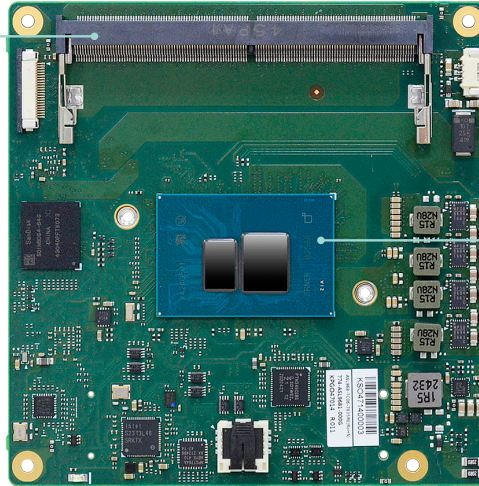


ASL968

Intel® Core™ 3 & N series Processor Twin Lake & Atom® Processor Amston Lake
COM Express® Compact

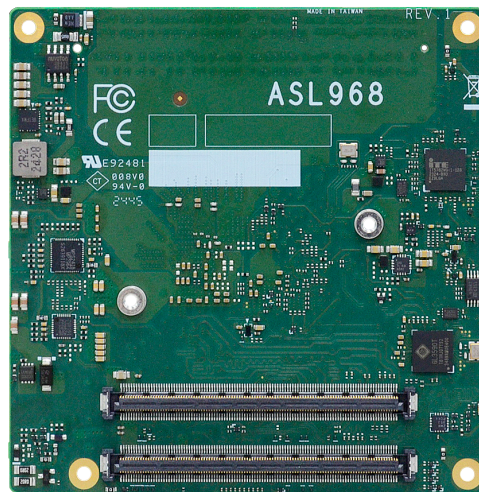


DDR5 SODIMM



Intel® Core™ 3 & N series
Processor Twin Lake &
Atom® Processor Amston Lake

Front View



Bottom View

KEY FEATURES



DDR5

Single Channel DDR5
4800MHz SODIMM
up to 16GB



4K High Resolution

Supports 4K / 2K reso-
lution



Triple Displays

1 LVDS/eDP, 2 DDI



Multiple Expansion

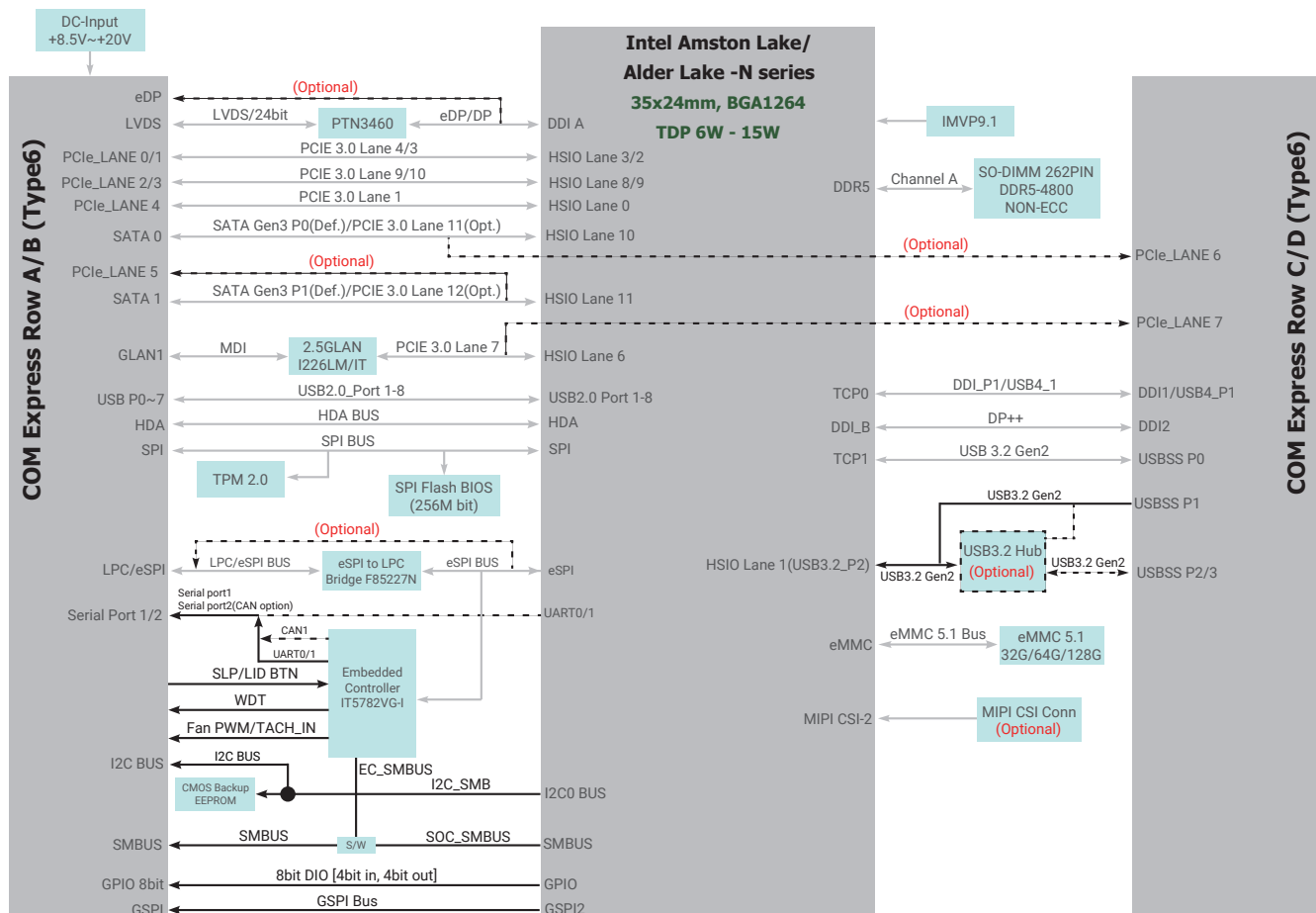
Up to 8 PCIe x1



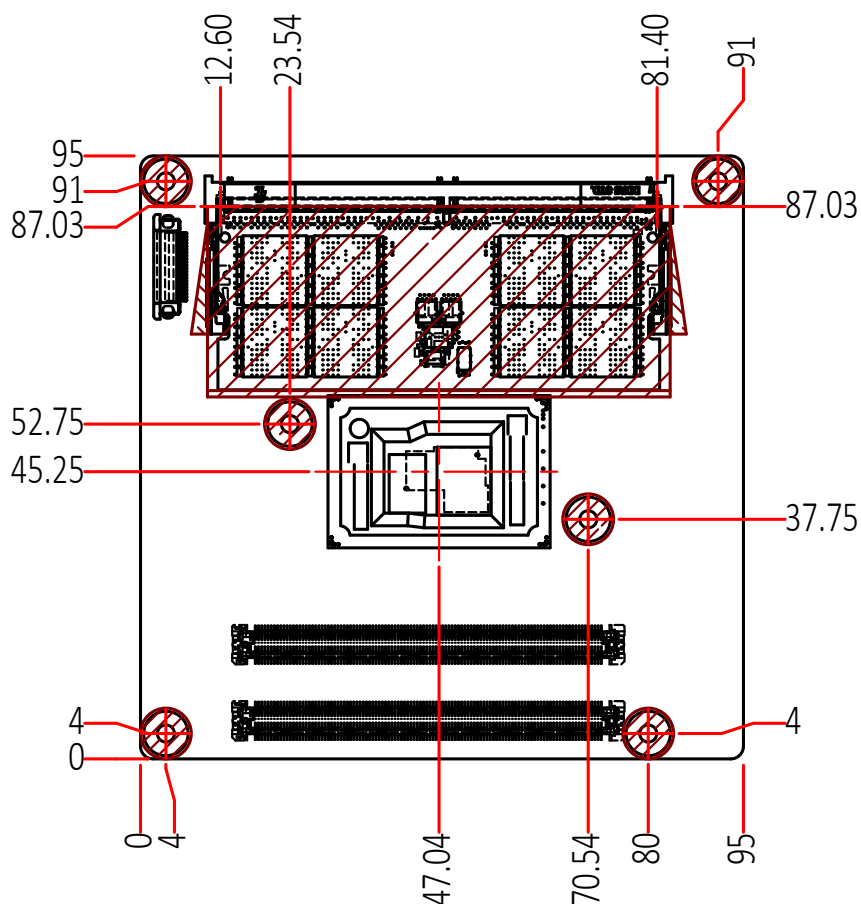
RICH I/O

1 Intel 2.5GbE,
up to 4 USB 3.2,
2 SATA 3.0

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 x7211RE, 2 Cores, 1.0~3.2GHz, 6W Intel® Core™ 3 Processor N355, 8 Cores, 1.8~3.9GHz, 9/15W Intel® Processor N150, 4 Cores, 1.0~3.6GHz, 6W
	Memory	One 262-pin SODIMM up to 16GB Single Channel DDR5 4800MHz In-band ECC (IB ECC) supported
	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 2 x DDI LVDS: dual channel 1920x1200 @60Hz eDP: 4096x2160 @60Hz
