

ARC6N0 T5X-8USBC

YUAN
Visualize Intelligent Planet

Groundbreaking AI Edge Platform, up to 2070 FP4 TFLOPS

Features

- Powered by NVIDIA® Jetson T5000™ / Jetson T4000™, up to 2070 / 1200 FP4 TFLOPS
- 3-axis Accelerometer, 3-axis Gyroscope and 3-axis Magnetometer
- 1×M.2 M Key / 1×M.2 E Key / 1×M.2 B Key
- Up to 10× USB3.2 Gen2 Type-C
- 1× 5GbE, 2x Custom High-speed Connectors for Expansion via Custom Cables
- I2C/ SPI/ GPIO/ UART/ PWM, and CAN Bus (T5000 Only)



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	128 GB 256-bit LPDDR5X 273 GB/s	64 GB 256-bit LPDDR5X 273 GB/s
Interface		
Storage	Supports External NVMe	Supports External NVMe
Display Interface	1×HDMI2.0 (Up to 4K60)	1×HDMI2.0 (Up to 4K60)
Ethernet	1×RJ45 for 5GbE DHCP Client	1×RJ45 for 5GbE DHCP Client
Expansion Slot	1×M.2 2230 E Key PCIe Gen4*1/USB2.0/SDIO Slot 1×M.2 2280 M Key PCIe Gen5×2 Slot 1x Custom High-speed connectors for external peripheral card (Up to 4 MGBE) <u>Daughter Board</u> 1×M.2 2242/ 3042/ 3052 B Key USB3.2 Gen1 slot, nano SIM	1×M.2 2230 E Key PCIe Gen4*1/USB2.0/SDIO Slot 1×M.2 2280 M Key PCIe Gen5×2 Slot 1x Custom High-speed connectors for external peripheral card (Up to 3 MGBE) <u>Daughter Board</u> 1×M.2 2242/ 3042/ 3052 B Key USB3.2 Gen1 slot, nano SIM
USB	2×USB3.2 Gen2 Type-C (shared 10G) 1x micro USB (for console only) <u>Daughter Board</u> 8×USB3.2 Gen2 Type C (shared 10G)	2×USB3.2 Gen2 Type-C (shared 10G) 1x micro USB (for console only) <u>Daughter Board</u> 8×USB3.2 Gen2 Type C (shared 10G)
MIPI	16×MIPI CSI-2 Lanes (D-PHY 2.1 (40Gbps), 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 (40Gbps), 4×4 3×4+2×2 2×4+4×2 1×4+5×2 6×2 MIPI lanes, support MIPI camera, capture card)
CAN	2x CAN bus (header)	N/A
Audio	1×3.5mm Line In or header 1×3.5mm Line Out or header	1×3.5mm Line In or header 1×3.5mm Line Out or header
Peripheral Communication	6-axis IMU (3-axis accelerometer + 3-axis gyroscope) wafer or pin Header · GPIO/USB3/USB2/CAN /UART/I2C/SPI/PWM/FAN Custom Header · CAN/ I2C/ SPI/ GPIO/ UART/USB <u>Daughter Board</u> · 3-axis IMU (3-axis magnetometer) · 3×CAN bus (1 shared with MB's CAN bus) · 2×RS485 · RTK support + GNSS antenna connector (optional)	6-axis IMU (3-axis accelerometer + 3-axis gyroscope) wafer or pin Header · GPIO/USB3/USB2/UART/I2C/SPI/PWM/FAN Custom Header · I2C/ SPI/ GPIO/ UART/USB <u>Daughter Board</u> · 3-axis IMU (3-axis magnetometer) · 2×RS485 · RTK support + GNSS antenna connector (optional)
Misc. Features	Firmware Upgradable Auto Power On (pin header)	Firmware Upgradable Auto Power On (pin header)

