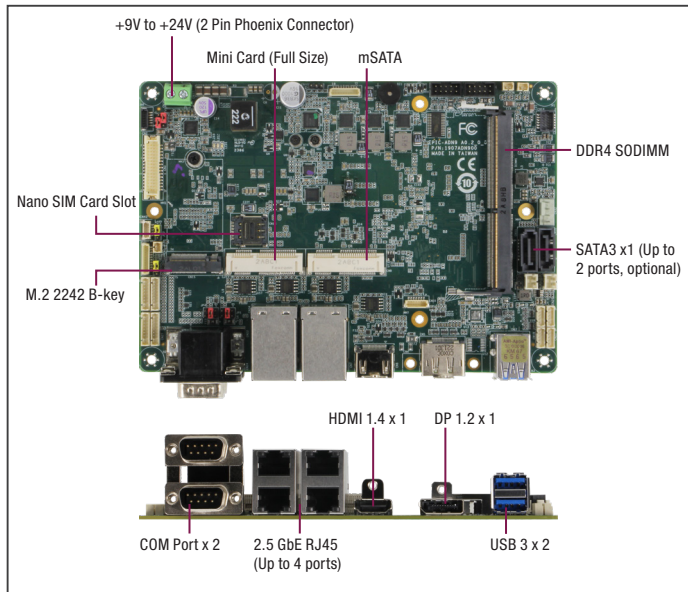


# EPIC-ADN9

EPIC Board with Intel Atom® x7000E Series, Intel® Processor N Series, and Intel® Core™ i3-N305 Processors



## Specifications

System	
Form Factor	4" EPIC Board
CPU	Intel Atom® x7000E Series/Intel® Processor N Series/Intel® Core™ i3-N305 Processors: Intel® Core™ i3-N305 (8C/8T, up to 3.8 GHz, TDP 15W) Intel Atom® x7425E (4C/4T, up to 3.4 GHz, TDP 12W) Intel® Processor N97 (4C/4T, up to 3.6 GHz, TDP 12W) Intel® Processor N50 (2C/2T, up to 3.4 GHz, TDP 6W)
Chipset	Integrated with Intel® SoC
Memory Type	DDR4 3200MHz Single-Channel SODIMM x 1, up to 16GB
BIOS	UEFI
Wake On Lan	Yes
Watchdog Timer	255 Levels
Security	TPM 2.0 (Optional)
RTC Battery	Lithium Battery 3W/240mAh
Dimension	4.53" x 6.50" (115mm x 165mm)
OS Support	Windows® 10 (64-bit) Ubuntu 22.04.2 LTS/Kernel 5.19
Power	
Power Requirement	+9-24V or +12V
Power Supply Type	AT/ATX
Connector	2-Pin Phoenix Connector
Power Consumption	Intel® Core™ i3-N305, DDR4 16GB, 1.87 A+24V (Typical) Intel® Core™ i3-N305, DDR4 16GB, 2.66A +24V (Max)
Display	
Controller	Intel® UHD Graphics
LVDS/eDP	24/48-bit Dual-Channel LVDS x 1, up to 1920 x 1080
Display Interface	HDMI 1.4 x 1, up to 3840 x 2160 @60Hz DP 1.2 or VGA x 1 DP 1.2 x 1, up to 3840 x 2160 @144Hz VGA x 1, up to 1920 x 1080
Multiple Display	Up to 3 Simultaneous Displays
Audio	
CODEC	Realtek ALC897
Audio Interface	Line-In / Line-Out / MIC
Speaker	5W Speaker (Optional)
External I/O	
Ethernet	RJ-45 for Intel® I226-V 2.5GbE x 2 (Standard: 2 Ports, Advanced: 4 Ports)
USB	USB 3.2 Gen 2 x 2
Serial Port	COM 1, COM 2 (RS-232/422/485, support 5V/12V/RI)
Video	HDMI 1.4 x 1 DP 1.2 x 1
Internal I/O	
USB	USB 2.0 x 4

## Features

- Intel Atom® x7000E Series, Intel® Processor N Series, and Intel® Core™ i3-N305 Processors
- DDR4 3200MHz SODIMM x 1, up to 16GB
- HDMI 1.4b x 1, Dual-Channel LVDS x 1, DP or VGA x 1
- Full Sized mSATA x 1 + SATA III x 1
- Intel® I226-V 2.5GbE x 2 (Up to I226V 2.5GbE x 4 support)
- USB 3.2 Gen 2 x 2, USB 2.0 x 4
- M.2 2242 B-Key x 1, NanoSIM x 1
- COM Port x 6, GPIO 16-bit x 1
- Supports +9V ~ +24V Wide Voltage Input

