

# Y-C17-DEV Development System



## Key Feature

- Jetson™ Orin NX: 157/117 TOPS, 16/8GB LPDDR5
- Jetson™ Orin Nano: 67/34 TOPS, 8/4GB LPDDR5
- Jetson™ Xavier NX: 21 TOPS, 16/8GB LPDDR4x
- Rich I/O: HDMI, Type-C, GPIO, I2C, PSDK
- Expansion Slots: miniPCIe, M.2 M 2230, M.2 B 3050
- Camera: 1× 2 Lane MIPI CSI
- Operating Temperature: -25°C ~ +65°C
- Input Voltage: DC 12V ~ 24V
- Pre-installed Ubuntu

## Introduction

Y-C17-DEV is an edge AI computing development kit powered by NVIDIA® Jetson™ Orin NX/Orin Nano /Xavier NX system-on-modules, offering scalable AI performance from 21 TOPS to 157 TOPS. With a compact dimension of 82mm × 60mm × 36.8mm, it is well-suited for drone AI applications including power line inspection, agricultural monitoring, smart warehousing and logistics delivery, providing highly compatible computing hardware to accelerate AI application development and deployment.

The kit adopts an industrial-grade high-reliability design with triple protection: ESD, over-voltage and reverse polarity protection. All components are wide-temperature rated to ensure stable operation in harsh environments. It supports the PSDK interface for drone payload development and is equipped with miniPCIe, M.2 M-Key and M.2 B-Key slots for flexible expansion of multi-channel Gigabit Ethernet, USB 3.0, high-capacity storage, 5G communication, video capture and multi-serial modules.



Website



Power inspection



Agricultural monitoring



Intelligent logistics



Intelligent warehousing

## Specifications

Module	Jetson Orin NX 16GB	Jetson Orin NX 8GB	Jetson Orin Nano 8GB	Jetson Orin Nano 4GB	Xavier NX 16/8GB
<b>AI Performance</b>	157 TOPS	117 TOPS	67 TOPS	34 TOPS	21 TOPS
<b>GPU</b>	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores			512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores	384-core NVIDIA Ampere architecture GPU with 48 Tensor Cores
<b>CPU</b>	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		6-core NVIDIA Carmel Arm®v8.2 64-bit CPU 6MB L2 + 4MB L3
<b>Memory</b>	16GB 128-bit LPDDR5 102.4GB/s	8GB 128-bit LPDDR5 102.4GB/s	8GB 128-bit LPDDR5 102 GB/s	4GB 64-bit LPDDR5 51 GB/s	16/8GB 128-bit LPDDR4x 59.7GB/s
<b>Storage</b>	(Supports external NVMe)				16GB eMMC 5.1
<b>Video Encode</b>	1x 4K60 (H.265)、3x 4K30 (H.265) 6x 1080p60 (H.265)、12x 1080p30 (H.265)		1080p30 supported by 1-2 CPU cores		2x 4K60 (H.265) 4x 4K30 (H.265) 10x 1080p60 (H.265) 22x 1080p30 (H.265)
<b>Video Decode</b>	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)		2x 8K30 (H.265)、6x 4K60 (H.265) 12x 4K30 (H.265) 22x 1080p60 (H.265) 44x 1080p30 (H.265)
<b>Display</b>	1 x HDMI				
<b>USB</b>	2x Type-C				
<b>Camera</b>	1x 2 Lane MIPI CSI				
<b>Expansion</b>	1x miniPCIe、1x M.2 Key M(2230)、1x M.2 Key B(3050)、1x nano SIM				
<b>Functional Signals</b>	4x GPIO、1x I2C、1x PSDK				
<b>Temperature</b>	-25°C~+65°C				
<b>Dimensions</b>	82mm×60mm×36.8mm				
<b>Power</b>	DC +12V~+24V				
<b>Weight</b>	125g				

## Interfaces

