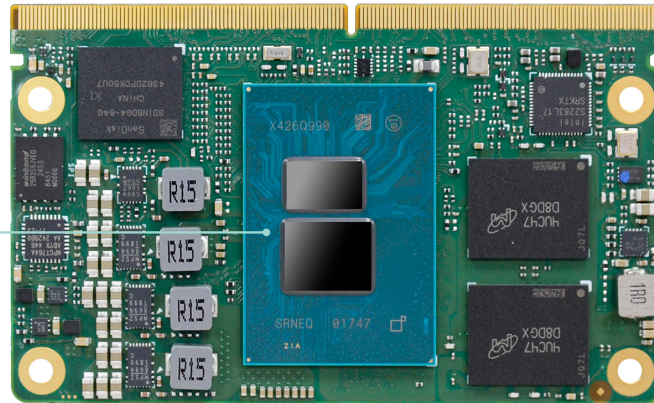


ASL600

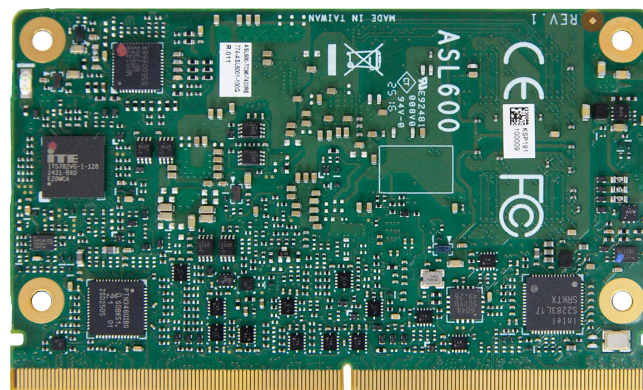
Intel® Atom® Amston Lake Processors
SMARC



Intel® Atom® Amston Lake
Processors



Top View



Bottom View

KEY FEATURES



LPDDR5

Onboard LPDDR5
4800MHz up to 16GB



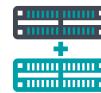
4K High Resolution

Supports 4K/2K
resolution



Triple Displays

1 LVDS/eDP, 1 HDMI,
1 DDI



Multiple Expansion

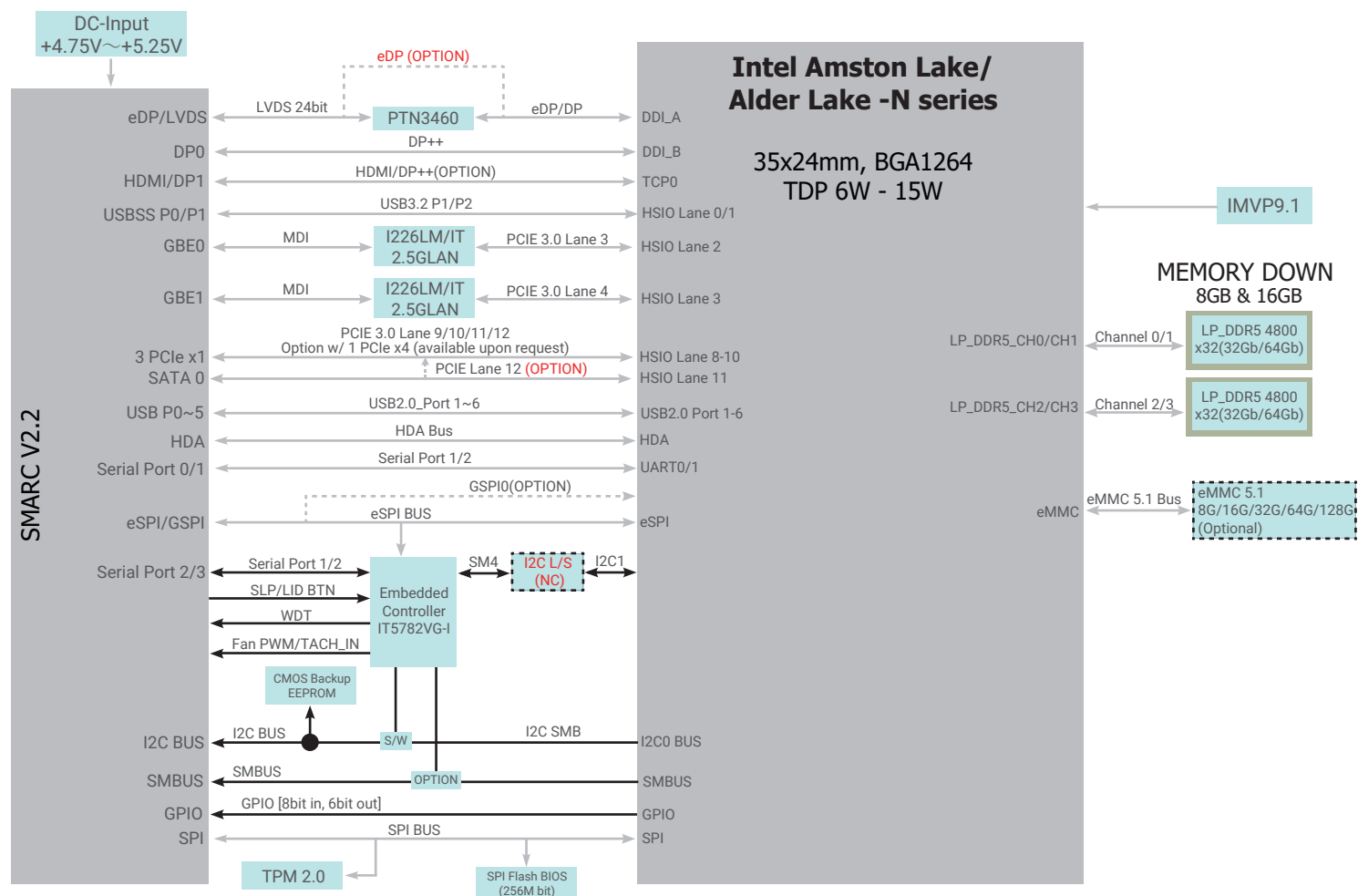
Up to 4 PCIe x1 (Gen3)



