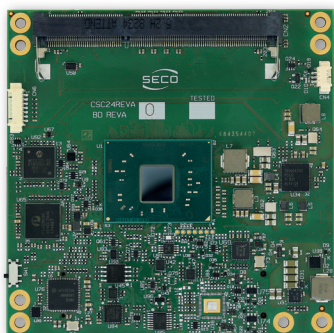# COM EXPRESS®

SOM-COMe-CT6-APL
COM Express® 3.0 Compact Type 6 Module with Intel® Atom® X, Celeron® J/N Series, Pentium® N Series (Codename: Apollo Lake) Processors

Rugged solution for industrial environment

HIGHLIGHTS

CPU
Intel® Atom® X Series, Intel® Celeron® J / N Series and Intel® Pentium® N Series (formerly Apollo Lake) Processors

CONNECTIVITY
4x USB 3.0; 8x USB 2.0; 5x PCI-e x1 Gen2

GRAPHICS
Intel® HD Graphics 500 series controller with up to 18 Execution Units

MEMORY
Two DDR3L SO-DIMM Slots supporting DDR3L-1866 non-ECC Memory

Available in Industrial Temperature Range

COM Express | PICMG | intel partner Gold

Windows 10 Enterprise | Windows IoT | Wind River Partner Program PLATINUM | Linux | yocto PROJECT | android

MAIN FIELDS OF APPLICATION

Coffee & Vending | Medical | Transportation | Industrial Automation | Digital Signage

FEATURES

Processor	Intel® Atom® **x5-E3930** Dual Core @1.3 GHz (Burst 1.8GHz), 2MB L2 Cache, 6.5W TDP Intel® Atom® **x5-E3940** Quad Core @1.6 GHz (Burst 1.8GHz), 2MB L2 Cache, 9.5W TDP Intel® Atom® **x7-E3950** Quad Core @1.6 GHz (Burst 2.0GHz), 2MB L2 Cache, 12W TDP Intel® Pentium® **N4200** Quad Core @1.1GHz (Burst 2.5GHz), 2MB L2 Cache, 6W TDP Intel® Celeron® **N3350** Dual Core @1.1GHz (Burst 2.4GHz), 2MB L2 Cache, 6W TDP Intel® Celeron® **J3455**, Quad Core @1.5GHz (Burst 2.3GHz), 2MB L2Cache, 10W TDP Intel® Celeron® **J3355**, Dual Core @2.0GHz (Burst 2.5GHz), 2MB L2Cache, 10W TDP
Max Cores	4
Max Thread	4
Memory	Two DDR3L SO-DIMM Slots supporting DDR3L-1866 non-ECC Memory, up to 8GB
Graphics	Integrated Intel® HD Graphics 500 series controller with up to 18 Execution Units Three Independent displays supported HW decoding of HEVC(H.265), H.264, MVC, VP8, VP9, MPEG2, VC-1, WMV9, JPEG/MJPEG formats HW encoding of HEVC(H.265), H.264, MVC, VP8, VP9 and JPEG/MPEG formats
Video Interfaces	Up to 2 x Digital Display Interfaces (DDIs), supporting DP 1.2, DVI and HDMI® 1.4b eDP 1.3 or Single/Dual-Channel 18-/24- bit LVDS interface optional VGA interface through a DP-to-VGA bridge
Video Resolution	DP: Up to 4096 x 2160 @60HZ eDP: Up to 3840 x 2160 @60Hz HDMI®: Up to 3840 x 2160 @30Hz LVDS, VGA: Up to 1920 x 1200 @ 60Hz

Mass Storage	Optional eMMC 5.0 drive soldered on-board 2 x external S-ATA Gen3 Channels microSD Card Slot onboard
Networking	Optional Gigabit Ethernet interface Intel® I210 or I211 GbE Controller (MAC + PHY)
USB	Up to 4 x USB 3.0 Host ports 8 x USB 2.0 Host ports
PCI-e	Up to 5 x PCI-e x 1 Gen2 lanes
Audio	HD Audio Interface
Serial Ports	2x UARTs
Other Interfaces	SPI, I2C, SM Bus, Thermal Management, FAN management LPC bus Optional TPM 2.0 on-board LID#/SLEEP#/PWRBTN#, Watchdog 4x GPI, 4 x GPO
Power Supply	+12V$_{DC}$ ± 10% and +5V$_{SB}$ (optional)
Operating System	Microsoft® Windows 10 Enterprise (64-bit) Microsoft® Windows 10 IoT core Wind River Linux (64 bit) Yocto (64 bit) Android (planning)
Operating Temperature*	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (Industrial version)
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.

