HELM BOARD

NVIDIA THOR CARRIER

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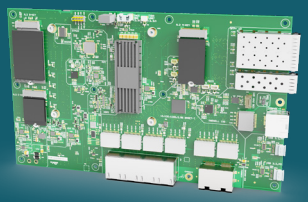
Helm is an NVIDIA Jetson Thor carrier board that exposes the full connectivity and functionality of the Thor platform. With a host of high-bandwidth Ethernet connections, CAN, USB, RS-232 and more, the Helm board simplifies integration of the NVIDIA Thor into complex autonomy systems.



SPECIFICATIONS

Dimensions	250mm x 150mm
Power Input	14 - 19.5 VDC *If not powering via Sluice, powering with regulated 18V highly recommended
Compute	NVIDIA Jetson T4000/T5000 Compatible (module not included) STM32 Microcontroller
Networking	3x 10 GbE SFP+ 1x RJ45: 10 GbE 6x RJ45: 2.5 GbE
Communications	5x CAN (4x Thor, 1x STM32) 2x RS-232 2x USB-C 3.2 1x PCIe Gen 4: M Key (NVMe) 2x PCIe Gen 3: B Key (LTE), E Key (WiFi) 1x HDMI 1x JTAG (STM32) 2x debug GPIO (Thor) 1x UART (Thor) 2x fan control (PWM, Tach, and Power)
Mechanical Interface	10x M3 Mounting Holes 4x 4mm standoffs for Thor
Sensors & Accessories	IMU (IIM-42652, 6 axis) Environmental Sensor (BME280) Battery backup for Thor RTC
Wireless Network	Configurable based on B & E M.2 selection
Software	NVIDIA JetPack 7.0 Thor configuration and power management via STM32
Environment	Recommended operating temperature -30 to 60°C

HELLBENDER.COM • PRODUCTS@HELLBENDER.COM • 4165 BLAIR ST, PITTSBURGH PA, 15207