Application Note - Quoridor Game on LandTiger LPC1768 with LCD and CAN Bus

Extrapoint 2

1 Introduction

The Quoridor game emulation on the LPC1768 offers an engaging experience with single-player and multiplayer modes. This note outlines key implementation details for users seeking to deploy and customize the game.

2 Implementation Steps

LCD Display Integration

- Utilize the provided library for LCD interfacing.

- Incorporate relevant functions for displaying game elements.

CAN Bus Configuration

- Connect the CAN bus to the desired controller (CAN 1 or CAN 2).

- Set the CAN_CONTROLLER_FOR_GAME variable to 1 or 2 based on the chosen CAN bus controller.

Single Player vs. NPC

- Leverage the NPC functionality within the library for an enhanced single-player experience.

Multiplayer Mode

- Configure CAN communication to establish a link between two LPC1768 boards.

- Ensure fair gameplay by assigning player movements based on the CAN controller number.

3   Results and Recommendations

- Successful implementation yields an interactive Quoridor game with a customizable LCD display and seamless multiplayer experience.

- Refer to the library documentation for additional features and advanced usage.

4   References

- Library documentation provided by the instructor.

- Relevant LPC1768 datasheets for detailed specifications.

  This Application Note serves as a practical guide for users interested in deploying the Quoridor game on the LPC1768, emphasizing LCD integration and CAN bus communication. For further details and troubleshooting, refer to the referenced documentation.