	Triple Displays	LVDS/eDP + 2 DDI
EXPANSION	Interface	Up to 8x PCIe x1 (Gen3) (support 5 PCIe devices, 3x PCIe x1 co-layout w/Ethernet and SATA, available upon request) 1 x I ² C 1 x SMBus 1 x LPC/eSPI (ESPI is BOM option; Default LPC) 2 x UART (TX/RX only) 1 x CAN (co-layout with UART)
AUDIO	Interface	HD Audio
ETHERNET	Controller	1 x Intel® I226 series (10/100/1000/2500Mbps), co-lay 1 x PCIe x1 (available upon request)
I/O	USB	2 x USB 3.2 Gen2 (option to 4 ports by USB hub) 8 x USB 2.0
	SATA	2 x SATA 3.0 (up to 6Gb/s), co-lay 2 x PCIe x1 (available upon request)
	eMMC 5.1	1 x 64GB eMMC
	DIO	1 x 8-bit DIO
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds
SECURITY	TPM	TPM 2.0 (Option: fTPM)
POWER	Type	8.5~20V, 5VSB, VCC_RTC (ATX mode) 8.5~12V, VCC_RTC (AT mode)
	Consumption	Typical: 8.5V @ 0.97A (8.245W); 20V @ 0.52A (10.4W) Max.: 8.5V @ 5.76A (48.96W); 20V @ 2.60A (52W)
OS SUPPORT	Microsoft	Windows 11/10 IoT Enterprise 64-bit
	Linux	Linux
ENVIRONMENT	Temperature	Operating: -40°C~85°C for Amston Lake CPU sku, 0°C~60°C for Twin Lake CPU sku Storage: -40°C~85°C
