

PE2000S

Intel Atom® x7000E Series, Intel® Processor N-series, and Intel® Core™ i3-N305 Processor, DP, HDMI, Dual-LAN, optional PoE, six COM ports, six USB ports, 9-36V DC

Features

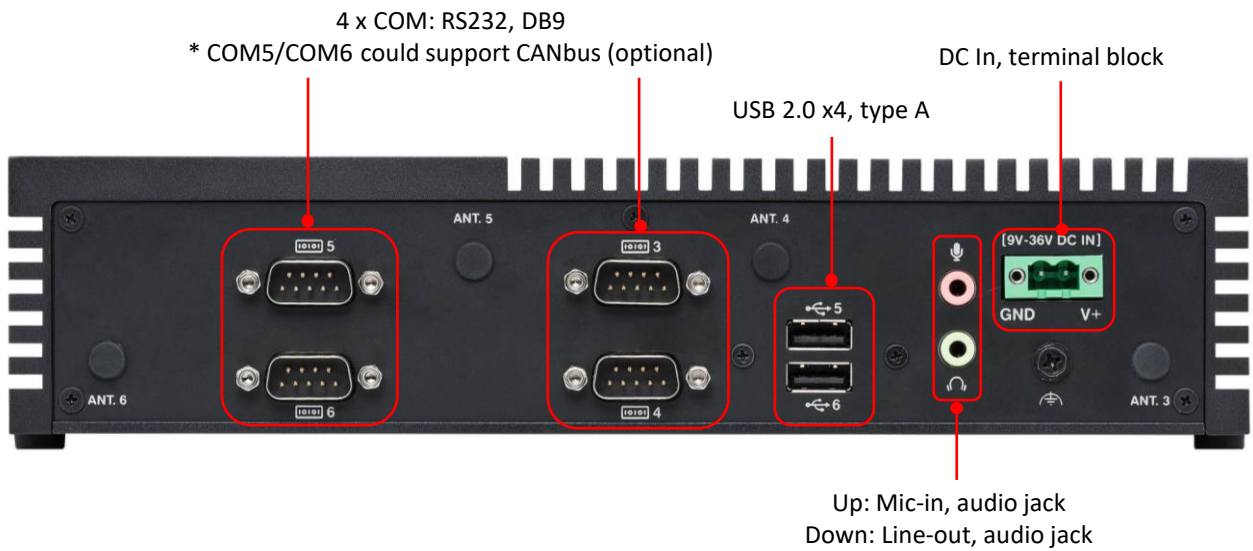
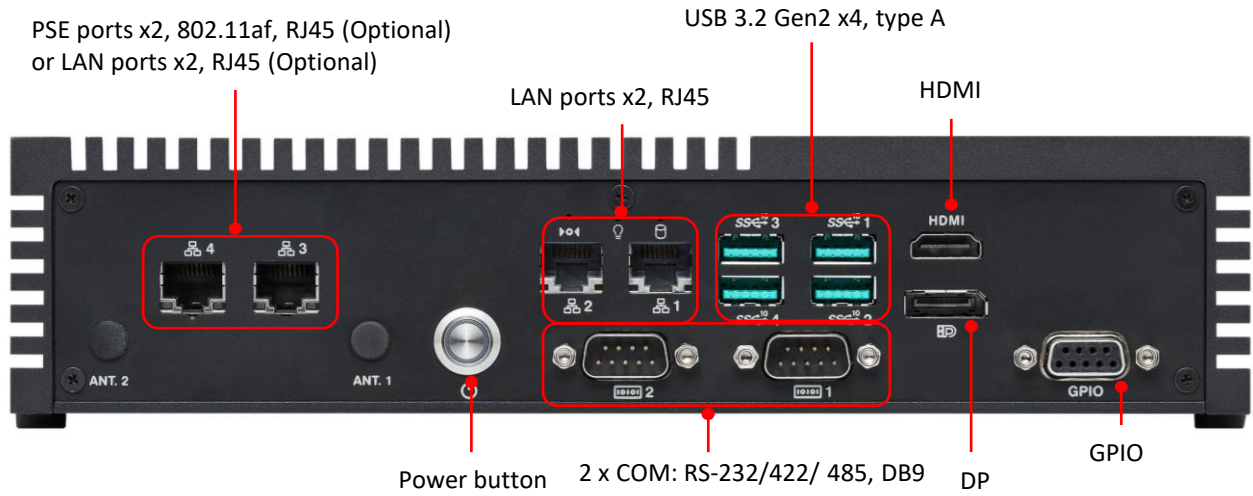
- Intel Atom® x7000E Series, Intel® Processor N-series, and Intel® Core™ i3-N305 Processor (formerly Alder Lake N)
- Supports 2 x RS-232/422/485, 4x RS-232
- Rich expansion capacity including PoE, LAN, CANbus module
- Wide Voltage Range: 9-36V
- Comply with MIL-STD 810H, and withstand up to 5 Grms vibration



