

MTM
717108

Tunes 408 MHz

symbol n = b1 'define the counter symbol

main: pause 500 'stabilize power supply 1/2 sec
low 1 'initialize
low 2 'initialize
low 4 'initialize
pause 500 'stabilize 1/2 sec
high 1 'raise tuner program enable
pause 10 'enable stabilize

loop1: for n = 1 to 27 'program tuner with 27 bits
high 2 'raise clock
pause 10
'choose the high bits
if n = 6 then datah
if n = 7 then datah
if n = 8 then datah
if n = 12 then datah
if n = 14 then datah
if n = 15 then datah
if n = 16 then datah
if n = 20 then datah
if n = 24 then datah
if n = 26 then datah

} 408 MHz Frequency

} Tuner Mode

gosub datah 'all other bits set low

index: next n 'index n and loop again

low 4 'exit in a known state
low 2 'exit in a known state
low 1 'lower tuner program enable
pause 10 'enable low stabilize
end 'end the program

datah: high 4 'sub to transmit high bit
pause 10
low 2
pause 10
goto index

datah: low 4 'sub to transmit low bit
pause 10
low 2
pause 10
goto index

'pin 1 is enable, pin 2 is clock, pin 4 is data

Scratch Pad

408 MHz

$$\text{Video IF} = 408 + 45.75 = 453.75 \text{ MHz}$$

$$\text{Tune} = 453.75 \text{ MHz}$$

$$\text{Steps} = \frac{453.75 \text{ MHz}}{31.25 \text{ kHz}} = 14,520 \text{ steps}$$

$$14,520 = \begin{matrix} \text{Denial} & & \text{Binary} \\ 11100010111000 \end{matrix}$$

Add leading 0 for 15 bits

5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
011100010111000

High Bits are

- n = 6
- n = 7
- n = 8
- n = 12
- n = 14
- n = 15
- n = 16