

# ASL9A2



Intel® Atom® Processor Amston Lake Series  
COM Express® Mini



Top View



Bottom View

## KEY FEATURES



### DDR5

LPDDR5-4800 up to 16GB



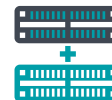
### 4K High Resolution

Supports 4K/ 2K resolution



### High Speed Ethernet

Supports 100M/1000M/2.5Gbps



### Multiple Expansion

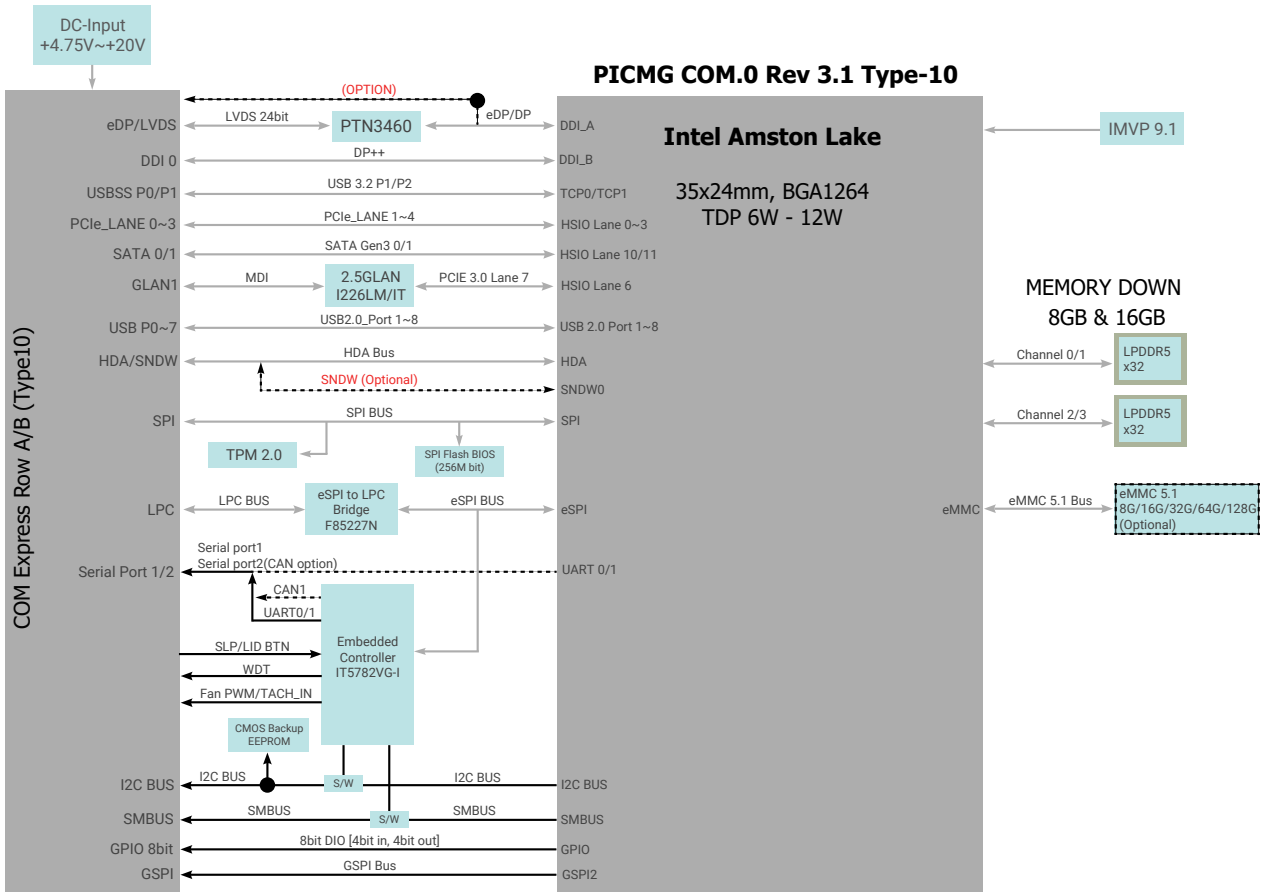
4 PCIe x1, 1 SMBus, 1 I<sup>2</sup>C, 1 eMMC



