

Y-C18-DEV Development System



Key Feature

- Jetson™ Orin NX:157/117 TOPS,16/8GB LPDDR5
- Jetson™ Orin Nano:67/34 TOPS,8/4GB LPDDR5
- Rich I/O: 1xHDMI, 4xUSB Type-A, 1xRJ45, 6xGPIO, 2xI2C, 2xSPI, 1xI2S, 1xCAN
- Camera: 2x4 Lane MIPI CSI
- Expansion Slots: 1x M.2 E 2230, 1x M.2 M 2230, 1x M.2 M 2280
- Operating Temperature: -25°C~+60°C
- Pre-installed Ubuntu system

Introduction

Y-C18-DEV is a high-performance edge AI Computing Development System equipped with NVIDIA Jetson Orin NX/Orin Nano module. It offers multi-gradient AI computing power configurations of 34/67/117/157 TOPS, with dimensions of only 103mm × 90.5mm × 34.6mm. It can seamlessly run various mainstream generative AI models, enabling developers, students, and makers to easily build cutting-edge AI applications such as robots, intelligent vision, and multimodal interaction. The adopts industrial-grade design standards, supporting direct migration from prototype development to mass production design.

Y-C18-DEV is equipped with rich I/O interfaces, providing M.2 E 2230 and M.2 M 2230/2280 expansion interfaces, and supports 2x4 Lane MIPI CSI cameras. It can flexibly connect functional modules and peripherals such as cameras, sensors, and storage, meeting core needs in edge scenarios such as multi-device collaboration, high-real-time data collection and processing, and massive local data storage. It provides efficient and reliable hardware guarantee for the rapid implementation of AI algorithms at the edge. The product is widely used in edge AI scenarios such as medical imaging, industrial quality inspection, intelligent inspection, and mobile robots.



Website



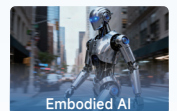
Smart Medical



Industrial Automation



Intelligent Patrol



Embodied AI

Specifications

Module	Jetson Orin NX 16GB	Jetson Orin NX 8GB	Jetson Orin Nano 8GB	Jetson Orin Nano 4GB
AI Performance	157 TOPS	117 TOPS	67TOPS	34TOPS
GPU	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores			512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores
CPU	8-core Arm® Cortex® -A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3	6-core Arm® Cortex® -A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3	6-core Arm® Cortex® -A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3	
Memory	16GB 128-bit LPDDR5 102.4GB/s	8GB 128-bit LPDDR5 102.4GB/s	8GB 128-bit LPDDR5 102 GB/s	4GB 64 位 LPDDR5 51 GB/s
Storage	(Supports external NVMe)			
Video Encoding	1x 4K60 (H.265) 3x 4K30 (H.265)、6x 1080p60 (H.265) 12x 1080p30 (H.265)		1080p30, supported by 1-2 CPU cores	
Video Decoding	1x 8K30 (H.265) 2x 4K60 (H.265)、4x 4K30 (H.265) 9x 1080p60 (H.265)、18x 1080p30 (H.265)		1x 4K60 (H.265)、2x 4K30 (H.265) 5x 1080p60 (H.265)、11x 1080p30 (H.265)	
Display	1 x HDMI			
USB	4×USB 3.0 Type-A			
Networking	1x RJ45			
Wireless	WIFI5			
Camera	2x 4 Lane MIPI CSI			
Expansion	1x M.2 E key (2230) 、1x M.2 M key (2230) 、1x M.2 M key (2280)			
Functional Signals	6x GPIO、2x I2C、2x SPI、1x I2S、1x CAN			
Serial Ports	1x TTL			
Temperature	-25°C~+60°C			
Dimensions	103mm × 90.5mm × 34.6mm			
Power	DC 9V~19V			
Weight	168g			

Interfaces

