

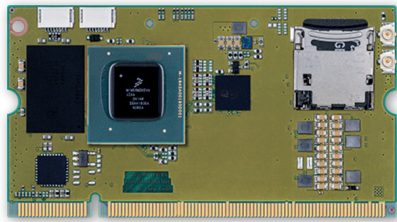
# TRIZEPS SODIMM SOM



## SOM-Trizeps-VIII-MX8M

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

Ideal for use in industrial and home automation, streaming audio applications or advanced imaging equipment



### HIGHLIGHTS



**CPU**  
NXP i.MX8M Applications Processors



**CONNECTIVITY**  
1x Gigabit Ethernet, WiFi/BT, 2x USB 3.0



**GRAPHICS**  
Integrated GPU with multi display support



**MEMORY**  
Up to 8 GB LPDDR4-3200 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

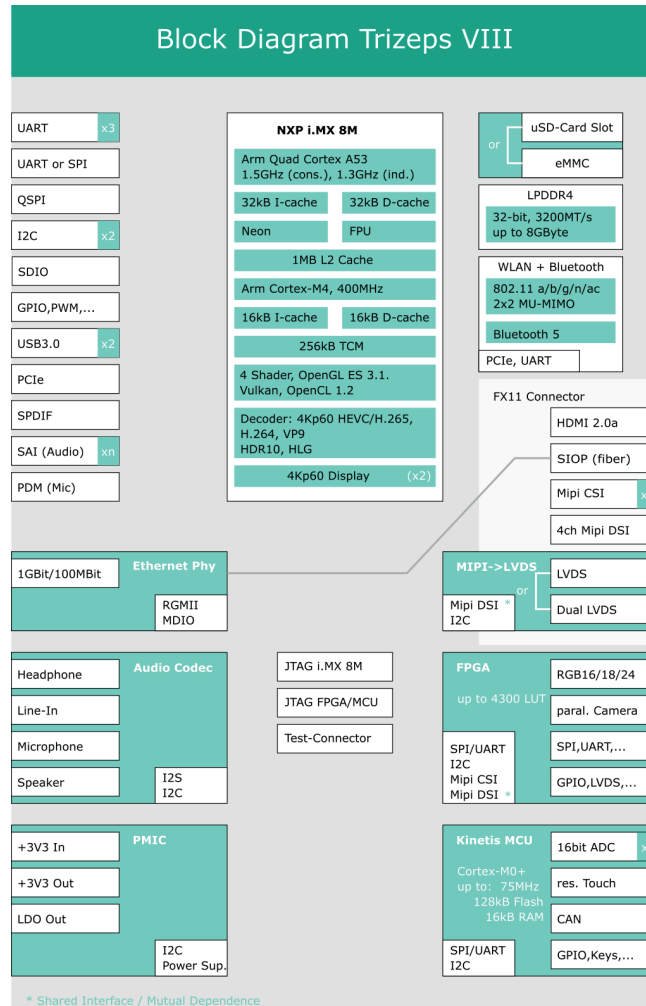
### FEATURES

|                  |   |  |  |
|------------------|---|--|--|
| Processor        | <p>NXP i.MX 8M Family based on Arm® Cortex®-A53 cores + general purpose Cortex®-M4 processor:</p> <ul style="list-style-type: none"> <li>i.MX 8M Quad - 4x Cortex®-A53 cores up to 1.5GHz</li> <li>i.MX 8M Dual - 2x Cortex®-A53 cores up to 1.5GHz</li> <li>i.MX 8M QuadLite - 4x Cortex®-A53 cores up to 1.5GHz, no VPU</li> </ul> <p>Optional: NXP™ Kinetis V Arm® Cortex-M0+ up to 75 MHz / 8x 16 Bit ADC, CAN, UART, SPI, GPIO</p> <p>Optional: Programmable FPGA, up to 4300 LUTs to convert parallel display/camera/data-streams to MIPI DSI/CSI</p> | <p>Serial Ports</p> <p>4x UART</p>   |  |
| Memory           | Soldered down LPDDR4-3200 memory, 32-bit interface, up to 8GB   | <p>Other Interfaces</p> <p>SPDIF In/Out<br/>I2S<br/>Multichannel Serial-Audio-Interface<br/>2x I2C<br/>SPI<br/>QSPI<br/>GPIOs<br/>PWM</p>  |  |
| Graphics         | <p>Integrated Graphics Processing Unit, supports 2 independent displays.</p> <p>Embedded VPU, supports HW decoding of HEVC,H.264, H.263, MPEG-4, MPEG-2, AVC, VC-1, RV, DivX, VP6, VP8, VP9, JPEG (not for i.MX8M QuadLite).</p> <p>Supports OpenGL ES 3.1, Open CL 1.2, OpenGL 2.x, DirectX 11</p>   | <p>Power Supply</p> <p>3.3 V<sub>DC</sub></p>  |  |
| Video Interfaces | HDMI® v2.0a, MIPI display (4ch), Single-, Dual-LVDS or LCD 24 Bit RGB<br>Camera Interfaces: 8bit parallel, MIPI (4ch and additional 2ch)  | <p>Operating System</p> <p>Linux Yocto<br/>Linux Debian<br/>Android<br/>Windows 10 IoT</p>   |  |
| Video Resolution | HDMI®, MIPI: up to 4k resolution  | <p>Operating Temperature*</p> <p>0 ÷ 70°C (Consumer)<br/>-25 ÷ 85°C (Extended Consumer)<br/>-40 ÷ 85°C (industrial)</p>  |  |
| Mass Storage     | Onboard 4 Bit wide µSD Card Socket or onboard 8 Bit wide eMMC   | <p>Dimensions</p> <p>67.6 x 36.7 x 6.4 mm</p>  |  |
| Networking       | Onboard 10/100MBit/IGBit RGMII PHY or SIOP interface<br>Optional: WiFi 802.11 a/b/g/n/ac 2x2 MU-MIMO / BT 4.2/5.0   | <p>*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.</p> |  |
| USB              | 2x USB 3.0 OTG  |  |  |
| PCI-e            | 1x PCIe   |  |  |
| Audio            | Audio Codec: Stereo Headphone output, Mono Speaker output, Stereo Line-In, Microphone input   |  |  |

