# NXP LPC54114

The LPC54114 is an ultra-low-power Cortex-M4 and Cortex M0+ dual-core design, flexible USART/SPI/I2C, multi-rate SCTimer/PWM, and powerful DMA engine. Built for IoT, wearables, and portable devices, it offers efficient concurrency, strong energy management, and a clean, maintainable driver ecosystem. Support package available: LQFP64

The BSP development is made with a NXP LPCXpresso54114 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.

This microcontroller offers a range of key features, including support for RTCC (Real Time Clock and Calendar) and numerous communication channels for I2C, UART, and SPI (8 channels each).

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

Version: 0.8.3

NXP LPC54114 Component Diagram
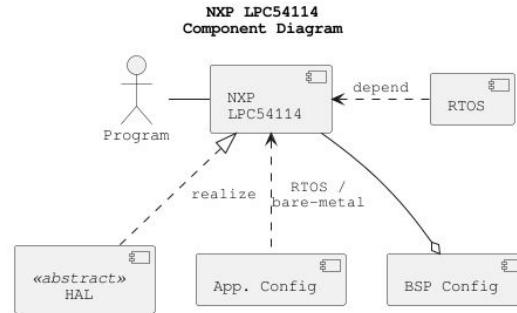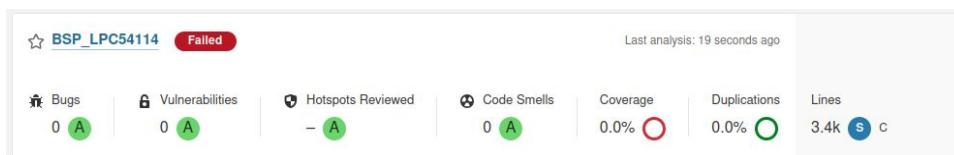
Available Peripherals

- ❏ ADC x12
- ❏ GPIO x48
- ❏ I2C x8
- ❏ PWM x8
- ❏ RTCC x1
- ❏ SPI x8
- ❏ TIMER x5
- ❏ UART x8
- ❏ WATCHDOG

☆ BSP_LPC54114 **Failed**			Last analysis: 19 seconds ago

Bugs	Vulnerabilities	Hotspots Reviewed	Code Smells	Coverage	Duplications	Lines
0 **A**	0 **A**	— **A**	0 **A**	0.0% ⭕	0.0% ⭕	3.4k **S** c