

# UltraGEA MX8QM

Engicam introduces the first SOM of the new family UltraGEA based on NXP® powerful i.MX 8QM processors equipped with the 4x Cortex-A53, plus up to 2x Cortex-A72 plus up to 2x Cortex-M4F.



## HIGHLIGHTS

- Virtualization
- Vision
- 3D Graphics
- 4K Video



yocto  
PROJECT

## APPLICATIONS



Industrial



Automotive



Transportation



Robotics



Biomedical/  
Medical devices



Digital Signage  
Infotainment



Avionics


















Surveillance



Gaming

## FEATURES

 <b>CPU</b>	NXP® i.MX8 Quad Max	 <b>VIDEO RESOLUTION</b>	Single UltraHD 4Kp60 display or up to 4 independent FullHD 1080p60 displays
 <b>CORES</b>	Up to 2x ARM Cortex-A72@ 1.6 GHz, 4x Cortex-A53 @ 1.26 GHz, up to 2 Cortex-M4 @ 266MHz and 1x HIFI4 DSP	 <b>MASS STORAGE</b>	4GB eMMC expandable
 <b>MEMORY</b>	Up to 6GB LPDDR4 @3200MT/s	 <b>NETWORKING</b>	2x GB Ethernet interface
 <b>GRAPHICS</b>	16 Vec4-Shader GPU, 32 compute units OpenGL® ES 3.2 and Vulkan® support Tessellation and Geometry Shading Split-GPU architecture enables 2x 8 Shader Cores Vision Extensions 4k h.265 Decode, 1080p h.264 encode	 <b>USB</b>	USB OTG 2.0/3.0 USB HOST 2.0/3.0
		 <b>AUDIO</b>	2x I2S interfaces
		 <b>PERIPHERAL INTERFACES</b>	PCIe interfaces, I2C, SPI, UART, JTAG, SDIO interfaces
 <b>VIDEO INTERFACES</b>	2x Display Processor Controllers with inline blending and WARP SafeAssure Fail-over capable (per DPC) 2x 4-lane MIPI DSI 2x 4-lane MIPI CSI 2x LVDS 1x HDMI* 2.0 TX with HDCP* 2.2, 1x eDP* 1.2, 1x DP* 1.4 1x HDMI 1.4 RX with HDCP 2.2	 <b>POWERSUPPLY</b>	+ 5V DC
		 <b>OPERATING SYSTEM</b>	Linux – Yocto
		 <b>OPERATING TEMPERATURE*</b>	Industrial (-40°C to 105°C Tj)
		 <b>DIMENSIONS</b>	41.5 x 81.5 mm

\*Valid for all components except CPU. Customer shall consider junction temperature for CPU. Temperature will widely depend on application. Specific cooling solutions could be necessary for the final system.