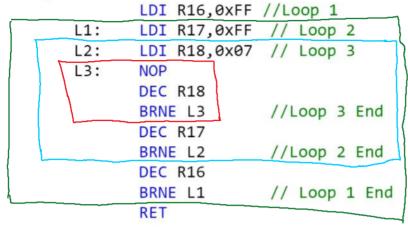
### T state calculation

Monday, January 13, 2025 10:25 AM

#### Delay:



T- States from datasheet LDI Rd, K -> IT NOP-> IT DEC RA -> IT BRNE Bloanch Taken -> 2T Branch NOT Taken -> IT RET -> 4T

#### Fob Loop 3:

Before & Fob R18 -> 6x07 to 0x02, that means 6 times BRNE -> 2T DEC Fob R18 -> 0x01, BRNE -> 1T

L3: NOP 
$$\longrightarrow$$
 1T  $\longrightarrow$  (1+1+2)  $\times$  6 Total  $\longrightarrow$  DEC RIS  $\longrightarrow$  1T  $\longrightarrow$  (1+1+1)  $\longrightarrow$  RRNE L3  $\longrightarrow$  2T  $\longrightarrow$  (1+1+1)

# Fob Loop 2 -

## Fob Loop 1:-

LI: LDI RIT, 0XFF 
$$\rightarrow$$
 IT

$$\begin{array}{c}
(1+7904+1+2) \times 254 \\
= 2008632 \text{ T}
\end{array}$$

$$\begin{array}{c}
DEC RI6 \longrightarrow 17 \\
BRNE LI \longrightarrow 27
\end{array}$$

$$\begin{array}{c}
(1+7904+1+1) \\
= 7907 \text{ T}
\end{array}$$

$$\begin{array}{c}
(1+7904+1+1) \\
= 7907 \text{ T}
\end{array}$$

$$\begin{array}{c}
(1+7904+1+1) \\
= 7907 \text{ T}
\end{array}$$

### T state calculation

Monday, January 13, 2025 11:09 AM

Thehefohe,

Delay: LDI RIG, OXFF -> IT

LDOP LI -> 2016539T

RET -> 4T

: Total Delay T state = (1+2016539+4) = 2016544T

If clock of the michocontroller = IMHZ
: IT State = I USEC

- Delay bot takes = 2016544×1111Sec = 2.016544 Sec