



STM32MP21 MPU lines

Optimize performance and power efficiency for industrial IoT applications



Cost-effective STM32MP21x offering efficient performance, low power consumption, strong security, and versatile connectivity

Built on the same architecture as STM32MP25 and STM32MP23, the STM32MP21 offers a single Arm Cortex-A35 core running up to 1.5 GHz and a Cortex-M33 core running up to 300 MHz.

The STM32MP21 lines are optimized for security and connectivity, tailored for edge devices and industrial applications, and offer extended junction temperature tolerance up to 125°C.

ENSURE ROBUST SECURITY AND RELIABLE CONNECTIVITY

- TrustZone® security on both cores, for secure boot and data protection
- SESIP Level 3 target for functional safety in critical industrial applications
- Dual Gigabit Ethernet ports with TSN for deterministic, low-latency communication in smart factory and IoT networks
- Multiple industrial interfaces (USB2, dual FDCAN) and MIPI CSI-2 camera interface

REDUCE TIME-TO-MARKET WITH STM32 ECOSYSTEM

- Simplify development and security with OpenSTLinux Distribution, Expansion packages and STM32Cube tools.
- Benefit from ST authorized partners for design and integration, reducing project risk
- Baremetal and RTOS flavors coming soon on Cortex-A, complementing existing Cortex-M options
- Choose from multiple RTOS options (FreeRTOS, Zephyr, Px5RTOS) for flexible software development

