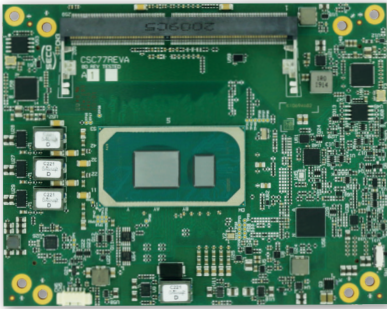




SOM-COM-HPC-A-TGL-UP3

COM-HPC® Client module Size A with the 11th Gen Intel® Core™ and Celeron® (Codename: Tiger Lake-UP3) Processors

11th Generation Intel® Core™ and Celeron® Processors in brand-new COM-HPC® format



HIGHLIGHTS



CPU
11th Gen Intel® Core™ processors and Intel® Celeron® processors



CONNECTIVITY
4x USB 4.0 / USB 3.2; 4x USB 2.0; 8x PCI-e x1 Gen3 ; 1x PCI-e x4 Gen4; up to 2x 2.5GbE



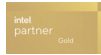
GRAPHICS
Intel® Iris Xe Graphics Core Gen12 GPU with up to 96 EU, up to 4 independent displays



MEMORY
Two DDR4 SO-DIMM Slots supporting DDR4-3200 ECC Memory

Available in Industrial Temperature Range

COM+HPC®



MAIN FIELDS OF APPLICATION



Coffee & Vending



Medical



Transportation



Industrial Automation



Smart Devices



Digital Signage



Energy & Utilities





FEATURES

Processor	<p>11th Generation Intel® Core™ and Celeron® Processors, also available in industrial temperature range</p> <ul style="list-style-type: none"> Intel® Core™ i7-1185G7E, Quad Core @ 2.8GHz (4.4GHz in Turbo Boost) with HT, 12MB Cache, 28/15/12W cTDP Intel® Core™ i5-1145G7E, Quad Core @ 2.6GHz (4.1GHz in Turbo Boost) with HT, 8MB Cache, 28/15/12W cTDP Intel® Core™ i3-1115G4E, Dual Core @ 3.0GHz (3.9GHz in Turbo Boost) with HT, 6MB Cache, 28/15/12W cTDP Intel® Celeron® 6305E, Dual Core @1.8GHz, 4MB Cache, 15W TDP Intel® Core™ i7-1185GRE, Quad Core @ 2.8GHz (4.4GHz in Turbo Boost) with HT, 12MB Cache, with IBCC, 28/15/12W cTDP – Industrial (w/ Turbo OFF) Intel® Core™ i5-1145GRE, Quad Core @ 2.6GHz (4.1GHz in Turbo Boost) with HT, 8MB Cache, with IBCC, 28/15/12W cTDP – Industrial (w/ Turbo OFF) Intel® Core™ i3-1115GRE, Dual Core @ 3.0GHz (3.9GHz in Turbo Boost) with HT, 6MB Cache, 28/15/12W cTDP – Industrial (w/ Turbo OFF) 	<p>DP, eDP: Up to 5120x3200 @60Hz 24bpp / 7680x4320@60Hz 30bpp with DSC</p> <p>MIPI-DSI: Up to 3200x2000 @60Hz 24 bpp, 5120x3200 @60Hz 24bpp with DSC</p> <p>HDMI® 1.4: Up to 4Kx2K 24-30Hz 24bpp</p> <p>HDMI® 2.0b: Up to 4Kx2K 48-60Hz 24bpp / 4Kx2K 48-60Hz 12bpc (need dedicated redriver on carrier board)</p>
Mass Storage	<p>2 x S-ATA Gen3 Channels</p> <p>PCI-e x4 port can be used to connect, on the carrier board, M.2 NVMe drives</p>	
Networking	<p>Up to 2x NBase-T Ethernet interfaces, supporting 2.5Gb Ethernet connection, managed by as many Intel® i225 2.5GbE Controllers</p> <p>M.2 1216 SD Module supporting WiFi 802.11abgn+ac R2 MIMO 2x2 + MU-MIMO and BT 5.0</p>	
USB	<p>Up to 4 x USB 4.0 / USB 3.2 Host ports</p> <p>4 x USB 2.0 Host port</p>	
PCI-e	<p>1x PCI-e x4 Gen 4 port</p> <p>Up to 8x PCI-e Gen 3 lanes, groupable to support up to 4 root ports (5 root ports without the second 2.5GbE controller)</p>	
Audio	<p>SoundWire and I2S Audio Interface</p>	
Serial Ports	<p>2 x UARTs</p>	
Other Interfaces	<p>2x 4-lane CSI-2 interfaces, optional SPI, SM Bus, 2x I2C, Watchdog timer, Carrier board FAN Control</p> <p>Management signals, ACPI signals, Safety Status signals</p> <p>Deep Sleep / Battery support</p> <p>Optional TPM 2.0 module on-board</p> <p>12x GPIOs</p>	
Max Cores	4	
Memory	2x DDR4-3200 SODIMM Slots with IBCC (In-Band Error Correction Code), up to 64GB supported	
Graphics	<p>Integrated Iris Xe Graphics Core Gen12 architecture, with up to 96 Execution Units</p> <p>MPEG2, WMV9, AVC/H.264, JPEG/MJPEG, HEVC/H.265, VP9, AVI HW decoding, up to 8k @60.</p> <p>AVC/H.264, HEVC/H.265, JPEG, VP9 HW encoding</p> <p>Support up to 4 independent displays</p>	
Video Interfaces	<p>1x eDP 1.4b or MIPI_DSI 1.3</p> <p>Up to 3x DP++ interface, supporting Display Port 1.4a and HDMI® 2.0b</p> <p>Up to 4x Display Port over Type-C (Alternate mode)</p>	

