



Main Features

- 275 TOPS computing power with NVIDIA® Jetson AGX Orin™ 64GB
- 200 TOPS computing power with NVIDIA® Jetson AGX Orin™ 32GB
- Supports multiple AI frameworks including TensorFlow, Caffe, and PaddlePaddle
- Compatible with various AI tools such as TensorRT and DeepStream SDK
- 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 industry box pc with NVIDIA® Jetson AGX Orin™ module. (64GB: 275 Tops, 32GB: 200 Tops). 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 + NexECM 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)
- 32GB: 8-core NVIDIA® Arm® Cortex-A78AE v8.2 64-bit CPU (2MB L2 + 4MB L3)

GPU

- 64GB: 2048 CUDA® core Ampere GPU with 64 Tensor Cores
- 32GB: 1792 CUDA® core Ampere GPU with 56 Tensor Cores

DL Accelerator

- 2 × NVDLA v2.0

Vision Accelerator

- 1 × PVA v2.0

RAM

- 64GB: 64GB 256-bit LPDDR5, 204.8 GB/s
- 32GB: 32GB 256-bit LPDDR5, 204.8 GB/s

Storage

- 64GB EMMC 5.1

I/O Interface-Front

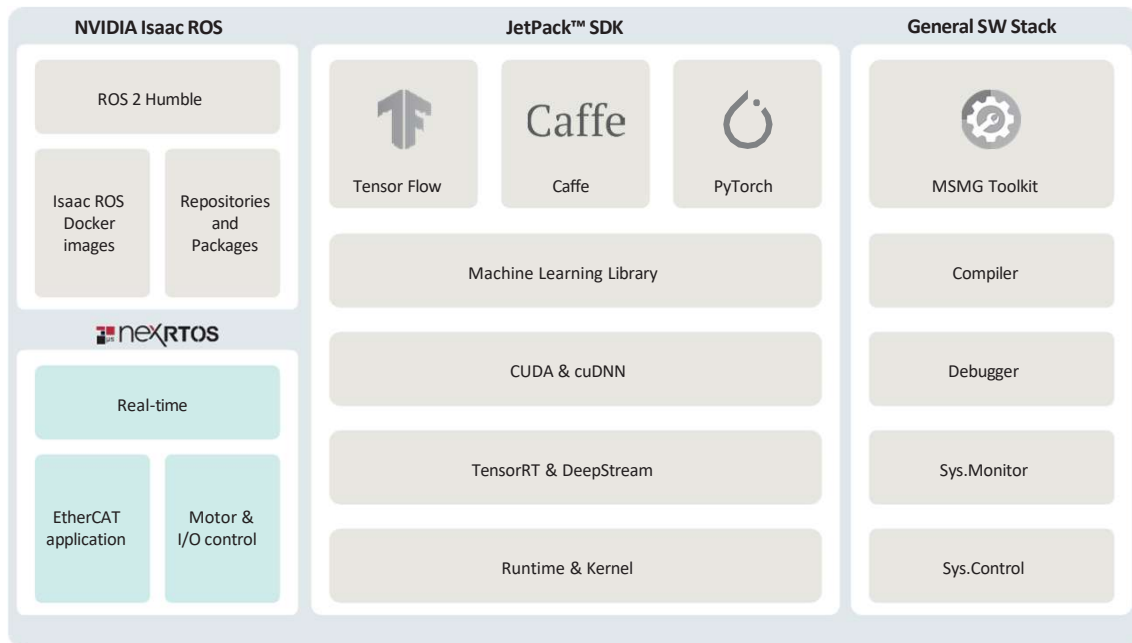
- 3 × RJ45 LAN (2.5GbE, Intel 226-IT)
- 4 × USB3
- 1 × Power button 1 × Power connector
- 1 × GPIO (8DI & 8DO)
- 1 × COM (Non-full signal, 1*DB9, COM1 RS-232/422/485, COM2 RS-232)
- 2 × CAN (1*DB9)

I/O Interface-Rear

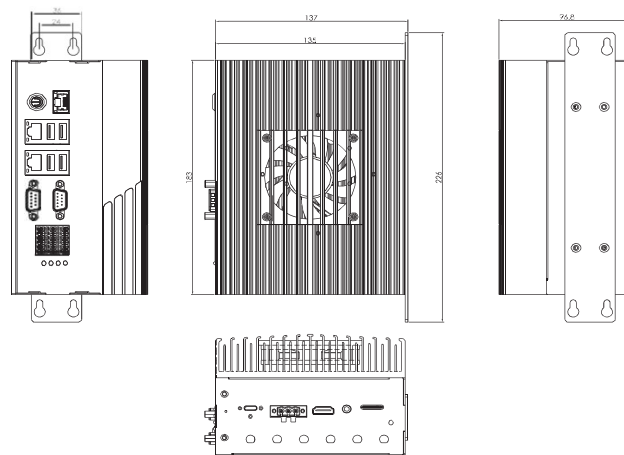
- 1 × Power connector
- 1 × OTG (Type-C)
- 1 × Recovery
- 1 × Ground screw hole
- 1 × HDMI
- 1 × Line out
- 1 × Nano-SIM



Software Application Service



Dimension Drawing



Expansio

- 1 x M.2 E-Key 2230 (support PCIe x 1/USB 2.0)
- 1 x M.2 M Key 2280(support PCIe x 4)
- 1 x M.2 B-Key 3052 support 5G, 4G, Wi-Fi
- 2 x MIPI CSI-2
- Fan: DC 12V 7015 2x Ball Bearing

Relative humidity

- 40°C, 95% (non-condensing)

Dimensions

- System (WxDxH mm) 96.8 x 135 x 183 (96.8 x 137 x 226 /w bkt)
- Carton (WxDxH mm) 320 x 300 x 220
- Net weight: 1.95 kg/ Gross weight: 3.15 kg

Operating temperature

- -10°C to 55°C with air flow

Storage temperature

- -20°C to 80°C

Working humidity

- 40°C, 95% no condensation

Power Requirement

- DC 12 ~ 30V

Ordering Information

- **Coeus-3901T-64G +512GB SSD (PN: 10JD3901T03XH)**

Nvidia Jetson AGX Orin 64GB,3xLAN,1xHDMI,1x Lin out,8xDI,8xDO,1xRS232,1xRS232/422/485,1x OTG,64GB EMMC+512GB SSD

- **Coeus-3901T-64G (PN: 10JD3901T00XH)**

Nvidia Jetson AGX Orin 64GB,3xLAN,1xHDMI,1x Lin out,8xDI,8xDO,1xRS232,1xRS232/422/485,1x OTG,64GB EMMC

- **Coeus-3901T-32G +512GB SSD (PN: 10JD3901T04XH)**

Nvidia Jetson AGX Orin 32GB,3xLAN,1xHDMI,1x Lin out,8xDI,8xDO,1xRS232,1xRS232/422/485,1x OTG,64GB EMMC+512GB SSD

- **Coeus-3901T-32G (PN: 10JD3901T02XH)**

Nvidia Jetson AGX Orin 32GB,3xLAN,1xHDMI,1x Lin out,8xDI,8xDO,1xRS232,1xRS232/422/485,1x OTG,64GB EMMC