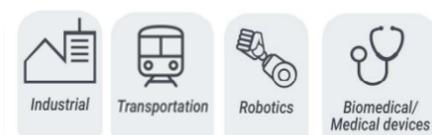# ENGICAM
EMBEDDED SOLUTIONS

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.

HIGHLIGHTS

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

APPLICATIONS

Industrial | Transportation | Robotics | Biomedical/Medical devices

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	• 1x MIPI DSI (4-lane) with PHY • 1x Parallel up-to 24-bit RGB (DBI/DPI)	
USB	2x USB HOST 2.0	
AUDIO	SAI interface	
NETWORKING	1x 10/100 Ethernet interfaces	

MASS STORAGE	4GB eMMC drive soldered on-board
PERIPHERAL INTERFACES	UART, SM Bus, I2C, LPC/eSPI, SPI, GPIOs
POWER SUPPLY	+3,3V DC
OPERATING SYSTEM	• Linux • Yocto
OPERATING TEMPERATURE*	Industrial qualified
DIMENSIONS	25 x 26 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.

NXP Gold Partner

MicroGEA MX8ULP

BLOCK DIAGRAM