

PICO-ADN4-SEMI Rev.B

Pico-SEMI with Intel® Processor N-series & Intel® Core™ Processor N-series Processors



Features

- DDR5 4800 SODIMM, up to 16GB
- HDMI 1.4 x 1
- 2.5GbE x 1, 1GbE x 1
- Full-size mSATA/mPCIe x 1, M.2 2230 E-Key x 1
- USB 3.2 Gen 2 x 2
- RS-232/422/485 x 2 (Optional)
- TPM 2.0, 4-bit GPIO (Optional)
- DC 9 ~ 36V input



Internal I/O	
USB	—
Serial Port	—
Video	—
SATA	—
Audio	Line-out Header x 1 (Optional)
DIO/GPIO	GPIO 4-bit (Optional)
SMBus/I2C	I2C/SMBus x1 (Default: SMBus)
Fan	—
Front Panel	HDD LED, PWR LED, Power Button, Buzzer, Reset
Others	—
Expansion	
Mini PCIe/mSATA	Full-Sized mSATA/mPCIe x 1 (default: mSATA, select with BIOS)
M.2	M.2 2230 E-Key x 1 (PCIe [x1] + USB 2.0)
Others	—
Environment & Certification	
Operating Temp	Default: 32°F – 122°F (0°C – 50°C) with 0.7m/s air flow Optional: -40°F – 122°F (-40°C – 50°C)
Storage Temp	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	2,219,397
EMC	CE/FCC Class A

Specifications

System	
Form Factor	PICO-SEMI
CPU	Intel® Processor N-series & Intel® Core™ Processor N-series Processors: Intel® Processor N97 (4C/4T, 2.00 GHz, 12W) Intel® Core™ i3-N305 Processor (8C/8T, 1.80 GHz, 15W)
Chipset	Integrated with Intel® SoC
Memory Type	DDR5 4800, Single Channel SODIMM x 1, Max.16GB, Non-ECC
BIOS	UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Security	TPM 2.0
RTC Battery	Lithium Battery 3V/240mAh
Dimension	5.51" x 3.94" x 1.69" (140mm x 100mm x 43mm)
Gross Weight	1.55 lbs (0.70 kg)
OS Support	Windows 10/11 (64 bit) Ubuntu 22.04.2/Kernel 5.19
Power	
Power Requirement	+9~36V (Optional: 12V)
Power Supply Type	ATX
Connector	Lockable DC Jack Connector
Power Consumption	Intel® Core™ i3-N305, DDR5 16GB x 1, 2.43A @+12V (Typical) Intel® Core™ i3-N305, DDR5 16GB x 1, 3.63A @+12V (Max)
Display	
Controller	Intel® UHD Graphics for 12th Gen Intel® Processors
LVDS/eDP	—
Display Interface	HDMI 1.4 x 1, 3840 x 2160 @30Hz
Multiple Display	1 Display
Audio	
Codec	Realtek ALC256 (Optional)
Audio Interface	Line-out (Optional)
Speaker	—
External I/O	
Ethernet	Intel® Ethernet Controller I226 2.5GbE, RJ-45 x 1 Realtek RTL8111H-CG, 1GbE, RJ-45 x 1
USB	USB 3.2 Gen 2 x 2
Serial Port	COM 1~2 (RS-232/422/485, support 5V/12V/RI, Optional)
Video	HDMI 1.4 x 1

