

18F1E1

Edge AI Box



Key Feature

- Jetson™ Orin NX:157/117 TOPS,16/8GB LPDDR5
- Jetson™ Orin Nano:67/34 TOPS,8/4GB LPDDR5
- 1xHDMI,4xUSB Type-A,1xRJ45
- 1x M.2 E 2230, 2x M.2 M(2230/2280)
- DC9V~19V
- -25°C~+60°C
- Pre-installed Ubuntu system

Introduction

Powered by the NVIDIA Jetson Orin NX/Orin Nano system-on-module,the 18F1E1 is a compact, high-performance edge AI computing platform for advanced AI deployment. It offers scalable AI performance with 34/67/117/157 TOPS multi-grade configurations, flexible enough to fit diverse scenario needs.

At an ultra-small 125mm × 105mm × 45mm size, it supports local model deployment and efficient AI inference, empowering developers, students and makers to quickly build innovative AI applications: mobile robotics, intelligent vision and multi-modal interaction.

Loaded with HDMI, RJ45 Ethernet and USB Type-A ports, it enables seamless multi-device coordination, real-time data processing and large local data storage. It delivers a stable, efficient hardware base for fast, reliable edge AI algorithm deployment.

Ideal for core edge AI use cases: medical imaging, industrial quality inspection, intelligent inspection and mobile autonomous robots.



Website



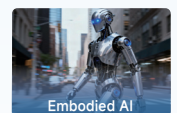
Smart Medical



Industrial Automation



Intelligent Patrol



Embodied AI

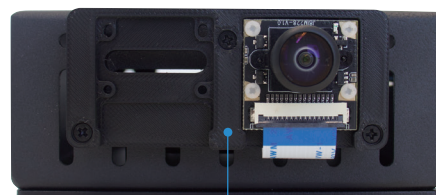
Specifications

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 3.0Type-A			
Networking	1x RJ45			
Wireless	WIFI5			
Expansion	1x M.2 E key (2230) 、1x M.2 M key (2230) 、1x M.2 M key (2280)			
Serial Ports	1x TTL			
Temperature	-25°C~+60°C			
Dimensions	125mm×105mm×45mm			
Power	DC 9V~19V			

Interfaces



HDMI 4*USB Type-A RJ45 Type-C(OTG)



MIPI CSI (option)