Serial Port	COM 3, COM 4, COM 5, COM 6 (RS-232, support RI only)
Video	LVDS x 1 Inverter x 1 (5V/12V@2A)
SATA	SATA 6.0Gbps x 1 (Default) (up to SATA x 2 shared with mSATA, BOM Optional)
Audio	Line-In / Line-Out / Mic
DIO/GPIO	GPIO 16-bits
SMBus/I2C	SMBUS
Touch	—
Fan	4 Pin Smart Fan
SIM	Nano SIM x 1
Front Panel	Power Button, Reset Button, Power LED, SATA LED, Buzzer
Others	—
Expansion	
Mini PCI-E/mSATA	Full Sized mPCIe x 1 Full Sized mSATA x 1
M.2	M.2 2242 B-Key x 1 (PCIe 2.0 [x1] + USB 2.0)
Others	—
ENVIRONMENT & CERTIFICATION	
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	364,565
EMC	CE/FCC Class A

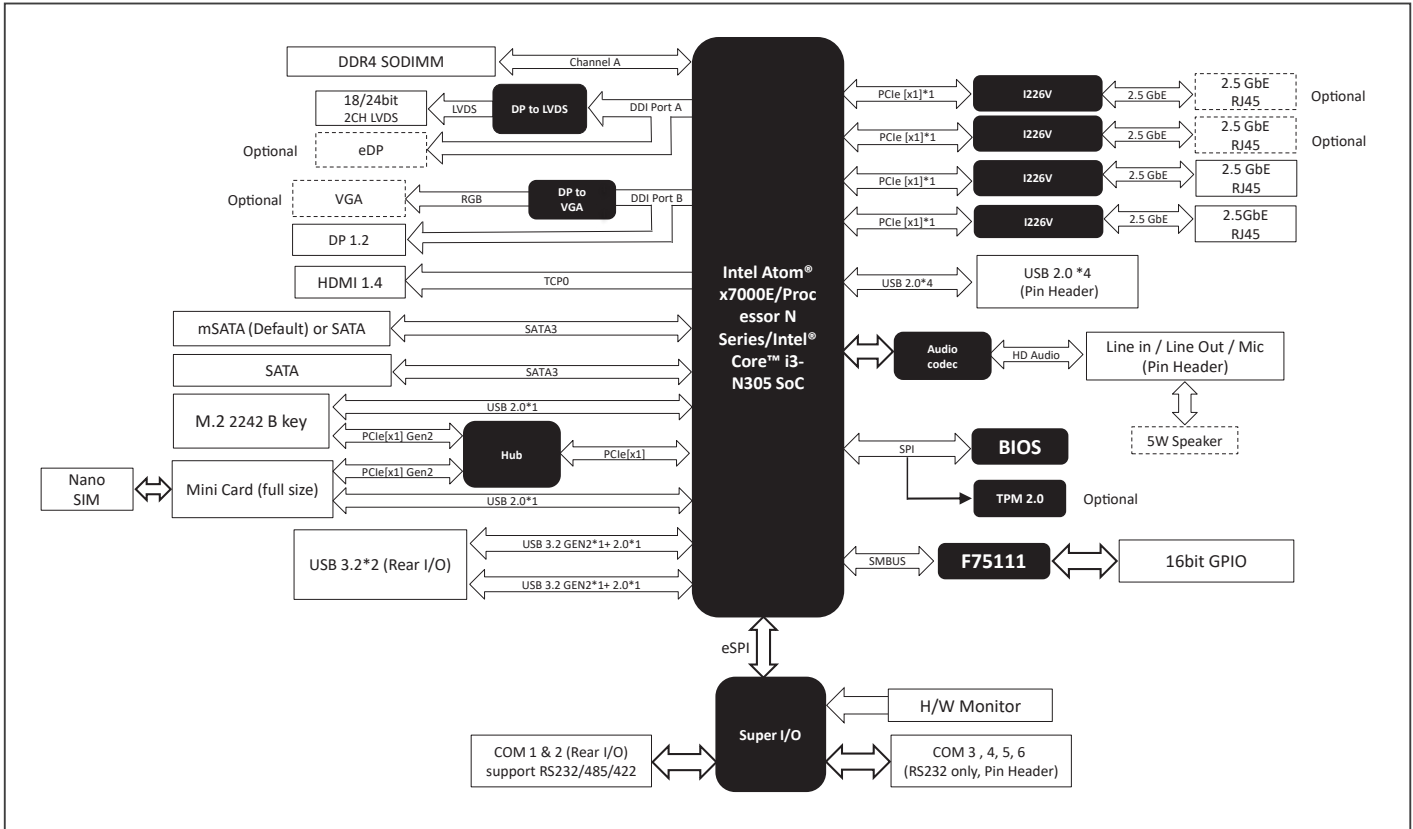
## Packing List

- EPIC-ADN9 x 1
- Screw kit x 1

## Optional Accessories

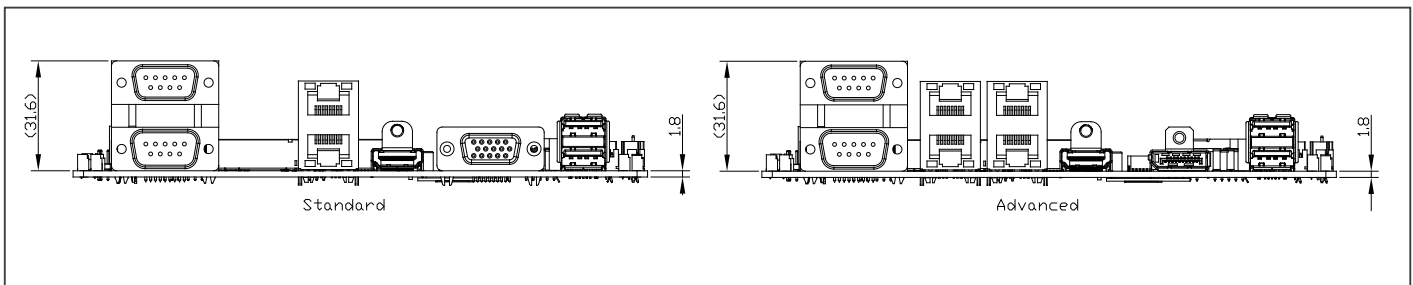
Part Number	Description
EPIC-ADN9-HSK01	Heat sink. 165*101.6*20mm. Silver
1700050207	USB2.0 Connector Cable
1701090150	COM Port Cable
1709070150	SATA Cable
1702150155	SATA 5V power cable
170X000603	Front Panel cable

## Block Diagram



## Dimension

Unit: mm



## Ordering Information

Part Number	CPU	Memory	Display	Storage	LAN	USB	COM Port	Expansion	TPM	Power	Operating Temperature	Others
EPIC-ADN9-A10-0001	Intel® Core™ i3-N305	DDR4 SODIMM x 1	LVDS x 1, DP x 1, HDMI x 1	SATA 6.0Gbps x 1	I226V 2.5GbE x 4	USB 3.2 Gen 2 x 2 USB 2.0 x 4	RS232/422/485 x 2 RS232 x 4	Full Sized mPCIe x 1 Full Sized mSATA x 1 M.2 2242 B-key x 1	Optional	+9V to +24V (2 Pin Phoenix Connector)	0°C ~ 60°C	NanoSIM x 1 GPIO 16 bits 5W Speaker
