



# REAL-TIME AUTOMOTIVE DASHBOARD SYSTEM USING CAN PROTOCOL

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BENGALURU

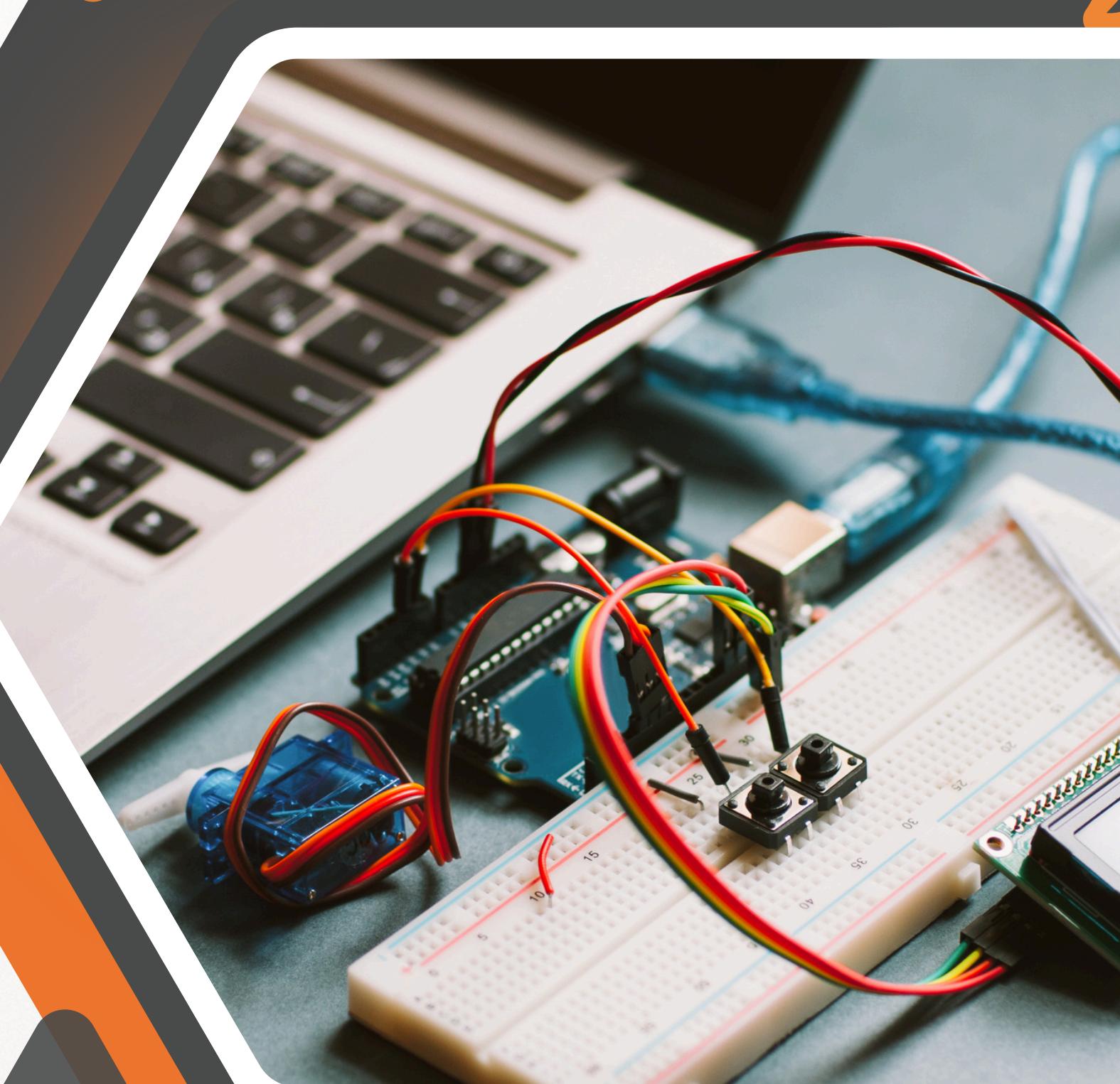
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**Date:** 6 September, 2025

**Team Member's**

Manendra Yadav

Gulshan Kumar Rana





# AGENDA

- ...  
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- ▶ Introduction **01**
- ▶ Project Overview **02**
- ▶ Working **03**
- ▶ Features Of CAN **04**
- ▶ Implementation Plan **05**
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Purpose of CAN

# INTRODUCTION

01

To Understand the Real World Parameters such as Speed, Temperature, Fuel Level.

