

Programming FreeRTOS real-time operating system on STM32 KIT

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Abstract: This topic focuses on developing and optimizing the FreeRTOS real-time operating system on the STM32 KIT platform. The context of the topic aims to meet the demand for fast computation and high accuracy in modern industrial applications. The objective is to build an efficient process management system to improve the parallel execution capability of multiple tasks. The research methodology includes theoretical analysis of FreeRTOS and practical application implementation on the STM32 KIT. The expected result is to provide a suitable solution for real-time systems requiring high reliability and optimal performance.

Keywords: FreeRTOS, STM32 Kit, Real-Time Operating System, Process Management, Industrial Applications