

Kit No.   Date:   /   /

USE TEMPLATE  
01234  
56789  
MISFILL -1 PT



# LABORATORY 7

Please print this sheet prior to coming to laboratory. Complete the pre-laboratory tasks in your lab notebook. Complete the lab tasks in **both** your lab notebook and this submission sheet.

## 1 Pre-laboratory Verification

|                                 |                                 |                                 |
|---------------------------------|---------------------------------|---------------------------------|
| <div>4E .. 44</div> <div></div> | <div>4E .. 45</div> <div></div> | <div>4E .. 46</div> <div></div> |
| <div>4E .. 47</div> <div></div> | <div>4E .. 48</div> <div></div> |                                 |

## 2 Laboratory Verification

|                                 |                                 |
|---------------------------------|---------------------------------|
| <div>4E .. 49</div> <div></div> | <div>4E .. 50</div> <div></div> |
|---------------------------------|---------------------------------|

### 3 Deliverables

1. Attach **servo.vhd** VHDL code.
2. Attach oscilloscope captures of the PWM signal in 0° and 180° positions, printed on a single page.
3. Copy the results table below (you may omit **0** values):

| Position | SW9..0       | Timing (calculated) | Timing (experimental) |
|----------|--------------|---------------------|-----------------------|
| 0°       | 00 0000 0000 | 0.75 ms / 20 ms     |                       |
| 45°      |              |                     |                       |
| 90°      |              |                     |                       |
| 135°     |              |                     |                       |
| 180°     | 00 1011 0100 | 2.5 ms / 20 ms      |                       |