02

Developed By - Robert Bosch.

03

Multi-master, message broadcast system that specifies a maximum signaling rate of 1 megabit per second (bps).

04

Ideally suited to the many high-level industrial protocols embracing CAN and **ISO-11898:2003** as their physical layer



# PROJECT OVERVIEW

## Hardware

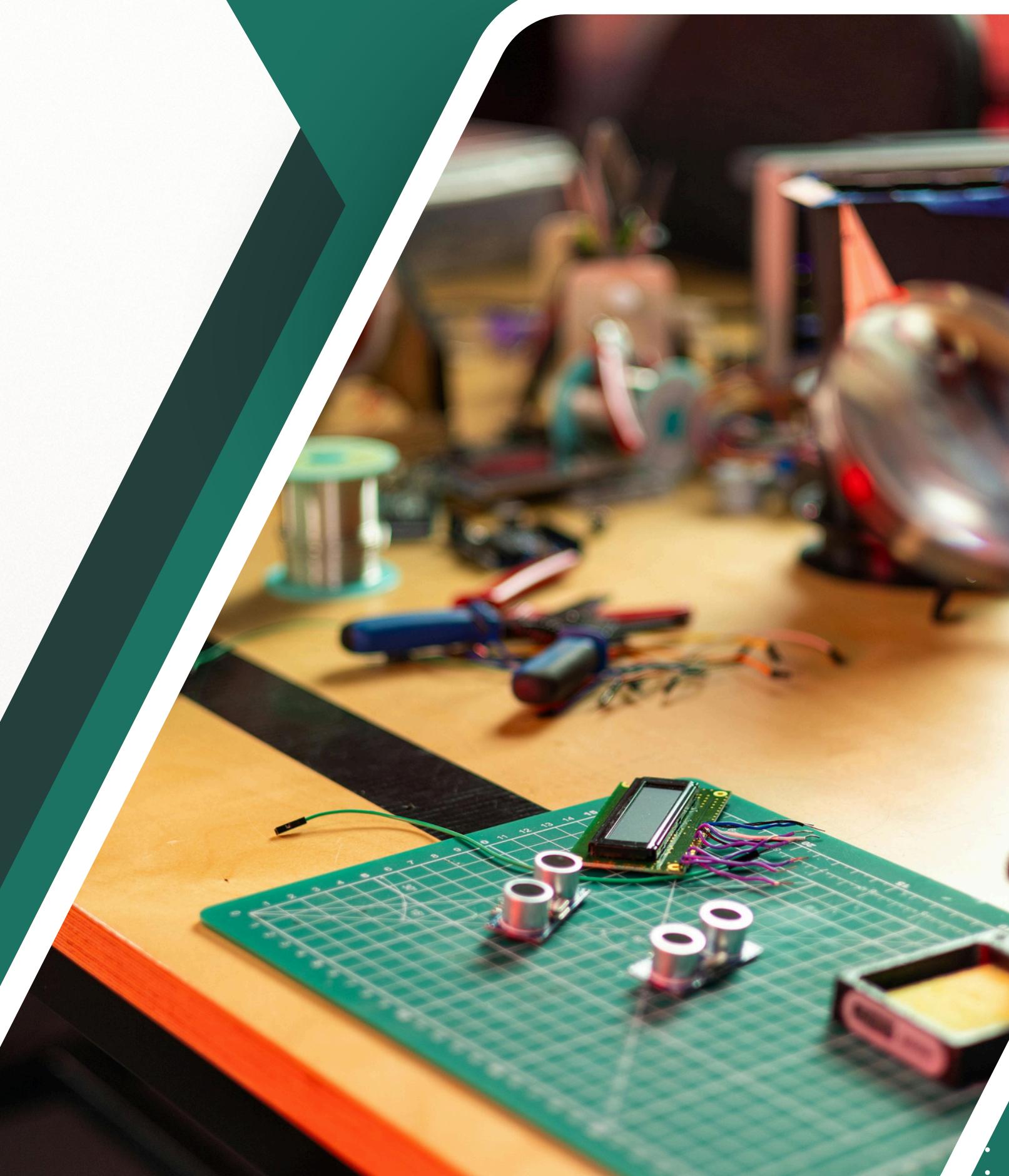
We are using Two **LPC2129** open ECU's.

