



- **Compact AI Edge Inference System**
- **Nvidia Jetson Orin Nano**
- **Linux OS with BSP (Board Support Pkg)**
- **40 & 20 TOPS AI Performance**
- **Supports Deep Learning (DL) trained models**
- **Fanless with wide operating temperature**

Introduction

The TI-TSON is a fast, power-efficient embedded AI computing device. An ARM-based system that integrates the NVIDIA® Jetson™ Orin Nano system-level module processor, it provides up to 40/20 trillion operations per second (TOPS) bringing true AI computing at the edge.

The system features 8GB/4GB LPDDR5 memory, 4K/FHD video decoding/encoding, 2 x Gb Ethernet, multiple I/O's and low power consumption. Compact size, wall-mount brackets, fanless design and wide operating temperatures make it ideal for harsh environments.

Specifications

TI-TSON8

TI-TSON4

	TI-TSON8	TI-TSON4
CPU	NVIDIA Jetson Orin Nano 8GB 6-core Arm® Cortex®-A784E v8.2 64-bit CPU 1.5MB L2 + 4MB L3	INVIDIA Jetson Orin Nano 4GB 6-core Arm® Cortex®-A784E v8.2 64-bit CPU 1.5MB L2 + 4MB L3
GPU	Orin Nano 8GB: Maximum Operating Frequency 625 MHz 1024-core NVIDIA Ampere architecture GPU with 32 tensor cores	Orin Nano 4GB: Maximum Operating Frequency 625 MHz 512-core NVIDIA Ampere architecture GPU with 16 tensor cores
Memory	8GB LPDDR5	4GB LPDDR5
Storage	256GB NVMe SSD	
AI Performance	40 TOPS	20 TOPS
Ethernet	2 x Gigabit Ethernet (RJ45)	
I/O	1 x USB 2.0 Micro-B 4 x USB 3.1 Gen1 1 x Micro HDMI 8 x Digital IO (4 x DI / 4 x DO)	
Buttons	Power Reset Recovery	
OS	Linux with BSP	
Power	DC 12-19V	
Power Budget	Max: 43.5 W / Typ: 24.5 W	Max: 38 W / Typ: 19 W
Op Temp	-20° C to 60°C	
Dimensions	157 x 94 x 71 mm	
Weight	890 g	