EDG6N0-S T5X (NVIDIA Jetson Thor)

YUAN Visualize Intelligent Planet

Highly Expandable AI Edge, up to 2070 FP4 TFLOPS w/ 1×HDMI2.0, 1xDP1.4

Features

- Powered by NVIDIA® Jetson T5000™/ Jetson T4000™, up to 2070/1200 FP4 TFLOPS
- 1×QSFP28
- 1×M.2 M Key / 1×M.2 E Key / 1×M.2 B Key
- 4×USB3.2 Gen2 Type-A, 2×USB3.2 Gen2 Type-C
- 1×HDMI2.0, 1×DP1.4
- UART / I2C / SPI, and CAN Bus (T5000 Only)

NVIDIA Preferred Partner



Specification

System		
SOM	NVIDIA® Jetson T5000™	NVIDIA® Jetson T4000™
CPU	14-Core ARM® Neoverse®-V3AE 64-bit CPU	12-Core ARM® Neoverse®-V3AE 64-bit CPU
GPU	2560-core NVIDIA Blackwell architecture GPU with 96 fifth-gen Tensor Cores	1536-core NVIDIA Blackwell architecture GPU with 64 fifth-gen Tensor Cores
AI Performance	Up to 2070 FP4 TFLOPS	Up to 1200 FP4 TFLOPS
System Memory	128GB 256-bit LPDDR5X 273 GB/s	64GB 256-bit LPDDR5X 273 GB/s
Interface		
Storage	Supports External NVMe	Supports External NVMe
Display Interface	1×HDMI2.0 (Up to 4K60), 1×DP1.4 (Up to 4K60)	1×HDMI2.0 (Up to 4K60), 1×DP1.4 (Up to 4K60)
Ethernet	1×QSFP28 for 100Gbps Ethernet 1×RJ45 for 5Gbps Ethernet DHCP Client	1×QSFP28 for 75Gbps Ethernet 1×RJ45 for 5Gbps Ethernet DHCP Client
Expansion Slot	PCIe 1×PCIe Gen5×4 (Gold Finger) M.2 1×M.2 2230 E Key PCIe Gen4*1/USB2.0/SDIO Slot 1×M.2 2280 M Key PCIe Gen5×2 Slot 1×M.2 2242/3042/3052 B Key USB3.2 Gen1 Slot	PCIe 1×PCIe Gen5×4 (Gold Finger) M.2 1×M.2 2230 E Key PCIe Gen4*1/USB2.0/SDIO Slot 1×M.2 2280 M Key PCIe Gen5×2 Slot 1×M.2 2242/3042/3052 B Key USB3.2 Gen1 Slot
USB	4×USB3.2 Gen2 (Type-A) 2×USB3.2 Gen2 (Type-C)	4×USB3.2 Gen2 (Type-A) 2×USB3.2 Gen2 (Type-C)
MIPI	16×MIPI CSI-2 Lanes (D-PHY 2.1, 4×4 | 3×4+2×2 | 2×4+4×2 | 1×4+5×2 | 6×2 MIPI Lanes, Support MIPI Camera, Capture Card)	16×MIPI CSI-2 Lanes (D-PHY 2.1, 4×4 | 3×4+2×2 | 2×4+4×2 | 1×4+5×2 | 6×2 MIPI Lanes, Support MIPI Camera, Capture Card)
Audio	1×Line In (3.5mm) 1×Line Out (3.5mm)	1×Line In (3.5mm) 1×Line Out (3.5mm)
Peripheral Communication	40Pin Header 1×UART (Pin Header) 2×GPIO (Pin Header) 2×CAN Bus (Pin Header or Wafer) 2×I2C (Pin Header) 1×I2S (Pin Header) 1×SPI (Pin Header) 3×PWM (Pin Header) 4×Fan Connector 4×CAN Bus (Wafer, Two of them share pins with the CAN BUS on the 40-pin header.)	40Pin Header 1×UART (Pin Header) 2×GPIO (Pin Header) 2×I2C (Pin Header) 1×I2S (Pin Header) 1×SPI (Pin Header) 3×PWM (Pin Header) 4×Fan Connector
Misc. Features	Firmware Upgradable Auto Power (Pin Header)	Firmware Upgradable Auto Power (Pin Header)

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Add-On Cards / SDK / Software