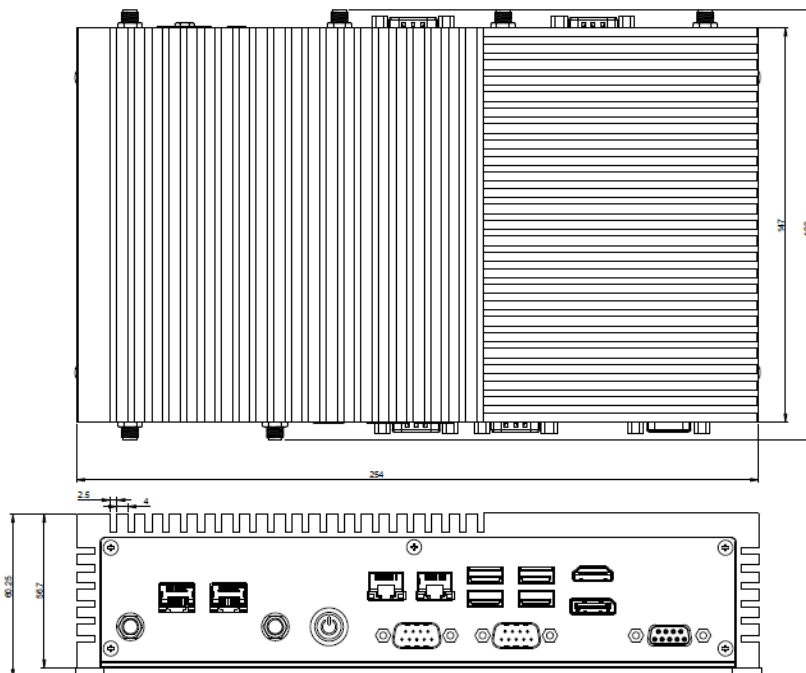
Specifications

System	CPU	Intel® Processor N97	Intel® Processor N200	Intel® Core™ i3-N305	Intel Atom® x7425E
	TDP	12W	6W	15W	12W
	# of Cores	4	4	8	4
	Core Base Freq.	2.0 GHz	1.0 GHz	1.8 GHz	1.5 GHz
	Max Turbo Freq.	3.6 GHz	3.7 GHz	3.8 GHz	3.4 GHz
	Memory	1 x SO DIMM, DDR5 4800 MHz, supports up to 16GB			
External Interfaces	Display	1 x HDMI 2.0, supports up to 4K x 2K @ 60 Hz 1 x DP1.2, supports up to 4096 x 2304 @ 60 Hz			
	Ethernet	2 x 10/100/1000 Mbps, RJ45 (2 x Intel i210AT (1Gb)) 2 x 802.11af PSE ports, RJ45 (optional)* 2 x 10/100/1000 ethernet ports, RJ45 (optional)* *either one			
	USB	4 x USB 3.2 Gen 2, type A 2 x USB 2.0, type A			
	Audio	1 x Mic-in, phone jack 1 x Line-out, phone jack			
	COM	2 x COM: RS-232/422/485, DB9 (COM1/COM2) 4 x COM: RS232, DB9 (COM3/COM4/COM5/COM6) * COM5/COM6 could support CANbus (optional)			
	GPIO	1 x 8bit GPIO, DB9			
	Expansion	Mini PCIe	1 x Full-Length Mini PCIe slot with on-board Nano-SIM socket (support CANbus module, PoE/LAN board, LTE)		
M.2 M Key		1 x M.2 2242/2280 M key socket (SATA)			
M.2 E Key		1 x M.2 2230 E key socket (USB2.0/CNVi mode/PCIe) supports TPU/ WiFi /BT module			
2.5" SATA		1 x SATA 6Gb/s connector supports 2.5" SSD			
SIM		1 x nano-SIM slot (on-board)			
Power	System Power	9 to 36 V DC, 2-pin terminal block			
	Power Supply	90W (Optional) ; 120W for PoE sku (Optional)			
Mechanical	Mounting	Wall mount			
	Dimension	254 x 147 x 57 mm			
	Weight	2.45 kg			
Environment	Operating Temp.	0~ 50°C			
	Storage Temp.	-40~85°C			
	Relative Humidity	10 to 95% (non-condensing)			
	EMC	CE, FCC, BSMI			
	Safety	CB, CE-LVD, BSMI			
	Vibration	Operating, MIL-STD-810H, Method 514.8 , Category 4 (Truck transportation over US highways) ; 5-500 Hz (Max. 5Grms), 3 Axes			
	Shock	Operating, MIL-STD-810H, Method 516.8, Procedure I (40G/11ms)			
Green	GA (RoHS)				
Security	TPM	TPM V2.0 powered by Nuvoton NCPT 750 (Optional)			
