

Exercício 6

Input frequency = 24 MHz (para poder usar a porta USB 48 MHz pra visualizar os sinais)

System clock (APB2) = 54 Mhz

$$\text{Prescaler (PSC)} = 24 - 1$$

Timer1 clock = 54 MHz / 24 = 2.25 MHz

$$\text{ARR} = 2.25 \text{ MHz} / 120 (2 \times 60 \text{ Hz}) = 18750 - 1$$

Channel 1 pulse (CCR1) = $3 / 6 * ARR = 9375$; Polarity = Low

Channel 2 pulse (CCR2) = $1 / 6 * \text{ARR} = 3125$: Polarity = High

Channel 3 pulse (CCR3) = 5 / 6 * ARR = 15625; Polarity = High
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			$2 \cdot \text{ARR} = T = 2 \cdot 8.333 \text{ ms} = 16.666 \text{ ms} \rightarrow f = 1/T = 60 \text{ Hz}$			
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Canal 1

ARR

ARR

ARR

Low					

Canal 2

ARR

ARR

ARR

High					
		Atraso = 04/6 * A			

RR					

Canal 3

ARR

ARR

ARR

High					

	Atraso = $4/6 * ARR$				