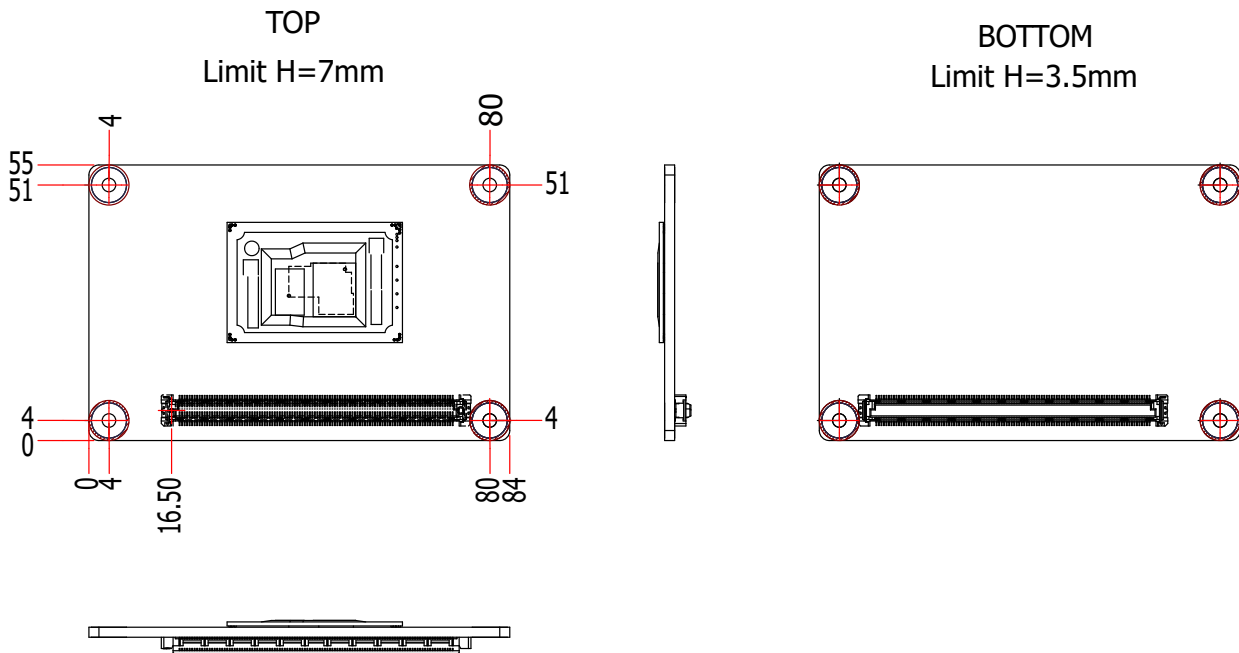
### Rich I/O

2 USB 3.2, 8 USB 2.0

# BLOCK DIAGRAM



# MECHANICAL DRAWING



## SPECIFICATION

SYSTEM	Processor	Intel® Atom x7000RE series processors (Code Name : Amston Lake) Intel® Atom Processor x7835RE, 8 Cores, 1.3~3.6GHz, 12W Intel® Atom Processor x7433RE, 4 Cores, 1.5~3.4GHz, 9W Intel® Atom Processor x7213RE, 2 Cores, 2.0~3.4GHz, 9W Intel® Atom Processor x7211RE, 2 Cores, 1.0~3.2GHz, 6W
	Memory	LPDDR5 up to 16GB Dual Channel LPDDR5 4800MHz 8GB/16GB supported by project basis. In-band ECC (IBECC) Supported by all CPU SKUs
	BIOS	AMI SPI 256Mbit
GRAPHICS	Controller	Intel® UHD
	Feature	Open GL 4.6, DirectX 12.1 Vulkan 1.2 (Windows) Mesa 3D, Open GL 4.6, Vulkan 1.2 (Linux) <b>HW Decode:</b> 4K60 10b 4:2:0, 4:4:4 HEVC/VP9/SCC, 4K60 10b 4:2:0 AV1 <b>HW Encode:</b> 4K60 10b 4:2:0, 4:4:4 HEVC/VP9/SCC
	Display	1 x DDI 1 x LVDS/eDP  <b>LVDS:</b> single channel 24-bit, resolution up to 1920x1200 @ 60Hz <b>eDP:</b> resolution up to 4096x2160 @ 60Hz <b>HDMI:</b> resolution up to 4096x2160 @ 30Hz <b>DP++:</b> resolution up to 4096x2160 @ 60Hz, 3840x2160 @60Hz
	Dual Displays	DDI + LVDS/eDP
EXPANSION	Interface	4 x PCIe x1 (Gen 3) 1 x I <sup>2</sup> C 1 x SMBus 1 x LPC 1 x SNDW (available upon request) 1 x GSPI 2 x UART (TX/RX) 1 x CAN bus (available upon request)
AUDIO	Interface	HD Audio
ETHERNET	Controller	1 x Intel® I226-IT / I226-LM (10/100/1000Mbps/2.5Gbps)
I/O	USB	2 x USB 3.2 Gen2 8 x USB 2.0