**Node A** : 3 Indicator Switch, Potentiometer, Temperature Sensor.

**Node B** : LCD (DashBoard).

## Objective

To get a understanding of CAN Frames, Debugging,  
Hardware and Software Limitations.



# CAN STANDARD

## ► Industry Overview

originally developed for the automotive industry to replace the complex wiring harness with a two-wire bus.

## ► Target Market

building automation, medical, and manufacturing.

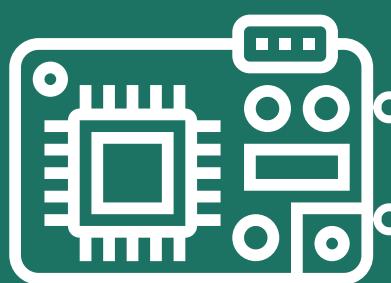
## ► CAN ISO-11898: 2003,

defines the lowest two layers of the seven layer OSI/ISO model as the

- Data-link layer
- Physical layer



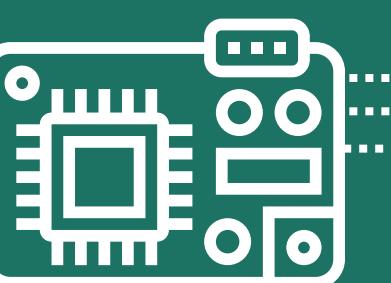
# PROJECT WORKFLOW



**Node A**

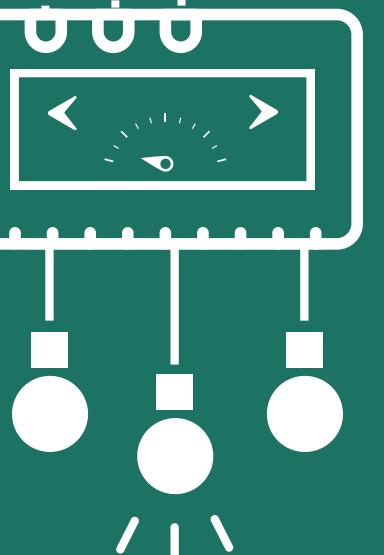
- Temperature Sensor
- Potentiometer
- Switches

