



# TT316 Rugged Fanless Thor Controller

## For Robotics and Rugged Outdoor Operations

### Key Features

- ▶ Rugged fanless platform
- ▶ IP67 waterproof and dustproof
- ▶ Advanced AI Performance
- ▶ x1 MTP 100GbE (4x 25GbE)
- ▶ x1 Gigabit Ethernet
- ▶ 2x NVMe M.2 M-Key Slots
- ▶ 14-core ARM Poseidon-AE CPU
- ▶ 128GB LPDDR5x Memory
- ▶ Hardware Security via SE050 TPM

### Applications

- ▶ Autonomous Transportation
- ▶ Robotics
- ▶ Agriculture
- ▶ Mining
- ▶ UAV

### Overview

The TT316 Rugged Fanless Thor is an IP67 waterproof AI compute platform built around the powerful NVIDIA® Jetson AGX Thor™ module. It features a 14-core ARM Poseidon-AE 64-bit CPU, an NVIDIA Blackwell Architecture GPU with 2560 CUDA® cores and 96 4th Gen Tensor Cores, and 128GB LPDDR5x DRAM running at 4266 MHz with 273 GB/s bandwidth, making it ideal for commercial and industrial applications.

Delivering up to 1050 FP8 TFLOPs/2100 FP4 TFLOPs of AI compute, the TT316 enables in high-performance edge inference and real-time video analytics. The system offers a wide range of latest-generation interfaces on the Jetson AGX Thor: 4x 25GbE through MTP fiber, Gigabit Ethernet, USB Type-C for KVM, 4x protected GPIO, 2x M.2 M-Key Slots (PCIe x2 and x4), and USB 2.0.

The platform integrates the NXP SE050 Secure Element, providing hardware root of trust, secure credential storage, and cryptographic acceleration. With EAL 6+ certification, it ensures strong protection for security-critical AI and IoT applications.

The TT316 supports 18V to 36V DC wide-range input and two built-in system control buttons for reset and force recovery. Rugged M12 connectors and an IP67-rated enclosure with a built-in heatsink guarantee reliable operation even in harsh environments, eliminating the need for additional cooling while providing robust protection against environmental challenges.