	SATA	2 x SATA 3.0 (up to 6Gb/s)
	eMMC	1 x 8GB/16GB/32GB/64GB/128GB eMMC 5.1 (available upon request)
	DIO	1 x 8-bit DIO
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds
SECURITY	TPM	dTPM or fTPM (Optional)
POWER	Type	4.75V~20V, 5VSB, VCC_RTC (ATX mode) 4.75V~20V, VCC_RTC (AT mode)
	Consumption	TBD
OS SUPPORT	OS Support (UEFI Only)	Windows 11/10 IoT Enterprise 64-bit Linux
ENVIRONMENT	Temperature	<b>Operating:</b> -40 to 85°C <b>Storage:</b> -40 to 85°C
	Humidity	<b>Operating:</b> 5 to 90% RH <b>Storage:</b> 5 to 90% RH
	MTBF	TBD
MECHANISM	Dimensions	COM Express® Mini 84mm (3.3") x 55mm (2.16")
	Compliance	PICMG COM Express® R3.1, Type 10
STANDARDS AND CERTIFICATIONS	Certifications	CE, FCC

## ORDERING INFORMATION

Model Name	P/N	CPU	Memory	eMMC	LVDS/eDP	TPM 2.0	Thermal	Operating Temp.
ASL9A2-TC16-7835RE	770-ASL9A21-000G	Intel® Atom Processor x7835RE, 8 Cores, 12W	16GB	64GB	eDP	N/A	Cooler	-40 to 85°C
ASL9A2-TC16-7433RE	770-ASL9A21-100G	Intel® Atom Processor x7433RE, 4 Cores, 9W	16GB	64GB	eDP	N/A	Cooler	-40 to 85°C
ASL9A2-TC86-7213RE	770-ASL9A21-200G	Intel® Atom Processor x7213RE, 2 Cores, 9W	8GB	64GB	LVDS	N/A	Cooler	-40 to 85°C
ASL9A2-TC86-7211RE	770-ASL9A21-300G	Intel® Atom Processor x7211RE, 2 Cores, 6W	8GB	64GB	LVDS	N/A	Cooler	-40 to 85°C

## PACKING LIST

Cooler	A71-108305-000G
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## OPTIONAL ITEMS

Heat Spreader	A71-808364-000G
COM335 Carrier Board Kit	770-CM3351-000G