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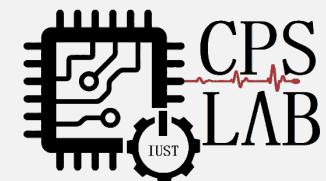
# Computer Architecture Laboratory

## LED Light Control With Serial - PWM

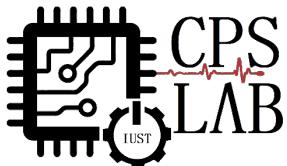
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9<sup>th</sup> session



Cyber-Physical Systems Laboratory



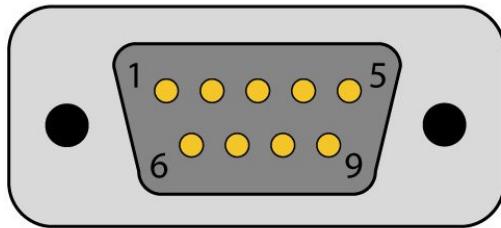
# Overview

- RS-232 Physical Layer
- Circuit Schematic
- How to Control With PWM
- Experiment

# RS-232

## Physical Layer

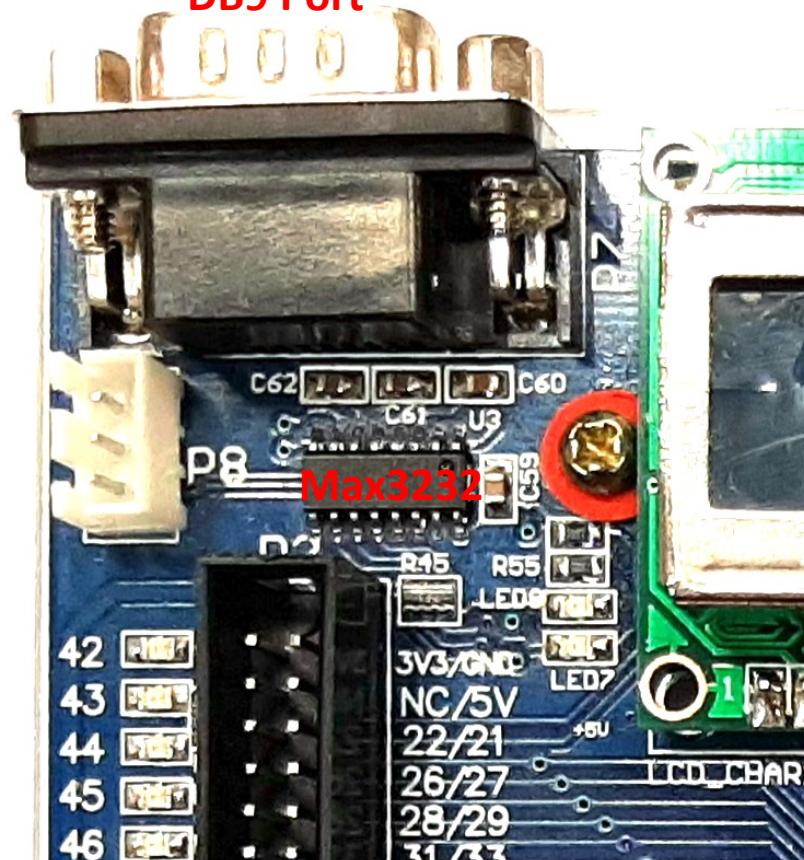
**DB9M Connector**



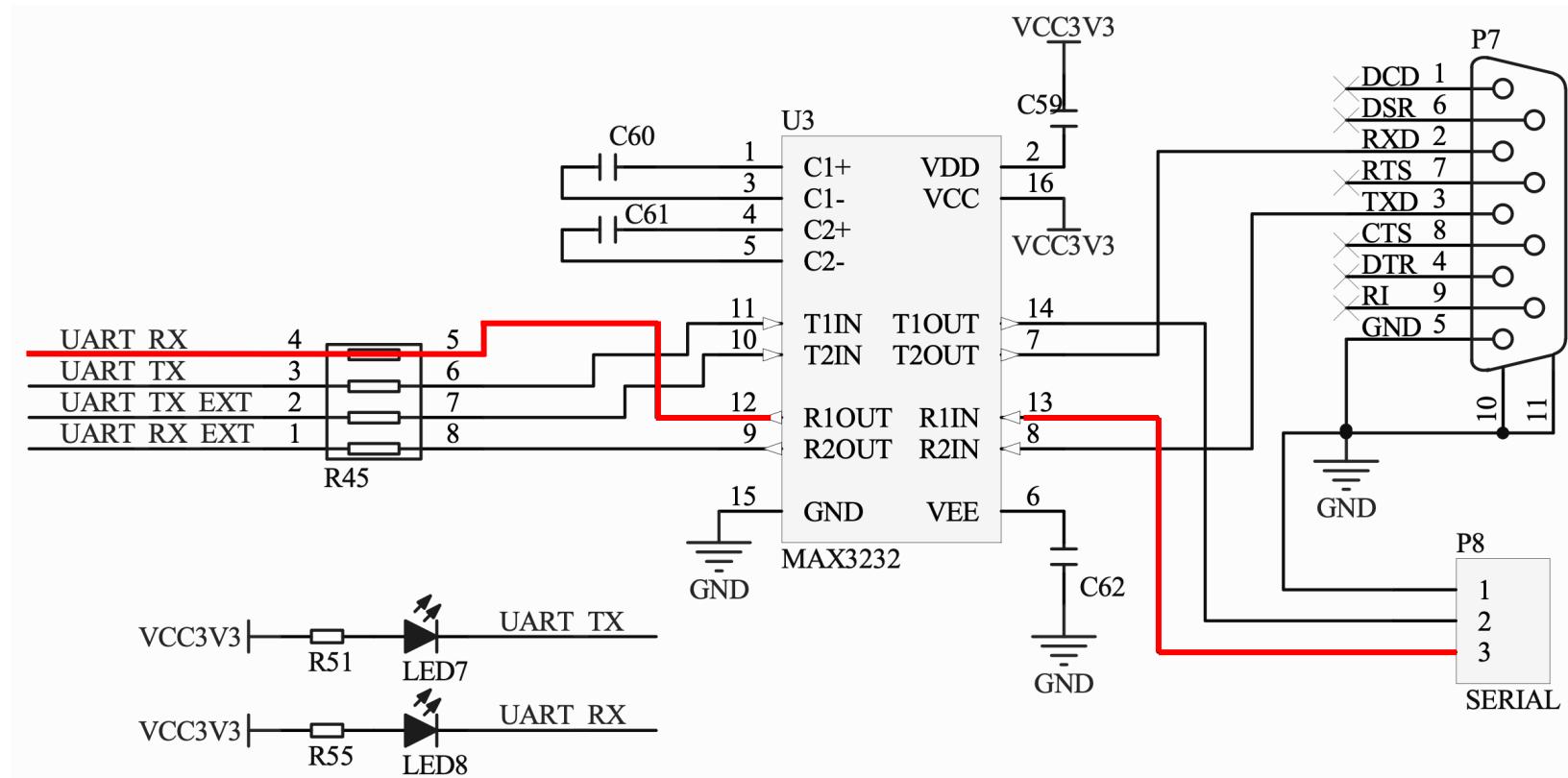
**RS232 Pin Out**

Pin #	Signal
1	DCD
2	RX
3	TX
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

