

# C381S-IM-AA

3.5" form factor, Intel® Core™ i3-8145U Processor, DDR4 SO-DIMM, DP, HDMI, LVDS, 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
- Supports I2C, SMBus and GPIO
- Wide temperature range endurance: -20~60 °C



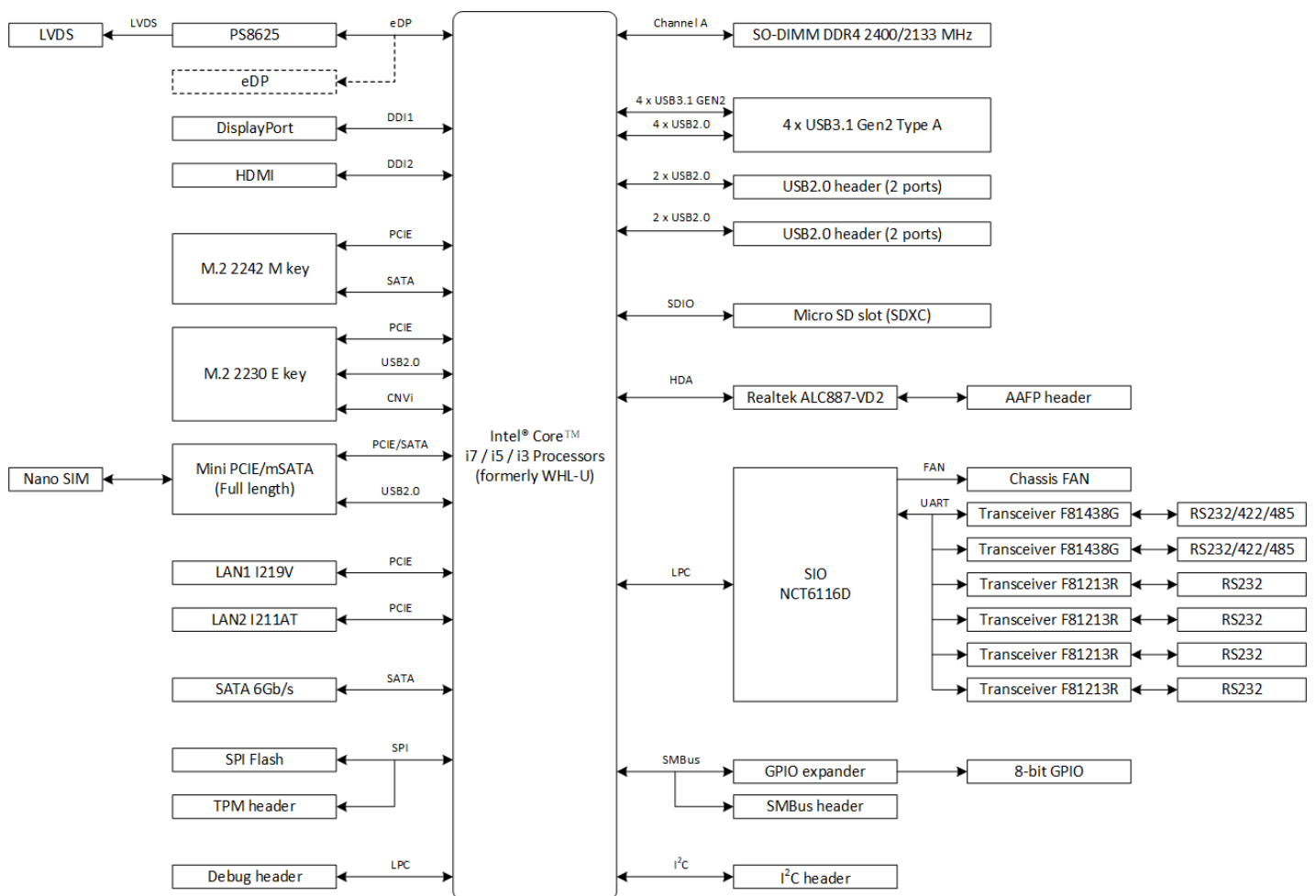
## Specifications

<b>Processor System</b>	CPU	Intel® Core™ i3-8145U Processor (SoC) ,non-ECC, un-buffered memory
	MAX. SPEED	2.1GHz Quad-core
	L2 Cache	4MB
	CHIPSET	Integrated
<b>Memory</b>	Technology	DDR4 2400/2133 MHz
	Max.	32GB
	Socket	1 x SO-DIMM
<b>Display</b>	Controller	Intel UHD Graphics 620
	HDMI	1, Supports HDMI 1.4 up to 4096 x 2160 @ 24 Hz
	Display Port	1, Supports DP 1.2a up to 4096 x 2304 @ 60 Hz
	LVDS	1, Supports 24 bits up to 1920 x 1200 @ 30Hz (colay with eDP)
	Embedded Display Port	1, Supports up to 4096 x 2304 @ 60 Hz (co-lay with LVDS)
<b>Expansion Slot</b>	Multi Display	DP+HDMI+LVDS, DP+HDMI+eDP
	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 and Intel® CNVi 1 x M.2 Socket 3 with M key, type 2242(PCIE & SATA mode)
<b>Ethernet</b>	others	1 x Micro SD Card slot (on-board)
	Speed	10/100/1000Mbps
	Controller	1 x Intel® i219V, supports WOL/PXE 1 x Intel® i211AT, supports WOL/PXE
<b>Audio</b>	Connector	2 x RJ-45
<b>Storage</b>	Codec	Realtek ALC887-VD2 High Definition Audio
	SATA port	1 x SATA Gen 3.0, up to 6Gb/s
<b>Rear I/O</b>	mSATA	1 x Full-size (shared with Mini PCIe slot)
	Display Port	1
	HDMI	1
	USB3.2 gen2	4
<b>Internal Connector</b>	Ethernet	2
	Serial Port	6 x header (2 x RS232/422/485, 4 x RS232)
	USB2.0	2 x header support additional 4 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 power header	1(4-pin)
