

Building and designing a traffic light system model on the Intel Galileo 2.0 kit platform.

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Abstract: This topic aims to research and build an automatic traffic light system based on the Intel Galileo 2.0 Kit with the goal of improving urban traffic management efficiency. The implementation process includes model design, programming, and practical testing of functions such as vehicle-flow-based light control, collision detection, and traffic status reporting. The project combines theoretical research on IoT technology with application deployment to create a more efficient traffic management system, thereby contributing to reducing congestion and improving traffic safety.

Keywords: Traffic light system, Intel Galileo 2.0 Kit, IoT (Internet of Things), Traffic management, Automation