



STM32MP23 MPU lines

Cost-optimized 64-bit microprocessors with Neural Processing Unit



Boost ML edge computing capabilities with the cost-optimized STM32MP23 for secure IoT applications

Like the STM32MP25, the STM32MP23 lines are built around single or dual Arm® Cortex®-A35 cores running up to 1.5 GHz and a single Arm® Cortex®-M33 core running up to 400 MHz.

The STM32MP23 lines are optimized for cost and performance, providing the same processing level as the previous MP2 without high-speed connectivity.

The STM32MP23 MPUs meet the demands of industrial applications, offering extended temperature tolerance up to 125°C.

ADVANCED COMPUTE CAPABILITIES

Embedded neural network accelerator (0.6 TOPS) for advanced AI/ML for HMI/machine vision or predictive maintenance at the industrial and IoT edge

ENHANCED MULTIMEDIA CAPABILITIES

- Multimedia capabilities for advanced HMI with 3D GPU (up to 1080p, including Vulkan support)
- H.264 HW video decoder and flexible display interfaces with RGB, MIPI DSI and LVDS (for high-quality video & versatile display options)
- MIPI CSI-2 camera interface with

image signal processor for raw Bayer camera sensor (enabling high-quality image processing & computer vision applications)

STRONG SECURITY

- SESIP3 and PSA certified level 3 Target certifications
- TrustZone® on Cortex®-A and Cortex®-M
- Secure provisioning ecosystem
- Secure isolation for edge confidential computing thanks to resource isolation framework

