Mini Workstation W638

NVIDIA Jetson

Product Introduction

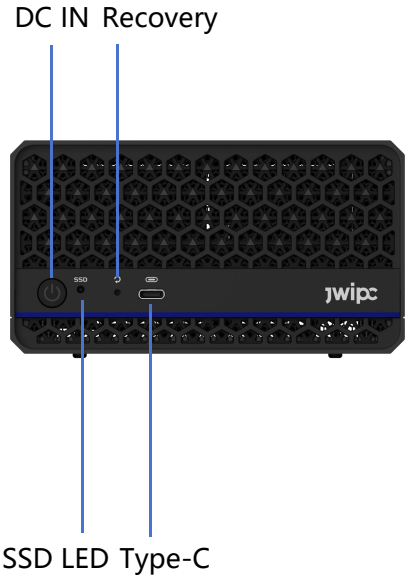
The JWIPC W638 workstation is equipped with NVIDIA Thor T5000/T4000 modules, specifically designed for the local deployment and inference of generative AI research and development, large language models, and multi-modal agents (such as OpenClaw). With its efficient heat dissipation and stable power supply design, the device ensures continuous high computing power output, and is equipped with abundant high-speed interfaces and flexible expansion capabilities to meet the needs of massive data throughput. It is an ideal high-performance platform for AI research, intelligent content creation, and complex model inference at the edge.

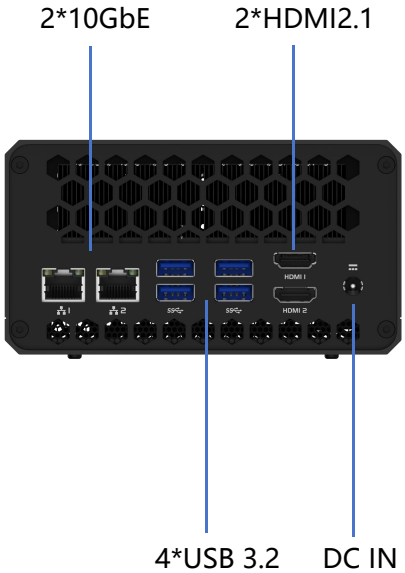
Product Features



- Equipped with Jetson AGX THOR module
- Unified memory architecture, supporting up to 128GB memory with a bandwidth of up to 273GB/s
- Effectively alleviates memory bottlenecks during large model operation
- Supports up to 2070 FP4 TFLOPs of computing power
- Supports 14-core Arm® Neoverse®-V3AE 64-bit
- 2 x 10GbE RJ45
- 4 x USB3.2 Type-A, 1 x USB3.0 Type-C
- Supports WiFi6 and Bluetooth
- 2T NVME SSD
- Compact design, plug-and-play, desktop-level installation, no rack required
- Local deployment, all data and models are processed locally without uploading to the cloud

I/O VIEW





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Product specifications

		W638	
System on Chip	**Module**	Jetson T4000	Jetson T5000
	CPU	12-core Arm® Neoverse®-V3AE 64-bit	14-core Arm® Neoverse®-V3AE 64-bit
	GPU	1536-core NVIDIA Blackwell architecture GPU with 64 fifth-gen Tensor Cores Multi-Instance GPU (MIG) with 6 TPCs	2560-core NVIDIA Blackwell architecture GPU with fifth-gen Tensor Cores Multi-Instance GPU (MIG) with 10 TPCs
	RAM	64GB	128GB
	AI performance	1200 Sparse FP4 TFLOPs	2070 Sparse FP4 TFLOPs
I/O port	**USB**	4 x USB3.2 Type-A，1 x USB3.0 Type-C	
	LED	1 x LED（SSD indicator light）	
	Button	1 x Power button	
Video	**GPU**	NVIDIA Blackwell GPU	
	Output	2 x HDMI2.1，Up to 4096 x 2160 @60Hz	
Storage	**SSD**	NVME M.2（1T/2T SSD）	
Internet	**Wired Network**	2 x 10GbE RJ45	
	WIFI	WiFi5/6	
	Bluetooth	BT 5.3	
Power & Power Consumption	**Input**	24V DC IN	
	Power Consumption	200W	
System	**Support**	NVIDIA Ubuntu24.04 (Jetpack7.1)	
	Watchdog	255-level programmable seconds/minutes	
Installation method	**Installation**	Standard desktop installation	
Environment	**Operating Temp.**	-20~40℃	
	Humidity	10%~90% non-condensing	
Weight &Dimensions	**Weight**	1.3Kg	
	Length, Width, Height	130（L）*125（W）*75（H）mm	

