

# N420S-IM-AA

3.5" form factor, Intel® Apollo Lake-I N4200E, DDR3L SO-DIMM, DP, HDMI, LVDS (eDP optional), Dual-LAN, Multiple COM, 12-24V DC



## Features

- Up to 6 COM ports, includes 2 x RS-232/422/485
- Supports 3 display configuration by multiple interface: DP/HDMI/LVDS (eDP optional)
- Supports I2C, SMBus and DIO

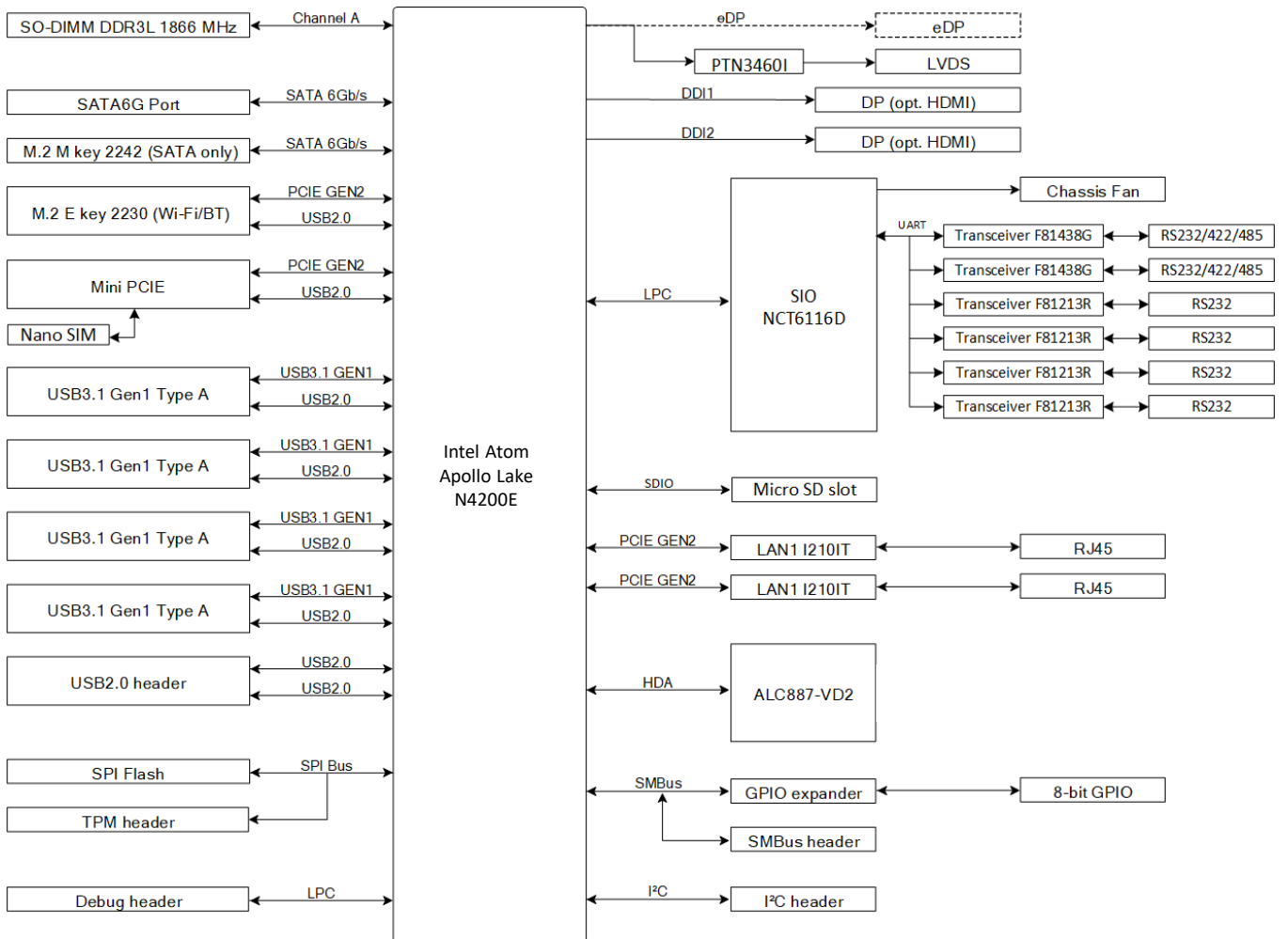
## Specifications

PROCESSOR SYSTEM	CPU	Intel® Apollo Lake-I, N4200E
	MAX. SPEED	1.1GHz Quad-core (Turbo 2.5GHz)
	L2 Cache	2MB
	CHIPSET	Integrated
MEMORY	Technology	DDR3L 1866MHz, non-ECC, un-buffered memory
	Max.	8GB
	Socket	1 x SO-DIMM
Display	Controller	Intel HD Graphics 505
	HDMI	1, Supports HDMI 1.4b up to 3840 x 2160 @ 30 Hz
	Display Port	1, Supports DP 1.2 up to 4096 x 2160 @ 60 Hz
	LVDS	1, Supports 1920 x 1080 at 60 Hz resolution in dual LVDS bus mode
	eDP (optional)	1, Support eDP 1.3 x4 lanes, Up to 3840x2160 @ 60 Hz
EXPANSION SLOT	Multi Display	DP+HDMI+LVDS Multi-VGA output support :DP/HDMI/LVDS ports Supports up to 3 displays simultaneous under OS
	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 WIFI/BT device 1 x M.2 Socket 3 with M key, type 2242 (SATA mode)
ETHERNET	others	1 x Micro SD Card slot (on-board)
	Speed	10/100/1000Mbps
	Controller	2 x Intel® I210IT
AUDIO	Connector	2 x RJ-45
	Codec	Realtek ALC887-VD2 High Definition Audio CODEC
STORAGE	Connector	Line-out, Mic-in
	SATA port	1x SATA Gen 3.0, up to 6Gb/s
Rear I/O	Display Port	1