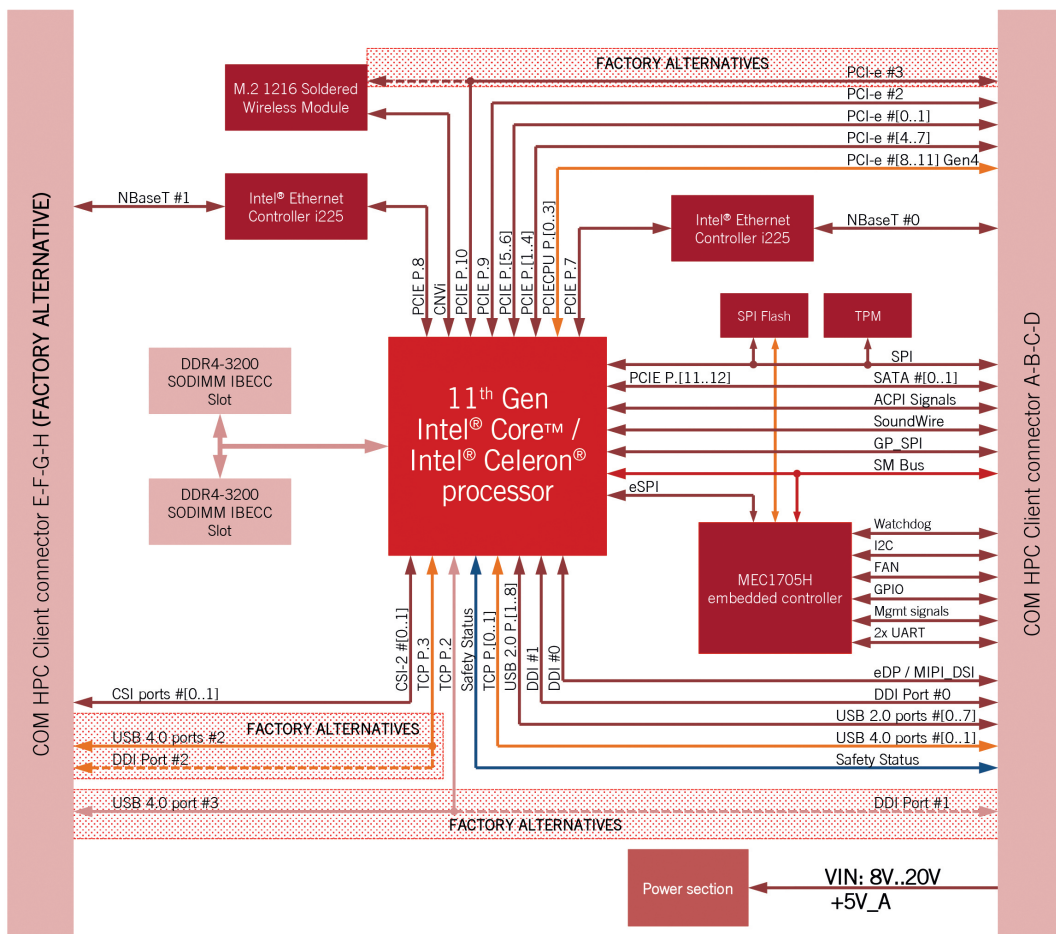
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FEATURES