Rich I/O

2 2.5GbE, 2 USB 3.2,
4 USB 2.0, 1 SATA 3.0

BLOCK DIAGRAM



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 x7211RE, 2 Cores, 1.0~3.2GHz, 6W
	Memory	Onboard LPDDR5 4800MHz up to 16GB
	BIOS	AMI SPI 256MHz
GRAPHICS	Controller	Intel® UHD
	Feature	DX12, Open GL 4.6, Vulkan 1.2 HW Decode: 4K60 10b 4:2:0, 4:4:4 HEVC/VP9/SCC, 4K60 10b 4:2:0 AV1 HW Encode: 4K60 10b 4:2:0, 4:4:4 HEVC/VP9/SCC
	Display	1 x LVDS/eDP 1 x HDMI/DDI1 1 x DDI LVDS: dual channel 1920x1200 @60Hz eDP: 4096x2160 @60Hz HDMI 1.4b: 4096x2160 @30Hz DP: 4096x2160 @60Hz
	Triple Displays	LVDS/eDP + HDMI + DDI
EXPENSION	Interface	Up to 4x PCIe1 (Gen3) or 1x PCIe4 (available upon request) 2 x I ² C 2 x CANBus 1 x SPI, 1 x eSPI/QSPI 2 x 4-wire UART; 2 x 2-wire UART 1 x 4-lane MIPI-CSI; 1 x 2-lane MIPI-CSI
AUDIO	Interface	HD Audio
ETHERNET	Controller	2 x Intel® I226 series (10/100/1000/2500Mbps)
I/O	USB	2 x USB 3.2 4 x USB 2.0
	SATA	1 x SATA 3.0 (up to 6Gb/s) BOM option 1 PCIe x1 (available upon request)
	eMMC	1 x 64GB eMMC 5.1
	GPIO	1 x 14-pin GPIO
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds
SECURITY	TPM	TPM 2.0
POWER	Type	5Vdc, +/-5%
	Consumption	TBD
OS SUPPORT	Microsoft	Windows 11/10 IoT Enterprise 64-bit
	Linux	Linux
ENVIRONMENT	Temperature	Operating: -40 ~ 85°C Storage: -40 ~ 85°C
	Humidity	Operating: 10 ~ 90% RH Storage: 10 ~ 90% RH
	MTBF	TBD
MECHANISM	Dimensions	SMARC V2.2 82mm (3.22") x 50mm (1.96")
	Compliance	SGET SMARC Specifications 2.2
STANDARDS AND CERTIFICATIONS	Certifications	CE, FCC, RoHS

ORDERING INFORMATION

Model Name	P/N	CPU	Memory	eMMC	LVDS/ eDP	TPM 2.0	Thermal	Operating Temp.
ASL600-TC16-7835RE	770-ASL6001-000G	Intel® Atom Processor x7835RE, 8 Cores, 12W	16GB	64GB	LVDS	Yes	Heatspreader	-40 to 85°C
ASL600-TC86-7433RE	770-ASL6001-100G	Intel® Atom Processor x7433RE, 4 Cores, 9W	8GB					
ASL600-TC46-7211RE	770-ASL6001-200G	Intel® Atom Processor x7211RE, 2 Cores, 6W	4GB					

PACKING LIST

• Heatspreader	A71-808370-000G
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OPTIONAL ITEMS

• Cooler	A71-108311-000G
• SMX331 SMARC carrier board kit	770-SMX3311-000G