

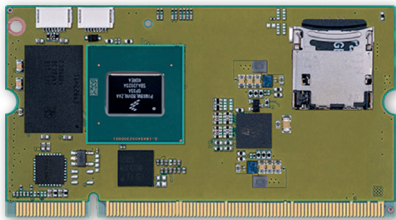
# TRIZEPS SODIMM SOM



## SOM-Trizeps-VIII-MX8M-Plus

SODIMM-200 CPU-Module with NXP i.MX 8M Plus Applications Processors

### Bringing artificial intelligence to Arm® embedded edge solutions



#### HIGHLIGHTS



**CPU**  
NXP i.MX8M Plus Applications Processors



**CONNECTIVITY**  
2x Gigabit Ethernet, 2x USB 3.0, 2x CAN-FD, PCIe, LVDS, 2x MIPI-CSI, WiFi/BT



**GRAPHICS**  
Integrated GPU with multi display support  
GC520L 2D accelerator + GC7000UL 3D accelerator



**MEMORY**  
Up to 8 GB LPDDR4-4000 memory

Available in Industrial Temperature Range



#### MAIN FIELDS OF APPLICATION



Coffee & Vending



Medical



Transportation



Industrial Automation



Smart Devices



Smart Buildings & Smart Cities



Digital Signage



Energy & Utilities

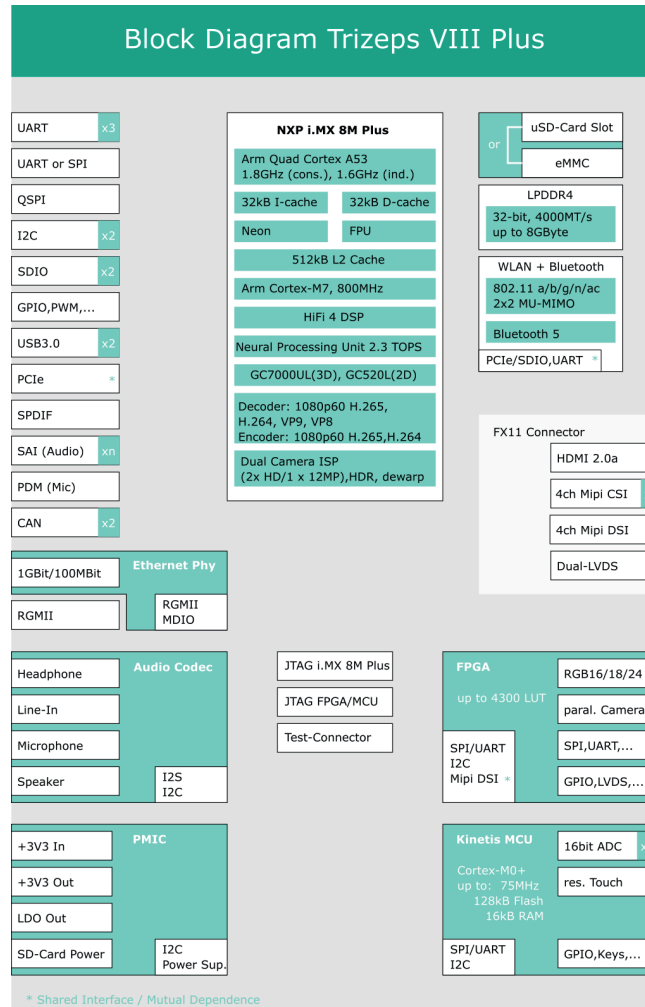
#### FEATURES

Processor	NXP i.MX 8M Plus family SoCs: Dual or Quad Arm® Cortex®-A53 Cores + general purpose Cortex® M7 800MHz processor <ul style="list-style-type: none"> <li>NXP i.MX 8M Plus Quad, 4x Arm® Cortex®-A53 Cores up to 1.8GHz</li> <li>NXP i.MX 8M Plus Dual, 2x Arm® Cortex®-A53 Cores up to 1.8GHz</li> <li>NPU: 2.3 TOPS Neural Network performance (not for Quad Life)</li> </ul> Optional: NXP™ Kinetis V Arm® Cortex-M0+ up to 75 MHz / 8x 16 Bit ADC, UART, SPI, GPIO, I2C Optional: Programmable FPGA, up to 4300 LUTs	Audio	Digital: 18x I2S TDM, DSD512, S/PDIF Tx + Rx, 8 channel PDM Microphone input Analog: Stereo Headphone output, Mono Speaker output, Stereo Line-In, Microphone input
Memory	Soldered down LPDDR4-4000 memory, 32-bit interface, up to 8GB	Serial Ports	4x UART
Graphics	Integrated Graphics Processing Unit GC7000UL, supports 3 independent displays. Embedded VPU, supports HW decoding of HEVC/H.265, AVC/H.264, MPEG-4, MPEG-2, MVC, VC-1, RV, VP6, VP7, VP8, VP9, JPEG, HW encoding of HEVC/H.265, AVC/H.264 Supports OpenVG 1.1, OpenGL ES 3.1, OpenCL 1.2 Full Profile and Vulkan	Other Interfaces	3x 4 Bit wide SDIO 3.0 SPDIF In/Out I2S Multichannel Serial-Audio-Interface 2x I2C SPI QSPI GPIOs PWMs 2x CAN
Video Interfaces	HDMI®, MIPI display (4 channel) / Single- or Dual-LVDS, LCD 24 Bit RGB	Power Supply	3.3 V <sub>DC</sub>
Video Resolution	HDMI®, LVDS, eDP: Up to 1920 x 1080p @60 Video-Decoder: 1080p60, h.265/4, VP9, VP8 / Video Encoder: 1080p60, h.265/4	Operating System	Linux Yocto Linux Debian Android Windows 10 IoT
Mass Storage	Onboard 4 Bit wide µSD Card Socket or onboard 8 Bit wide eMMC	Operating Temperature*	0 ÷ 70°C (Consumer) -25 ÷ 85°C (Extended Consumer) -40 ÷ 85°C (Industrial)
Networking	2x Gigabit Ethernet (1x RGMII PHY and 1x RGMII interface) Optional: WiFi 802.11 a/b/g/n/ac 2x2 MU-MIMO / BT 4.2/5.0	Dimensions	67.6 x 36.7 x 6.4 mm
USB	2x USB 3.0 OTG	*All carrier board components must remain within the operating temperature at any and all times, including start-up; carrier operating temperature is independent of the module installed. Please refer to the specific module for more details. Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider specific cooling solutions for the final system.	
PCI-e	Up to 1x PCI-e x1 Gen3 port		

