PWM Drawer

Graduation Project

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Objectives

Show the importance of PWM drawer.

Present scope of work.

What is PWM?

- Pulse-width modulation (PWM) is a modulation process or technique used in most communication systems for encoding the amplitude of a signal right into a pulse width or duration of another signal, usually a carrier signal, for transmission.
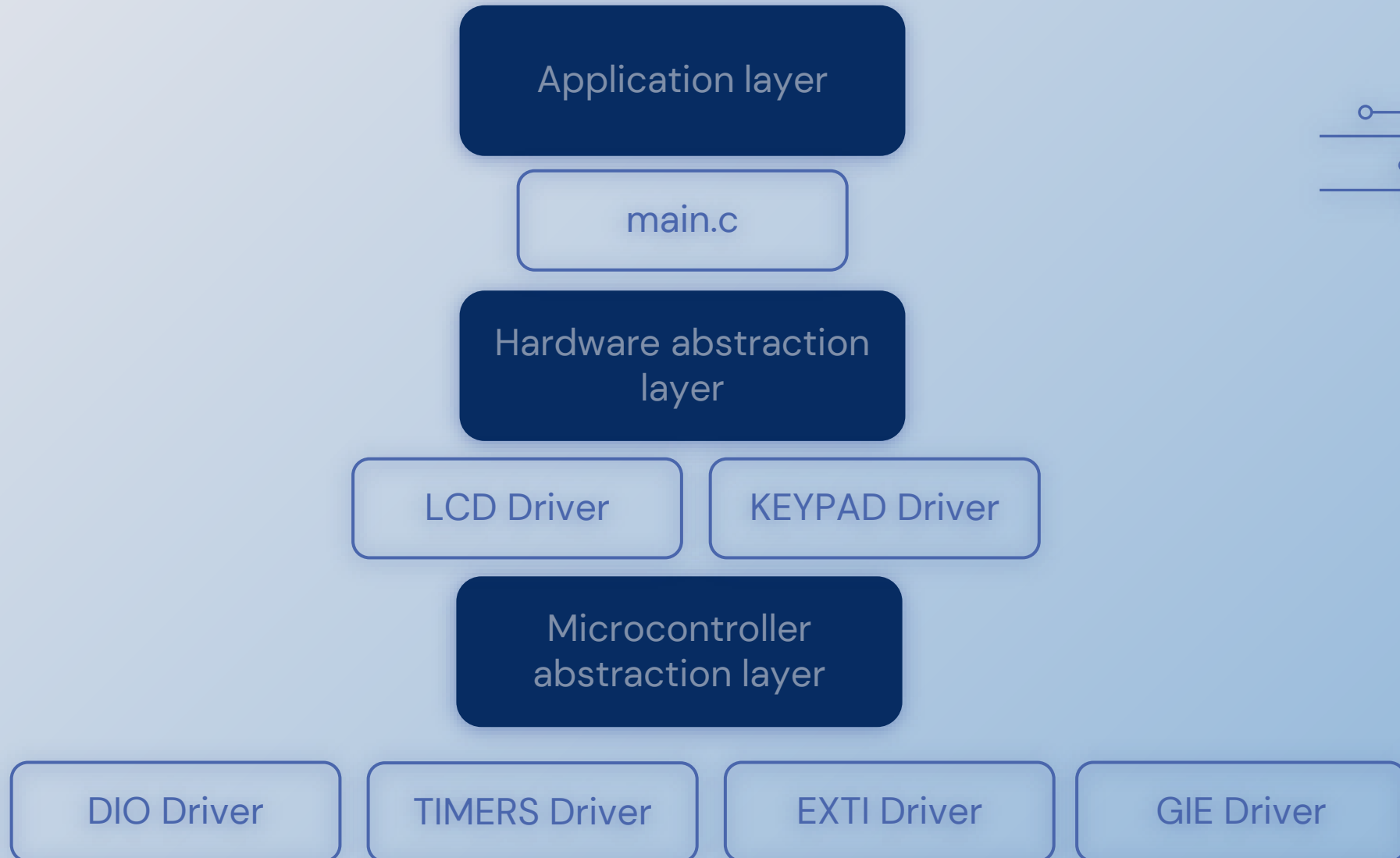
What is ICU?

- Input capture is a method of dealing with input Pulse-Width-Modulation signals in an embedded system.

- Embedded systems using input capture will record a timestamp in memory when an input signal is received. It will also set a flag indicating that an input has been captured. This allows the system to continue executing without interruption while an input is being received while still having the capability to trigger events based on the exact time when the input was received.

