

Learning route

1.The learning route of B01 board

1. This product provides factory images, which can be plugged into the motherboard using the built-in USB drive/TF card in the package. There is no need to repeatedly burn the images according to this tutorial. For detailed image environment, please refer to the documentation in the attached image. If you burn the official image of Jetson nano, you need to build the relevant AI environment yourself. Due to software version differences, errors may occur and you need to find a solution on your own. For the method of burning images, please refer to Chapter 2, Jetson Nano B01 Basic Tutorial
2. After you burn other third-party images and successfully boot them. If you want to perform some simple configurations on Jetson nano, such as:
 - SD card expansion
 - Ssh VNC login
 - Transferring files between windows and Jetson nano
 - Increase the space of Jetson nano
 - System backup and other operations

You can watch Chapter 4 System

3. When you want to understand the usage of Jetson nano's GPIO port and have a certain foundation in Python, you can watch Chapter 5 GPIO Hardware Control Tutorial
4. When you want to learn artificial intelligence vision, you can watch Chapter 6 AI Vision Advanced Tutorial

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1. On-board camera tutorial
 2. USB external camera test
 3. Jupyter lab and Jetcham installation
 4. Install TensorFlow (optional)
 5. Jetson-Inference environment construction (optional)
 6. Hello AI World
 7. Image classification reasoning
 8. Object detection reasoning
 9. Semantic segmentation
 10. Pose estimation
 11. Action recognition
 12. Background removal
 13. Monocular depth estimation
 14. DeepStream environment construction (optional)
 15. Automotive Inspection
 16. Introduction to yolo5
 17. YOLO5 environment construction (optional)
 18. Real-time detection of yolo5
 19. yolo5 + tensorrt acceleration
 20. yolo5 + tensorrt acceleration + DeepStream (open camera)
 21. Mediapipe environment construction (optional)
 22. Mediapipe development

Each box with a different color is a part, and each part is dependent on the previous part and is rarely separate. If the previous environment is not set up properly, an error will be reported, and using our set up image can directly run the AI case inside.

5. When you want to learn the ROS1 system course, you can watch Chapter 7 ROS Advanced Tutorial. After mastering the knowledge of ROS1, you can purchase our ROS accessories for advanced learning. The image we have built also has the corresponding ROS accessory source code.