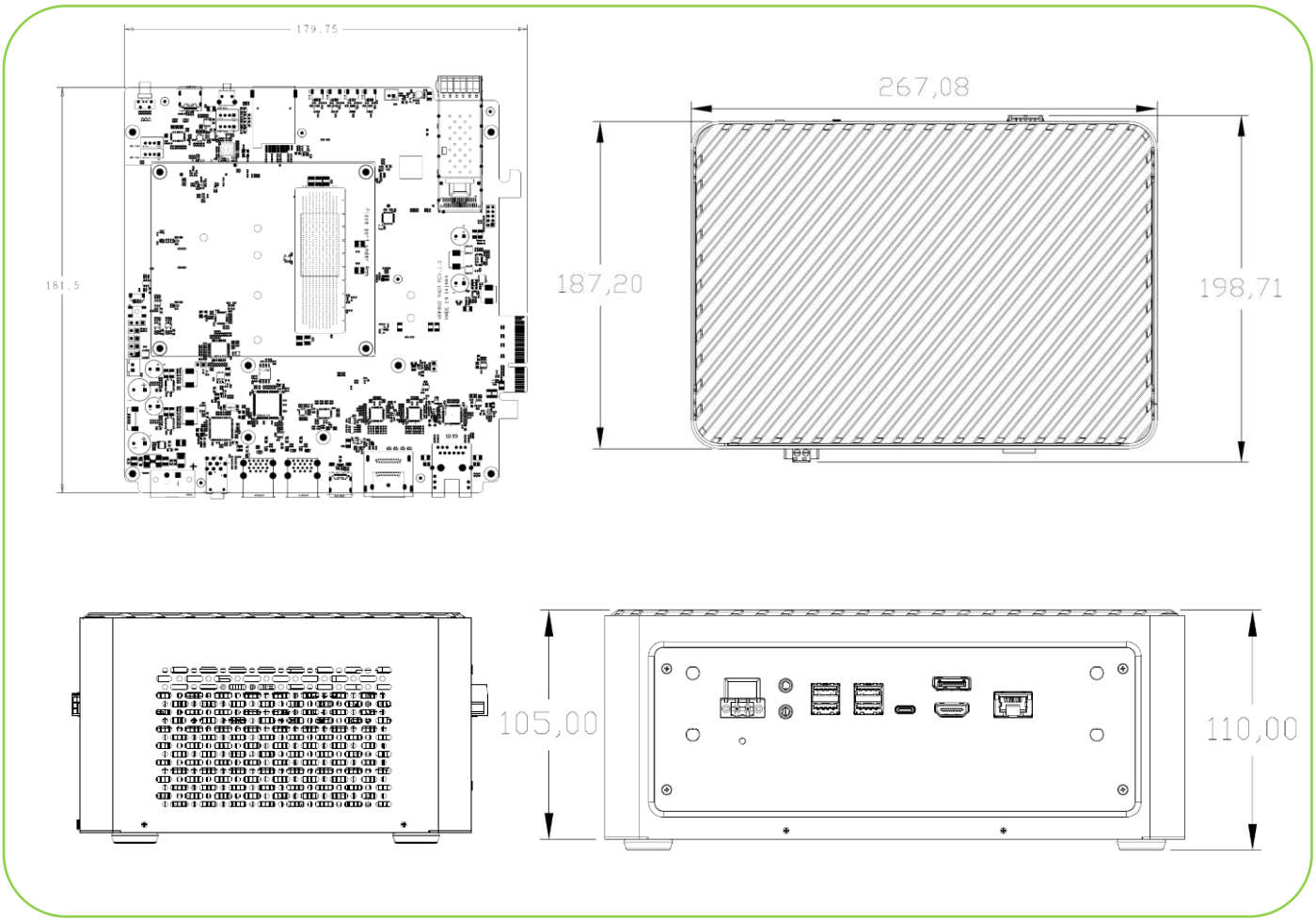
Video Feature		
Video Encode	NVIDIA Jetson Thor™ 128GB H.265 (UHP) · 6×4K60 | 12×4K30 | 26×1080p60 | 54×1080p30 H.264 (UHP) · 6×4K60 | 12×4K30 | 24×1080p60 | 48×1080p30	NVIDIA Jetson Thor™ 64GB H.265 (UHP) · 3×4K60 | 6×4K30 | 13×1080p60 | 27×1080p30 H.264 (UHP) · 3×4K60 | 6×4K30 | 12×1080p60 | 24×1080p30
Video Decode	NVIDIA Jetson Thor™ 128GB AV1 (Main Profile) · 2x8K30 | 6x4K60 | 12x4K30 | 26x1080p60 | 54x1080p30 H.265 (Main, Main10) · 4x8K30 | 10x4K60 | 20x4K30 | 40x1080p60 | 82x1080p30 H.264 (Baseline, Main, High) · 4x8K30 | 10x4K60 | 22x4K30 | 42x1080p60 | 84x1080p30 VP9 (Profile 0, Profile 2) · 2x8K30 | 8x4K60 | 16x4K30 | 32x1080p60 | 64x1080p30	NVIDIA Jetson Thor™ 64GB AV1 (Main Profile) · 1x8K30 | 3x4K60 | 6x4K30 | 13x1080p60 | 17x1080p30 H.265 (Main, Main10) · 2x8K30 | 5x4K60 | 10x4K30 | 20x1080p60 | 41x1080p30 H.264 (Baseline, Main, High) · 2x8K30 | 5x4K60 | 11x4K30 | 21x1080p60 | 42x1080p30 VP9 (Profile 0, Profile 2) · 1x8K30 | 4x4K60 | 8x4K30 | 16x1080p60 | 32x1080p30

