### Based on NVIDIA® Jetson™ TX2 NX Platform

# Coeus 3501T



## Main Features

- ◆ NVIDIA® Pascal™ architecture with 256 NVIDIA® CUDA® cores
- Supports multiple AI frameworks including Tensorflow, Caffe, and PyTorch
- Support TensorRT, DeepStream SDK and other AI tools
- Support 5G, 4G, and Wi-Fi
- Fanless embedded design, DC 9 to 30V wide voltage input, complete I/O interface, supports wall hanging and rail installation

# **Product Overview**

Coeus 3501T uses NVIDIA® Jetson™ TX2 NX core, up to 1.33 TFlops computing power, 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.

# Al environment

- Ubuntu18.04
- CUDA Toolkit
- cuDNN
- Multimedia
- VisionWorks

- OpenCV
- TensorRT
- VPI on target
- DeepStream
- Container Runtime

# Specifications

#### **CPU Support**

- Dual-Core NVIDIA® Denver 2 64-bit CPU
- Quad-Core Arm® Cortex-A57 MPCore processor

#### GPU

• NVIDIA® Pascal™ architecture with 256 CUDA cores

#### Memory

• 4GB 64-bit LPDDR4x

#### Storage

• 16G eMMC

#### I/O Interface-Front

- 2 × USB3.0
- 2 × R 1451 AN
- 1 × HDMI
- 1 × PWR indicator light
- 1 × SYS indicator light

- 1 x Line Out
- 1 × Power switch
- 2 × Antenna reservation

#### I/O Interface-Bottom

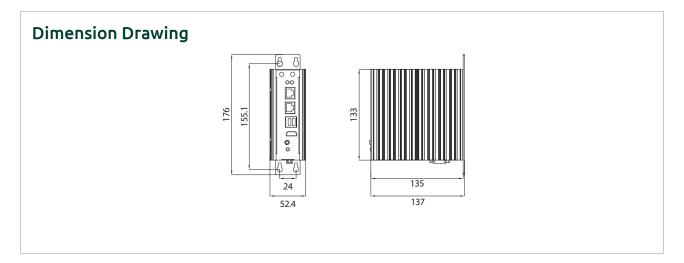
- 1 × Power connector
- 1 × GPIO (4DI & 4DO)
- 2 × COM (Not all signal, 1\*DB9 form lead, COM1 RS-232/422/485; COM2 RS-232)
- 1 × OTG
- 1 × Recovery
- 1 × Ground screw hole

#### Expansion

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



# **Software Application Service** JetPack™ SDK **NVIDIA Isaac ROS** General SW Stack ROS 2 Humble Caffe Caffe Tensor Flow MSMG Toolkit Isaac ROS Repositories Docker and Packages images Machine Learning Library Compiler **™**nexrtos CUDA & cuDNN Debugger Real-time TensorRT & DeepStream Sys.Monitor EtherCAT Motor & application I/O control Runtime & Kernel Sys.Control



#### Power Requirement

• DC 9 to 30V wide voltage

#### **Dimensions**

• 52.4mm (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

#### Working humidity

• 40°C, 95% relative humidity, no condensation

# Ordering Information

• Coeus 3501T (P/N: 10JD3501T00XH)

NVIDIA® Jetson™ TX2 NX, 2xLAN, 1xHDMI, 1xLin out, 4xDI, 4xDO, 1xRS232, 1xRS232/422/485, 1xOTG

Last update: 02/02/2024

**NÈ∖IOT** Coeus 3501T