

# Microchip PIC32MK

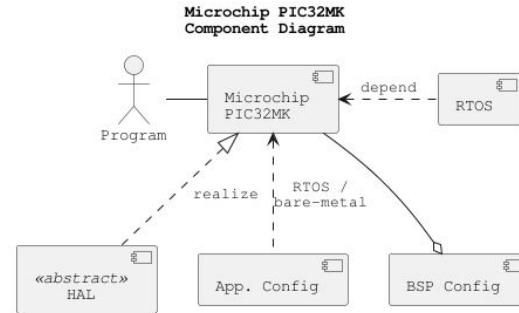
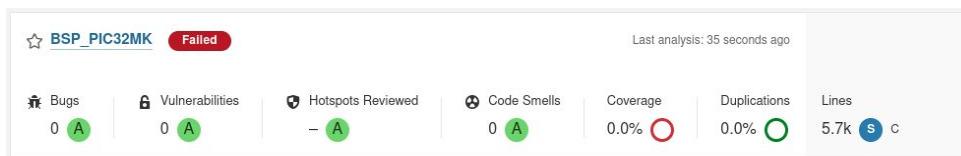
The PIC32MK is a performance-driven MCU equipped with a 120 MHz MIPS core, high-resolution PWM, multiple 12-bit ADCs, quadrature encoder inputs, and robust CAN/CAN-FD interfaces. Designed for motion control, automation, and high-speed regulation loops, it provides a stable, production-ready software layer for demanding real-time applications. Support package available: TQFP100

The BSP development is made with a Microchip PIC32MK MCM Curiosity development board. The BSP features a CMake and GCC build system and built based on **Hardware Abstraction Layer (HAL)**. It requires an application configuration file, which allows the user to specify the CPU clock frequency, enable or disable RTOS, and further define project-level I/O and settings.

The key features of this microcontroller include support for CAN-FD, QEI (Quadrature Encoder Interface), RTCC (Real Time Clock and Calendar), and numerous ADC and PWM channels for motor control application.

Some peripherals provide a resource lock interface for thread-safe operation, including CAN, DAC, I2C, NVM, PWM, SPI, and UART.

Version: 0.9.2



## Available Peripherals

- ADC x42
- CAN-FD x4
- DAC x3
- GPIO x78
- I2C x4
- NVM
- PWM x12
- QEI x6
- RTCC x1
- SPI x6
- TIMER x9
- UART x6
- WATCHDOG

