

3.5" SBC

ASBC-3040



FEATURES

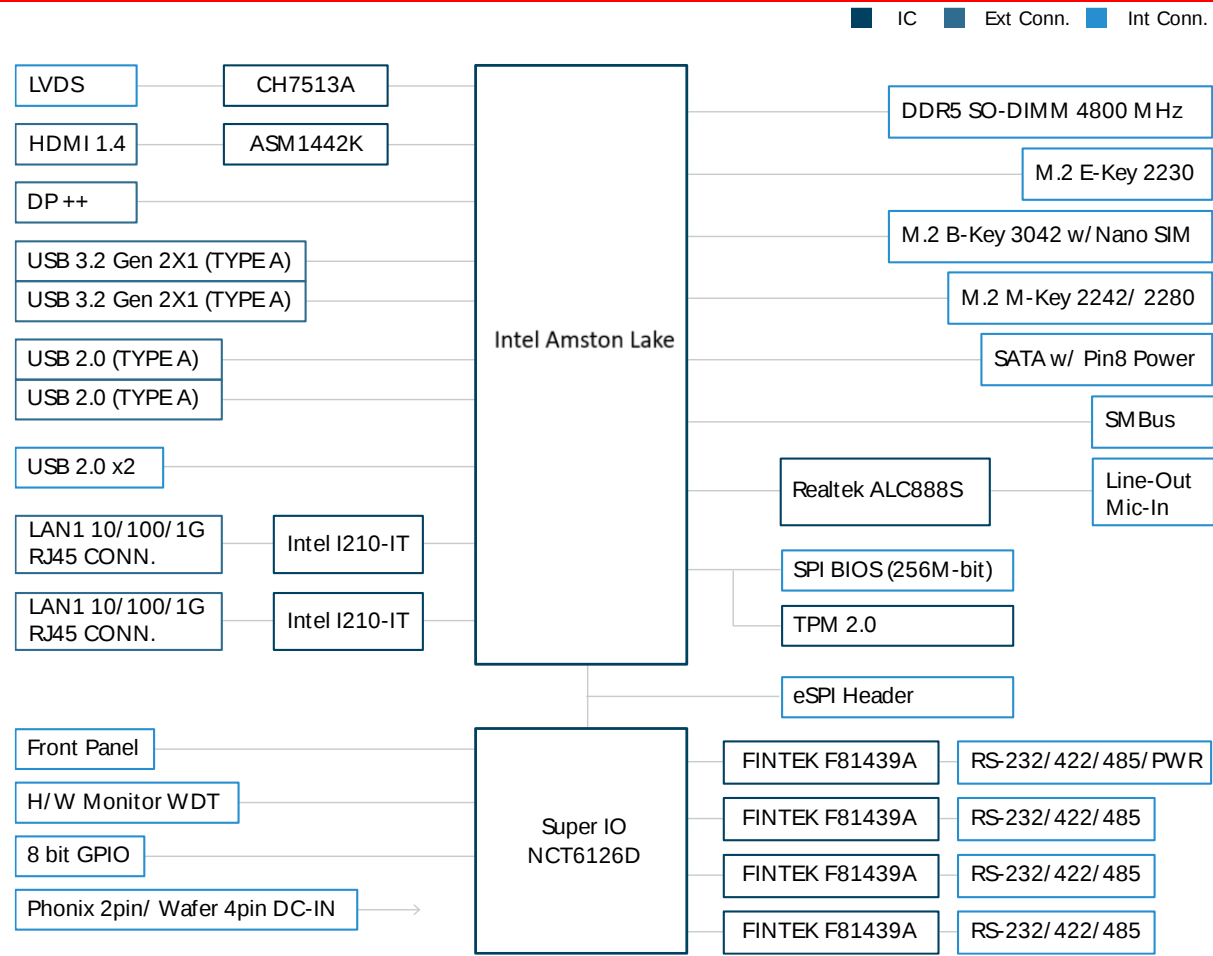
- Intel® Industrial RE processors offer a balance of performance, power consumption, and wide operating temp.
- Low TDP maintains low operational temperatures, enabling quieter operation
- Support M.2 B key 3042, E key 2230, and M key 2242/2280 for an extra expansion slot