SECO   www.seco.com

SOM-COMe-CT6-APL

COM Express® 3.0 Compact Type 6 Module with Intel® Atom® X, Celeron®
J/N Series, Pentium® N Series (Codename: Apollo Lake) Processors

BLOCK DIAGRAM
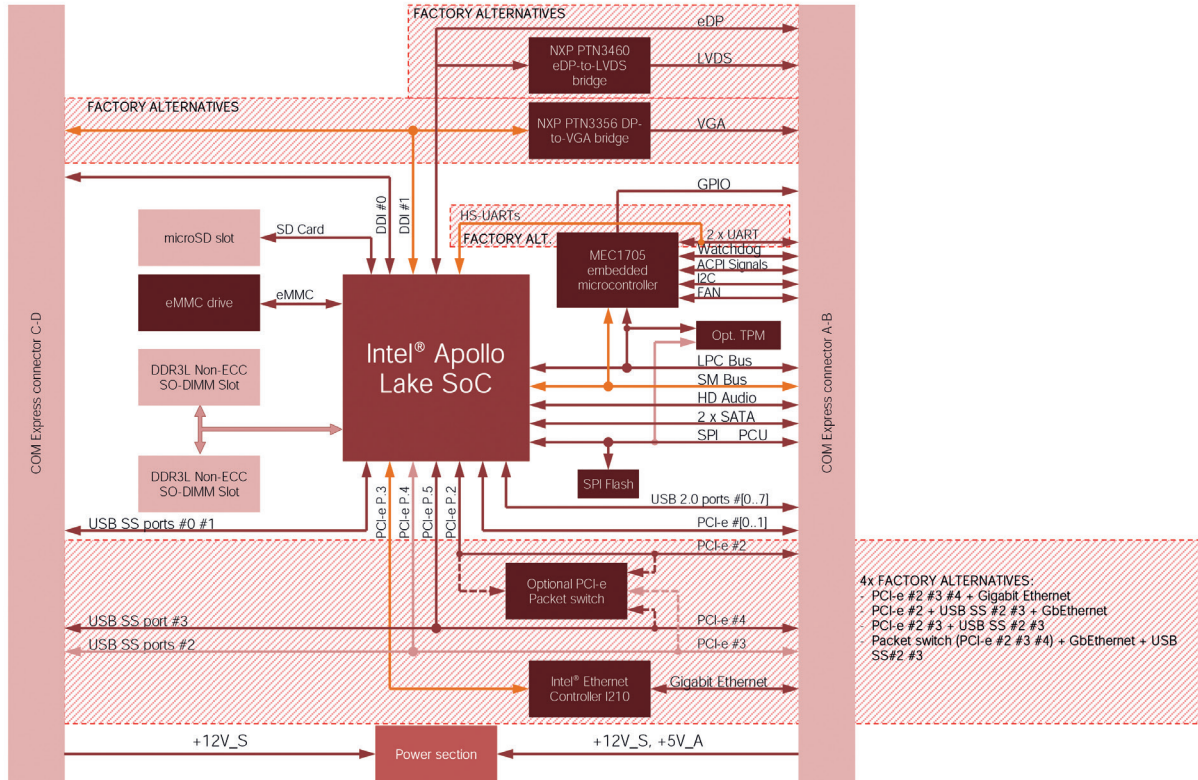
Streamline and expedite your edge computing implementations

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 AI-based protection.

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.

