

CPU information

CPU specifications	CPU brand	CPU model	Core/Thread	Main frequency	Turbo frequency	CPU basic power consumption (W)	Maximum Turbo Power Consumption (W)
12th generation i3	core	1215U	Six cores and eight threads	1.2G	4.4G	15	55
		1210U	Six cores and eight threads	1.0G	4.4G	9	29
12th generation i5	core	1235U	Ten cores and twelve threads	1.3G	4.4G	15	55
		1240U	Ten cores and twelve threads	1.1G	4.4G	9	29
		1230U	Ten cores and twelve threads	1.0G	4.4G	9	29
		1245U	Ten cores and twelve threads	1.6G	4.4G	15	55
12th generation i7	core	1250U	Ten cores and twelve threads	1.1G	4.7G	9	29
		1260U	Twelve cores and sixteen threads	1.1G	4.7G	9	29
		1265U	Ten cores and twelve threads	1.8G	4.8G	15	55
		1255U	Ten cores and twelve threads	1.7G	4.7G	15	55
13th generation i3	core	1305U	Five cores and six threads	1.6G	4.5G	15	55
		1315U	Six cores and eight threads	1.2G	4.5G	15	55
13th generation i5	core	1334U	Ten cores and twelve threads	1.3G	4.6G	15	55
		1335U	Ten cores and twelve threads	1.3G	4.6G	15	55
		1345U	Ten cores and twelve threads	1.6G	4.7G	15	55
13th generation i7	core	1355U	Ten cores and twelve threads	1.7G	5.0G	15	55
		1365U	Ten cores and twelve threads	1.8G	5.2G	15	55
12th generation i3	core	1220P	Ten cores and twelve threads	1.5G	4.4G	28	64
12th generation i5	core	1240P	Twelve cores and sixteen threads	1.7G	4.4G	28	64
		1250P	Twelve cores and sixteen threads	1.7G	4.4G	28	64

12th generation I7	core	1280P	Fourteen cores and twenty threads	1.8G	4.8G	28	64
		1260P	Twelve cores and sixteen threads	2.1G	4.7G	28	64
		1270P	Twelve cores and sixteen threads	2.2G	4.8G	28	64
13th generation i5	core	1340P	Twelve cores and sixteen threads	1.8G	4.6G	28	64
		1350P	Twelve cores and sixteen threads	1.9G	4.7G	28	64
13th generation I7	core	1360P	Twelve cores and sixteen threads	2.2G	5.0G	28	64
		1370P	Fourteen cores and twenty threads	1.9G	5.2G	28	64
12th generation i5	core	12450H	Eight cores and twelve threads	2.0G	4.4G	45	95
		12500H	Twelve cores and sixteen threads	2.5G	4.5G	45	95
12th generation I7	core	12800H	Fourteen cores and twenty threads	2.4G	4.8G	45	115
		12700H	Fourteen cores and twenty threads	2.7G	4.7G	45	115
		12650H	Ten cores and sixteen threads	2.3G	4.7G	45	115
		12600H	Twelve cores and sixteen threads	2.7G	4.5G	45	95
12th generation I9	core	12900H	Fourteen cores and twenty threads	2.5G	5.0G	45	115
13th generation i5	core	13420H	Eight cores and twelve	2.1G	4.60G	45	95

			threads				
		13500H	Twelve cores and sixteen threads	2.6G	4.70G	45	95
		13505H	Twelve cores and sixteen threads	2.6G	4.70G	45	115
		13600H	Twelve cores and sixteen threads	2.8G	4.80G	45	95
13th generation I7	core	13620H	Ten cores and sixteen threads	2.4G	4.90G	45	115
		13700H	Fourteen cores and twenty threads	2.4G	5.00G	45	115
		13705H	Fourteen cores and twenty threads	2.4G	5.00G	45	115
		13800H	Fourteen cores and twenty threads	2.5G	5.20G	45	115
13th generation I9	core	13900H	Fourteen cores and twenty threads	2.6G	5.40G	45	115