SPECIFICATIONS

Platform	CPU	Intel Atom x7213RE	Intel Atom x7433RE	Intel Atom x7835RE
	Max Frequency	3.40GHz	3.40GHz	3.60GHz
	Cores	2	4	8
	Cache	6MB	6MB	6MB
	CPU TDP	9W	9W	12W
	BIOS	Insyde SPI 256Mbit		
Memory	Technology	DDR5 4800MT/s		
	Max. Capacity	Up to 32GB		
	Socket	1 x 262-pin DDR5 SO-DIMM (Non-ECC support)		
Graphics	Controller	Intel® UHD Graphics		
	Max Frequency	1.25 GHz		
	Graphic Engine	OpenGL 4.6, DirectX 12, Vulkan 1.2 (Windows); Mesa 3D, OpenGL 4.6, Vulkan 1.2 (Linux) Decode 4K60 8b 4:2:0 AVC/VP8; 4K60 10b4:2:0, 4:4:4HEVC/VP9/SCC, 4K60 10b4:2:0AV1 Encode 4K60 8b 4:2:0AVC; 4K60 10b4:2:0, 4:4:4HEVC/VP9/SCC		
Audio	Controller	Realtek ALC888, High Definition Audio		
Expansion Slots	Interface	1 x M.2 B Key 3042 (PCIe x1 Gen.3/USB 3.0/USB 2.0), w/ Nano SIM socket		
		1 x M.2 E Key 2230 (PCIe x1 Gen.3/USB 2.0)		
		1 x M.2 M Key 2242/2280 (PCIe x1 Gen.3/SATA)		
Rear I/O	Displays	1 x HDMI 1.4, up to 2K@30Hz		
		1 x DP, up to 4K@60Hz		
	USB 2.0 (Type A)	2		
	USB 3.2 Gen.2 x1 (Type A)	2		
	Ethernet	LAN1~2: Intel® I210AT, up to 1000Mbps		
Internal I/O	Serial Port	COM1: RS232/RS422/RS485/PWR COM2~4: RS232/RS422/RS485		
	eDP/LVDS	1, up to 2K@60Hz		
	USB 2.0 (Type A)	2		
	SATA III	1, up to 6.0Gb/s		
	GPIO	1 x 8-bit		
	SMBus	1		
Power Supply	Power Input Voltage	DC 9~36V		
	Power Consumption	Idle: x7835RE: 15.1W; Max: x7835RE: 27.2W		
	Connector Type	Phoenix header (co-layout 4-pin connector)		
Environment	Operating Temperature	-40°C~85°C		
	Storage Temperature	-40°C~85°C		
	Operational Humidity	40°C @ 95%, non-condensing		
Watchdog Timer	Interval	Programmable from 1 to 255 seconds		

Security	TPM 2.0	Default: dTPM 2.0; Optional: fTPM 2.0
Physical Characteristics	Dimensions	146mm x 102mm x 16.34mm
	Net Weight/Gross Weight	0.14KG/0.78KG
Operating System		Windows 10 IoT Enterprise 2021 LTSC Windows 11 IoT Enterprise 2024 LTSC
Regulation	Safety	CE/FCC Class B/RoHS

BLOCK DIAGRAM



ORDER INFORMATION

/STANDARD MODEL

Part Number	CPU	COM	LAN	USB3.2/2.0	Displays	M.2	Operating Temp.
ASBC-3040-A00	Intel Atom® x7213RE	4	2	2/4	1 x HDMI 1 x DP	1 x B 1 x E 1 x M	-40°C~85°C
ASBC-3040-A01	Intel Atom® x7433RE						
ASBC-3040-A02	Intel Atom® x7835RE						

PACKING LIST

Part Number	Description	Quantity
ASBC-3040-AXX	ASBC-3040 Series SBC	1
7SW1-M2003511SN	Mounting screws for M.2 module	3
7W4000000120	SATA cable	1
7W4000000110	SATA power cable	1
7W6000000540	COM cable	1
7AOA01000E120E02	Heatsink	1
7SW1M3040ISNN	Heatsink Screws	6
7TG002M00011	2P Terminal Block	1

OPTIONAL ACCESSORIES

Part Number	Description
TZ-000-39-11-C2	Wi-Fi Module (Intel® AX210)
7W5000000331	IPX Cable (Recommend installing in sets of 2)
9Z5000000290	Wi-Fi Antenna (Recommend installing in sets of 2)
9Z9000000220	Adapter, 60W, 12V Phoenix Header
7W5000000080	Audio Cable
7W2000000230	USB 2.0 Cable
7W3000001211	4-pin power to DC Jack Cable
TZ-000-45-12	Hailo-8 AI Acceleration Module
7W8000000070	Power Cord (UK), Standards 1.8m
7W8000000080	Power Cord (EU), Standards 1.8m
7W8000000090	Power Cord (US), Standards 1.8m