

OVERVIEW

The WOLF Thor-in-a-Box platform packages NVIDIA® IGX Thor™ T5000 in a compact, conduction-cooled standalone enclosure without requiring a VPX chassis. The system reuses the proven WOLF-16T9, WOLF-16T5 or WOLF-16T0 carrier-card architecture and replaces the VPX connector card with a common purpose-built standalone I/O card.

The enclosure and external I/O baseline can support three internal configurations: IGX Thor, IGX Thor with ConnectX®-7 enhanced networking, or IGX Thor with ConnectX-7 and WOLF FGX2 video processing.

KEY IGX THOR PLATFORM FEATURES

- 2070 FP4 TFLOPs AI compute
- Embedded Blackwell GPU with 2560 CUDA® cores and 96 fifth-generation Tensor Cores
- 14-core Arm® Neoverse®-V3AE CPU at 2.6 GHz
- 128 GB ECC LPDDR5X, 256-bit memory at 273 GB/s
- Multi-Instance GPU (MIG) support, two instances
- 1 TB onboard NVMe storage
- IGX OS Enterprise software and CUDA® 13 platform support
- Base, Network and Video carrier configurations
- Supports a wide range of generative AI models
- Runs NVIDIA Isaac™ GR00T, Metropolis, and Holoscan
- Up to 6x 4Kp60 H.265 encode
- Up to 10x 4Kp60 H.265 decode
- 10-year lifecycle support to 2035

MECHANICAL / POWER TARGETS

- Target chassis height: approximately 1.0 in; footprint and connector envelope: TBD
- Conduction-cooled enclosure concept; final thermal path and heat-rejection capacity: TBD
- 28 VDC nominal input; final input range, isolation and transient protection: TBD
- Conduction-cooled enclosure concept; final thermal path and heat-rejection capacity: TBD
- Industrial temperature support: -40°C to +85°C
- Environmental qualification and screening defined by program requirements



COMMON SYSTEM I/O

- 28 VDC nominal rugged power input
- 2 x 10 GbE external ports; PHY / media and connector implementation: TBD
- 1 x 2.5GBASE-T Ethernet
- 1 x DisplayPort output
- USB 3.2 and USB 2.0
- Removable service panel for UART / serial, user GPIO, debug and recovery
- Optional SDI input with the Thor Video configuration; channel count and connector: TBD

CONFIGURATION OPTIONS

THOR BASE | WOLF-B6T9

IGX Thor compute with the two common 10 GbE ports sourced through the carrier dual-PHY / 10GBASE-T path.

THOR NETWORK | WOLF-B6T5

Adds ConnectX-7; the same two common 10 GbE ports are sourced through the CX-7 10GBASE-T path for additional networking functionality.

THOR VIDEO | WOLF-B6T0

Adds ConnectX-7 and WOLF FGX2; supports the common I/O baseline plus optional SDI input, with channel count and connector TBD.

PRELIMINARY

