

# SOM-COMe-CT6-ASL

COM Express® 3.1 Type 6 Compact Module with Intel Atom® Processors x7000E Series (Codename: Amston Lake and Alder Lake N)

# Intel® Next Gen Atom® processors in high-performance, versatile COM Express® with rugged efficiency



# HIGHLIGHTS

Intel® Atom® Processors x7000E Series, Intel® Processor N series and Intel® Core™ i3 N305 Processor

Integrated Intel® Gen12 UHD graphics controller with



### CONNECTIVITY

1x NBase-T 2.5GbE; up to 2x USB 10Gbps + 3x USB 5Gbps; 8x Hi-Speed USB; 6x PCI-e lanes Gen3.



One SO-DIMM slot supporting DDR5-4800 IBECC memory, up to 16GB





( Available in Industrial Temperature Range

up to 32 EU







# MAIN FIELDS OF APPLICATION









Medical

Transportation

Industrial **Automation** 

Smart Buildings & **Smart Cities** 

# FEATURES

Intel® Atom® Processors x7000RE (Codename: Amston Lake) Series:

- Intel Atom® x7835RE Eight Core @ 1.3GHz (3.6GHz turbo) 12W TDP w/ TSN and TČC, industrial
- Intel Atom® x7433RE Quad Core @ 1.5GHz (3.4GHz turbo)  $9W\ TDP\ w/\ TSN\ and\ TCC$  , industrial Intel Atom® x7213RE Dual Core @ 2GHz (3.4GHz turbo)
- 9W TDP w/ TSN and TCC, industrial
- Intel Atom® x7211RE Dual Core @ 1GHz (3.2GHz turbo) 6W TDP w/ TSN and TCC, industrial

Intel Atom® Processors x7000E (Codename: Alder Lake N) Embedded E Series

- Intel Atom® x7425E Quad Core @15GHz (34GHZ turbo) 12W TDP w/ TSN and TCC, commercial
- Inte Atom® x7213E Dual Core @1.7GHz (3.2GHZ turbo) 10W TDP w/ TSN and TCC, commercial
- Intel Atom® x7211E Dual Core @IGHz (3.2GHZ turbo) 6W TDP w/ TSN TCC, commercial

Intel® Core™ i3 Processors and Intel® Processor N Series (Codename: Alder Lake N) PC Client Processors

- Intel® Core<sup>TM</sup> **i3-N305** Eight Core @1GHz / 1.8GHz (3.8GHZ turbo) 9W/I5W TDP w/o TSN and w/o TCC, commercial
- Intel® Processor N200 Quad Core @1GHz (3.7GHZ turbo) 6W TDP w/o TSN and w/o TCC - commercial Intel® Processor **N97** Quad Core @2GHz (3.6GHZ turbo)
- 12W TDP w/o TSN and w/o TCC commercial
- Intel® Processor N50 Dual Core @1GHz (3.4GHZ turbo) 6W TDP w/o TSN and w/o TCC - commercial

(\*) TCC: Time Coordinated Computing (\*\*) TSN: Time Sensitive Networking

System Memory

Processor

One DDR5 SO-DIMM slot supporting DDR5-4800 IBECC modules, up to 16GB

(\*) IBECC: In-Band Error-Correcting Code memory

Graphics	Integrated Intel® Gen12 UHD graphics controller with up to 32 EU Support up to 3 independent displays
Video Interfaces	2x Digital Display Interfaces (DDIs), supporting DP, HDMI®, DP Alt-Mode over Type-C 1x DDI Interface supporting DP / HDMI® 1x eDP or Single/Dual-Channel 18-/24-bit LVDS interface (factory alternatives)
Video Resolution	HDMI®: up to 4Kx2K @60Hz according to HDMI 2.0b DP 1.4, eDP 1.4: 4096x2304@60 Hz LVDS up to 1920x1200 @ 60Hz
Mass Storage	Up to 2x S-ATA Gen3 channels Optional eMMC 5.1 drive soldered on-board
문 Networking	lx NBase-T Ethernet interface with MaxLinear GPY211/215 GbE controller, supporting 2.5GbE and TSN.
• <del>&lt;</del> USB	Up to 2x USB 10Gbps Optional 3x USB 5Gbps 8x Hi-Speed USB ports
Audio	HD Audio interface SoundWire Interface
PCI-e	Up to 6x PCI-e Gen3 lanes
Serial Ports	2x UARTs
Other Interfaces	SPI, 2x I2C, SM Bus, Thermal Management, FAN management Optional eSPI or LPC bus (factory alternatives) Optional TPM 1.2/2.0 on-board LID#/SLEEP#/PWRBTN#, watchdog 4x GPI, 4x GPO Optional 2x CSI camera interfaces
Power Supply	$+12V_{DC} \pm 10\%$ , $+5V_{SB}$ (optional), $+3VRTC$ (optional)

