

# Datasheet

## ASUS IoT

### N97S-IM-AA

**3.5" SBC, Intel® N97 Processor (ADL N platform)**

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# N97S-IM-AA

3.5" SBC, Intel® N97 Processor (ADL-N platform), DDR5 SO-DIMM, DP, HDMI, eDP/LVDS, Dual-LAN, Multiple COM, USB3.2, M.2, SATA 3.2, PCIE 3.0, TPM

## Features

- Supports 3x display configuration by multiple interface: HDMI, DP, eDP/LVDS
- Intel Gen 12 UHD Graphics, up to 4K/60 Hz
- 6 COM, 2x RS-232/422/485 and 4x RS-232
- M.2 E-key 2230, M-key 2280/2242, SATA 3.2
- Dual-LAN and Nano SIM

## Specifications

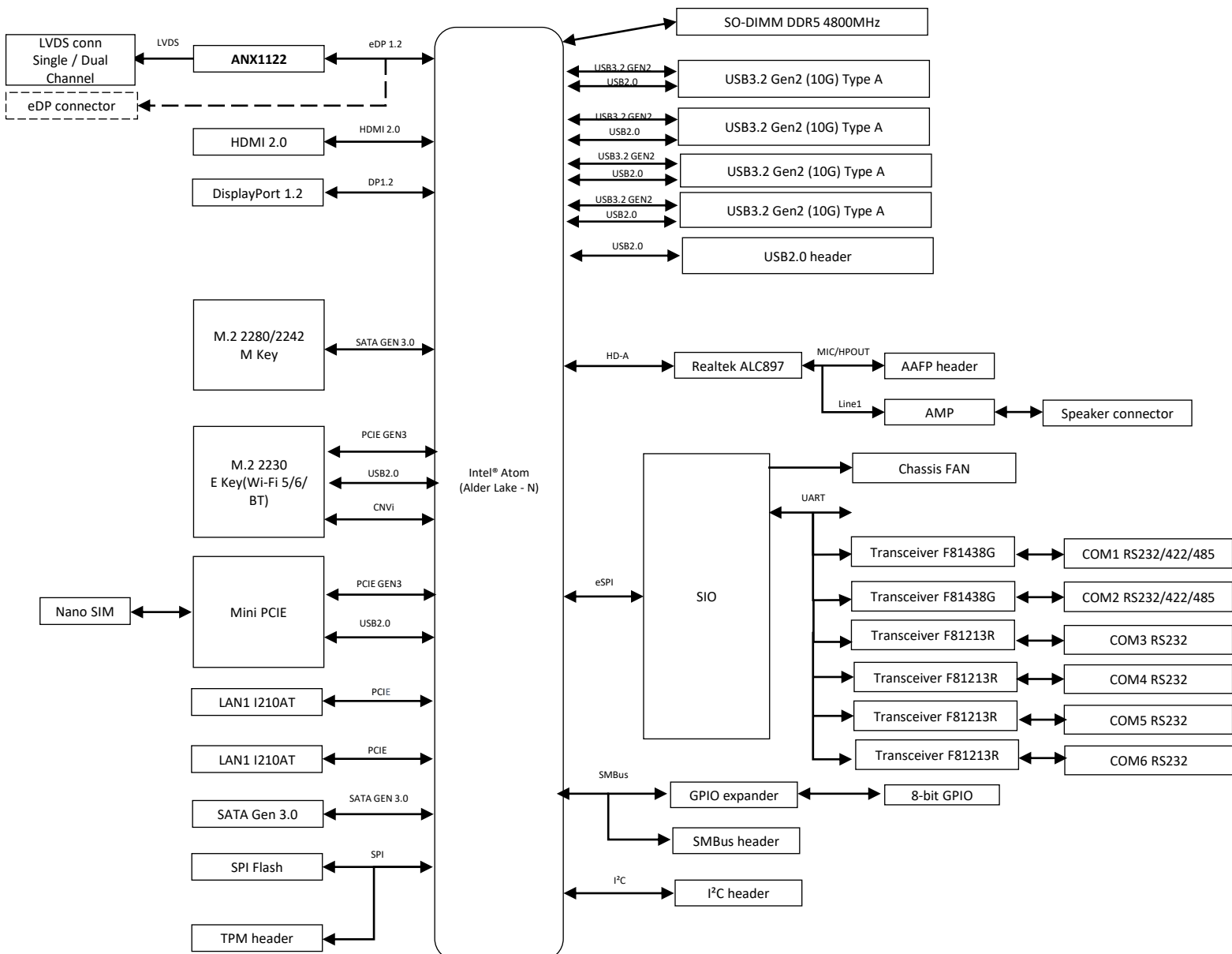


<b>Processor System</b>	CPU	Intel® Processor N97
	Cores	4
	TDP	12W
	Base Frequency	2.0 GHz
	Max. Turbo Frequency	3.6 GHz
<b>Memory</b>	Technology	DDR5 4800 MT/s, In-Band ECC (IBECC)
	Max.	16GB
	Socket	SO-DIMM
<b>Display</b>	Controller	Intel Gen 12 UHD Graphics
	HDMI	1, Supports HDMI 2.0 up to 4K x 2K @ 60 Hz
	Display Port	1, Supports DP1.2 up to 4096 x 2304 @ 60 Hz
	Embedded DisplayPort	1, Supports eDP1.2 (co-lay with LVDS)
	LVDS	1, Supports 1920 x 1080 @ 60 Hz (co-lay with eDP)
	Multiple Display	3 Display Configuration: HDMI+DP+LVDS/eDP
<b>Expansion Slot</b>	Mini PCIe	1 x Full-Length Mini PCIe slot with on-board Nano-SIM socket
	M.2	1 x M.2 Socket 1 with E key, type 2230 for TPU/WIFI/BT device (PCIe/USB/CNVi)