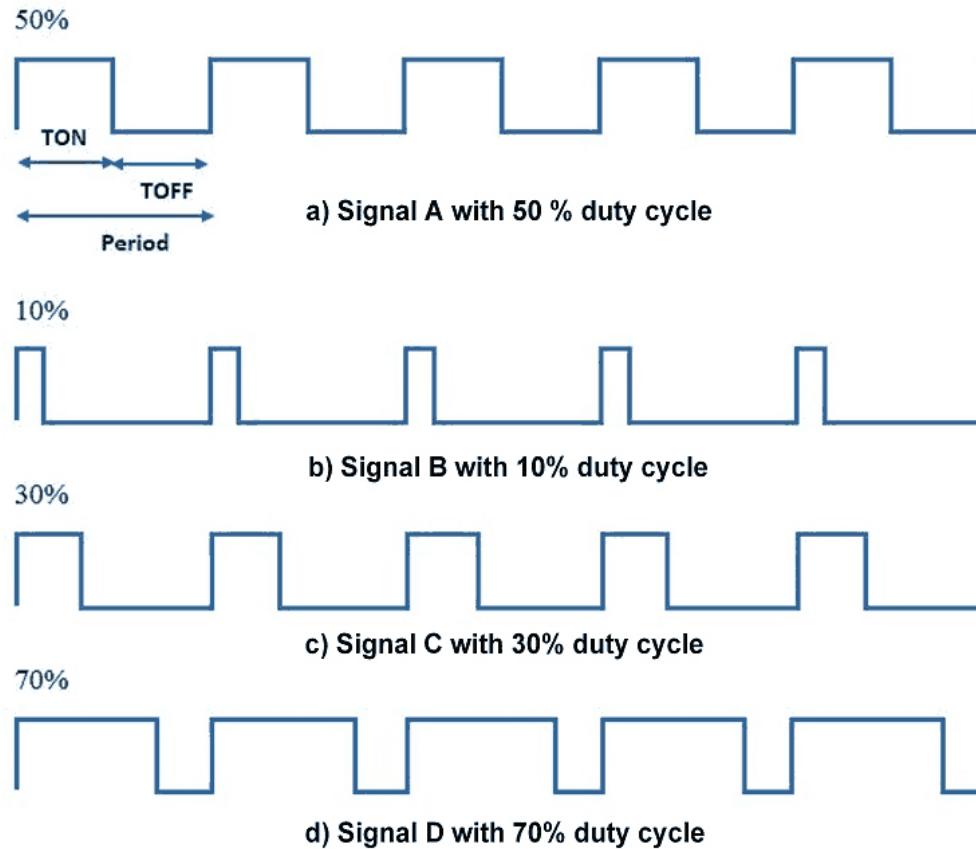
**DB9 Port**



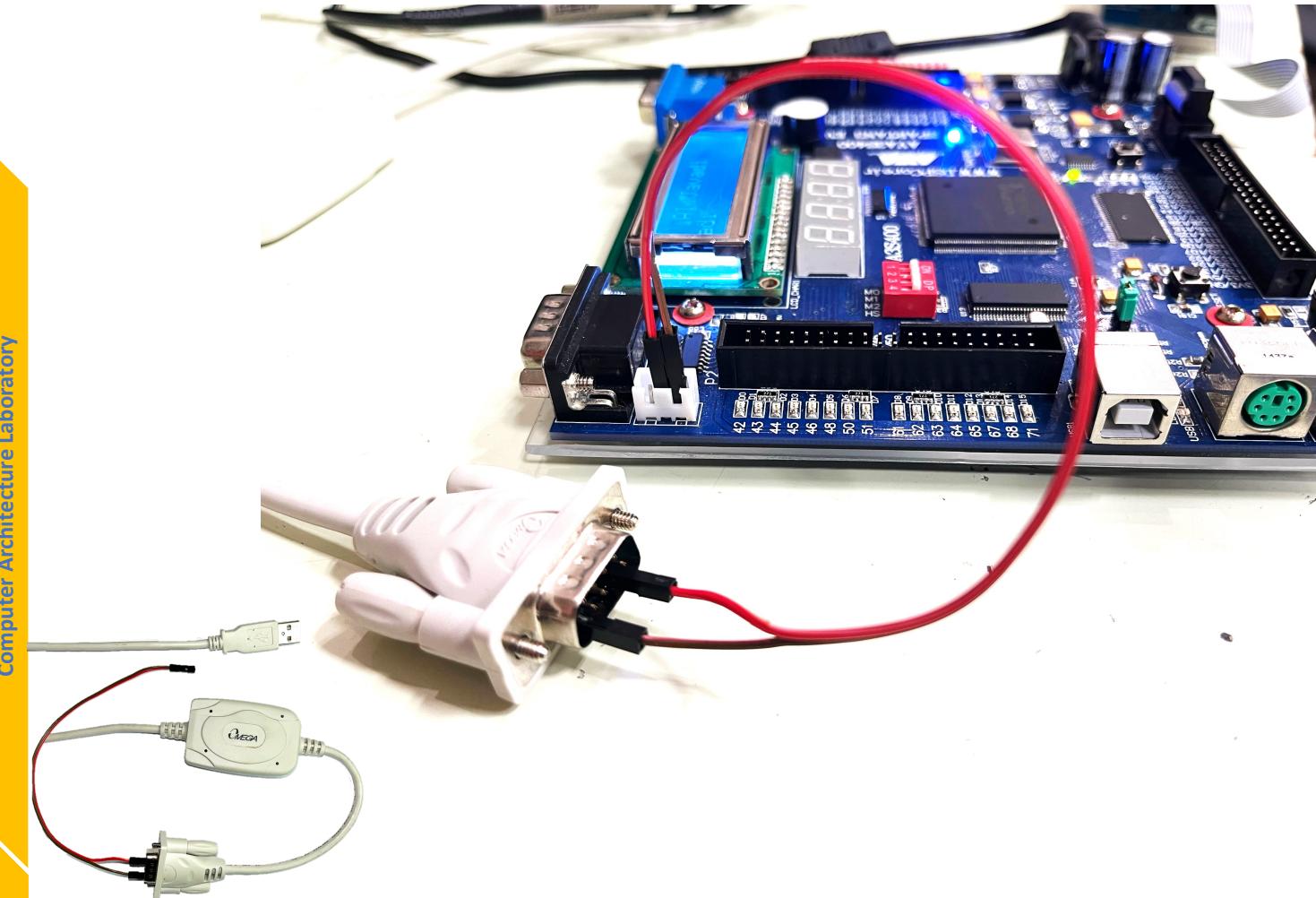
# Schematic



# What is a Pulse Width Modulation (PWM)



# Experiment





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# THANK YOU

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