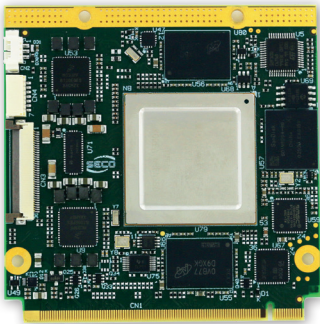




SOM-Q7-MX8

Qseven® Rel. 2.1 compliant module with NXP i.MX 8 Applications Processors

Take advantage of the wide scalability offered by Qseven® form factor and the i.MX 8 family



HIGHLIGHTS

CPU NXP i.MX 8 Applications Processors	CONNECTIVITY 1x USB 3.0; PCI-e x1 Gen3; CSI camera connector; Boot select signal
GRAPHICS Integrated GPU, supports 2 independent displays	MEMORY soldered down LPDDR4-3200 memory

Available in Industrial Temperature Range



MAIN FIELDS OF APPLICATION



Coffee & Vending



Medical



Industrial Automation



Smart Devices



Digital Signage

FEATURES

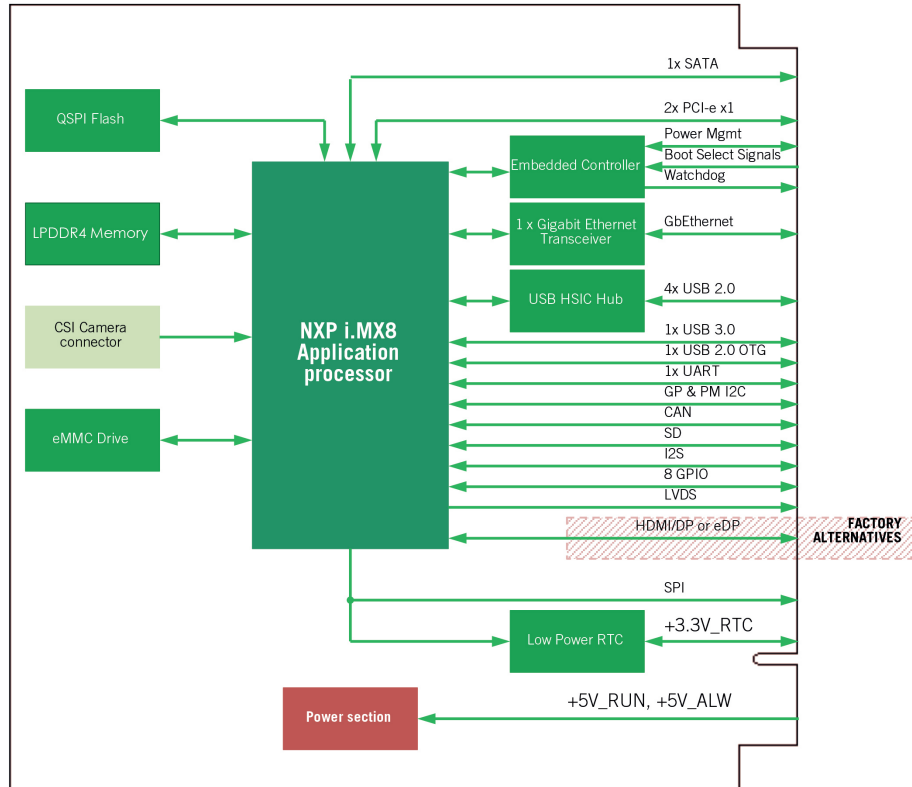
Processor	NXP i.MX 8 Family; i.MX 8QuadMax - 2x Cortex®-A72 cores @1.6GHz + 4x Cortex®-A53 cores @1.2GHz + 2x Cortex®-M4F cores @264MHz i.MX 8QuadPlus - 1x Cortex®-A72 cores @1.6GHz + 4x Cortex®-A53 cores @1.2GHz + 2x Cortex®-M4F cores @264MHz	PCI-e	2x PCI-e x1 Gen3 ports
Memory	Soldered Down LPDDR4-3200 memory, 64-bit interface, up to 8GB	Audio	I2S Audio Interface
Graphics	Integrated Graphics Processing Unit, supports 2 independent displays. Embedded VPU, supports HW decoding of HEVC/H.265, AVC/H.264, MPEG-2, VC-1, RV9, VP8, H.263 and MPEG4 part, HW encoding of AVC/H.264 Supports OpenGL ES 3.1, Open CL 1.2, OpenGL 3.x, DirectX 11	Serial Ports	1x UART Tx/Rx/RTS/CTS 1x CAN Bus (TTL level)
Video Interfaces	HDMI® 2.0a / DP 1.3 or eDP 1.4 interface, supporting HDCP 2.2 Dual Channel or 2 x Single Channel 18- / 24-bit LVDS interface (1 x Single Channel in case of eDP interface available)	Other Interfaces	CSI camera connector 2x I2C Bus SPI interface 8 x GPIOs Boot select signal Power Management Signals Watchdog
Video Resolution	HDMI® / DP / eDP: resolution up to 4096x2160 @ 60Hz LVDS: resolution up to 1920x1080 @ 60Hz	Power Supply	+5V _{pc} ±5% +3.3V _{RTC}
Mass Storage	1x SATA Gen3 interface eMMC 5.1 drive soldered on-board SD 4-bit interface QSPI Flash soldered-on-board	Operating System	Linux Yocto Android
Networking	1 x Gigabit Ethernet interface	Operating Temperature*	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (Industrial version)
USB	4 x USB 2.0 Host Ports 1 x USB 3.0 Host Port 1 x USB 2.0 OTG port	Dimensions	70 x 70 mm (2.76" x 2.76")

*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.

