

PARA UMA FREQUÊNCIA DE 10Hz

$$f_{OUT_PRESC} = f_{PBCLK} = 20 \text{ MHz}$$

$$PRx = \left(\frac{20 \times 10^6}{10} \right) - 1$$

$$f_{OUT} = \frac{f_{OUT_PRESC}}{PRx + 1}$$

$$f_{OUT} = \frac{(f_{PBCLK} / K_{PRESCALER})}{(PR2 + 1)}$$

$$K_{PRESCALER} = \left\lceil \frac{f_{PBCLK}}{((65535 + 1) \times f_{OUT})} \right\rceil$$

$$K_{prescaler} = \frac{20 \cdot 10^6}{65536 \cdot \left(\frac{20 \cdot 10^6}{10} - 1 \right) + 1}$$

$$K_{prescaler} = \frac{20 \cdot 10^6}{65536}$$

$$= [30.51] = 31$$