Product Specifications

PC size	195mm(L)*180mm(W)*30mm(H)	
Motherboard size	170mm(L)*190mm(W)*21mm(H)	
CPU processor	OPS-12H	Supports Intel Alder Lake 12th generation U/P/H series CPUs
	OPS-13H	Supports Intel Raptor Lake 13th generation U/P/H series CPUs
Memory support	1*NB-DDR4 SODIMM memory slot, supports 2133/2400/2666/3200 MHz memory, supports up to 32 GB	
Power supply	1*DC_IN	Supports 12V/19V voltage, the inner diameter of the DC head is 2.5MM The maximum turbo power consumption is 115W. It is recommended to use a 12V 10 A or 19V 6.3A or above power supply.
	1*4Pin ATX	
Display function	Integrated Intel UHD Graphics super core graphics card, supports single display, dual display/triple display/quad display duplication, dual display/triple display/quad display expansion, dual display under SHELL	
	1*HDMI 2.0 interface (motherboard side)	Support 4K resolution 4096/3840*2160@60Hz
	1*VGA DB15 interface (motherboard side)	Support 1920X1080@60Hz
	1*DP interface (motherboard side) (optional)	Does not support DP++; supports 4K resolution 4096/3840*2160@60Hz
	Supports VGA interface by default, optionally supports DP interface	
	1*HDMI 2.0 interface (daughter card side)	Support 4K resolution 4096/3840*2160@60Hz
	1*DP interface (daughter card side)	Does not support DP++; supports 4K resolution 4096/3840*2160@60Hz
	Internet function	1*LAN-RJ45 interface
1*Mini-PCIE interface		PCIe3.0 signal; supports WIFI by default, can be changed to support WIFI/4G/Bluetooth module
Hard disk function	1*NGFF1 (M.2) interface	PCIe4.0 signal; supports Key-M interface, default M.2 2280 hard drive, optional M.2 2242 hard drive ; supports PCIe (NVMe) protocol by default, and can change the hardware to support SATA protocol;
	1*SATA1 interface (no signal by default)	Standard SATA3.0 hard disk interface, maximum transmission speed 6.0 Gbps
	1*SATA2 interface	2.5-inch hard drive bay, supports 2.5-inch SSD/HDD
	The motherboard SATA1 and SATA2 signals are optional. By default, SATA2 has a signal and SATA1 has no signal.	
Sound function	Integrated Realtek ALC 897 HD digital audio decoder, 6-channel high-fidelity audio controller Modifiable hardware supports BBH621 USB sound card	
	1*LIN_OUT interface	Support audio output (green)
	1*MIC_IN interface	Support microphone input (red)
USB function	3*USB3.2 interface	Rear standard USB 3.2 Gen1 interface, maximum transmission bandwidth is 5.0Gbps
	3*USB2.0 interface	Rear standard USB2.0 interface , maximum transmission bandwidth is 480Mbps
	External blue DUAL USB30 2 upper USB interface is USB2.0 signal	

Switch function	1*PWR_SW 1 button	switch button
	1*RST_BTN button	Support hardware restart
Other I/O	1*TTL (daughter card side)	By default, the subcard TTL has a signal, and the motherboard COM2 has no signal. Choose one of the COM2 and subcard TTL signals.
	1*SIM_CARD card slot	Supports SIM card, SIM card is required when using 4G
	1* CLR_GHO_SW button	System hardware one-click restore button and motherboard reset and discharge buttons
	1*OPS interface	Standard 80Pin OPS interface
Operating environment	Working temperature: -10°C~60°C; Working humidity: 5%~95% relative humidity, no condensation	
BIOS	AMI BIOS supports power-on, scheduled boot, and intelligent identification of remote power on and off devices.	
Watch Dog	Watchdog programming, supports hardware reset function (level 256, 0~255 seconds)	
Operating system	Support Windows 11 , Windows 10, Linux, etc.	