EPIC-ADN9-A10-0002	Intel Atom® x7425E	DDR4 SODIMM x 1	LVDS x 1, DP x 1, HDMI x 1	SATA 6.0Gbps x 1	I226V 2.5GbE x 4	USB 3.2 Gen 2 x 2 USB 2.0 x 4	RS232/422/485 x 2 RS232 x 4	Full Sized mPCIe x 1 Full Sized mSATA x 1 M.2 2242 B-key x 1	Optional	+9V to +24V (2 Pin Phoenix Connector)	0°C ~ 60°C	NanoSIM x 1 GPIO 16 bits 5W Speaker
EPIC-ADN9-A10-0003	Intel® Processor N97	DDR4 SODIMM x 1	LVDS x 1, DP x 1, HDMI x 1	SATA 6.0Gbps x 1	I226V 2.5GbE x 2	USB 3.2 Gen 2 x 2 USB 2.0 x 4	RS232/422/485 x 2 RS232 x 4	Full Sized mPCIe x 1 Full Sized mSATA x 1 M.2 2242 B-key x 1	Optional	+9V to +24V (2 Pin Phoenix Connector)	0°C ~ 60°C	NanoSIM x 1 GPIO 16 bits 5W Speaker
EPIC-ADN9-A10-0004	Intel® Processor N50	DDR4 SODIMM x 1	LVDS x 1, DP x 1, HDMI x 1	SATA 6.0Gbps x 1	I226V 2.5GbE x 2	USB 3.2 Gen 2 x 2 USB 2.0 x 4	RS232/422/485 x 2 RS232 x 4	Full Sized mPCIe x 1 Full Sized mSATA x 1 M.2 2242 B-key x 1	Optional	+9V to +24V (2 Pin Phoenix Connector)	0°C ~ 60°C	NanoSIM x 1 GPIO 16 bits 5W Speaker
EPIC-ADN9-A10-0007	Intel® Processor N97	DDR4 SODIMM x 1	LVDS x 1, VGA x 1, HDMI x 1	SATA 6.0Gbps x 2	I226V 2.5GbE x 2	USB 3.2 Gen 2 x 2 USB 2.0 x 4	RS232/422/485 x 2 RS232 x 4	Full Sized mPCIe x 1 M.2 2242 B-key x 1	Optional	+12VIN (2 Pin Phoenix Connector)	0°C ~ 60°C	NanoSIM x 1 GPIO 16 bits 5W Speaker
EPIC-ADN9-A10-0009	Intel® Processor N97	DDR4 SODIMM x 1	LVDS x 1, DP x 1, HDMI x 1	SATA 6.0 Gbps x 1	I226V 2.5GbE x 4	USB3.2 Gen2 x 2 USB2.0 x 4	RS232/422/485 x 2 RS232 x 4	Full Sized mPCIe x 1 Full Sized mSATA x 1 M.2 2242 B-key x 1	Optional	+9V to +24V (2 Pin Phoenix Connector)	0°C ~ 60°C	NanoSIM x 1 GPIO 16 bits 5W Speaker