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## 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

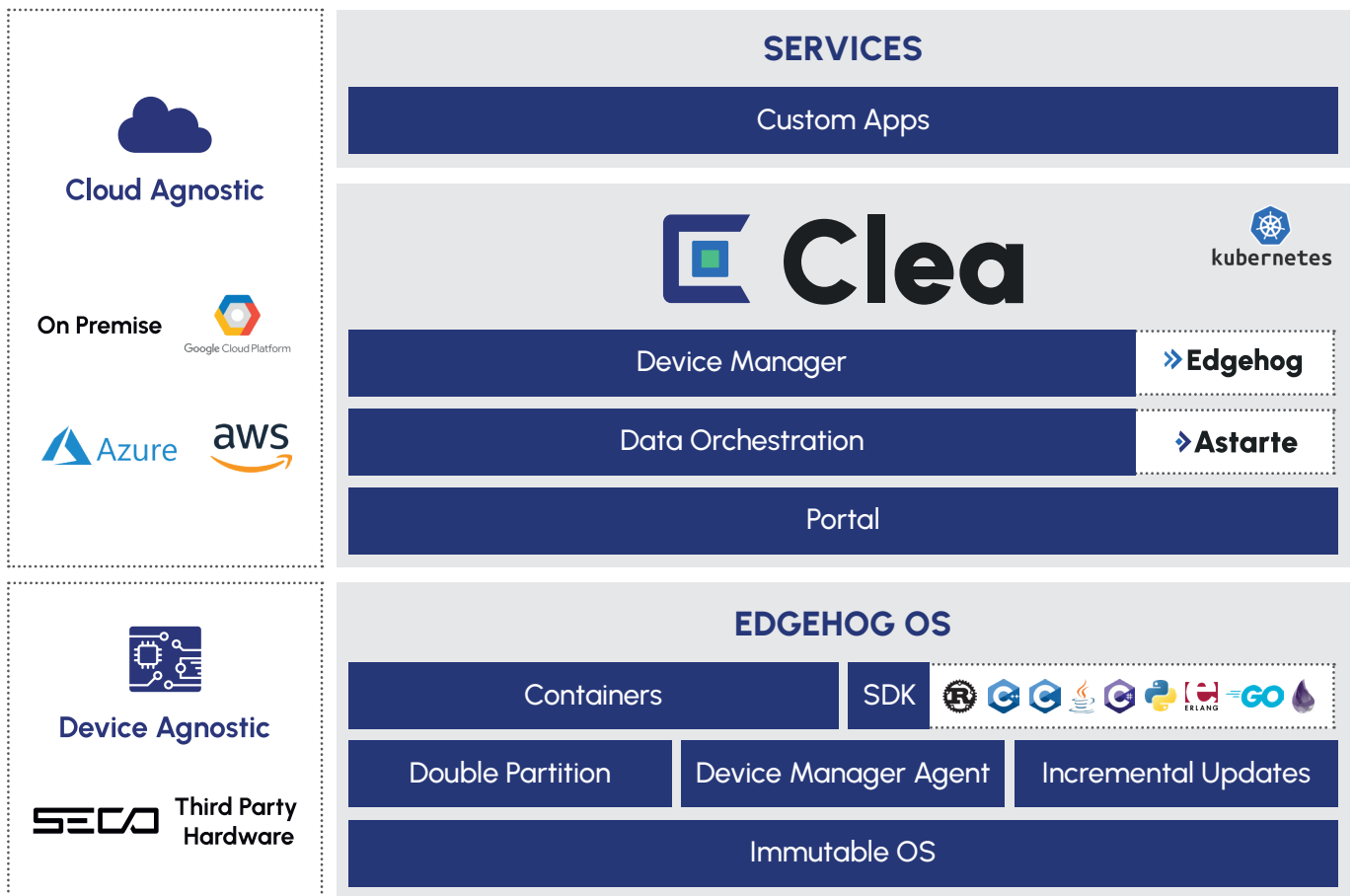
Integrate third-party services, simplify data flows and analysis, and enhance business efficiency by enabling easy and fast utilization of AI.

## 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

