Intelligent Edge Computer
Datasheet

ASUS IoT

PE3000N

Accelerated by NVIDIA® Jetson Thor™, 10 GbE, GMSL, support LTE/5G/GNSS module, DIO, COM, 12-60V



Features

- Next-Gen Edge AI Supercomputer with NVIDIA® Jetson T5000™
- Rugged, Low-profile and scalable chassis design
- Optional second stack enables project-specific I/O for vertical (CAN, QSFP28, POE) expansion, within 2U height*
- DC 12 to 60V wide range of DC or Battery power input with Ignition
- Supports multiple generative AI pipelines and sensor fusion for next-gen robotics and automation

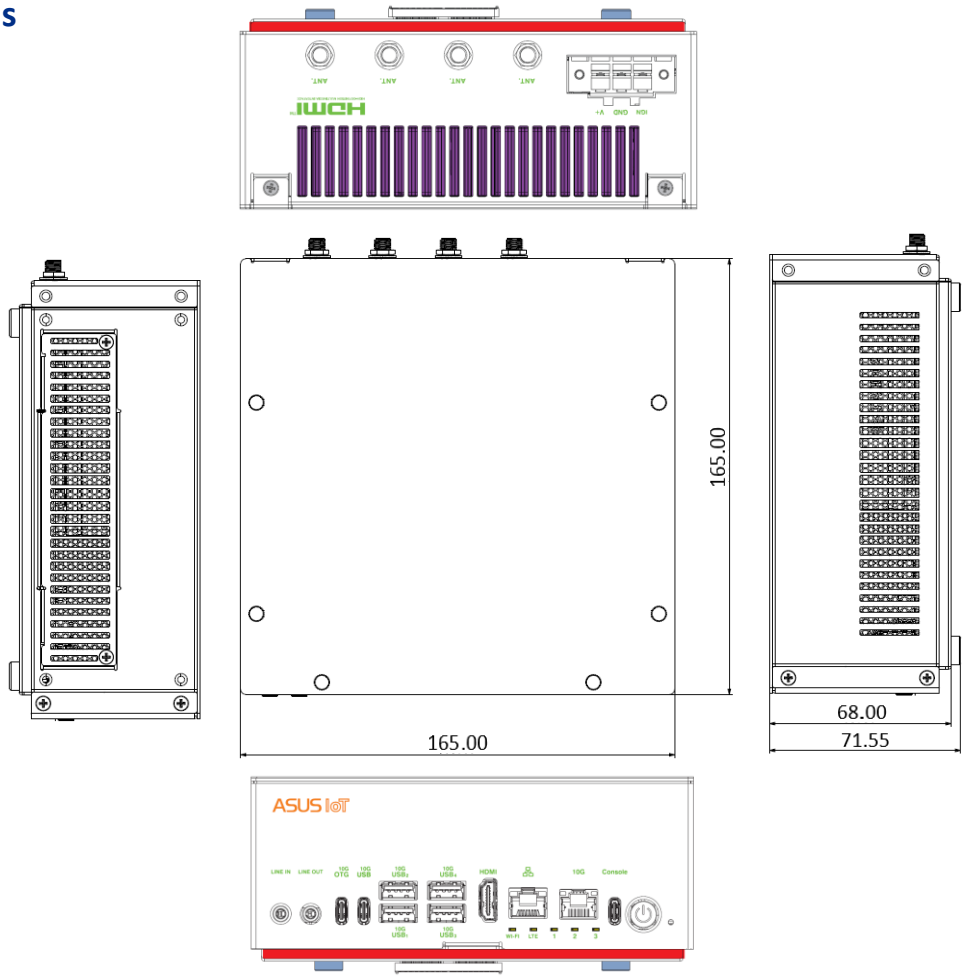
Specifications

Processor System	Jetson Module	NVIDIA® Jetson T5000™	NVIDIA® Jetson T4000™
	AI Performance	2070 TFLOPS (FP4—Sparse)	1200 TFLOPS (FP4—Sparse)
	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 Multi-Instance GPU (MIG) with 10 TPCs	1536-core NVIDIA Blackwell architecture GPU with 64 fifth-gen Tensor Cores
	Memory	128 GB 256-bit LPDDR5X	64GB 256-bit LPDDR5X , 273 GB/s
Wired Interface	Ethernet	1 x 1 GbE, RJ45 1 x 10 GbE, RJ45	
	USB (or Header)	4 x USB 3.2 Gen2, Type-A 1 x USB 3.2 Gen2, Type-C 1 x USB 3.2 Gen2, Type-C (OTG, OS Flash) 2 x USB 2.0 (Pin header)	
	Display	1 x HDMI 2.0	
	Audio	1 x 3.5 Audio In 1 x 3.5 Audio Out	
	Debug Port	1 x Debug console via Type-C (console port)	
Wireless Interface	Wi-Fi	Optional	
	Bluetooth	Optional	
	Cellular	Optional	
	GPS	Optional	
Expansion	M.2 M key	1 x 2242/2260/2280, for M.2 SSD, etc	
	M.2 E key	1 x 2230, for Wi-Fi/BT, etc	
	M.2 B key	1 x 3042/3052, for 4G/5G, etc	
	MIPI CSI	1 x AGX CSI connector, 16 lane (for GMSL)	
	COM / CAN	2 x RS-232/422/485 (Pin header) 2 x CAN bus (Pin header)	(T4000 , No CANBUS)
	PCIe	1 x PCIe x4 (Pin header)	
	MGBE	4 x 25 GbE (for 1/5/10/25G cable or fiber ethernet, e.g. RJ45, M12, QSFP28 100G, etc)	3 x 25 GbE (for 1/5/10/25G cable or fiber ethernet, e.g. RJ45, M12, QSFP28 100G, etc
	Time Sync	PPS, PTP, Camera Sync	
	GPIO	UART, I2C, SPI, Control Pin, GPIO	
	DIO	2x5 DI & DO (optional)	
