

ALP_603_F



Product introduction:

Leetop_ALP_603_F is an embedded artificial intelligence computer developed based on the NVIDIA Orin Nano/Orin Nx core board, which can provide up to 20/40/70/100 TOPS computing power for many terminal devices. Leetop_ALP_603_F provides a fast active cooling design, which can meet industrial standards such as shock resistance and anti-static. At the same time, Leetop_ALP_603_F has rich interfaces and high cost performance.

Product specification:

Processor module :

	Jetson Orin Nano 4GB	Jetson Orin Nano 8GB
AI Performance	20 TOPS	40 TOPS
GPU	512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores
CPU	6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3	
Video Encode	1080p30 supported by 1-2 CPU cores	
Video Decode	1x 4K60 (H.265) 2x 4K30 (H.265) 5x 1080p60 (H.265) 11x 1080p30 (H.265)	
Memory	4GB 64-bit LPDDR5 34 GB/s	8GB 128-bit LPDDR5 68 GB/s
Storage	— (Supports external NVMe)	

	Jetson Orin NX 8GB	Jetson Orin NX 16GB
AI Performance	70 TOPS	100 TOPS
GPU	1024-core NVIDIA Ampere GPU with 32 Tensor Cores	
CPU	6-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3	8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3
Video Encode	1x 4K60 3x 4K30 6x 1080p60 12x 1080p30 (H.265) 1x 4K60 2x 4K30 5x 1080p60 11x 1080p30 (H.264)	
Video Decode	1x 8K30 2x 4K60 4x 4K30 9x 1080p60 18x 1080p30 (H.265) 1x 4K60 2x 4K30 5x 1080p60 11x 1080p30 (H.264)	
Memory	8 GB 128-bit LPDDR5 102.4 GB/s	16 GB 128-bit LPDDR5 102.4 GB/s
Storage	— (Supports external NVMe)	

I/O :

Interface	Specification
Network	1 × Gigabit Ethernet Connector (10/100/1000)
USB	2x USB 3.0 Type A (Integrated USB 2.0) 1x USB 3.0 0.5mm pitch 20P ZIF 1x USB 2.0 Micro-AB
Video output	1 × HDMI
CAN	1 × CAN
RS232	1x RS232
power	+9V to +20V DC Input @ 7A

Power Supply:

Power Supply	Spec
Input Voltage	+9--+20V DC Input @7A
power consumption	Above 60W

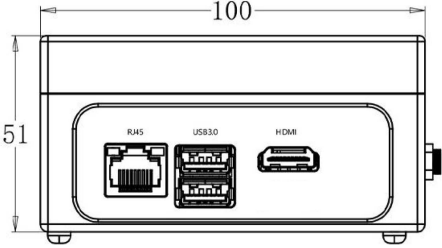
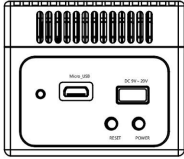
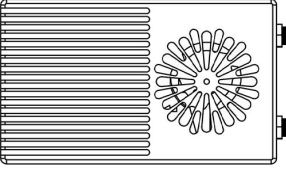
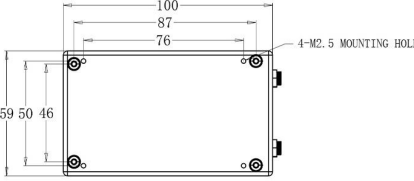
Mechanical

Mechanical	Spec
Dimensions (W×D ×H)	100x59x51(mm)
Weight	0.4KG

Environmental

Environmental	Spec
Operating Temperature	-25℃-65℃ 0.2~0.3m/s airflow
Storage Temperature	-20℃-60℃
Storage Humidity	10%-90% Non-condensing environment

Schematic diagram of dimensions:

Front view	Left view
	
Up view	Rear view
	

Matching table :

Product name	Core module	SSD	communication	power
ALP_603_F				
	J1:Orin Nano (4G)			
	J2:Orin Nano (8G)			
	J3:Orin NX (8G)			
	J4:Orin NX (16G)			
		N		
		128G		
		256G		
		512G		
		1T		
			N	
			4G	
			5G	
				N
				01:MEAN WELL
				02:Custom made

Note: It is not recommended that the equipment work for a long time in the environment of extreme high and low temperature.

FCC Warning:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.