

PE1100N

Arm System, NVIDIA Jetson, LPDDR4, eMMC, USB3, Dual LAN, HDMI, M.2 E, M.2 M, M.2 B, AEM, Dual SIM, 12-24V

Features

- Intelligent Edge AI System with NVIDIA Jetson™ Orin™ NX, Orin™ Nano
- Fanless design and diverse I/O in a compact size
- Ready to connect Wi-Fi, BT & LTE by optional modules
- Wide range of power input and operating temperature
- Support ASUS Expansion Module (AEM)



Specifications

Processor System	SOM	Jetson Orin Nano 4G	Jetson Orin Nano 8G	Jetson Orin NX 8G	Jetson Orin NX 16G
	CPU	6 x Arm® Cortex®-A78AE v8.2			8 x Arm® Cortex®-A78AE v8.2
	GPU	512-core NVIDIA Ampere GPU with 16 Tensor Cores	1024-core NVIDIA Ampere GPU with 32 Tensor Cores		
	Memory	4 GB 64-bit LPDDR5	8 GB 128-bit LPDDR5	8 GB 128-bit LPDDR5	16 GB 128-bit LPDDR5
Wired Interface	Ethernet	2 x 10/100/1000 Mbps, RJ45			
	USB (or Header)	3 x USB 3.2 Gen1, Type-A 1 x USB 2.0, Micro-USB for OS Flash 2 x USB 2.0, Pin Header (Internal)			
	COM	2 x RS-232/422/485, DB9 1 x CAN bus, DB9			
	DIO	4 x DI, 4 x DO (2x5 Terminal Block, w/ isolation)			
	Display	1 x HDMI 1.4a, 3840 x 2160 @30Hz		1 x HDMI 2.0b, 3840 x 2160 @60Hz	
	Debug Port ¹	1 x Debug console via Micro-USB			
Wireless Interface	Wi-Fi	Optional			
	Bluetooth	Optional			
	Cellular	Optional			
	GPS	Optional			
Expansion	M.2 M key	1 x 2242/2260/2280, for M.2 SSD (PCIe, OS disk, size option)			
	M.2 E key	1 x 2230, for Wi-Fi/BT (PCIe, USB 2.0, I2C and PCM)			
	M.2 B key	1 x 3042/3052, for 4G/5G (PCIe, USB 2.0/3.0)			
Slot	SIM	2 x nano-SIM slots			
Power	Power Input	12 to 24 VDC, 3-pin terminal block (1-pin for remote power button)			
Mechanical	Mounting	Wall-mount (support assembly with DIN rail clips)			
	Dimensions	Board: 3.5", 146 x 105 mm System: 152 x 114 x 72 mm			
	Weight	1.4 KG			
Environment	Operating Temp.	-20 ~ up to 60°C			
	Storage Temp.	-40 ~ 85°C			
	Relative Humidity	10 ~ 95% (non-condensing)			
Security	TPM	on-board TPM v2.0			
Others	Watch Dog Timer	Yes. HW WDT			
	Operating System ¹	Ubuntu Desktop			

¹ On selected models

Preliminary