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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

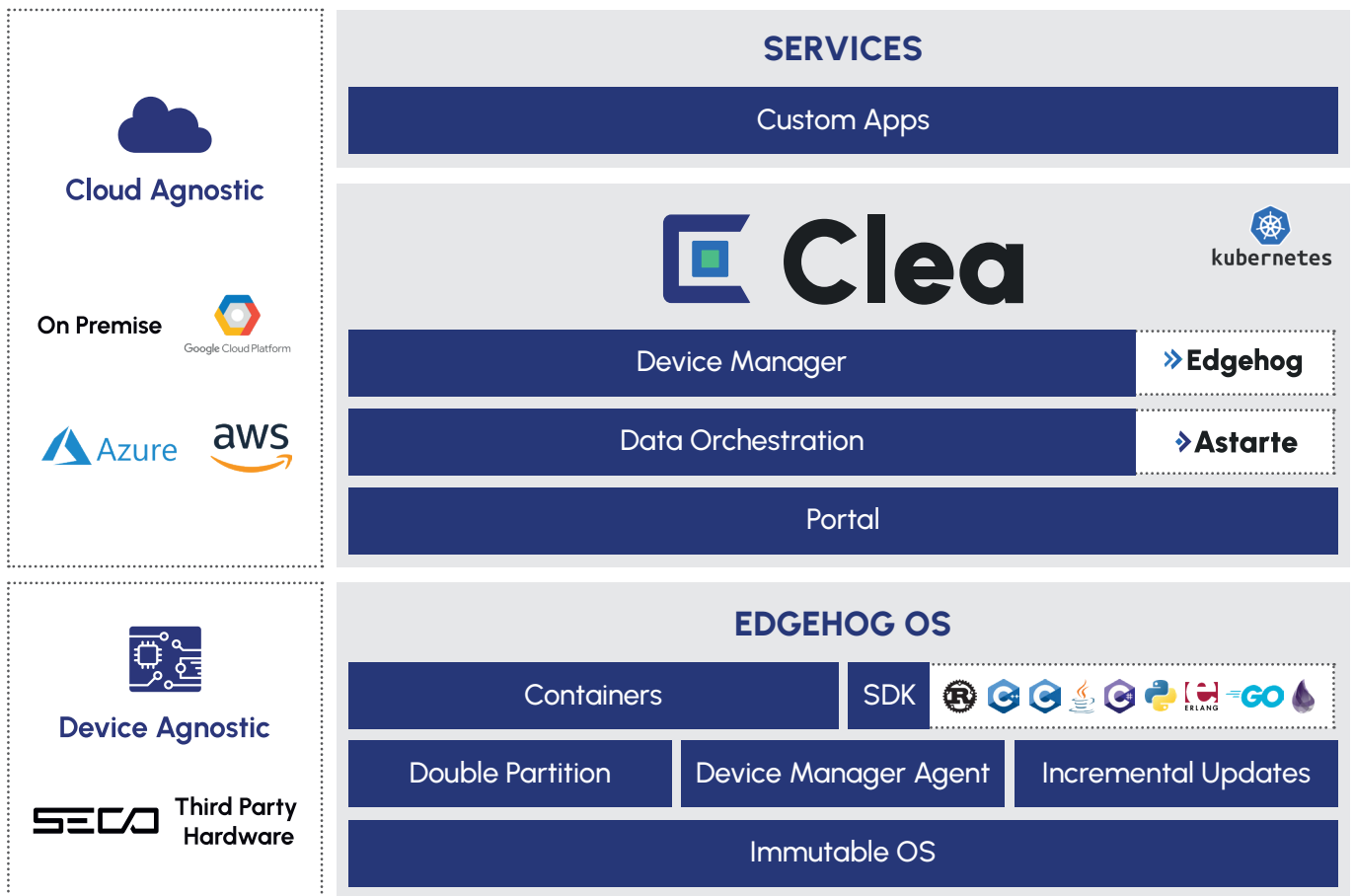
Integrate third-party services, simplify data flows and analysis, and enhance business efficiency by enabling easy and fast utilization of AI.

## 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

