THOR11-X6

5G Technology and High-Performance Computing Server
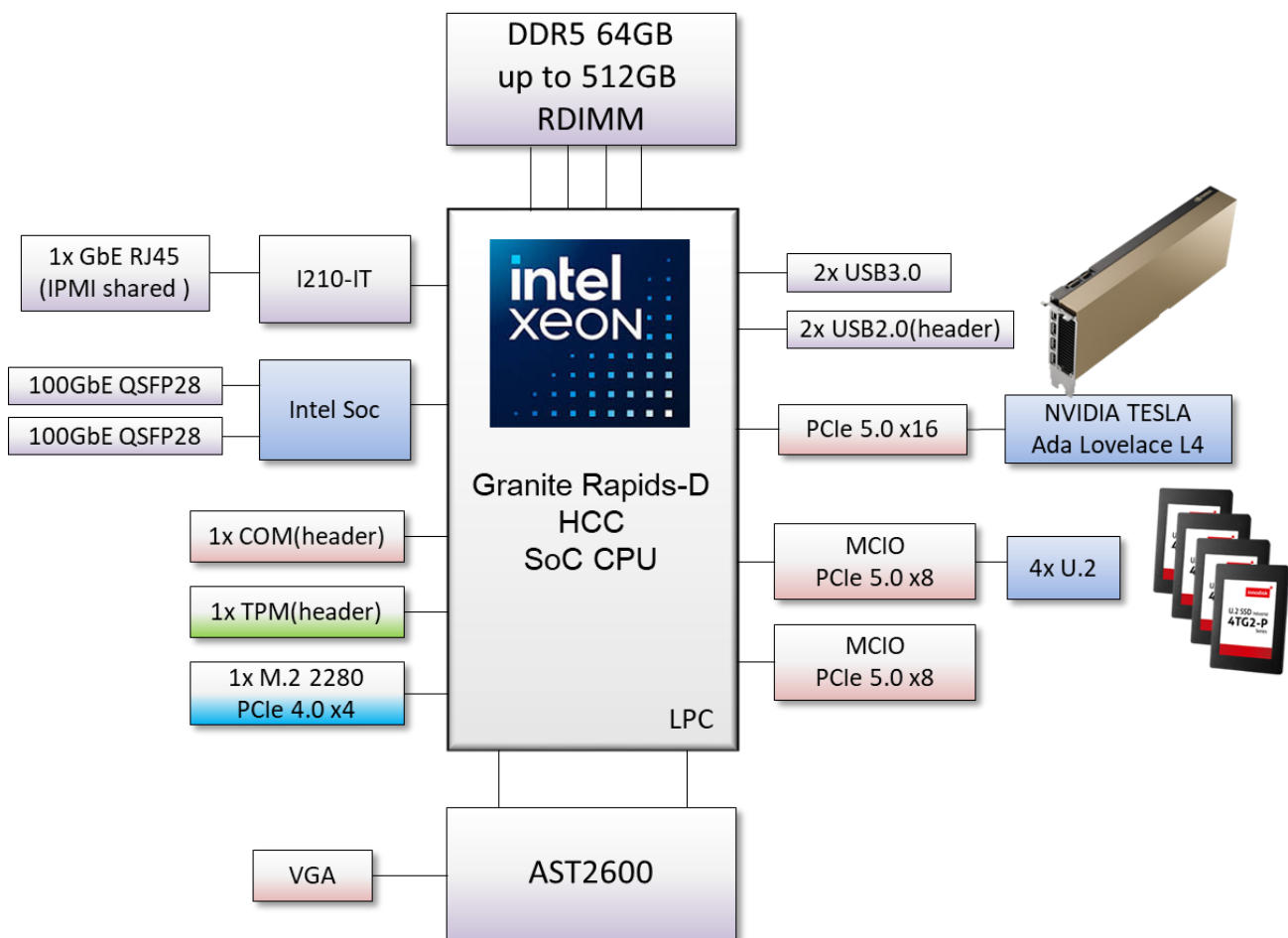
7STARLAKE

