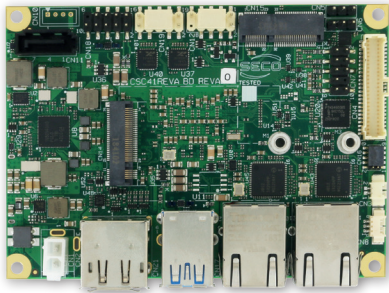




## SBC-pITX-APL

Pico-ITX SBC with the Intel® Atom® X Series, Intel® Celeron® J / N Series and Intel® Pentium® N Series (Codename: Apollo Lake) Processors

### x86 solution designed for IoT edge computing in harsh environments



#### HIGHLIGHTS

<b>CPU</b> Intel® Atom® X Series, Intel® Celeron® J / N Series and Intel® Pentium® N Series (formerly Apollo Lake) Processors	<b>CONNECTIVITY</b> 2x GbE, M.2 WWAN and WLAN slots; 8x GPIOs
<b>GRAPHICS</b> Integrated Intel® HD Graphics 500 series controller with up to 18 Execution Units	<b>MEMORY</b> Up to 8GB LPDDR4 memory

Available in Industrial Temperature Range



#### MAIN FIELDS OF APPLICATION



Safety & Surveillance



Digital Signage



Transportation



Energy & Utilities




#### FEATURES

<b>Processor</b>	Intel® Atom® <b>x5-E3930</b> Dual Core @1.3 GHz (Burst 1.8GHz), 2MB L2 Cache, 6.5W TDP Intel® Atom® <b>x5-E3940</b> Quad Core @1.6 GHz (Burst 1.8GHz), 2MB L2 Cache, 9.5W TDP Intel® Atom® <b>x7-E3950</b> Quad Core @1.6 GHz (Burst 2.0GHz), 2MB L2 Cache, 12W TDP Intel® Pentium® <b>N4200</b> Quad Core @1.1GHz (Burst 2.5GHz), 2MB L2 Cache, 6W TDP Intel® Celeron® <b>N3350</b> Dual Core @1.1GHz (Burst 2.4GHz), 2MB L2 Cache, 6W TDP Intel® Celeron® <b>J3455</b> , Quad Core @1.5GHz (Burst 2.3GHz), 2MB L2Cache, 10W TDP Intel® Celeron® <b>J3355</b> , Dual Core @2.0GHz (Burst 2.5GHz), 2MB L2Cache, 10W TDP	<b>Video Resolution</b> HDMI®: up to 3840x2160 @ 30Hz DP++: up to 4096x2160 @ 60Hz LVDS: up to 1920x1200 @ 60Hz
<b>Mass Storage</b>	Optional eMMC 5.0 drive on-board SATA Gen3 7p M connector SSD M.2 Socket 2 Key B lot, size 2260 / 3042 (excludes WWAN modules) microSD Card slot (combo with miniSIM slot)	<b>Networking</b> Up 2x Gigabit Ethernet connectors WWAN (modem) M.2 Socket 2 Key B 2260 / 3042 slot (excludes SSD interface) Connectivity M.2 Socket 1 Key E 2230 Slot for WiFi+BTLE modules
<b>Max Cores</b>	4	<b>USB</b> USB 3.0 Dual Type-A connector Internal USB 2.0 Dual pin header
<b>Max Thread</b>	4	<b>Audio</b> HD Audio Codec Line Out + Microphone + S/PDIF Out interfaces on internal pin header
<b>Memory</b>	32-bit Single-/Dual-/Quad-Channel LPDDR4 soldered on-board, up to 2400 MT/s Max memory size 8GB	<b>Serial Ports</b> 2 x RS-232/RS-422/RS-485 Serial ports on internal pin header
<b>Graphics</b>	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/MJPEG formats	<b>Other Interfaces</b> miniSIM slot for M.2 modems (combo with microSD slot) 8 x GPIOs connector FAN connector Switch / LED Front Header connector I2C + INT# + RST# signals for I2C Touch Screen controller on LVDS connector Optional TPM 2.0 on-board
<b>Video Interfaces</b>	HDMI® connector Optional DP++ connector (combo with HDMI®) LVDS connector	<b>Power Supply</b> +12V <sub>DC</sub> Cabled coin cell battery for RTC