- Input capture is a method to measure the most important main parameters of any Pulse-Width Modulation that are:
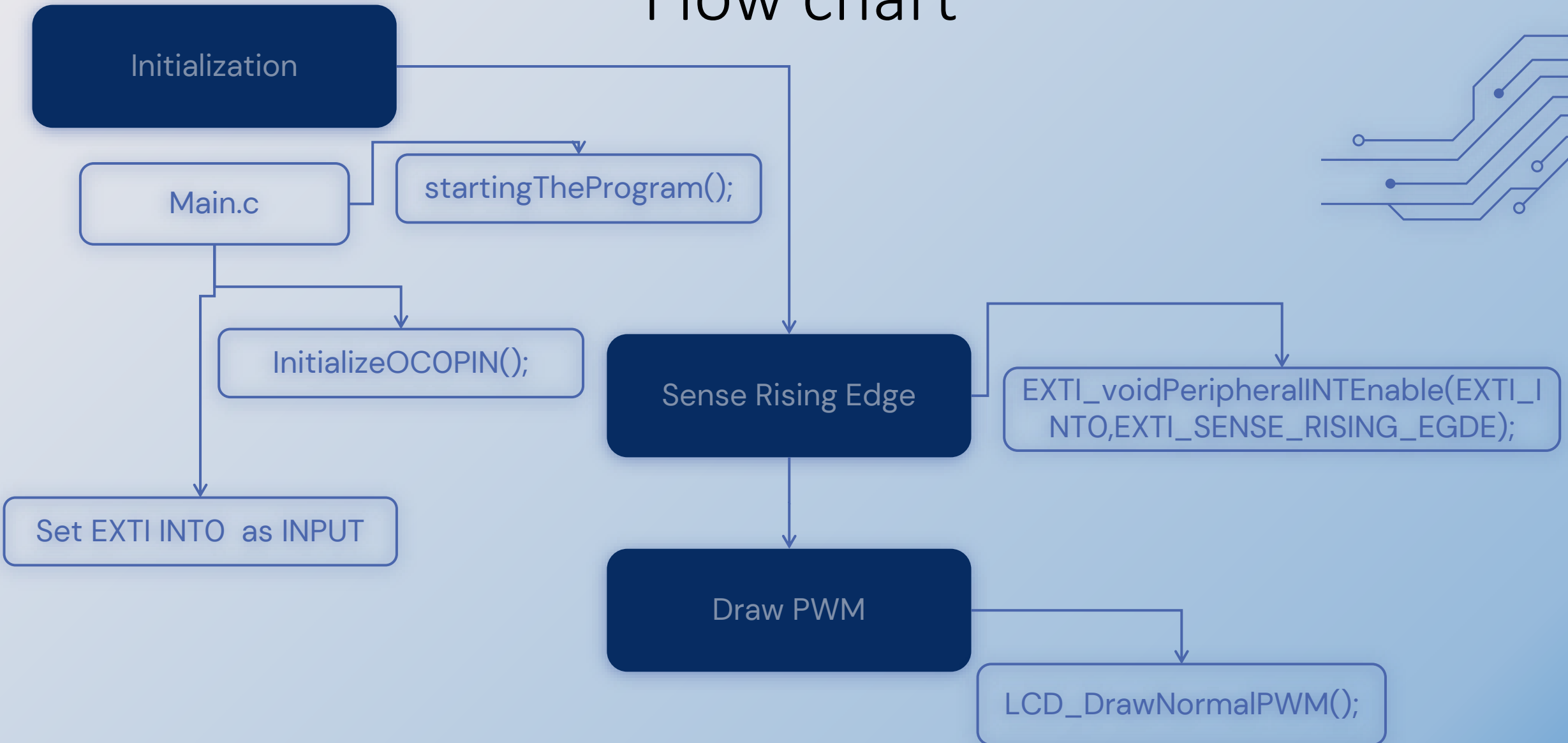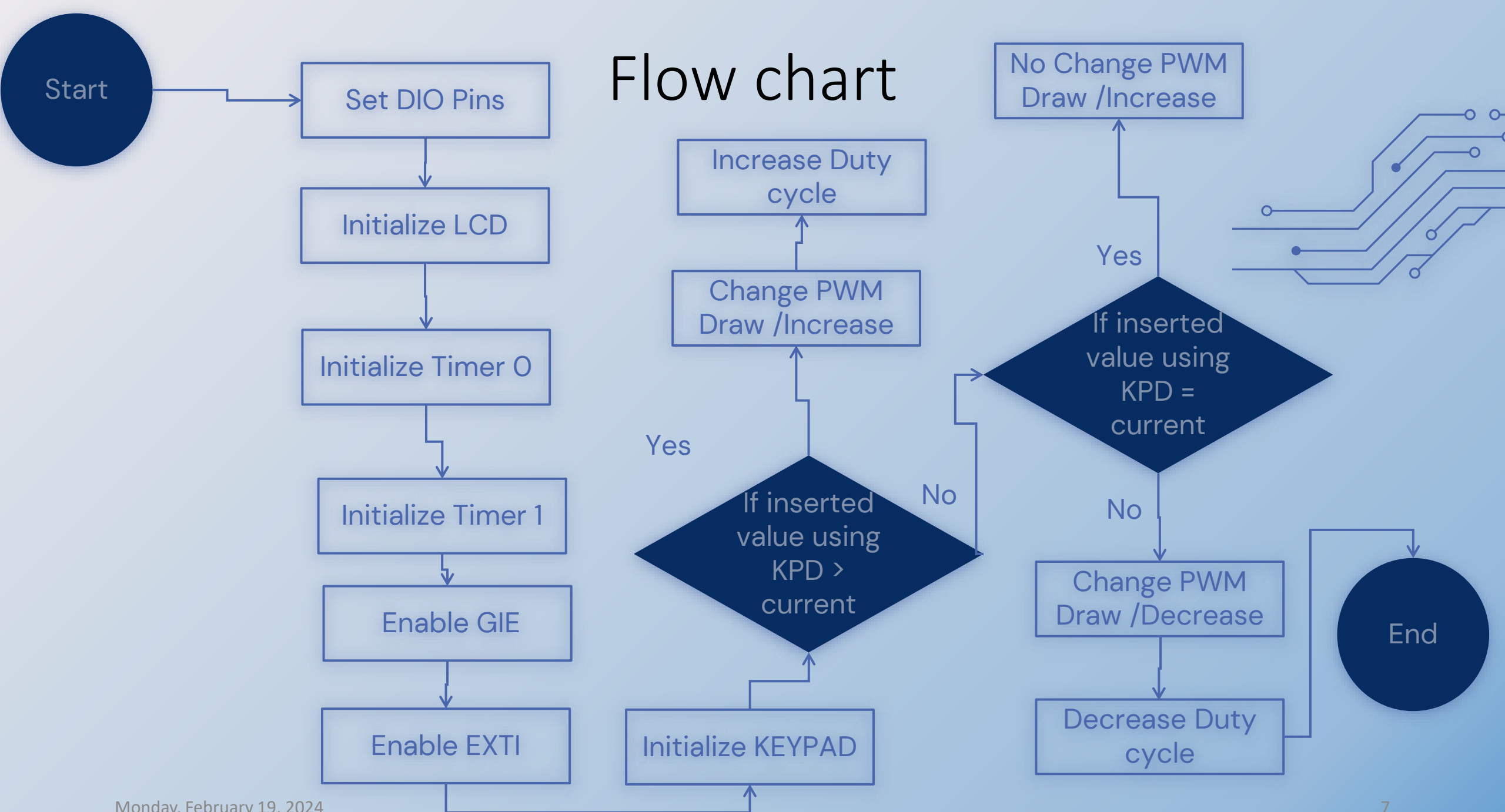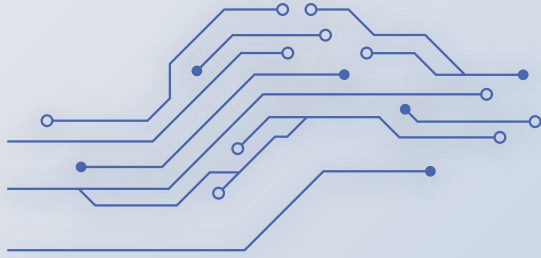
Duty Cycle.

Frequency.

Embedded system layered architecture

Flow chart

Initialization

Main.c

startingTheProgram();

InitializeOCOPIN();

Sense Rising Edge

EXTI_voidPeripheralINTEnable(EXTI_INTO,EXTI_SENSE_RISING_EGDE);

Set EXTI INTO as INPUT

Draw PWM

LCD_DrawNormalPWM();

Flow chart

Thank you