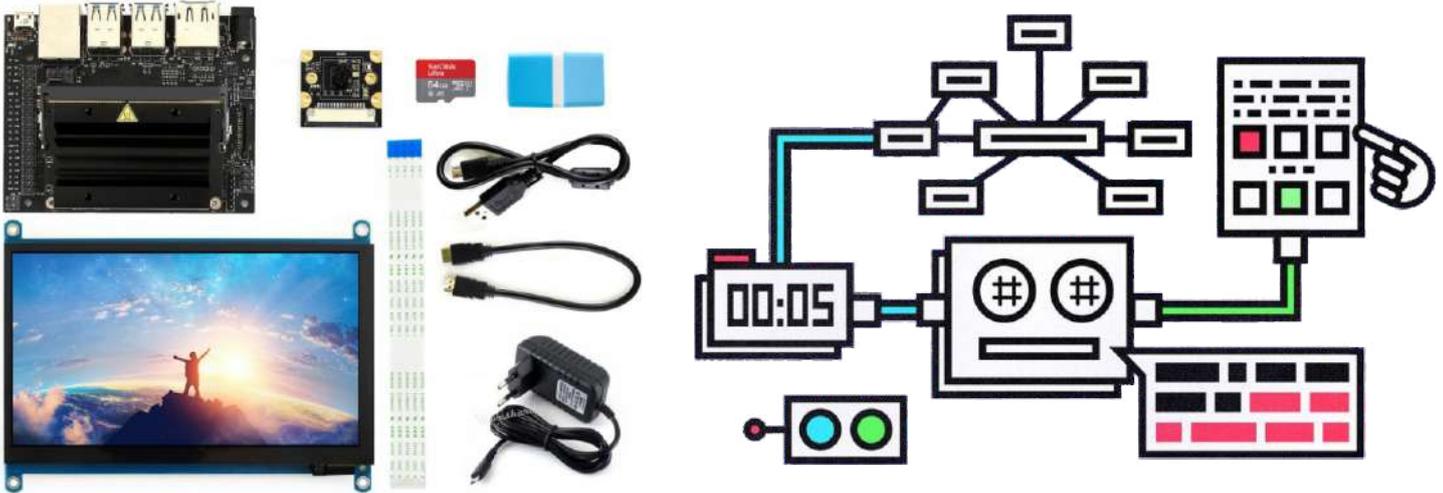


AI (Artificial Intelligence) Developers Platform

Model – MTS-AIDP



Features:

AI Developers Kit is a small, powerful computer that lets you run multiple neural networks in parallel for applications like image classification, object detection, segmentation, and speech processing. All in an easy-to-use platform that runs in as little as 5 watts.

AI Developers Kit delivers 472 GFLOPS for running modern AI algorithms fast, with a quad-core 64-bit ARM CPU, a 128-core integrated NVIDIA GPU, as well as 4GB LPDDR4 memory. It runs multiple neural networks in parallel and processes several high-resolution sensors simultaneously.

This platform supported by NVIDIA Jetpack, which includes a board support package (BSP), CUDA, cuDNN, and TensorRT software libraries for deep learning, computer vision, GPU computing, multimedia processing, and much more. The SDK also includes the ability to natively install popular open source Machine Learning (ML) frameworks such as TensorFlow, PyTorch, Caffe / Caffe2, Keras, and MXNet, enables the developers to integrate their favourite AI model / AI framework into products fast and easily.

AI 2 wheel drive smart robot compatible with hardware to evaluate facial recognition, object tracking, auto line following, and collision avoidance, machine vision & natural language processing AI frameworks. It also include ROS nodes code examples and easy to understand the ROS concepts.

Mass attendance monitoring system using Jetson Nano.

Hardware Specifications:

- GPU: 128-core Maxwell™ GPU

- CPU: quad-core ARM® Cortex®-A57 CPU
- Memory: 4GB 64-bit LPDDR4
- Storage: Micro SD card slot (requires an external minimum 16G TF card)

Video:

- Encode: 4K @ 30 (H.264/H.265)
- Decode: 4K @ 60 (H.264/H.265)

Interfaces:

- Ethernet: 10/100/1000BASE-T self-negotiation
- Camera: 12-ch (3x4 OR 4x2) MIPI CSI-2 DPHY 1.1 (1.5Gbps)
- Display: HDMI 2.0, DP (DisplayPort)
- USB: 4x USB 3.0, USB 2.0 (Micro USB)
- Others: GPIO, I2C, I2S, SPI, UART
- 40 Pin FRC cable

Power:

- Micro USB (5V 3A)
- DC jack (5V 4A)
- Detail Documentation useful for development & lab experiments.

Deliverables:

1. AI hardware Developer Kit x1
2. 7inch HDMI LCD (H) 1024 x600 x1
3. 8MP IMX219-77 Camera x1
4. AI smart 2 wheel robot complete hardware setup
5. Micro SD Card 64GB x1
6. Power adapter EU standard USB output x1
7. HDMI cable x1
8. USB type A plug to micro B plug cable x1
9. SD card reader x1
10. 15-pin FFC (opposite sides contact) x1