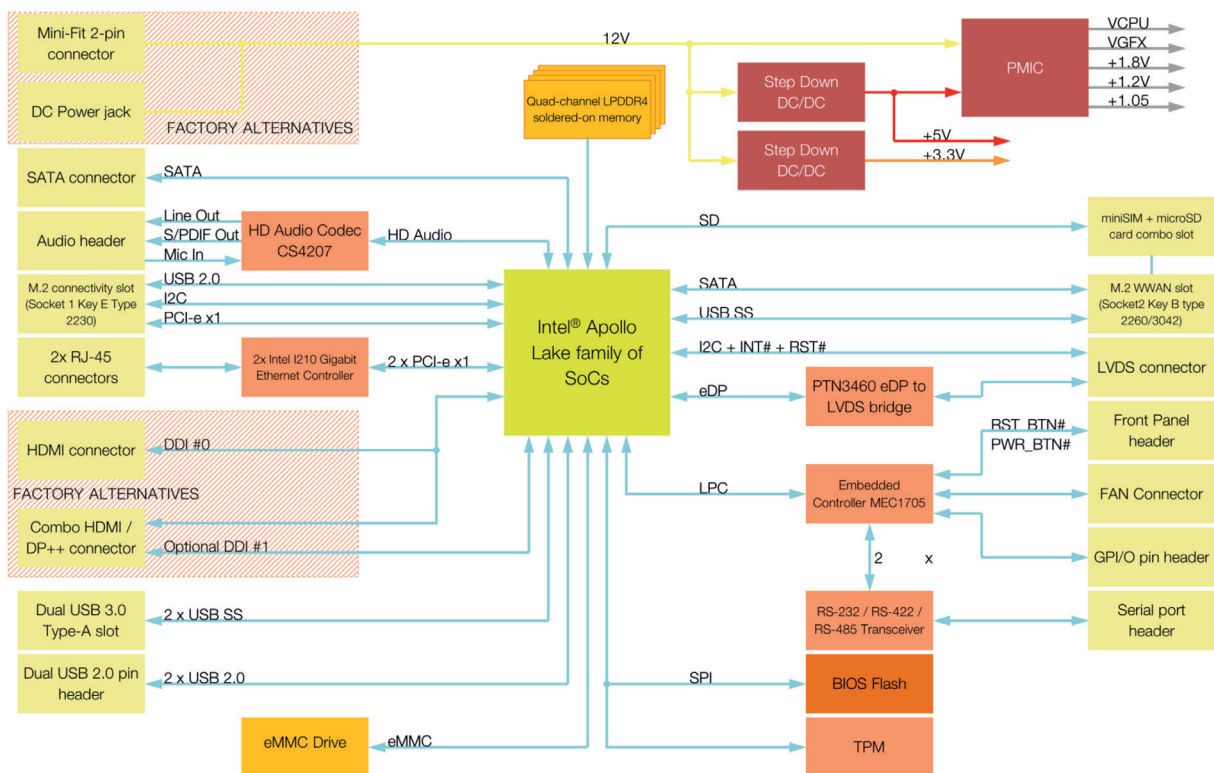
# SBC-pITX-APL

Pico-ITX SBC with the Intel® Atom® X Series, Intel® Celeron® J / N Series and Intel® Pentium® N Series (Codename: Apollo Lake) Processors

## FEATURES

 Operating System	Windows 10 Enterprise (64-bit) Windows 10 IoT Core (32- / 64-bit) WindRiver Linux 64-bit Yocto (64-bit) Android (planning)	*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.
 Operating Temperature*	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (industrial version)	
 Dimensions	100 x 72 mm (3.93" x 2.83")	