SOM-Q7-MX8

Qseven® Rel. 2.1 compliant module with NXP i.MX 8 Applications 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.

DATA ORCHESTRATION

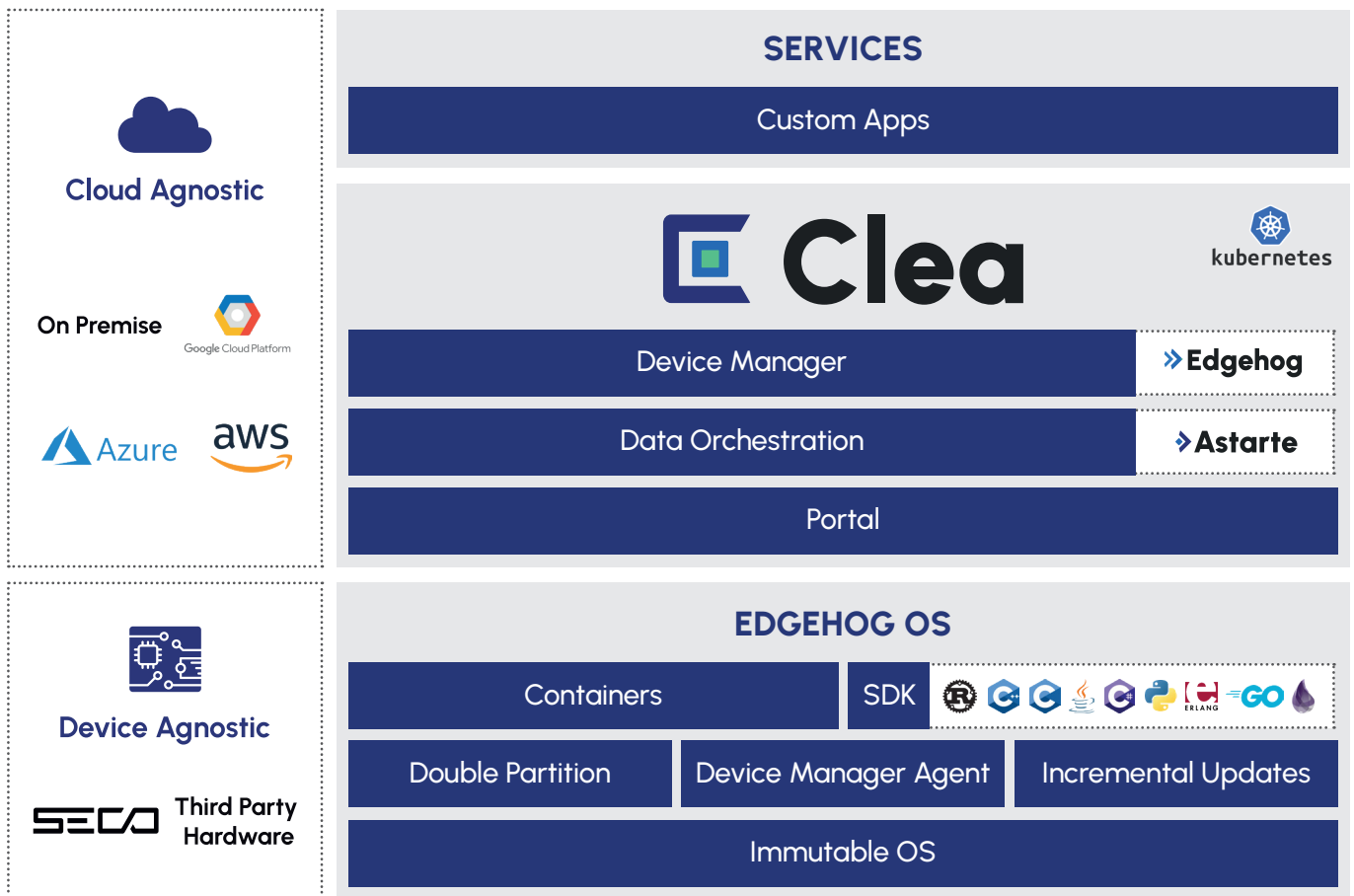
Integrate third-party services, simplify data flows and analysis, and enhance business efficiency by enabling easy and fast utilization of AI.

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