		1 x M.2 Socket 3 with M key, type 2280/2242 (SATA mode)
<b>Ethernet</b>	Speed	10/100/1000Mbps
	Controller	2 x Intel® i210AT, supports WOL/PXE
	Connector	2 x RJ-45
<b>Audio</b>	Codec	Realtek® ALC897
<b>Storage</b>	SATA port	1 x SATA Gen 3.2, up to 6 Gb/s
<b>Rear I/O</b>	HDMI	1
	Display Port	1
	USB3.2 Gen2	4 (10 Gb/s)
	Ethernet	2
<b>Internal Connector</b>	Serial Port	6 (2 x RS-232/422/485, 4x RS-232)
	USB2.0	2
	Chassis Fan Header	1 (PWM+DC Mode)
	Chassis Intrusion Header	1
	Front Panel Audio Header (AAFP)	1
	System Panel Header	1 (10-1 Pin)
	Clear CMOS Jumper	1
	SATA Power Header	1
	SMBus Header	1
	I <sup>2</sup> C Header	1
	GPIO Header	1 (8-bit)
Power Connector	1 x 4-pin Power Connector	

## Specifications

<b>Watchdog Timer</b>	H/W	YES
<b>Security</b>	TPM	1 x SPI TPM header; Intel® PTT
	Platform Integrity	Intel® OS Guard; Intel® Boot Guard
<b>Power</b>	Power Type	DC power input
	Voltage	9V-36V
<b>Operating System</b>	Microsoft Windows	Windows® 10 (64bit)/Windows 10 IoT Enterprise
	Linux	Ubuntu, RedHat Enterprise
<b>Environment</b>	Operating Temperature	0~ 60°C
	Non-Operating Temperature	-40~85°C
	Relative Humidity	10%~95%
<b>Dimension</b>	Form Factor	3.5", 146 x 105 mm
<b>Certification</b>	Safety	CB, BSMI, CE-LVD
	EMC	CE, FCC, VCCI, BSMI, RCM
	Green	GA (RoHS)

## Block Diagram



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