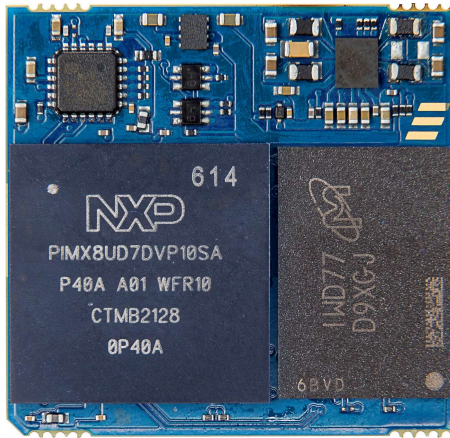










# MicroGEA MX8ULP

Engicam presents MicroGEA MX8ULP based on new NXP® i.MX 8ULP processor that features up to two Arm® Cortex®-A35 running at 1 GHz, an Arm Cortex-M33 core. This module brings ultra-low power processing advanced integrated security and a graphical engine.



yocto  
PROJECT

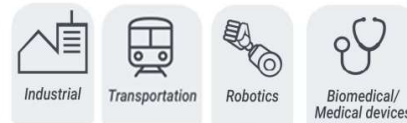
## FEATURES







 CPU	NXP® i.MX8ULP
 CORES	Up to two Arm Cortex-A35 @ 1.0 GHz Arm Cortex-M33 @ 216 MHz
 MEMORY	Starting from 1 GB LPDDR4x
 GRAPHICS	3D GPU includes OpenGL® ES 3.1, Vulkan®, OpenVG™ 1.1, OpenCL™ 2.x and OpenVG™ 1.1 3D graphics accelerator, and 2D graphics accelerator
 VIDEO INTERFACES	<ul style="list-style-type: none"> <li>• 1x MIPI DSI (4-lane) with PHY</li> <li>• 1x Parallel up-to 24-bit RGB (DBI/DPI)</li> </ul>
 USB	<ul style="list-style-type: none"> <li>• 2x USB HOST 2.0</li> </ul>
 AUDIO	<ul style="list-style-type: none"> <li>• SAI interface</li> </ul>
 NETWORKING	1x 10/100 Ethernet interfaces

## HIGHLIGHTS

- Very small form factor
- Optimizing energy at the chip level
- 3D GPU engine

## APPLICATIONS



 MASS STORAGE	<ul style="list-style-type: none"> <li>• 4GB eMMC drive soldered on-board</li> </ul>
 PERIPHERAL INTERFACES	UART, SM Bus, I <sup>2</sup> C, LPC/eSPI, SPI, GPIOs
 POWER SUPPLY	+3,3V DC
 OPERATING SYSTEM	<ul style="list-style-type: none"> <li>• Linux</li> <li>• Yocto</li> </ul>
 OPERATING TEMPERATURE*	Industrial qualified
 DIMENSIONS	25 x 25 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.

**BLOCK DIAGRAM**