DATA ORCHESTRATION

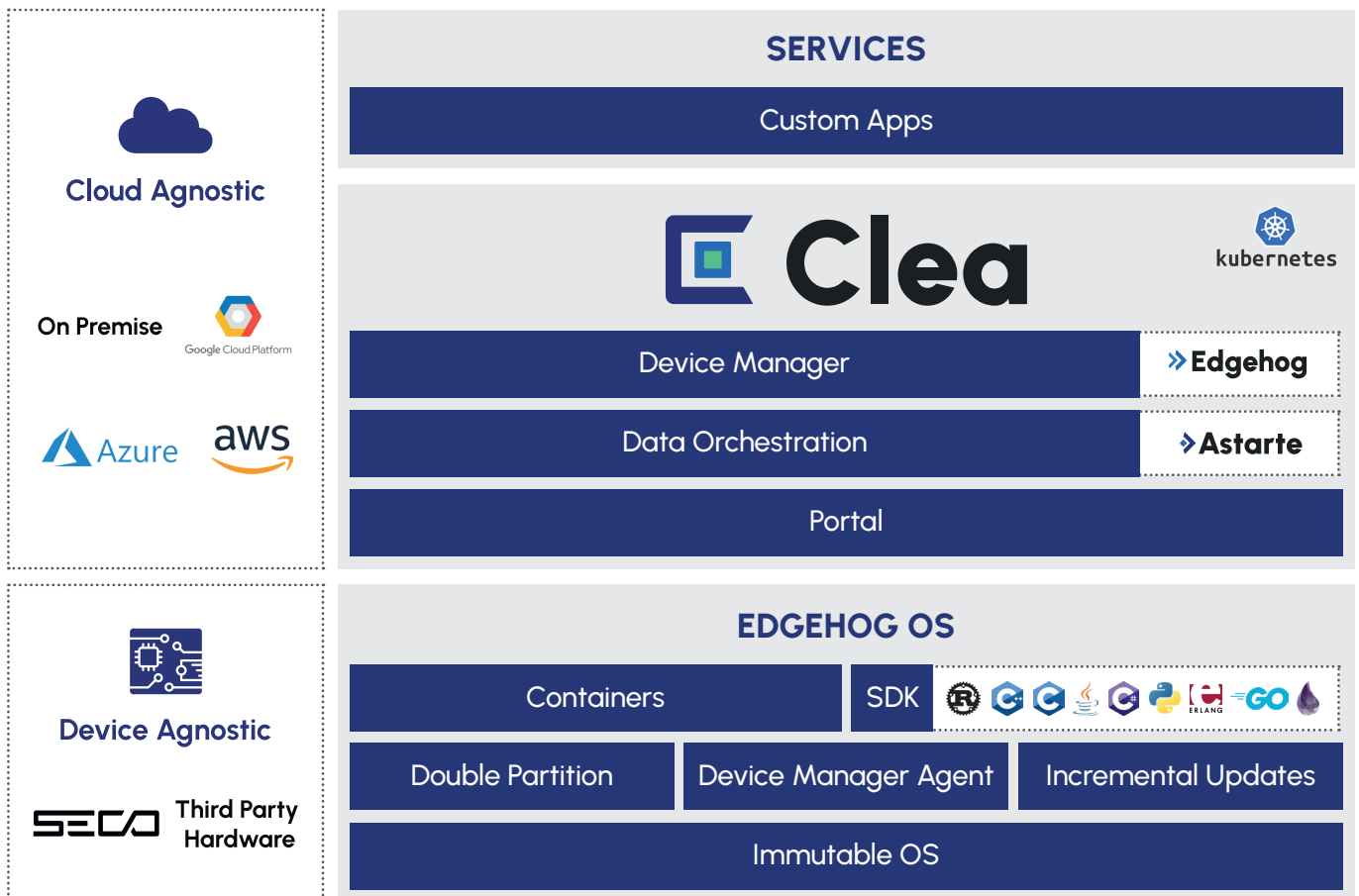Integrate third-party services, simplify data flows and analysis, and enhance business efficiency by enabling easy and fast utilization of AI.

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.

Cloud Agnostic

On Premise
Google Cloud Platform

Azure

aws

Device Agnostic

SECO Third Party Hardware

SERVICES

Custom Apps

Clea

kubernetes

Device Manager — Edgehog

Data Orchestration — Astarte

Portal

EDGEHOG OS

Containers | SDK

Double Partition | Device Manager Agent | Incremental Updates

Immutable OS

Scan to know more about our solution

EDGEHOG OS

CLEA DOCS

SECO

www.seco.com

Information subject to change. Please visit www.edge.seco.com to find the latest version of this datasheet