

MicroGEA STM32MP2 is based on the Next-gen STM32 MPUs by ST® Microprocessors, with industrial-grade 64-bit MPU for secure Industry 4.0 and advanced edge computing applications that require high-end multimedia capabilities. This new MicroSOM includes single or dual Arm® Cortex®-A35 up to 1.5 GHz and Arm® Cortex® -M33 at 400 MHz, NPU at 1.35 TOPS and 3D GPU for advanced HMI applications. Robustness, extended connectivity, high-end graphics and strong security in a compact format.



FEATURES

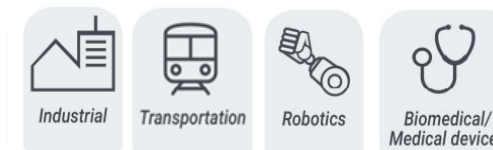


	CPU	Designed for : ST® STM32MP25x, 23x, 21x
	CORES	Single or dual core Arm Cortex-A35 @1.5 GHz and Arm Cortex-M33@400MHz
	MEMORY	Up to 2GB 16bit LPDDR4 @2400MTs
	GRAPHICS	3D GPU: VeriSilicon® - Up to 900 MHz - OpenGL® ES 3.2.8 - Vulkan 1.2 - OpenCL™ 3.0, OpenVX™ 1.3 - Up to 150 Mtriangle/s, 900 Mpixel/s
	VIDEO INTERFACES	- MIPI® DSI or LVDS displays - RGB parallel interface
	VIDEO PROCESSING	1080p60 HEVC (h.264, VP8) dec 1080p60 HEVC (h.264, VP8) enc
	AUDIO	I²S interface
	NETWORKING	1x 10/100 Ethernet interface with PHY 1x RMII interface

HIGHLIGHTS

- Neural Processing Unit (NPU)
- 1 x Ethernet 10/100
- 3D GPU, H.264 hardware video Codec
- RGB parallel and MIPI DSI or LVDS displays

APPLICATIONS



	USB	• 1x USB HOST 2.0 • 1x USB HOST/DEVICE 2.0
	MASS STORAGE	Starting form 8GB eMMC drive soldered on-board
	PERIPHERAL INTERFACES	UART, I²C, SPI, CAN Bus, PWM, SDIO i/f, JTAG i/f, GPIOs
	POWER SUPPLY	+5V DC
	OPERATING SYSTEM	• Linux Yocto
	OPERATING TEMPERATURE*	Up to -40°/+85° (+125° Tj)
	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

