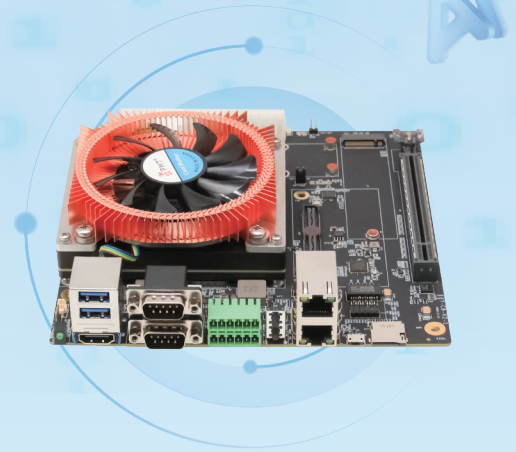


# Y-C8-DEV Development System



## Key Feature

- Jetson™ AGX Orin: 275/200 TOPS, 64/32GB LPDDR5, 64GB eMMC
- Jetson™ AGX Xavier: 32 TOPS, 64/32GB LPDDR4x, 32GB eMMC
- Rich I/O: HDMI, RJ45, USB3.0 Type-A, Micro USB, Micro SD, RTC, CAN, GPIO, RS232
- Expansion Slots: miniPCIe (USB2.0 & PCIe x1), M.2 M 2280, PCIe x16
- Camera: 6× 2 Lane MIPI CSI, 4 × 4-Lane MIPI CSI
- Operating Temperature: -25°C ~ +65°C
- Input Voltage: DC 12V
- Pre-installed Ubuntu

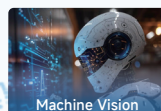
## Introduction

Y-C8-DEV is an edge AI computing development kit powered by NVIDIA® Jetson™ AGX Orin/AGX Xavier system-on-modules, providing scalable AI performance from 32 TOPS to 275 TOPS for industrial automation, intelligent transportation, smart healthcare and autonomous driving. It supports rapid iteration, deployment and mass production of AI products.

With industrial-grade high-reliability design and triple protection, the kit uses a single-side concentrated interface layout to simplify mechanical design. It is equipped with PCIe x16, dual miniPCIe and dual M.2 M-Key slots for flexible expansion of multi-channel Gigabit Ethernet, USB 3.0, high-capacity storage, video capture and multi-serial modules.



Website



Machine Vision



Machine Control



Logistics AGV



Intelligent Driving

## Specifications

Module	Jetson AGX Orin 64GB	Jetson AGX Orin 32GB	Jetson AGX Xavier 64GB	Jetson AGX Xavier 32GB
<b>AI Performance</b>	275 TOPS	200 TOPS	32 TOPS	
<b>GPU</b>	2048-core NVIDIA Ampere architecture GPU with 64 Tensor Cores	1792-core NVIDIA Ampere architecture GPU with 56 Tensor Cores	512-core NVIDIA Ampere architecture GPU with 64 Tensor Cores	
<b>CPU</b>	12-core Arm® Cortex®-A78AE v8.2 64-bit CPU 3MB L2 + 6MB L3 (64-bit, 12-core ARM processor core)	8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3	8-core NVIDIA Carmel ARM®v8.2 64-bit CPU 8MB L2 + 4MB L3	
<b>Memory</b>	64GB 256-bit LPDDR5 204.8GB/s	32GB 256-bit LPDDR5 204.8GB/s	64GB 256-bit LPDDR4x 136.5GB/s	32GB 256-bit LPDDR4x 136.5GB/s
<b>Storage</b>	64GB eMMC 5.1		32GB eMMC 5.1	
<b>Video Encode</b>	2x 4K60 (H.265) 4x 4K30 (H.265) 8x 1080p60 (H.265) 16x 1080p30 (H.265)	1x 4K60 (H.265) 3x 4K30 (H.265) 6x 1080p60 (H.265) 12x 1080p30 (H.265)	4x 4K60 (H.265)、8x 4K30 (H.265) 16x 1080p60 (H.265)、32x 1080p30 (H.265)	
<b>Video Decode</b>	1x 8K30 (H.265)、3x 4K60 (H.265) 7x 4K30 (H.265)、11x 1080p60 (H.265) 22x 1080p30 (H.265)	1x 8K30 (H.265)、2x 4K60 (H.265) 4x 4K30 (H.265) 9x 1080p60 (H.265) 18x 1080p30 (H.265)	2x 8K30 (H.265)、6x 4K60 (H.265) 12x 4K30 (H.265)、26x 1080p60 (H.265) 52x 1080p30 (H.265)	
<b>Display</b>	1 x HDMI			
<b>USB</b>	2x USB3.0 Type-A、1x Micro USB(OTG)		1x USB3.0 Type-A、1x USB2.0 Type-A、1x Micro USB(OTG)	
<b>Networking</b>	2x RJ45			
<b>SD Card</b>	1x micro SD			
<b>Button</b>	1x Recovery、1x Reset			
<b>Camera</b>	6x 2 Lane MIPI CSI、4x 4 Lane MIPI CSI			
<b>Expansion</b>	2x miniPCIe、2x M.2 Key M (2280)、1x PCIe16		1x miniPCIe、1x M.2 Key M (2280)、1x PCIe16	
<b>Functional Signals</b>	2x CAN、4x GPIO、1x SPI、1x I2C、1x I2S			
<b>Serial Ports</b>	2x RS232			
<b>Temperature</b>	-25°C~+65°C			
<b>Dimensions</b>	170mm × 170mm × 42.5 mm			
<b>Power</b>	DC +12V			
<b>Weight</b>	713g			

## Interfaces