Environment

Development Environment	
OS	Ubuntu: 24.04.2
Kernel	6.8.12-tegra or Higher
BSP	Linux for Tegra(L4T) R38.2.0 or Higher
SDK	NVIDIA JetPack™ 7.0.0
Environment	
Power Supply	DC input : 20~57V (Max current 10A)
Power Consumption	TBA
Operating Temperature	Standard Version: -20 ° C ~45 ° C with Airflow
Storage Temperature	-25 ° C ~80 ° C
Certification	CE, FCC

Mechanical

- Dimension of main PCB: 179.75mm×181.5mm
- Dimension of main CASE: 267.08mm×187.2mm×105mm
- Weight: TBA



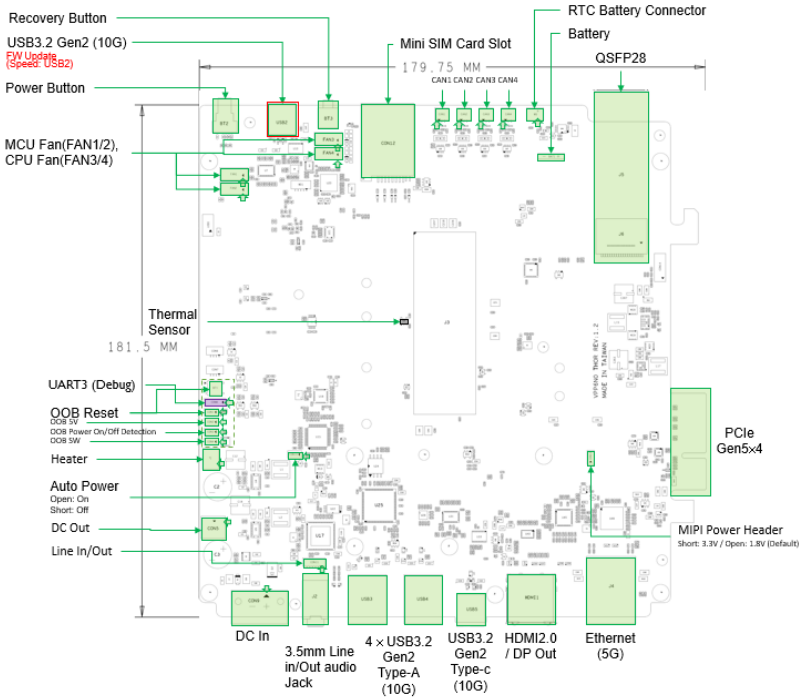
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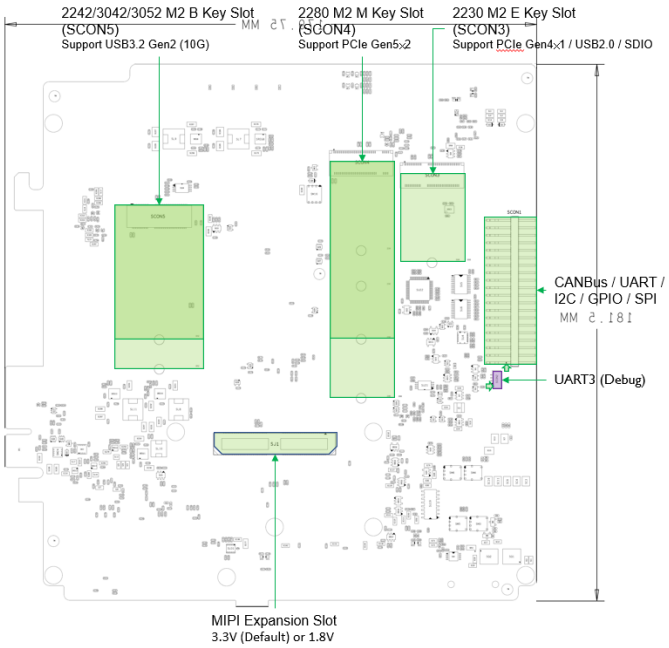
I/O Layout