	HDMI	1
	USB3.2 Gen1 Type-A ports	4
	Ethernet	2
Internal Connector	COM header	6 (2 x RS-232/422/485, 4 x RS-232)
	USB2.0	1, support additional 2 x USB2.0 connectors
	Chassis fan header	1
	Chassis intrusion header	1
	Front panel audio header (AAFP)	1
	System panel header	1
	Clear CMOS jumper	1
	SATA port 6g	1
	SATA power header	1
	LPC Debug header	1
	SMBus header	1
	I2C header	1
	power connector	1(4 pin)
	GPIO header (8 bit)	1
Dual 24bit LVDS	1	
DIO (8 bit)	1	

# Specifications

<b>Watchdog Timer</b>	HW	1
<b>Security</b>	TPM	1 x SPI TPM header
<b>POWER</b>	Power Type	DC power input
	Voltage	12V-24V
<b>Operating System</b>	Microsoft Windows	Windows® 10 (64bit) / Win10 IoT Enterprise
	Linux	Ubuntu, RedHat Enterprise, Fedora Workstation
<b>ENVIRONMENT</b>	Operating Temperature	-20~60° C
	Non-Operating Temperature	-40~85° C
<b>DIMENSION</b>	Form Factor	3.5", 146 x 105 mm
<b>Certification</b>	Safety	CE, FCC
	EMC	UL, CCC

# Block Diagram



## Ordering Information

Model Name	Description
N420S-IM-AA	3.5" form factor, Atom® N4200 Processor, DDR3L SO-DIMM, DP, HDMI, LVDS, Dual-LAN, Multiple COM, 12-24V DC

## Optional Accessories

Part Number	Description
14011-03700400	COM Port Cable, 1 Port, 28mm
14013-00260000	SATA cable with SATA power
14011-03740000	Power Button Cable with LED
14011-03750000	USB 2.0 Cable, 2 ports, 70mm

## Packing List

Part Number	Description
14013-00260000	SATA 22P TO SATA 7P+4P 15+12CM//ASAP/L67ST107-DT-R