Add-On Cards / SDK / Software

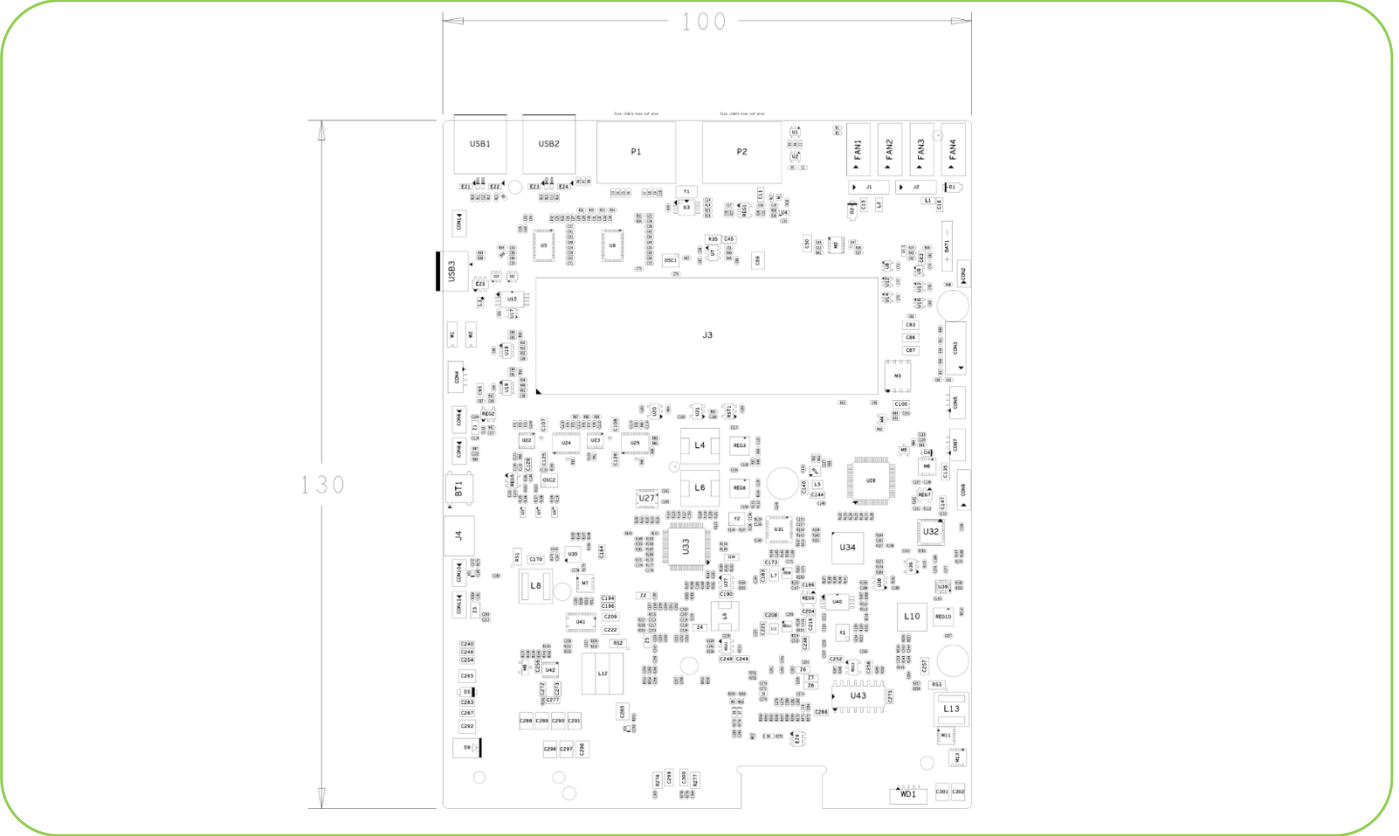
Video Feature		
Video Encode	NVIDIA Jetson Thor™ 128GB H.265 (UHP) · 6×4K60 12×4K30 26×1080p60 54×1080p30 H.264 (UHP) · 6×4K60 12×4K30 24×1080p60 48×1080p30	NVIDIA Jetson Thor™ 64GB H.265 (UHP) · 3×4K60 6×4K30 13×1080p60 27×1080p30 H.264 (UHP) · 3×4K60 6×4K30 12×1080p60 24×1080p30
	NVIDIA Jetson Thor™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