Others	Watch dog timer	HW WDT Enable (WDT_EN)			
	OS	Windows 10 IoT Enterprise			

Appearance



Dimension (mm)



Ordering Information

SKU	DRAM	2.5" STAT	TPM module	LAN	PoE	Serial Port	USB	mPCIe	M.2 2230 E-key	M.2 2242/2280 M-key
Default	Up to 16 GB	1	optional	2	--	6*	6	1 ^{1, 2}	1 ^{4 or 5}	1 ⁶
LAN	Up to 16 GB	1	optional	4	--	6	6	1 ⁷	1 ^{4 or 5}	1 ⁶
PoE	Up to 16 GB	1	optional	2	2	6	6	1 ⁸	1 ^{4 or 5}	1 ⁶

* COM5/COM6 could support CANbus (optional)

1. LTE
2. TPU (mini-PCIe socket)
3. CANbus module
4. Wifi
5. TPU (E-key)
6. M.2 SSD
7. LAN module
8. POE module

- The part number might vary for different regulations and package. Please consult the local sales representative for the exact 90PN.
- Please check with your importer or integrator for system level certification.

Packing list

Description	Qty
Power terminal block to power jack adaptor, 10cm	1
Wall mount bracket	2
SATA 22P to SATA 7P+4P 15+12CM	1
2.5HDD screw pack	1

Optional Accessories (purchased separately)

Part Number	Description
ADAPTER	
	Power adapter, 90W 12V, input voltage 100 to 264VAC, output voltage 12VDC with 2A DC load, 0 to 40°C operating temperature
	Power adapter, 120W 20V, input voltage 90 to 264VAC, output voltage 20VDC with 6A DC load, 0 to 40°C operating temperature
POWER CORD	
	Power cord with United States (US) plug
	Power cord with Europe (EU) plug
	Power cord with China (CN) plug
	Power cord with Japan (JP) plug
	Power cord with Australia (AU) plug
	Power cord with United Kingdom (UK) plug
	Power cord with Korea (KR) plug
	Power cord with Swiss (CH) plug
	Power cord with Taiwan (TW) plug
	Power cord with Thailand (TH) plug
WIRELESS EXTENSION CABLE	
	External wireless extension cable, RP-SMA to RP-SMA, 60cm
4G LTE ANTENNA	
	Omni-directional rubber duck GPRS/EDGE/UMTS/HSPA/LTE antenna, 704 to 960MHz & 1710 to 2690MHz, 3.5 dBi, RP-SMA, antenna length 10cm
WI-FI ANTENNA	
	Omni-directional rubber duck Wi-Fi antenna, 2.4/5GHz, 2dBi, RP-SMA, antenna length 8.6cm