Slot	SIM	1 x nano-SIM slot	
Power	Power Input	12 to 60 VDC, 3-pin terminal block (1-pin for remote power button)	
Mechanical	Mounting	Wall-mount	
	Dimensions	Board: 145 x 145 mm System: 165 x 165 x 68 mm	
	Weight	2.28 KG (main sku)	
Environment	Operating Temp.	-20 ~ up to 60°C	
	Storage Temp.	-40 ~ 85°C	
	Relative Humidity	10 ~ 95% (non-condensing)	
	Vibration (Operating)	MIL-STD 810H Method 514.8, Category 4 (Truck transportation over US highways); 5 Grms, 5-500 Hz, 3 Axes	
	Shock (Operating)	MIL-STD 810H Method 516.8, Procedure I; 40 Grms/11 ms	
Security	TPM	on-board TPM v2.0	
Others	Watch Dog Timer	Yes. HW WDT	
	Operating System[1]	Ubuntu 24.04 LTS with NVIDIA Jetpack™ 7.1	

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Dimensions

Unit: mm



Appearance





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Ordering Information

NVIDIA Module	Memory	eMMC	Installed Jetpack version	NVMe
NVIDIA® Jetson T5000™	128 GB	NA	JetPack 7.1	1TB Pre-installed
NVIDIA® Jetson T4000™	64 GB	NA	JetPack 7.1	1TB Pre-installed

- M.2 M-key: M.2 SSD
- M.2 B-key: LTE/ 5G module
- M.2 E-key: WIFI/BT & GPS module
- The part number might vary for different regulations and package. Please consult the local sales representative for the exact 90PN.
- Please check with your importer or integrator for system level certification.

Packing list

Description	Q'ty
Power terminal block to power jack adaptor, 10cm	1

Optional Accessories (purchased separately)

Part Number	Description
ADAPTER	
	Power adapter, 330W 24V, input voltage 100 to 264VAC, output voltage 24VDC with 13.75A DC load, 0 to 40°C operating temperature
POWER CORD	
	Power cord with United States (US) plug
	Power cord with Europe (EU) plug
	Power cord with China (CN) plug
	Power cord with Australia (AU) plug
	Power cord with United Kingdom (UK) plug
	Power cord with Korea (KR) plug
	Power cord with Taiwan (TW) plug
Wall mount kit	Wall mount kit & screw pack

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