## 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.

## DATA ORCHESTRATION

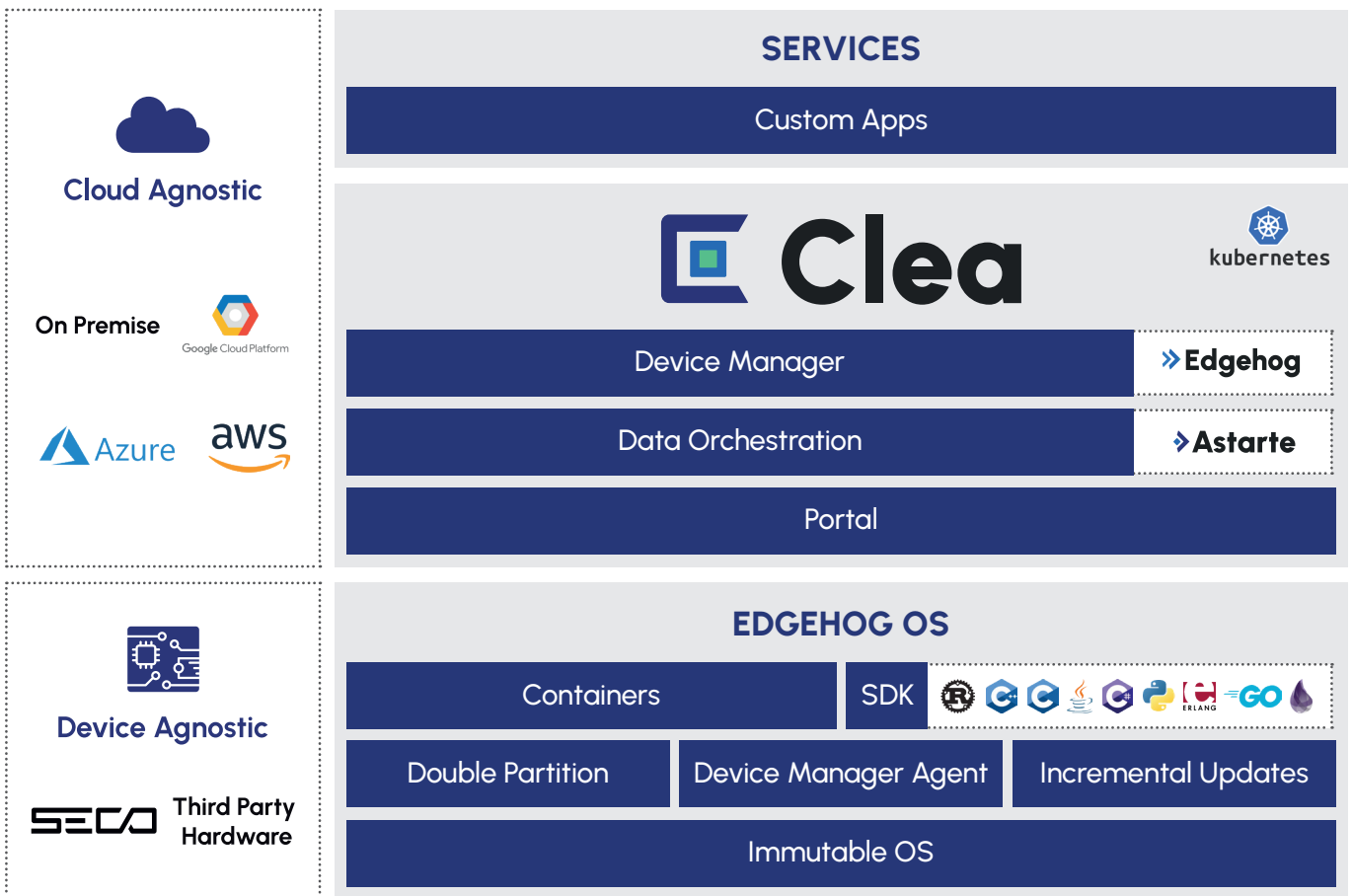
Integrate third-party services, simplify data flows and analysis, and enhance business efficiency by enabling easy and fast utilization of AI.

## 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

