



Main Features

- Powerful CPU with 1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores
- Two GPU Options: 8GB / 40 TOPS and 4GB / 20 TOPS (INT8)
- 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 9 ~ 30V Rich I/O interfaces
- Supports wall-mounting and rail installation

Product Overview

Coeus 3721T-8GB is a fan-less design box pc with NVIDIA® Jetson Orin™ Nano module(8GB: 40 Tops), Coeus 3721T-4GB is Jetson Orin Nano Module(4GB: 20 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 + 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 and accelerate the time to market.

BSP Customization Service

- Bootloader for customized carrier board.
- Kernel driver fine-tune for new add peripherals, like USB device, Bluetooth, WIFI, etc.
- Kernel device tree modification.
- 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

- 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3

GPU Support

- 8GB: 1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores (8GB: 40 Tops)
- 4GB: 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores (4GB: 20 Tops)

Main Memory

- 8G: 8GB LPDDR5
- 4G: 4GB LPDDR5

I/O Interface - Front

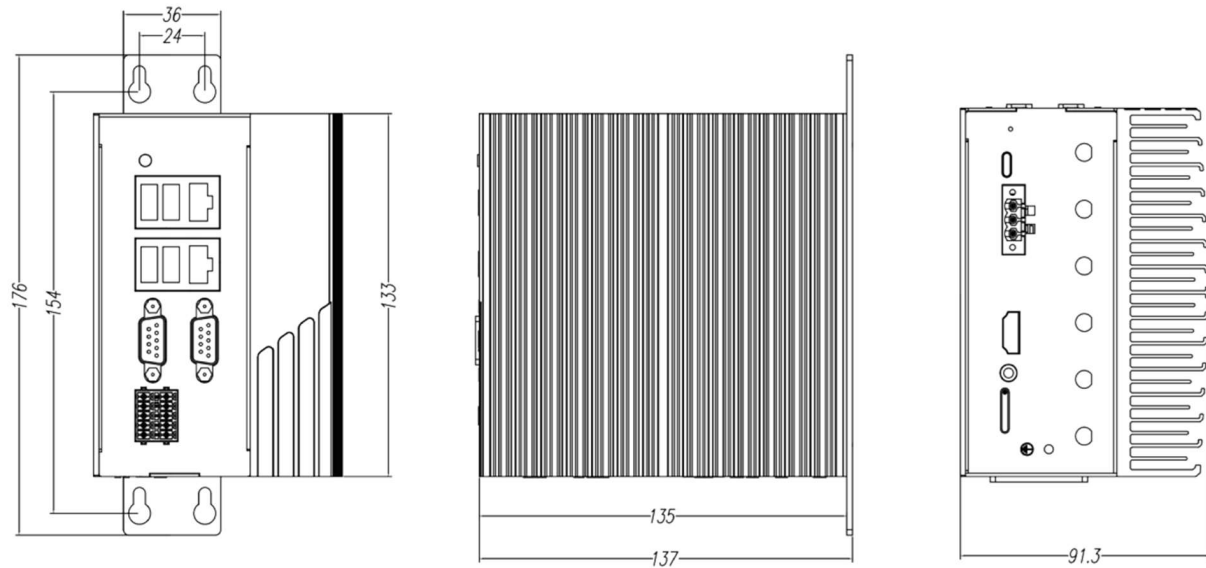
- 4 x USB3.0
- 2 x RJ45 LAN
 - 1x GbE from module
 - 1 x GbE from Intel® I210

- 1 x Power on/off switch
- 1 x GPIO (4 DI & 4DO)
- 2 x COM (1 x RS232/422/48S, 1 x RS232 via 1 x DB9)
- 1 x CAN bus via DB9

I/O Interface - Top

- 1 x HDMI
- 1 x Power connector
- 1 x OTG
- 1 x Recovery
- 1 x Ground screw hole
- 1 x Line Out
- 6 x Antenna holes
- 1 x SIM slot

Dimension Drawing



Power Requirement

- 9-30V DC input with +/-5% range, with reverse polarity protection

Dimensions

- System Dimension (WxDxH)
91.3 x 135 x 133 mm (91.3 x 137 x 176 with bracket)
- Carton Dimension (WxDxH)
320x 300 x 220 mm
- Net weight: 1.35 kg
- Gross weight: 2.45 kg

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
Ambient with air flow: -10°C to 55° C (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 95% (non-condensing)

Certifications

- CE approval
- EN61000-3-3
- EN61000-3-2
- FCC Class A
- LVD

OS Support

- Ubuntu 22.04, Kernel 5.15

Ordering Information

- **Coeus 3721T-8G (P/N: 10JD3721T00XH)**
Nvidia Jetson Orin Nano-8GB ,2xLAN,1xHDMI,1x Line Out, 4xDI, 4xDO, 1xRS232, 1xRS232/422/485, 1x OTG & 128GB SSD
- **Coeus 3721T-4G (P/N: 10JD3721T02XH)**
Nvidia Jetson Orin Nano-4GB ,2xLAN,1xHDMI,1x Line out, 4xDI, 4xDO, 1xRS232,1xRS232/422/485,1 x OTG & 128GB SSD
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060054X00)**