

PE1100N V2

Arm System, NVIDIA Jetson Orin Super Mode, LPDDR5, USB3, Dual LAN, HDMI, M.2 E, M.2 M, M.2 B, AEM, Dual SIM, 12-19V

Features

- Intelligent Edge AI System with NVIDIA Jetson™ Orin™ NX, Orin™ Nano (Super Mode)
- 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

	SOM	Jetson Orin Nano 4G (Super Mode)	Jetson Orin Nano 8G (Super Mode)	Jetson Orin NX 8G (Super Mode)	Jetson Orin NX 16G (Super Mode)
Processor System	AI Performance	34 TOPS	67 TOPS	117 TOPS	157 TOPS
	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 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)			
	AEM	Dual LAN, OOB, etc (option)			
Slot	SIM	2 x nano-SIM slots			
Power	Power Input	12 to 19 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 (w/o FAN) 158 x 114 x 93 mm (w FAN)			
	Weight	1.4 KG			
Environment	Operating Temp.	-20 ~ 60 °C			
	Storage Temp.	-40 ~ 85 °C			
	Relative Humidity	10 ~ 95% (non-condensing)			
	Vibration (Operating)	MIL-STD 810H Method 514.8, Category 4 (Truck transportation over US highways); 5 Grms, 5-500 Hz, 3 Axes			
Security	Shock (Operating)	MIL-STD 810H Method 516.8, Procedure I; 50 Grms/11 ms			
Security	TPM	on-board TPM v2.0			
	Others	Watch Dog Timer	Yes. HW WDT		
Operating System ¹		Ubuntu Desktop			