	Humidity	Operating: 10%~90% RH Storage: 10%~90% RH
	MTBF	TBD
MECHANICAL	Dimensions	COM Express® Compact 95mm (3.74") x 95mm (3.74")
	Compliance	PICMG COM Express® R3.1, Type 6
STANDARDS AND CERTIFICATIONS	Certification	CE, FCC, RoHS, UKCA

ORDERING INFORMATION

Model Name	P/N	Processor	eMMC	Display	TPM	USB 3.2	Thermal	Operating Temp.
ASL968-TC06-7835RE	770-ASL9681-000G	Intel Atom x7835RE, 8 cores, 9/15W	64GB	LVDS	TPM 2.0	2	Cooler	-40~85°C
ASL968-TC06-7433RE	770-ASL9681-100G	Intel Atom x7433RE, 4 cores, 9W	64GB					-40~85°C
ASL968-TC00-7211RE	770-ASL9681-200G	Intel Atom x7211RE, 2 cores, 6W	NA					-40~85°C
ASL968-BC06-N355	770-ASL9681-300G	Intel Core 3 N355, 8 cores, 9/15W	64GB					0~60°C
ASL968-BC00-N150	770-ASL9681-400G	Intel N150, 4 cores, 6W	NA					0~60°C

PACKING LIST

• Cooler	A71-108312-000G
• Heatspreader(CPU block only)	A71-810417-000G
• Thermal grease	912-077832-000G

OPTIONAL ITEMS

• Heat Spreader (all-in-one, upon request, MOQ: 50pcs)	
• COM335 Carrier Board Kit	770-CM3351-000G