- Case



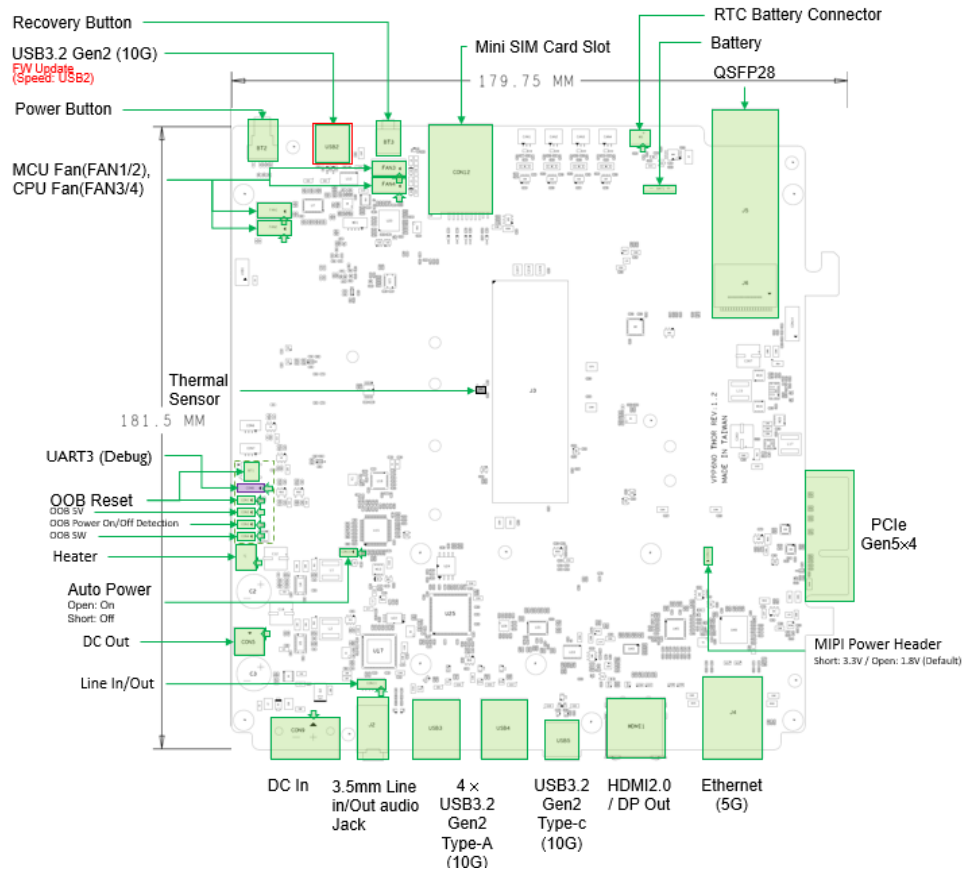
- Carrier Board (NVIDIA® Jetson T5000™)

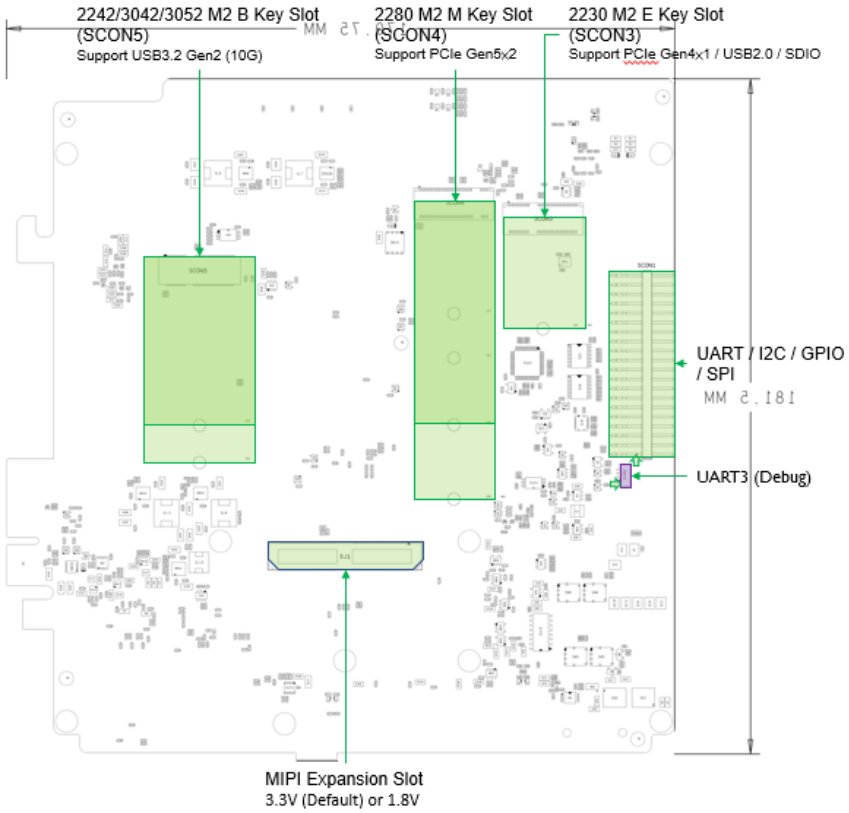




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· Carrier Board (NVIDIA® Jetson T4000™)





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