

## 4

## Digital Systems Project #4: PWM IP Block

Submission form revision September 5, 2025

RealDigital  
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I am submitting my own work, and I accept that penalties will be assessed against me if I submit work that isn't mine.

## Point Scale

4: Exemplary  
 3: Complete  
 2: Incomplete  
 1: Minor effort  
 0: Not submitted

Print Name

Sign Name

Date

Asst. Signature

## Circle one column below and modify earned scores accordingly

Weeks Early / Late	-3	-2	-1	0	1	2	3	4	5+
Requirements Points	+18	+12	+6	0	-7	-15	-21	-25	-28
Challenges Points	+6	+4	+2	0	-4	-8	-12	-12	-12

## Requirements

Wt

Pt

Score

Possible

Earned

1. Design a hardware PWM block in Verilog

6

2. Make the PWM IP an AXI peripheral to control RGB LEDs

7

3. Make it a full-featured PWM block

6

76

Modify earned scores by submission  
 week according to table above.

## Challenges

Possible

Earned

1. Create a hardware PWM block to control servo motors

7

2. Generate simple waveforms using a PWM module

7

56