**Can Data Frame**

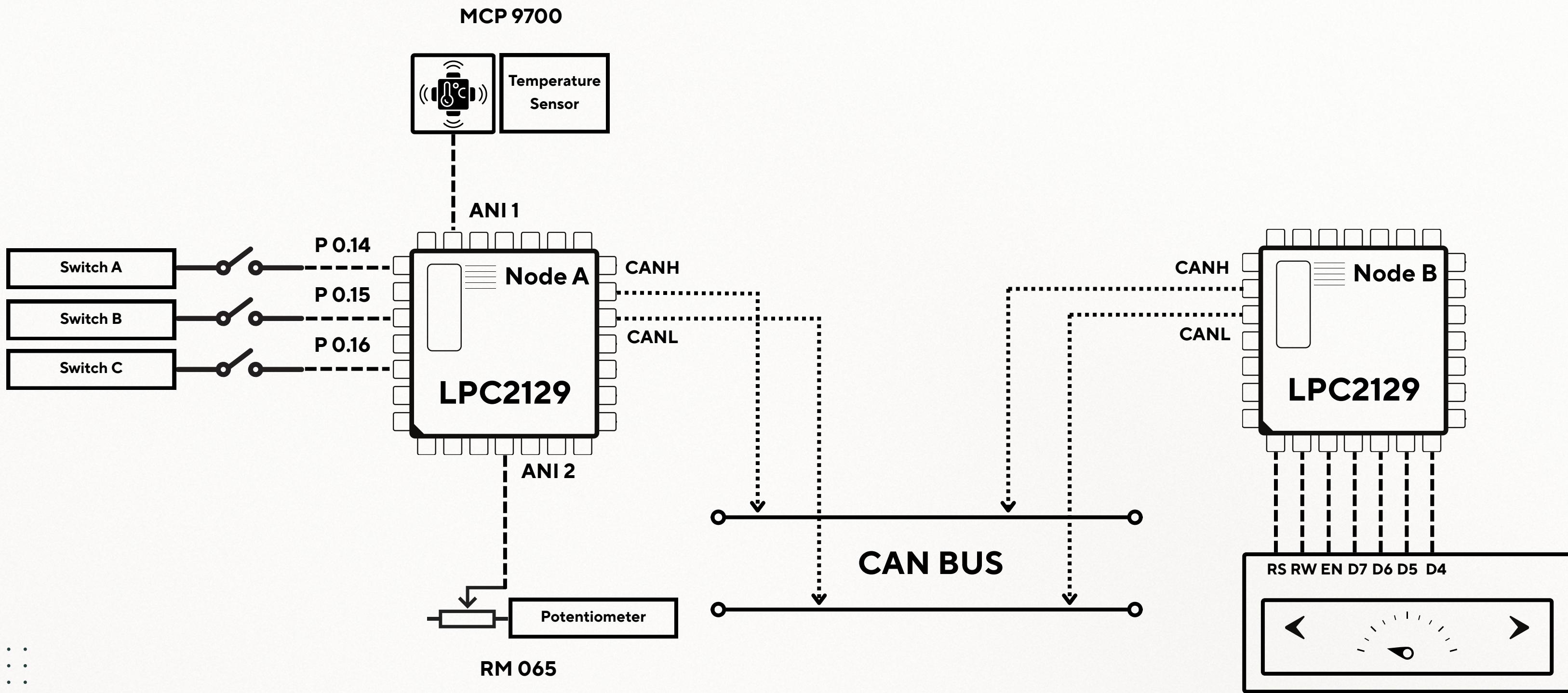


**Node B**

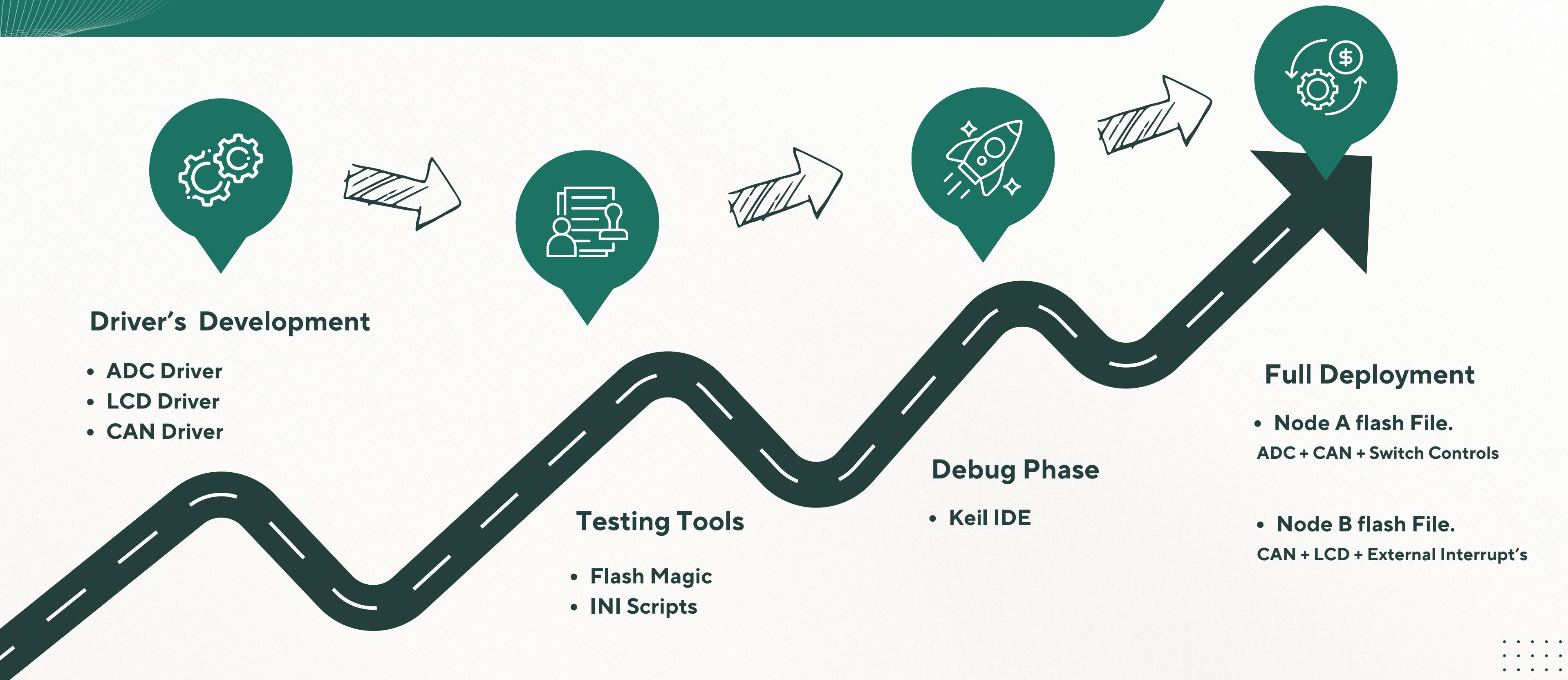
- 16x2 LCD
  - Left/Right Indicator
  - Speed



