

Lab Exercise #5

Objectives

- Create a queue based serial data transmit routine for UART2

References

- [1] NXP Kinetis KL25 processor sub-family data sheet (pdf) on class web page.
- [2] NXP Kinetis KL25 processor sub-family reference manual (pdf) on class web page.

Lab 5 Problem Statement

Design, implement, and verify software to send ASCII characters using UART2. There will be a queue into which characters are written. Functions to put characters into and take characters out of the queue will be used. There will be an interrupt handler that knows when a character has been sent, will check to see if there are more characters in the queue, and keep sending until the queue is empty.

See pages 216 to 220 in the textbook.

To Turn In

- In the “comment header” of your main.c file report success, failure, or other observations
- Submit your main.c file to a D2L drop box
- Zip up your complete lab 5 uVision project and submit to the D2L drop box