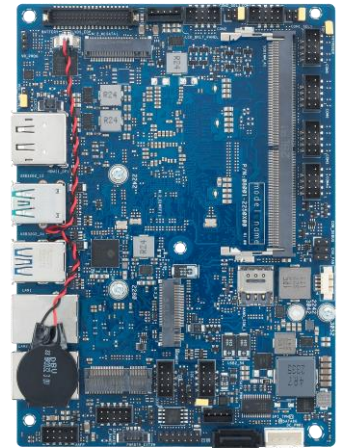


# X7835RE-IM-A

3.5" SBC, Intel® Atom® X7835RE, DDR5 SO-DIMM, 5G, LTE, WiFi 5/6/6E  
DP, HDMI, eDP/LVDS, Dual-LAN, Multiple COM, USB3.2, M.2, SATA 3.0, PCIE 3.0, TPM

## Features

- Intel® Amston Lake SoC, Low Power Consumption at 12W TDP
- 3x Display Configuration with Multiple Interface: HDMI, DP, eDP/LVDS
- Integrated Intel® UHD Graphics, up to 4K/60 Hz
- 6 COM ports, 2x RS-232/422/485 and 4x RS-232
- M.2 E-key 2230, M-key 2242/2280, B key 3042/3052, SATA 3.0
- Wide Voltage: 9~36V; Wide Operating Temperature: -20° ~ 70°C
- Built-in AI Acceleration with Intel® Deep Learning Boost



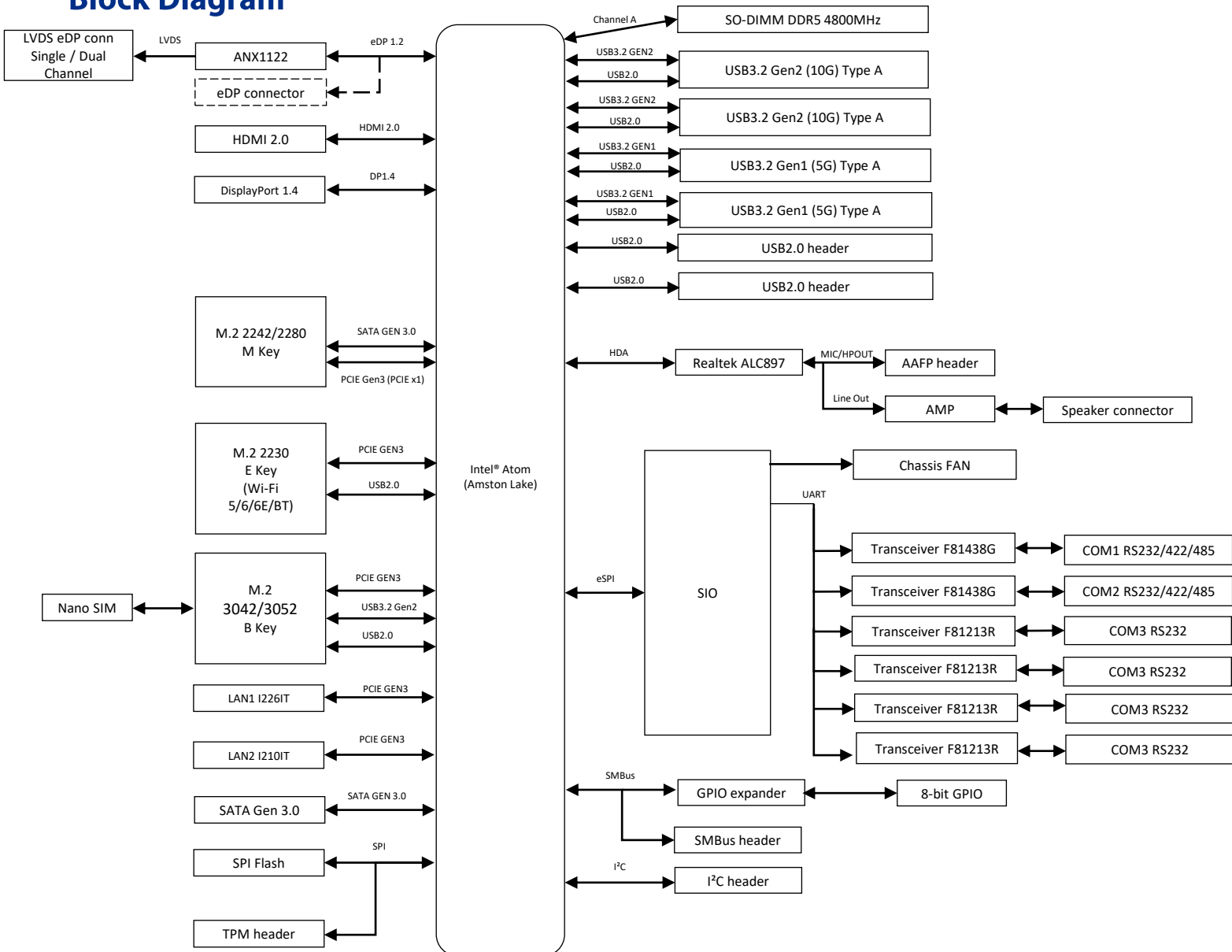
## Specifications

<b>Processor</b>	CPU	Intel® Atom® X7835RE
	TDP	12W
	# of Cores	8
	Base Frequency	1.3 GHz
	Max. Turbo Frequency	3.6 GHz
<b>Memory</b>	Technology	DDR5 4800 MHz, In-Band ECC (IB ECC)
	Max.	16GB
	Socket	SO-DIMM
<b>Display</b>	Controller	Integrated Intel® UHD Graphics
	HDMI	1, Supports HDMI 2.0 up to 4K x 2K @ 60 Hz
	Display Port	1, Supports DP1.4 up to 4096 x 2304 @ 60 Hz
	LVDS	1, Supports 1920 x 1080 @ 60 Hz (co-lay with eDP 1.2)
	Multiple Display	3 Display Configuration: HDMI+DP+LVDS/eDP
<b>Expansion Slot</b>	M.2	1 x M.2 Socket 1 with E key, type 2230 for TPU/WIFI/BT device (PCIe/USB)
		1 x M.2 Socket 3 with M key, type 2242/2280 (SATA mode/PCIEx1)
		1 x M.2 Socket 2 with B key (3042/3052) for 4G/5G (PCIe/USB2.0/USB3.2 Gen2)
<b>Ethernet</b>	Speed	10/100/1000Mbps/2.5G
	Controller	1x Intel® i210IT, supports WOL/PXE 1x Intel® i226IT (2.5G), supports WOL/PXE
	Connector	2 x RJ-45
<b>Audio</b>	Codec	Realtek® ALC897 AMP 3W
<b>Storage</b>	SATA port	1 x SATA Gen 3.0 (6Gb/s)
<b>Rear I/O</b>	HDMI	1
	Display Port	1
	USB3.2	2x Gen2 (10 Gb/s) & 2x Gen1(5 Gb/s)
	Ethernet	2 (1G; 2.5G)
<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/ Windows® 11 IoT Enterprise
	Linux	Ubuntu, RedHat Enterprise, Fedora Workstation
<b>Environment</b>	Operating Temperature	-20~ 70°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



## Order Information

Model name	Part number	Description
X7835RE-IM-A	90ME09E*	X7835RE,DDR5 SO DIMM,DUAL LAN, 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.