

LattePanda Sigma Specification

Component	Content	Specs.
Processor	CPU	Intel® Core™ i5-1340P
	Cores / Threads	12C(4P+8E) / 16T
	Max Turbo Frequency	4.60 GHz(Performance-core), 3.4 GHz(Efficient-core)
	L2 Cache	12 MB
	Base Power	28 W (BIOS Default: PL1 45W, PL2 64W)
	Graphics	Intel® Iris® Xe Graphics
	Max Dynamic Frequency	1.45 GHz
	Execution Units	80
	Co-processor	Microchip® ATmega32U4-MU
Memory	Technology	Dual-Channel, Samsung LPDDR5-6400(16GB), LPDDR5-6000(32GB)
	Capacity	16GB, 32GB
Storage	Drive Form Factor	M.2 SSD (NVMe/SATA), SATA Drive
Wireless	Wireless Form Factor	M.2 Wireless Module (PCIe/CNVio)
Display	HDMI Port	HDMI 2.1, Up to 4096 x 2304 @ 60Hz

Component	Content	Specs.
	USB Type-C Port	DP 1.4a, Up to 7680 x 4320 @ 60Hz (One Monitor)
	eDP(Embedded Display Port)	eDP 1.4b, 4 Lanes, Up to 4096 x 2304 @ 120Hz
External I/O	USB Type-A	2 x USB2.0 (480Mbps), 2 x USB3.2 Gen 2 (10Gbps)
	USB Type-C	2 x Thunderbolt™ 4 (40Gbps)
	HDMI	HDMI 2.1
	Ethernet	2 x 2.5GbE RJ45 Ports (Intel® i225-V Gigabit Ethernet Controller, Supports 10/100/1000/2500 Mbps, WOL)
	Power	5.5mm x 2.5mm DC Jack
	Audio	3.5mm Microphone Headphone Combo Connector
	Sim Card	Micro Sim Card Slot
Internal I/O	USB 2.0	2.0mm Pitch 4-Pin Connector, 480Mbps
	Fan	1.27mm Pitch, 12V 4-Wire Fan Connector, PWM Control
	SATA	SATA 6.0 Gb/s Data Connector, 2.0mm Pitch 4-Pin Power Connector
	Front Panel	2.54mm Pitch 9-Pin Header, Supports Power, Reset, Power LED, HDD LED
	Front Audio Panel	2.54mm Pitch 9-Pin Header, Supports High Definition Audio (HD), Line-Out, Mic-in

Component	Content	Specs.
	COM	2.54mm Pitch 9-Pin Header, Supports RS232, RS485
	GPIO	2.54mm Pitch 34-Pin Header, Including ATmega32U4 I/O Pins, 5V Power Pins, S0/S3/S4 State Pins
	eDP	0.5mm Pitch 40-Pin Connector, 4 Lanes
Expansion Slot	M.2 M Key	Type 2280, Supports PCIe 3.0 x4 Type 2280, Supports PCIe 4.0 x4
	M.2 B Key	Type 2242/2252/2280, Supports SATA III/PCIe 3.0 x1, USB2.0, USB3.0, SIM
	M.2 E Key	Type 2230, Supports PCIe 3.0 x1, USB2.0, Intel CNVio
Security	TPM	Processor's Built-in TPM (2.0)
Power	Power Input	5.5mm x 2.1mm DC Jack: DC 12~20V USB Type C: PD 20V
	Attached Power Adapter	19V DC, 4.74A, 90W
	RTC Battery	CR1220 Battery Holder: 3V 1.27mm Pitch 2-Pin Connector: 3V
Operating System	Microsoft Windows	Windows 10, Windows 11
	Linux	Ubuntu, Promox VE, etc.
Environment	Operating Temperature	0~45°C
	Relative Humidity	0%~80%RH

Component	Content	Specs.
Dimension	Form Factor	3.5", 146 x 102 mm
Model(SKU)	DFR1080	LattePanda Sigma (16GB RAM, no SSD, no WiFi)
	DFR1081	LattePanda Sigma (16GB RAM, 500GB PCIe 4.0 x4 NVMe SSD, Intel AX211 WiFi6E)
	DFR1090	LattePanda Sigma (32GB RAM, no SSD, no WiFi)
	DFR1091	LattePanda Sigma (32GB RAM, 500GB PCIe 4.0 x4 NVMe SSD, Intel AX211 WiFi6E)
Compliance	Certification	CE, FCC, KC, RoHS