	Supports power-on,network wake-up,and timed power on/off		
power dissipation	TDP 10W	TDP 10W	TDP 10W	TDP 10W	TDP 10W	TDP 15W	TDP 15W		
working temperature	working temperature: -20°C~70°C;	working temperature: -20°C~70°C;	working temperature: -20°C~70°C;	working temperature: -20°C~70°C;	working temperature: -20°C~70°C;	working temperature: -20°C~70°C;	working temperature: -20°C~70°C;		
storage temperature	storage temperature: -30°C~80°C	storage temperature: -30°C~80°C	storage temperature: -30°C~80°C	storage temperature: -30°C~80°C	storage temperature: -30°C~80°C	storage temperature: -30°C~80°C	storage temperature: -30°C~80°C		
size	5%-95%relative humidity, non condensing	5%-95%relative humidity, non condensing	5%-95%relative humidity, non condensing	5%-95%relative humidity, non condensing	5%-95%relative humidity, non condensing	5%-95%relative humidity, non condensing	5%-95%relative humidity, non condensing		
ESD	Electrostatic design requirements: contact1.BKV,air15KV	Electrostatic design requirements: contact1.BKV,air15KV	Electrostatic design requirements: contact1.BKV,air15KV	Electrostatic design requirements: contact1.BKV,air15KV	Electrostatic design requirements: contact1.BKV,air15KV	Electrostatic design requirements: contact1.BKV,air15KV	Electrostatic design requirements: contact1.BKV,air15KV		
Anti surge	Add TVS in surge protection design	Add TVS in surge protection design	Add TVS in surge protection design	Add TVS in surge protection design	Add TVS in surge protection design	Add TVS in surge protection design	Add TVS in surge protection design		
front									
back side									
suggestion:	Not recommended for J4125B	J1900 board low-priced promotion	Return order consumption the J4125,new customer recommends J4125B	Celeron standard main push	Celeron high-end main push	Core Standard Featuring 6th Generation	Core Core with 10generations of main features		
note:	1.Comes with wide voltage12V-36V 2.Memory supports up tosupport8G, single memory 3.without M.2 port 4.audio port only supportoutput 5.support1*LAN (dual gigabit) 6.USB2.0*6 USB3.0*2 7.6*232(including one RS232/RS422/RS485 mutual conversion) 8.*GPIO(4way input /4way output) can be defined in BIOS 9. shore wire port&CL- J1900B/J4125B/J4125B/J6412/series6/7/8/10/13sname	1.Comes with wide voltage12V-36V 2.Memory supports up tosupport8G, single memory 3.without M.2 port 4.audio port only supportinput output 5.support2*LAN (dual gigabit) 6.USB2.0*6 USB3.0*2 7.6*232(including one RS232/RS422/RS485 mutual conversion) 8.*GPIO(4way input /4way output) can be defined in BIOS 9 shore wire port&CL- J1900B/J4125B/J4125B/J6412/series6/7/8/10/13sname	1.Comes with wide voltage12V-36V 2.Memory supports up tosupport8G, single memory 3.without M.2 port 4.audio port only supportoutput 5.support2*LAN (dual gigabit) 6.USB2.0*6 USB3.0*2 7.6*232(including one RS232/RS422/RS485 mutual conversion) 8.*GPIO(4way input /4way output) can be defined in BIOS 9. shore wire port&CL- J1900B/J4125B/J4125B/J6412/series6/7/8/10/13sname	1.Comes with wide voltage12V-36V 2.Memory supports up tosupport8G, single memory 3.supportM.2 port 4.audio portsupport input/output 5.support2*LAN (dual gigabit) 6.USB2.0*6 USB3.0*2 7.6*232(including one RS232/RS422/RS485 mutual conversion) 8.*GPIO(4way input /4way output) can be defined in BIOS 9. shore wire port&CL- J1900B/J4125B/J4125B/J6412/series6/7/8/10/13sname	1.Comes with wide voltage12V-36V 2.Memory supports up tosupport32G, single memory 3.supportM.2 port 4.audio portsupport input/output 5.support2*LAN (dual gigabit) 6.USB2.0*6 USB3.0*4 7.6*232(including one RS232/RS422/RS485 mutual conversion) 8.*GPIO(4way input /4way output) can be defined in BIOS 9. shore wire port&CL- J1900B/J4125B/J4125B/J6412/series6/7/8/10/13sname	1.Comes with wide voltage12V-36V 2.Memory supports up tosupport32G, single memory 3.supportM.2 port 4.audio portsupport input/output 5.support2*LAN (dual gigabit) 6.USB2.0*6 USB3.0*4 7.6*232(including one RS232/RS422/RS485 mutual conversion) 8.*GPIO(4way input /4way output) can be defined in BIOS 9. shore wire port&CL- J1900B/J4125B/J4125B/J6412/series6/7/8/10/13sname	1.Comes with wide voltage12V-36V 2.Memory supports up tosupport64G, 双内存 3.supportM.2 port 4.audio portsupport input/output 5.support2*LAN (dual gigabit) 6.USB2.0*6 USB3.0*4 7.6*232(including one RS232/RS422/RS485 mutual conversion) 8.*GPIO(4way input /4way output) can be defined in BIOS 9. shore wire port&CL- J1900B/J4125B/J4125B/J6412/series6/7/8/10/13sname		