

Lab 7 – Analog to Digital Converter

CSE 479 – Advanced Embedded Systems

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11/10/2025

Program Overview:

Description:

The Tiva C-Series's Analog to Digital Converter (ADC) is used by this program to periodically sample a potentiometer on the Alice EduBase Board. The processor triggers the ADC to begin sampling the potentiometer and the resulting converted data is placed in a FIFO (circular buffer) register. The program continuously loops through this pattern: trigger the sampling, wait for completion, retrieve the data, and reset the ADC's status for the next sampling cycle. The initialization and polling routines, *adc_init* and *poll_adc*, respectively, are shown below.