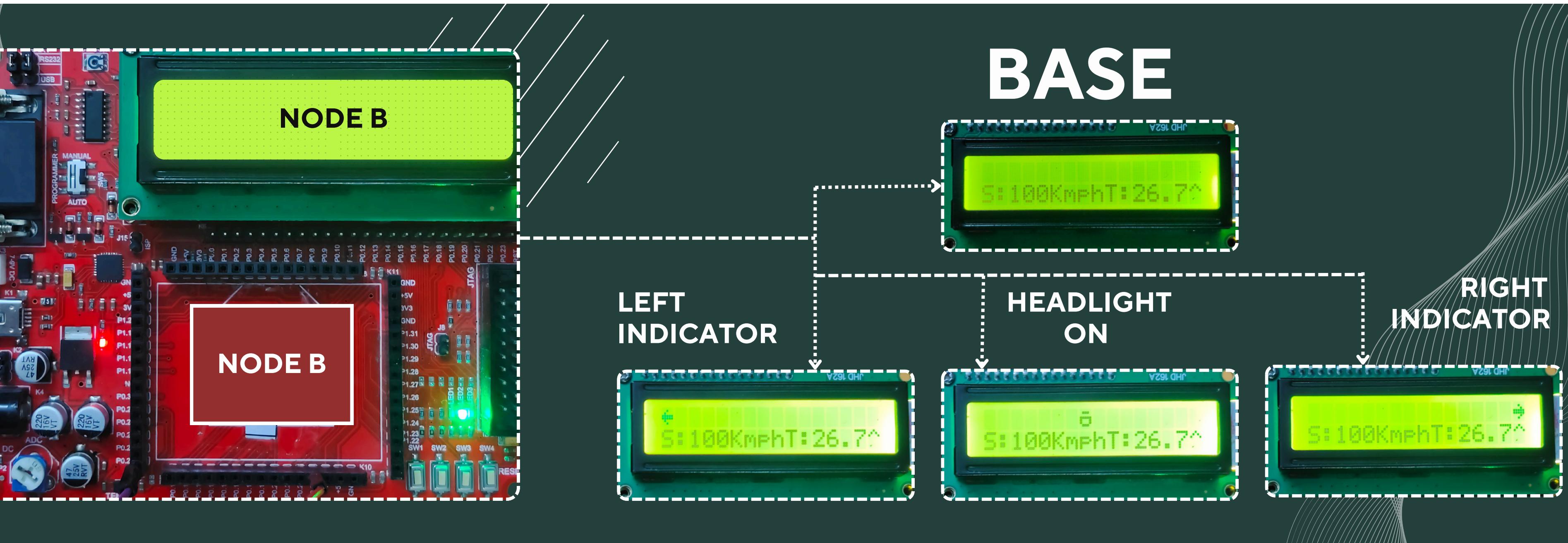
# IMPLEMENTATION PLAN



# IMPLEMENTATION PLAN



# RESULT



# TEAM MEMBERS

Name	Batch ID
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## Our Trainers

Name
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