intel Xeon

- **Intel® Xeon® 6 Granite Rapids PB Processor**
  - 6516P-B, 20Cores 2.3/3.5 GHz, 145W
  - 6726P-B, 42Cores 2.3/3.5 GHz, 235W
- **DDR5 up to 6400MT/s , 64GB RDIMM, up to 512GB**
- **1TB/8TB SSD Storage**
- **2 x MCIO Gen 5.0 x8**
- **100~264 VAC 860W Redundancy PSU**
- **Dual 100GbE QSFP28, 1GbE-T share with IPMI**
- **Operating Temperature: 0°C to +60°C**
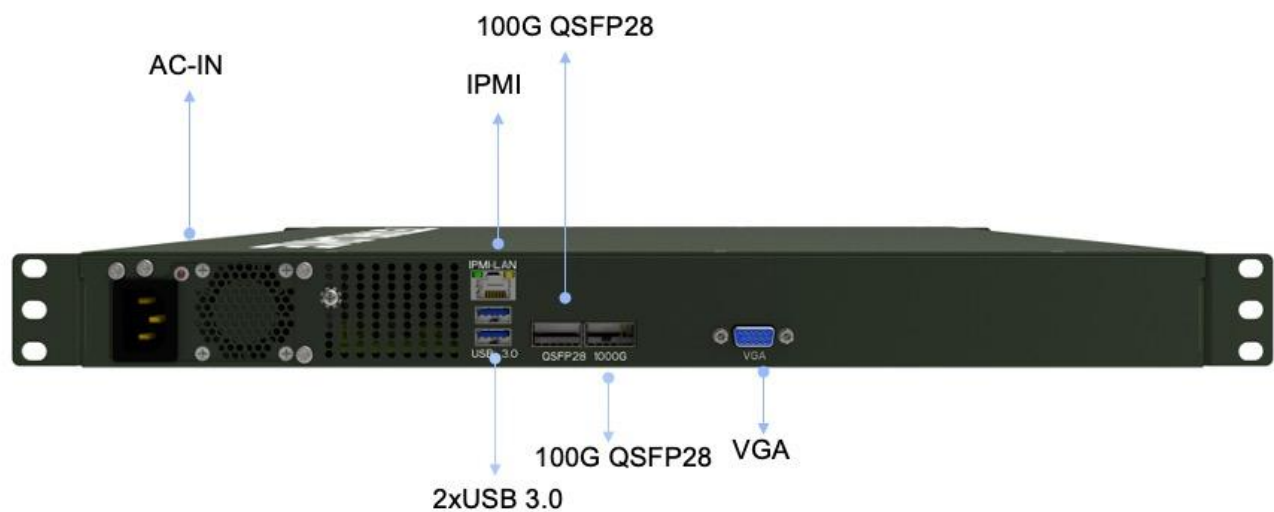- **1U Rackmount Short Depth lightweight chassis**

INTRODUCTION

The THOR11-X6 is a high-performance 1U rackmount server purpose-built for 5G infrastructure and advanced computing workloads. Powered by the latest Intel® Xeon® 6 Granite Rapids processor, it delivers exceptional processing power with support for DDR5 memory up to 6400MT/s, ensuring low latency and high-bandwidth performance. With up to 512GB RDIMM and SSD storage up to 8TB, it handles data-intensive tasks with ease.

Built for mission-critical operations on air, land, or water, the THOR11-X6 offers redundant 860W power supply and wide operating temperature from 0°C to 60°C, ensuring reliability in harsh conditions. Dual 100GbE QSFP28 ports and a 1GbE-T with shared IPMI provide high-throughput networking and remote manageability. The compact 1U design allows for flexible integration without compromising on performance or durability. Whether supporting real-time analytics, AI workloads, or telecom edge services, the THOR11-X6 is engineered to meet the demands of modern infrastructure. Rugged, reliable, and powerful, the THOR11-X6 is ready for the future of military computing.

Block Diagram

Appearance

SPECIFICATIONS

System

CPU	Intel® Xeon® 6 SoC 6516P-B, 20 Cores, CPU TDP 145W Intel® Xeon® 6 SoC 6726P-B, 42 Cores, CPU TDP 235W
Memory type	Up to 512GB RDIMM, 4CH DDR5 4800/6400 MHz in 4 Slots
Chipset	SoC
IPMI	ASPEED AST2600
GPU	NVIDIA Ada Lovelace L4 Tensor Core GPU

Storage

HDD/SSD	2 x MCIO, Gen5 x8 connector slots

Ethernet

Ethernet	Dual 100GbE QSFP28 (SoC)+ x IPMI shared LAN 1 x GbE RJ45

Expansion

MCIO	2 x PCIe 5.0 x 8 via MCIO Connector slots
M.2	1 M.2 PCIe 4.0 x4 slot (M-Key 2280)
OS support List	Windows 11, RHEL 9.4 64bit, RHEL 9.5 64bit, Oracle 9.4 64bit, Oracle 9.5 64bit, Rocky Linux 9.4 64bit, Rocky Linux 9.5 64bit, SLES 15 SP6 64bit, Ubuntu 24.04.1 64bit Server, VMWare ESXi 8.0U2

Power

Power Requirement	100~264 VAC 860W Power Supply 18~36V 500W DC Power Supply (optional)
Dimensions	410 x 400 x 44 mm (W x D x H); final size is dependent on specific configuration
Weight	≦ 12 kg; final size is dependent on specific configuration

Front I/O

Switch	1 x Power On switch
IPMI	1 x IPMI shared LAN 1x GbE RJ45
USB	2 x USB 3.0
LAN1, 2	2 x 100GbE QSFP28
Display	1 x VGA

Environment

Operating Temp.	0°C to +60°C
Storage Temp.	-10°C to +70°C
Relative Humidity	5% to 95%, non-condensing