Environment

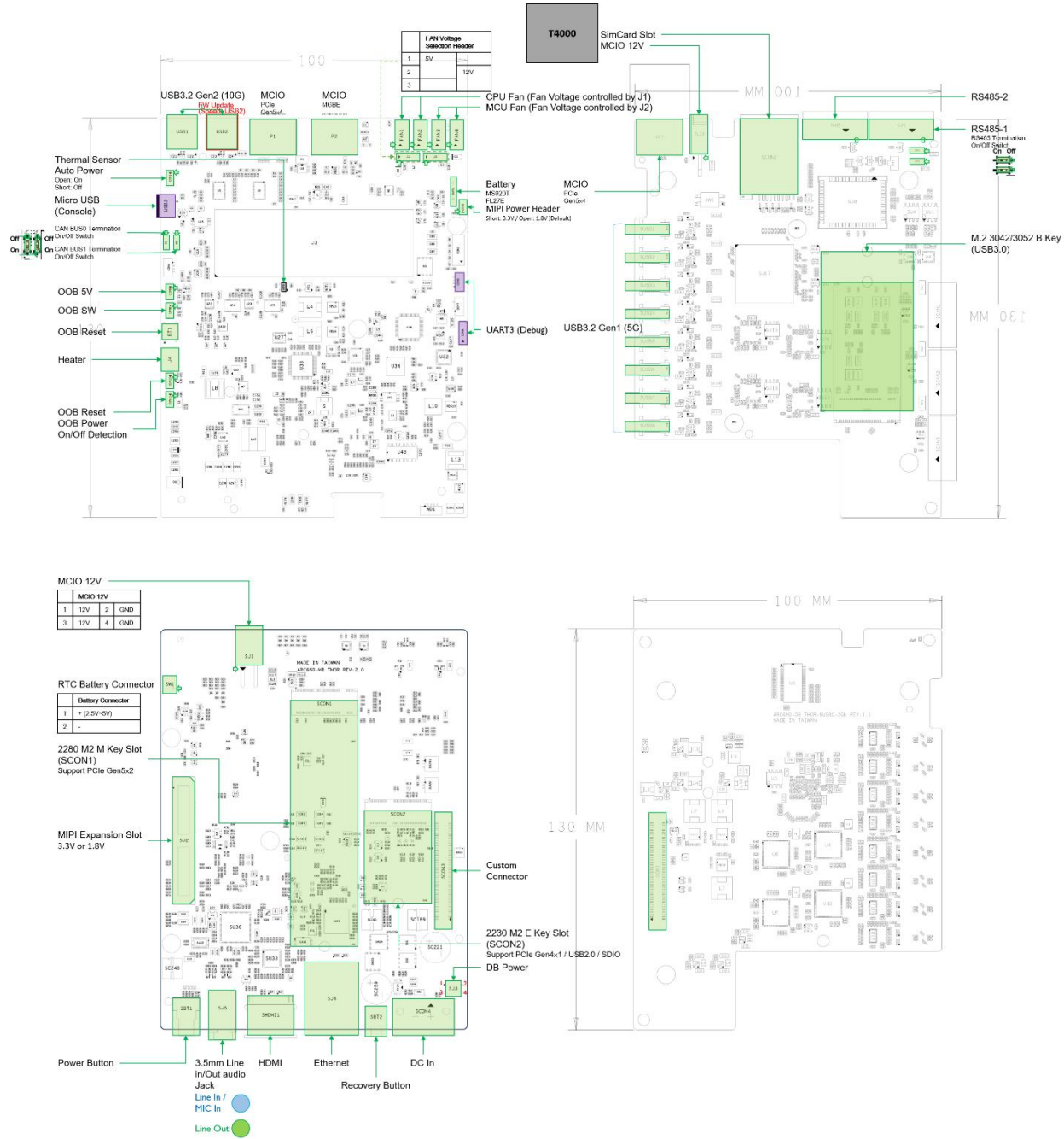
Development Environment	
OS	Ubuntu: 24.04
Kernel	6.8-tegra or Higher
BSP	Linux for Tegra(L4T) R38.4.0 or Higher
SDK	NVIDIA JetPack™ 7.X.0 or Higher
Environment	
Power Supply	DC input : 20~57V
Power Consumption	TBA
Operating Temperature	Standard Version: -20` C ~45` C with Airflow
Storage Temperature	-25` C ~80` C
Certification	CE, FCC

Mechanical

- Dimension of main Board: 100mm×130mm
- Weight: TBA



Carrier Board (NVIDIA® Jetson T4000™)



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