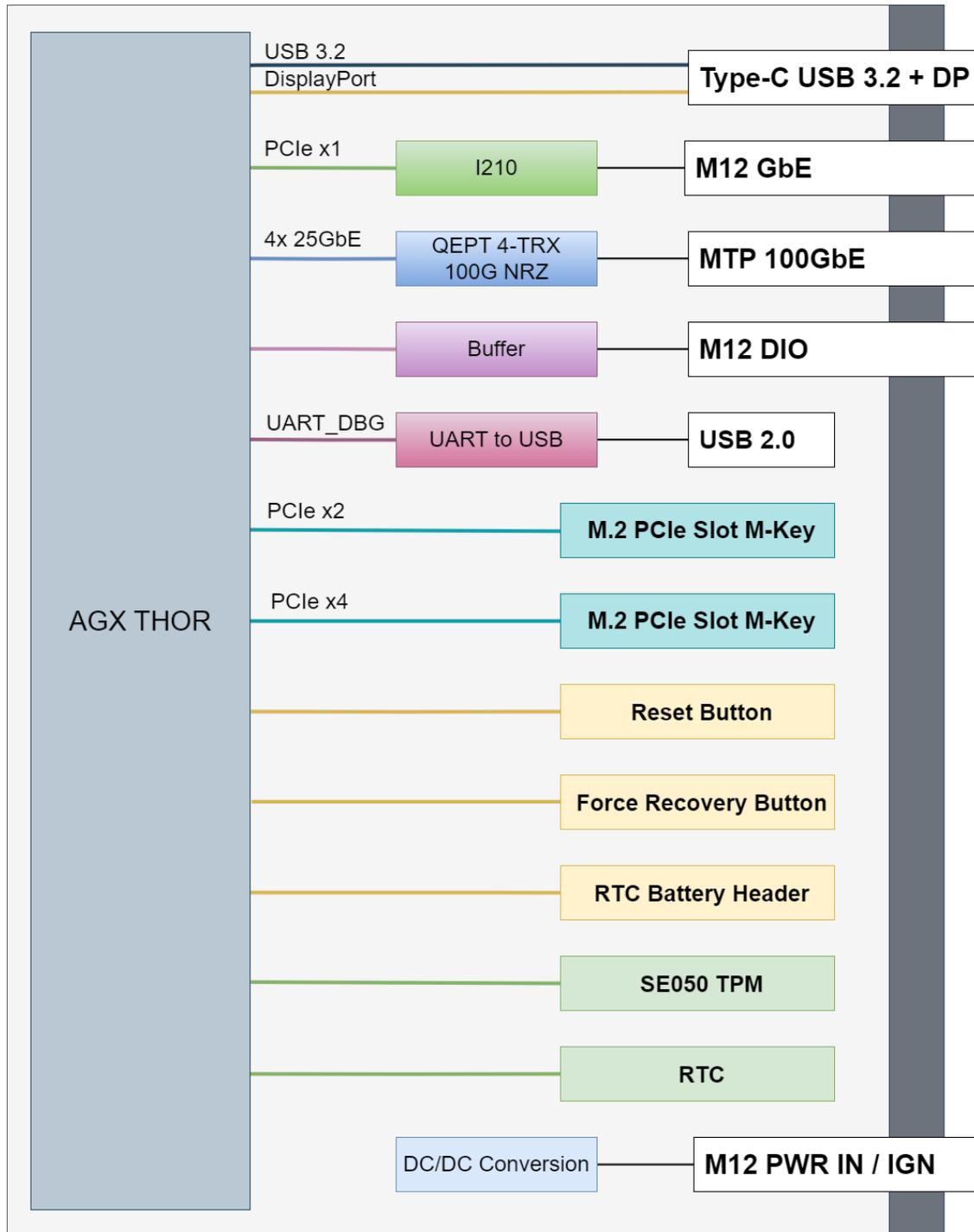
### Key Advantages

- ▶ Powered by NVIDIA Jetson AGX Thor
- ▶ Rugged IP67 Waterproof Design
- ▶ NVIDIA Blackwell GPU with 2560 CUDA® cores and 96 4th Gen Tensor Cores
- ▶ 4K Graphics & High-Speed Communication
- ▶ 2x M.2 PCIe Expansion Slots (PCIe x2 and x4) for Storage
- ▶ 2x Built-in Buttons for System Maintenance and Recovery
- ▶ NXP SE050 Secure Element for Secure AI & IoT Operations



# TT316 Rugged Fanless Thor Controller

## Block Diagram



9205 W. Russell Rd., Ste 240  
Las Vegas, NV 89148  
taurotech.com

Phone: +1 (725) 220-6100  
Email: info@taurotech.com



Visit Our Website

## Specifications

SOM	NVIDIA® Jetson AGX Thor up to 1050 FP8 TOPS/2100 FP4 TOPS
SYSTEM MEMORY	128GB LPDDR5x 4266MHz 256-bit, 273GB/s
DISPLAY INTERFACE	USB Type-C Display Port
ETHERNET	1x 100GbE MTP Interface (4x 25GbE)
	1x GbE LAN
I/O	USB 3.2 Type-C + DP
	3x Protected General Purpose I/O
EXPANSION	M.2 PCIe Slot M-Key PCIe x2
	M.2 PCIe Slot M-Key PCIe x4
ADDITIONAL FEATURES	NXP SE050 TPM
	I2C-Integrated RTC
	Debug USB 2.0
INDICATOR	Power LED
OS SUPPORT	Ubuntu 24.04
POWER	18V to 36V DC input
	Maximum 180W total power budget
DIMENSION	185 mm (W) x 185 mm (D) x 100 mm (H)

## Environmental

OPERATING TEMPERATURE	-25°C to 60°C
STORAGE TEMPERATURE	-40°C to 85°C
HUMIDITY	10% to 90%, non-condensing
VIBRATION	Operating, MIL-STD-810H, Method 514.8, Category 4
SHOCK	Operating, MIL-STD-810H, Method 516.8, Procedure I
EMC	Designed to meet FCC, CE, and UL certifications, where applicable

## Ordering Options

Part Number	Description
TT316-100-000-000	TT316 with NVIDIA Jetson AGX Thor 128GB

The system can be customized for specific customer requirements, contact Tauro Technologies sales for details.



9205 W. Russell Rd., Ste 240  
Las Vegas, NV 89148  
taurotech.com

Phone: +1 (725) 220-6100  
Email: info@taurotech.com



Visit Our Website