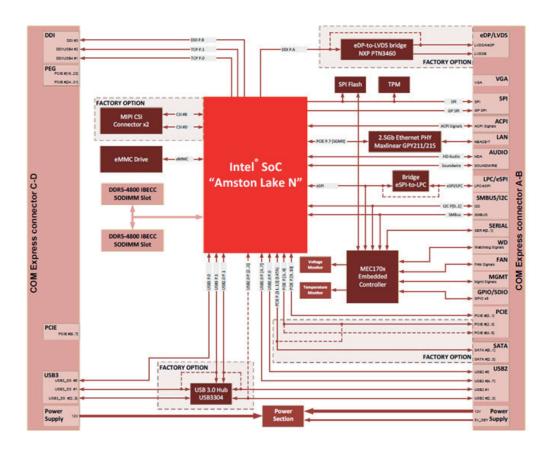


# FEATURES

os	Operating System	Microsoft® Windows 10 IoT Enterprise 2019 LTSC Microsoft® Windows 10 IoT Enterprise 2021 LTSC Edgehog OS (Yocto)
	Operating Temperature*	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (Industrial version)
L	Dimensions	95 x 95 mm (COM Express® Compact Form factor, Type 6 pinout)

\*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the heatspreader temperature in the range indicated.

# **BLOCK DIAGRAM**





# Streamline and expedite your edge computing implementations

# **EDGEHOG OS**

A flexible operating system that adapts to your needs, thanks to the customization tool and Docker support. Reliability and security are built-in through a dual-partition system and native integration with Exein's robust Al-based protection.

# **DATA ORCHESTRATION**

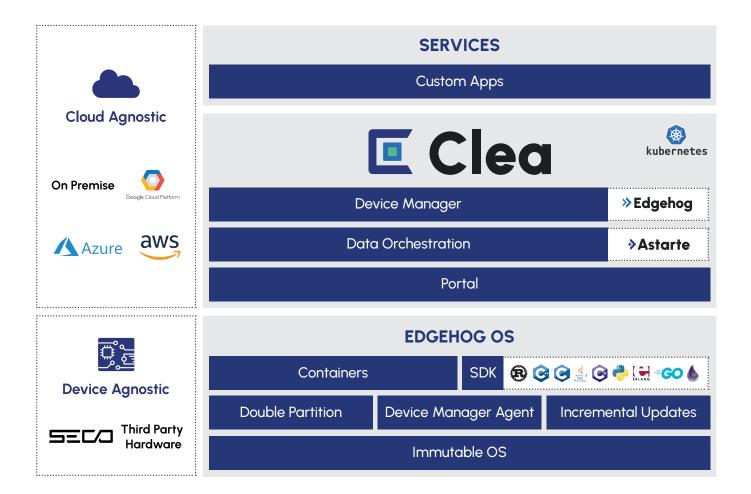
Integrate third-party services, simplify data flows and analysis, and enhance business efficiency by enabling easy and fast utilization of AI.

# **DEVICE MANAGER**

Update, configure, and manage remote devices. Optimize time and costs to maximize operational efficiency and security without the need for costly field interventions.

# **PORTAL**

Analyze data from remote devices, customize the user experience with applications tailored to user needs, and manage user rights, company access, and tenant privileges.



Scan to know more about our solution

**EDGEHOG OS** 



**CLEA DOCS** 