	Power Supply	+8V _{DC} .. +20V _{DC} Main power supply +5V stand-by		Dimensions	120 x 95 mm (COM-HPC® Size A Form factor, Client pinout)
	Operating System	Windows 10 IoT Enterprise LTSC Linux Kernel LTS Yocto VxWorks 7.0 Android	*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)			

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

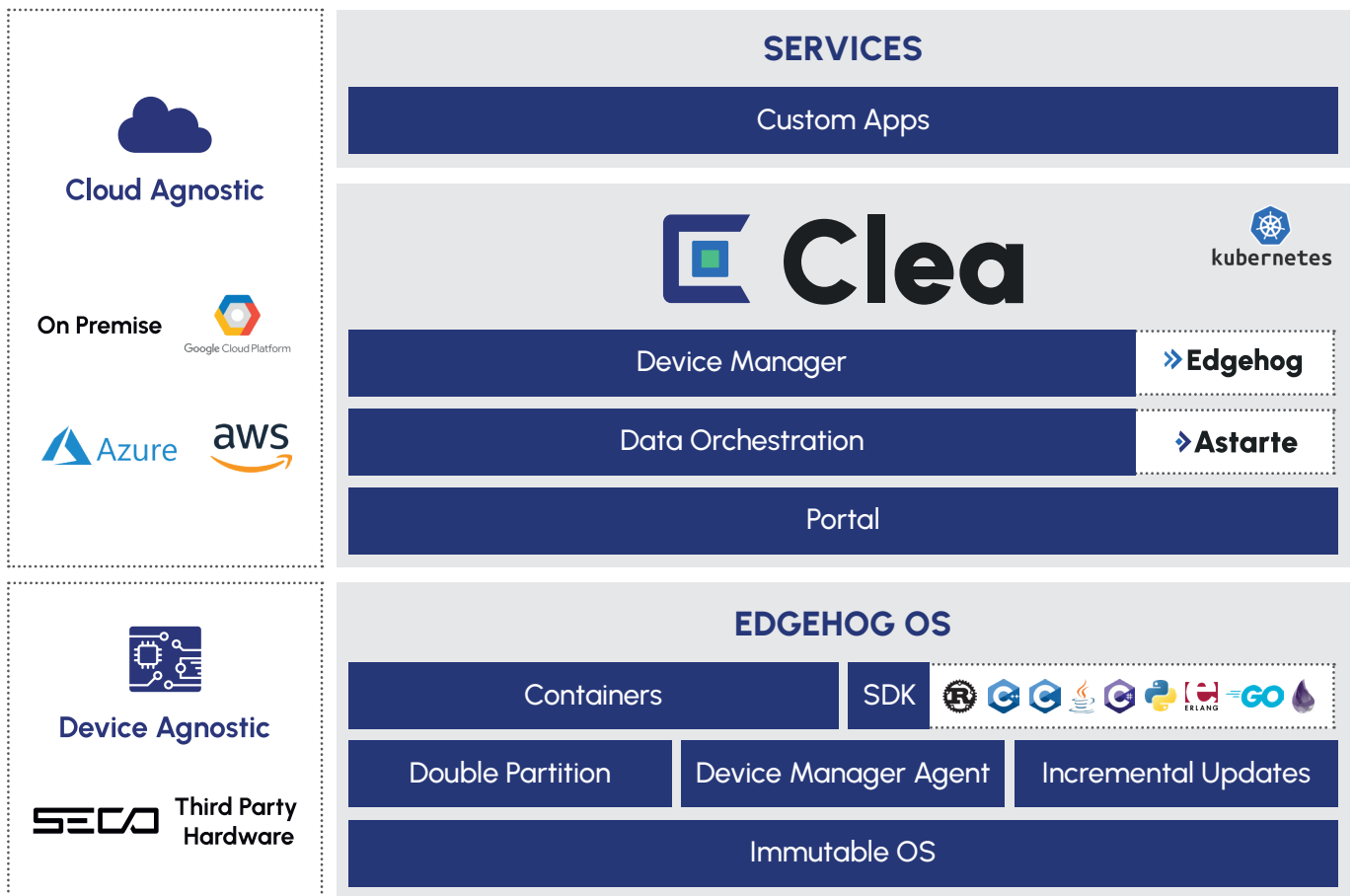
Integrate third-party services, simplify data flows and analysis, and enhance business efficiency by enabling easy and fast utilization of AI.

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

