Embedded Voting Machine (EVM) Project

Overview

This project developed an embedded voting machine (EVM) using an NXP LPC2148 microcontroller. The system facilitated voting for four candidates, displayed results on an LCD, and transmitted winning candidate information via UART.

Key Features

- **User Interface:** An LCD displayed candidate names and vote counts. Users cast votes via dedicated push buttons.
- **Vote Tallying:** The system accurately counted votes for each candidate.
- **Winner Determination:** The candidate with the highest vote count was identified and transmitted.
- **UART Communication:** Voting results (winner and total votes) were sent to a connected terminal.
- **Hardware Integration:** The project involved interfacing with an LCD, push buttons, and UART.
- **Simulation:** The system was simulated using Proteus software to verify functionality.

Components

- NXP LPC2148 microcontroller
- 16x2 character LCD
- Push buttons
- LED (for potential visual feedback)
- UART converter

Project Outcomes

The EVM successfully demonstrated the capabilities of the LPC2148 in a real-world application. Key functionalities included vote counting, result display, and data transmission.

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