Software Ecosystem

1、System Environment

Ubuntu 24.04 Driver

2、Toolchain

CUDA, cuDNN, CuBLAS, NCCL, TensorRT

3、Container Tool

NVIDIA Container Toolkit

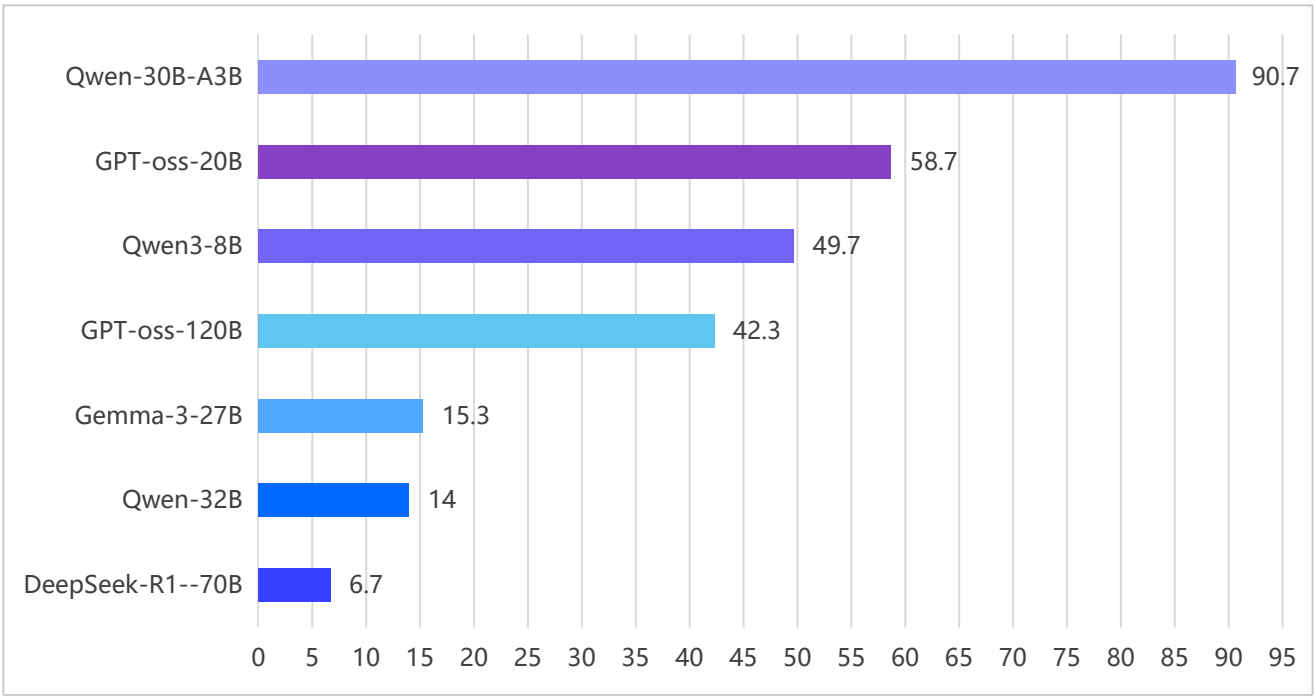
4、AI Development Kit

NVIDIA NIM, NVIDIA AI Blueprints (customizable workflows), NVIDIA AI Workbench (development environment manager)

5、Frameworks

Supports PyTorch, TensorFlow, MATLAB, etc.

Test Speed of Model Generation （token/s)



Ordering Information

Model	CPU	GPU	RAM	MODULE POWER	AI Performance
W638-A	12-core Arm® Neoverse®-V3AE 64-bit CPU	1536-core NVIDIA Blackwell architecture GPU with 64 fifth-gen Tensor Cores Multi-Instance GPU (MIG) with 6 TPCs	64G	70W	1200 TOPS
W638-B	14-core Arm® Neoverse®-V3AE 64-bit CPU	2560-core NVIDIA Blackwell architecture GPU with 96 fifth-gen Tensor Cores Multi-Instance GPU (MIG) with 10 TPCs	128G	130W	2070 TOPS

Part Number	Description
Power adapter	Adapters, 200W POWER Adaptor, AC100~240V, 24V

Optional accessories

SSD1TB	SSD1TB,M.2_M-KEY,2280，NVMe
SSD2TB	SSD2TB,M.2_M-KEY,2280，NVMe
WiFi & Bluetooth Module	WiFi & Bluetooth Module