



Main Features

- 275 TOPS computing power with NVIDIA® Jetson AGX Orin™ 64GB
- Supports multiple AI frameworks including TensorFlow, Caffe, and PaddlePaddle
- Compatible with various AI tools such as TensorRT and DeepStream SDK
- Supports 5G, 4G, and Wi-Fi
- Fanless design, supports wide temperature range of -10°C to 55°C, wide voltage input range of DC 12 ~ 30V rich I/O interfaces, supports wallmounting and rail installation
- NexRTOS + IGH patch is option

Product Overview

Coeus 3901T is a fan-less design box pc with NVIDIA® Jetson AGX Orin™ 64GB module. (Fan Module is option). It is designed to run largest and complex AI models to solve problems such as natural language understanding, 3D perception, and multi-sensor fusion. For AMR development, NVIDIA have Issac ROS (ROS 2 Humble) SDK software stack. For real-time, our NexRTOS + IGH can help you to develop EtherCAT Master application and control Servo drive/ motor & Distributed I/O in real time. This is a very ideal solution that can quickly produce artificial intelligence product prototypes and accelerate the time to market.

BSP Customization Service

- Bootloader for customize carrier board.
- Kernel driver fine tune for new add peripherals, like USB device, Bluetooth, WIFI, etc.
- Kernel device tree modifiedcation.
- Kernel Customization by Installing Additional Packages/Repackaging Debian Packages.
- Upgrade to NexRTOS realtime OS for precise latency and Jitter enhance.
- Support IGH EtherCAT Master application for controlling Servo drive/motor & Distributed I/O.

Specifications

CPU Support

- 64GB: 12-core NVIDIA® Arm® Cortex-A78AE v8.2 64-bit CPU (3MB L2 + 6MB L3)

GPU

- 2048-core NVIDIA® Ampere GPU with 64 Tensor Cores

DL Accelerator

- 2 x NVDLA v2

Vision Accelerator

- 1 x PVA v2

RAM

- 64GB 256-bit LPDDR5 204.8GB/s

Storage

- ◆ 64GB EMMC 5.1

I/O Interface-Front

- ◆ 4 × USB3.2

- 1 x Powerw button
- 2 x RJ45 LAN GbE (Intel I226-IT)
- 1 x RJ45 LAN 10GbE
- 1 x GPIO (4DI & 4DO)
- 2 x COM (Non-full signal, 1*DB9, COM1 RS-232/422/485, COM2 RS-232)

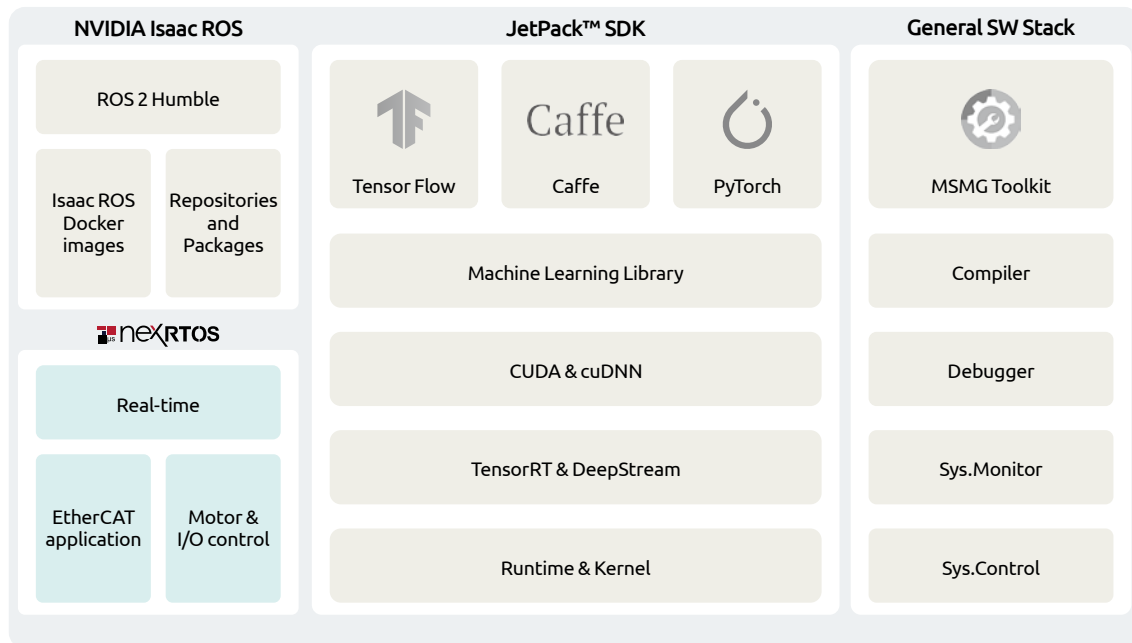
I/O Interface-Rear

- 1 x Power connector
- 1 x OTG (Type-C)
- 1 x Recovery
- 1 x HDMI (3840*2160 60Hz)
- 1 x Line out
- 1 x Nano-SIM

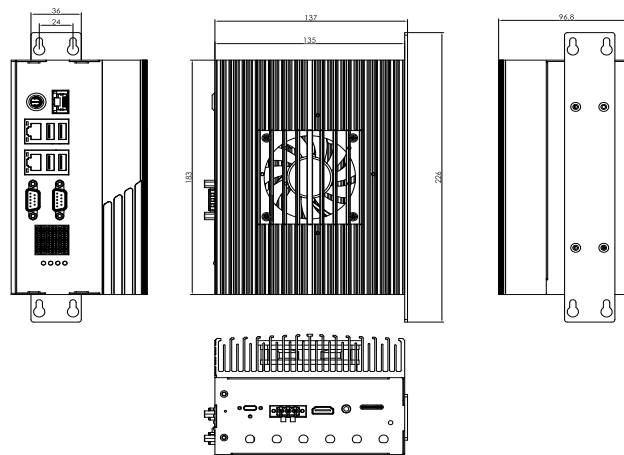
Expansion

- ♦ 1 x M.2 E-Key 2230 (support PCIe x 1/USB 2.0)
- ♦ 1 x M.2 M Key 2280

Software Application Service



Dimension Drawing



- 1 × M.2 B-Key 3052 support 5G, 4G, Wi-Fi
- 2 × MIPI CSI-2
- Option Fan: DC 12V 7015 2x Ball Bearing)

Power Requirement

- DC 12 ~ 30V

Relative humidity

- 40°C, 95% (non-condensing)

Dimensions

- 96.8mm (W) x 137mm (D) x 226mm (H)

Installation

- wall-mounting and rail installation

Operating temperature

- -10°C to 55°C with air flow

Storage temperature

- -20°C to 80°C

Working humidity

- 40°C, 95% no condensation

Ordering Information

- Coeus 3901T (P/N: 10JD3901T00XH)

NVIDIA® Jetson AGX Orin™ 64GB, 3xLAN, 1xHDMI, 1x Lin out, 4xDI, 4xDO, 1xRS232, 1xRS232/422/485, 1x OTG

- Coeus 3901T-32 (P/N: 10JD3901T01XH)

NVIDIA® Jetson AGX Orin™ 32GB, 3xLAN, 1xHDMI, 1x Lin out, 4xDI, 4xDO, 1xRS232, 1xRS232/422/485, 1x OTG