	LPC Debug header	1
	GPIO header	1 (8 bit)
	SMBus header	1
	I <sup>2</sup> C header	1
power connector	1 x 4-pin ATX power connector	

# Specifications

<b>Watchdog Timer</b>	H/W	yes
<b>Security</b>	TPM	1 x SPI TPM header
<b>Power</b>	Power Type	DC input
	Voltage	12-24V DC input
<b>Operating System</b>	Microsoft Windows	Windows® 10 (64bit ) / Win10 IoT Enterprise
	Linux	Ubuntu, RedHat Enterprise, Fedora Workstation, OpenSUSE
<b>Environment</b>	Operating Temperature	-20~60° C
	Non-Operating Temperature	-40~85° C
	Relative Humidity	0%~85%
<b>Dimension</b>	Form Factor	3.5 ", 146 x 105 mm
<b>Certification</b>	Safety	CE, FCC, CCC

# Block Diagram



## Order Information

Model name	Part number	Description
C381S-IM-AA	90ME00R0*	i3-8145U,MINI PCIE,DUAL LAN,MB
C381S-IM-AA	90ME00R2*	i3-8145U,WITH HEAT SPREADER,MB
C381S-IM-AA	90ME00R3*	i3-8145U,WITH HEAT SINK_15W,MB

\* The part number might vary for different regulations and package. Please consult the TPM in your region for exact 90PN.

## Packing List

Part number	Description	Quantity
14013*	SATA 6G CABLE	1

\* The part number might vary due to part number revision.

## Optional Accessories

Part number	Description	Quantity
13071*	HEAT SPREADER, WITH SPRING SCREW PACK (5pcs)	1
13ME*	HEAT SINK_15W, WITH SPRING SCREW PACK (5pcs), SIDE SCREW PACK (12pcs)	1

\* The part number might vary due to part number revision.

\* The optional accessories can be configured with SBC by case. Please refer to Order Information and contact the TPM in your region if needed.