Packing List

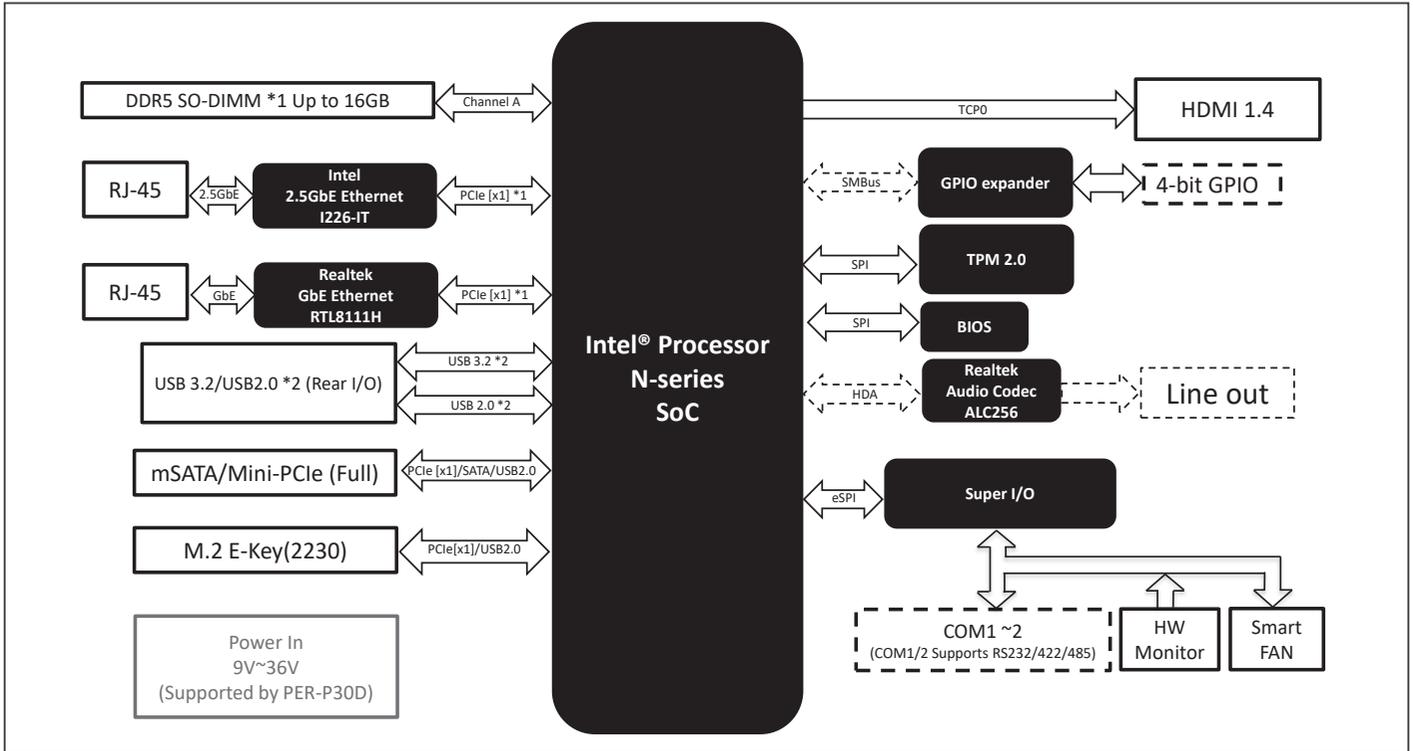
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Optional Accessories

Part Number	Description	Qty.
1702031802	Power Cord (US Type)	1
1702031803	Power Cord (Europe Type)	1
1255X00063	AC/DC Adapter.100~240V.150W.12V/12.5A.AC C14 DC JACK W/ Lock 180D. DELTA.DPS-150AB-15 J	1
170X001114	GPIO cable (150mm)	1
170X000568	Dual COM port cable (120mm)	1
170X001201	Line-out cable (120mm)	1
PICO-SEMI-WMT1	PICO-ADN4-SEMI Wallmount bracket kit	1
PICO-SEMI-DIN01	Din rail kit.25mm*48.3mm	1

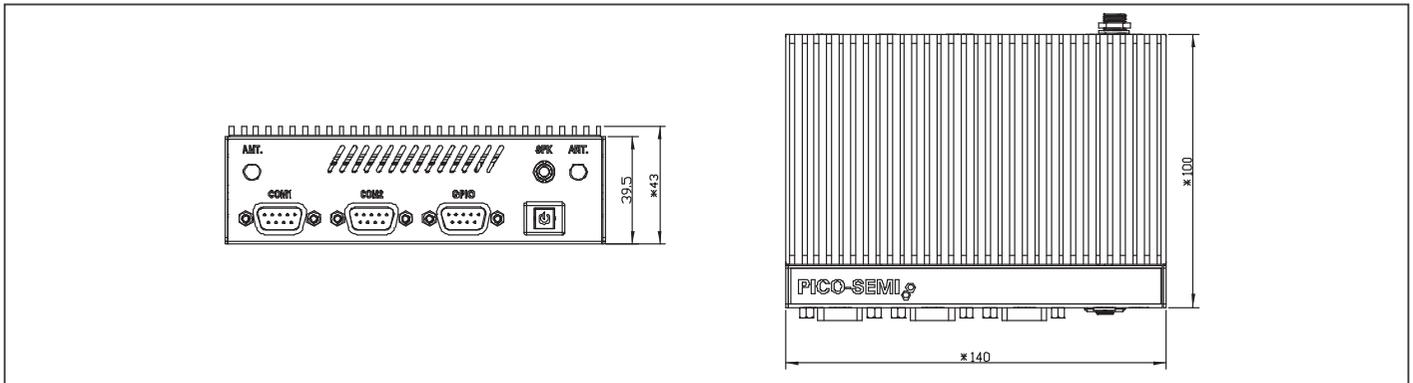


Block Diagram



Dimension

Unit: mm



Ordering Information

Part number	CPU	Memory	Display	Storage	LAN	USB	RS-232/422/485	Expansion slot	Power	Operating Temp	Others
PICO-ADN4-SEMI-B10-PP01	Intel® Processor N97	SODIMM 8GB	HDMI x 1	—	GbE x 1 2.5GbE x 1	USB3.2 Gen 2 x 2	—	M.2 2230 E-key x 1 miniCard (Full) x 1	+9~36V ATX	0°C ~ 50°C	—
PICO-ADN4-SEMI-B10-PP02	Intel® Core™ i3-N305	SODIMM 8GB	HDMI x 1	—	GbE x 1 2.5GbE x 1	USB3.2 Gen 2 x 2	—	M.2 2230 E-key x 1 miniCard (Full) x 1	+9~36V ATX	0°C ~ 50°C	—