



Sandip Foundation's
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Event Title: Expert lecture on Microcontroller

Event Scheduled: 25th -26th Nov, 2024.

Resource Person: Prof. Pankaj Nawale, Matoshree College of Engineering, Nashik.

Duration: 5hrs.

Event Venue: Online Platform

Participants: TE students of E&TC Department

Name of Faculty coordinator: Prof. Amit Kr. Mishra, faculty of E&TC department

Objectives:

The objective of a lecture on **Peripheral Support in PIC18FXXXX Microcontrollers** would typically be to provide an in-depth understanding of the built-in peripheral modules in the PIC18FXXXX series of microcontrollers. The focus would be on explaining how to configure and utilize these peripherals effectively to enhance system functionality. Key goals could include:

Introduction to PIC18FXXXX Peripheral Features

- Overview of the architecture and available peripherals.
- Highlighting key advantages of PIC18 microcontrollers, such as low power consumption, high performance, and integration capabilities.

Understanding Specific Peripherals

Detailed explanation of various peripherals such as:

- **I/O Ports:** Configuring and using general-purpose I/O pins.
- **Timers/Counters:** Configuring for time delays, event counting, or PWM generation.
- **Analog-to-Digital Converters (ADC):** Capturing and processing analog inputs.
- **USART/EUSART:** Communication via serial protocols.
- **SPI/I2C Modules:** Implementing high-speed and low-speed serial communications.
- **PWM Modules:** Generating pulse-width modulated signals.
- **Capture/Compare/PWM (CCP/ECCP):** Managing complex control systems.

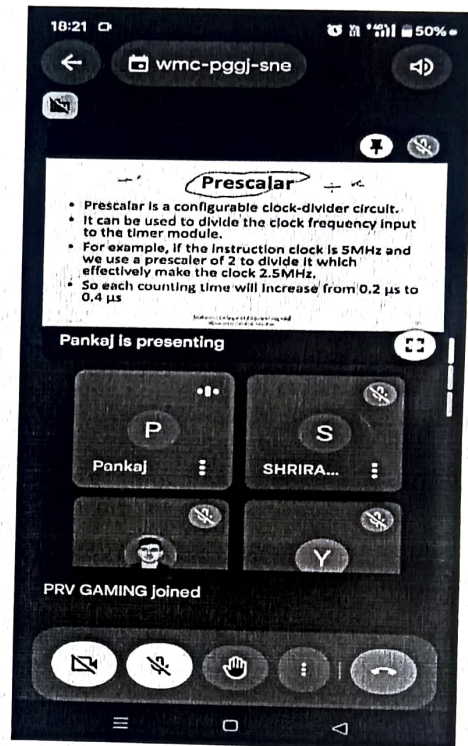


Practical Implementation

- Demonstrating peripheral setup through code examples (using MPLAB IDE, XC8 compiler, or similar tools).
- Explaining configuration steps in detail, such as setting up registers and initialization routines.

Photos

Photos of the Event




Event Coordinator




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