Coeus 3701T

Main Features

- Using NVIDIA® Jetson Orin™ Nano module, with 67 TOPS computing power
- NVIDIA® Ampere architecture with 1024 NVIDIA® CUDA® cores and 32 Tensor cores
- Supports multiple AI frameworks including TensorFlow, Caffe, and PyTorch
- Rich expansion capabilities, supporting 5G, 4G, and Wi-Fi expansion
- Fanless embedded design, DC 9 to 30V wide voltage input, supports wall hanging and rail installation

Product Overview

Coeus 3701T use NVIDIA® Jetson Orin™ Nano module, with 67 TOPS computing power, with 1024 NVIDIA® CUDA® cores and 32 Tensor cores. It supports multiple AI frameworks, provides rich I/O interfaces, and uses fanless heat dissipation and industrial wide temperature design. It supports 5G, 4G, and Wi-Fi expansion, and can communicate with terminals through various forms, reducing the forwarding and processing time during data transmission, significantly reducing communication delay, sharing the pressure of cloud data calculation, and reducing network traffic costs.

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.

AI environment

- Ubuntu18.04
- CUDA Toolkit
- cuDNN
- Multimedia
- VisionWorks
- OpenCV
- TensorRT
- VPI on target
- DeepStream
- Container Runtime

Specifications

CPU Support
- 6-core Arm® Cortex-A78AE v8.2 64-bit CPU1.5MB L2 + 4MB L3

GPU
- 1024-core NVIDIA® Ampere GPU with 32 Tensor Cores

Memory
- 8GB 128-bit LPDDR5

I/O Interface-Front
- 2 × USB3.0
- 2 × RJ45 LAN
- 1 × HDMI
- 1 × PWR indicator light
- 1 × SYS indicator light
- 1 × Line Out
- 1 × Power on/off switch
- 2 × Antenna reservation

I/O Interface-Bottom
- 1 × Power interface
- 1 × GPIO (4DI & 4DO)
- 2 × COM (Non-full signal, 1*DB9, COM1 RS-232/422/485, COM2 RS-232)
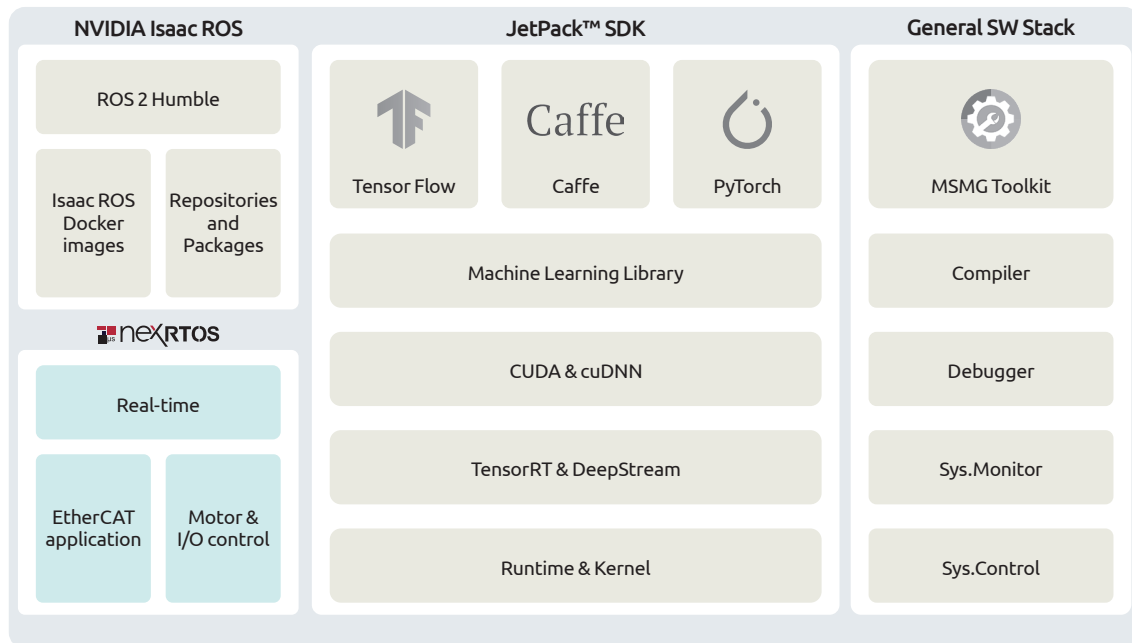- 1 × OTG
- 1 × Recovery
- 1 × Ground screw hole

Expansion
- 1 × Micro SD
- 1 × M.2 M Key 2280
- 1 × M.2 B Key 3052 support 5G, 4G, Wi-Fi
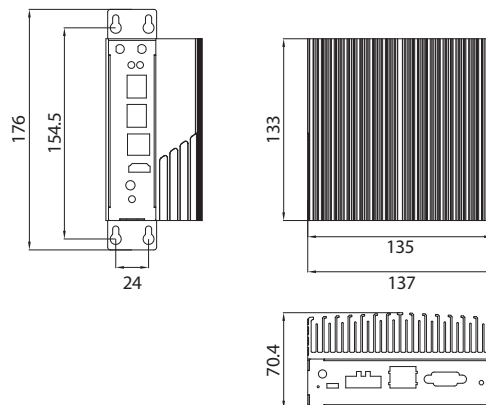- 1 × miniPCIe Full-size slot with mSATA support

Power Requirement
- DC 9 to 30V wide voltage

Coeus 3701T

NEXGEMO

Software Application Service

NVIDIA Isaac ROS

ROS 2 Humble

Isaac ROS Docker images

Repositories and Packages

neXRTOS

Real-time

EtherCAT application

Motor & I/O control

JetPack™ SDK

Tensor Flow

Caffe

PyTorch

Machine Learning Library

CUDA & cuDNN

TensorRT & DeepStream

Runtime & Kernel

General SW Stack

MSMG Toolkit

Compiler

Debugger

Sys.Monitor

Sys.Control

Dimension Drawing

176
154.5
24

133
135
137

70.4

Dimensions
◆ 70.4mm (W) x 137mm (D) x 176mm (H)

Installation
◆ wall-mounting and rail installation

Operating temperature
◆ -10°C to 55°C with air flow

Storage temperature
◆ -20°C to 80°C

Relative humidity
◆ 40°C, 95% (non-condensing)

Ordering Information

◆ **Coeus 3701T-8G (P/N: 10JD3701T00XH)**
NVIDIA® Jetson Orin™ Nano-8GB, 2xLAN, 1xHDMI, 1xLin out, 4xDI, 4xDO, 1xRS232, 1xRS232/422/485, 1xOTG & 128GB SSD

◆ **Coeus 3701T-4G (P/N: 10JD3701T01XH)**
NVIDIA® Jetson Orin™ Nano-4GB, 2xLAN, 1xHDMI, 1xLin out, 4xDI, 4xDO, 1xRS232, 1xRS232/422/485, 1xOTG & 128GB SSD