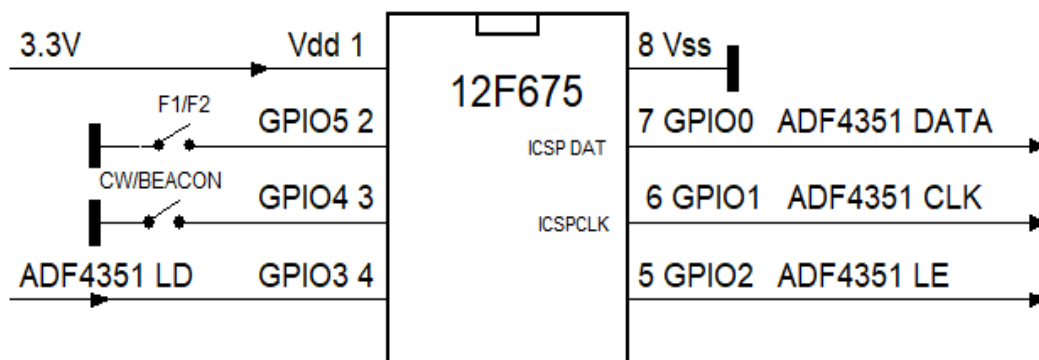
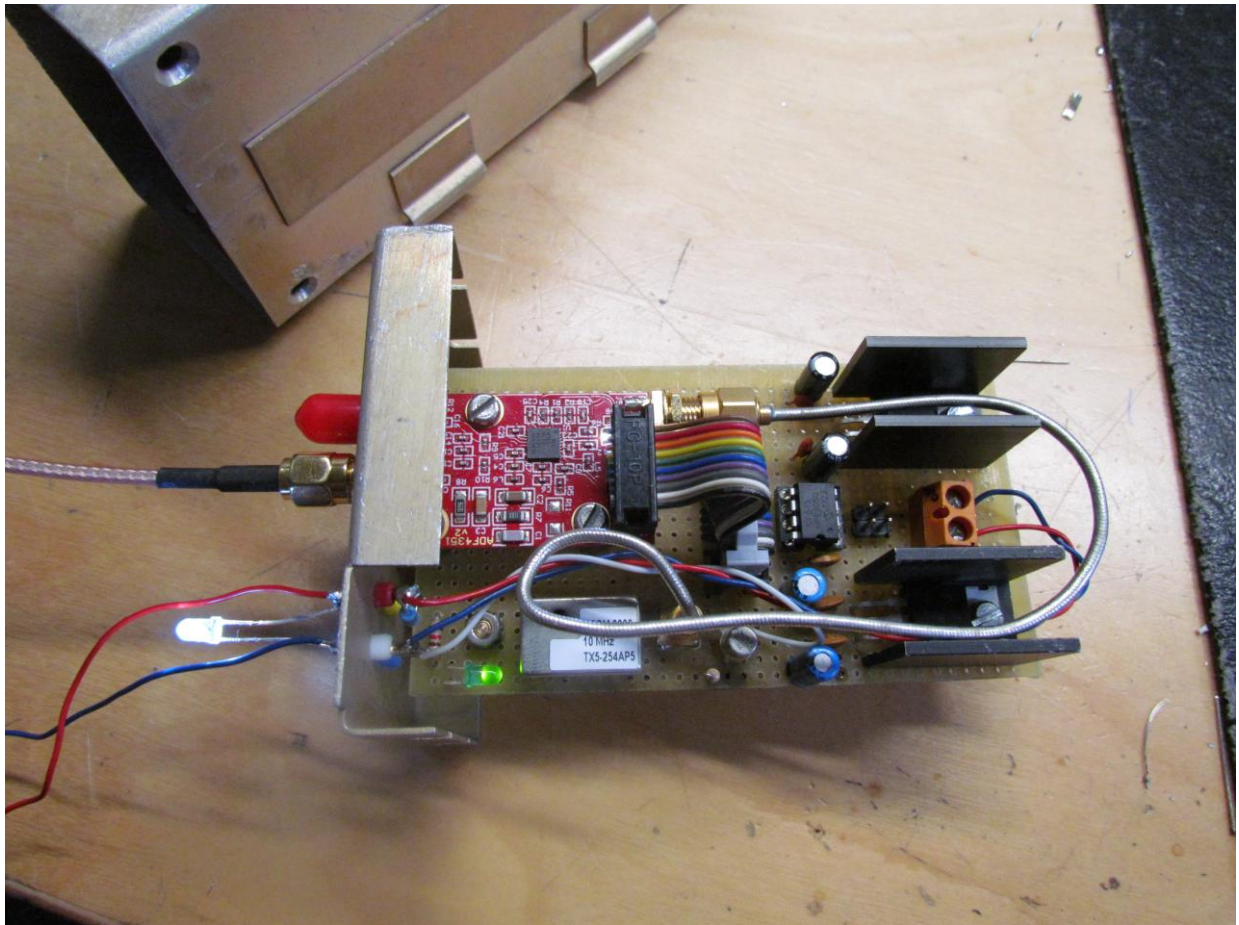


Using a SV1AFN ADF4351 board is easy , in this project a simple 12f675 can interface the board , two frequencies can be choosen , continius wave or beep-beep to simulate a beacon



Open the Analog devices ADF435x software to defines the desired frequencies (two times , for the twos frequency), then open the ADF_4351_f5ubz.ASM using notepad for windows , modify the

EEPROM zone (in the original file : 1296.200 and 2320 Mhz with a 25Mhz as reference)

Analog Devices ADF435x Software

File Tools Help

Select Device and Connection Main Controls Registers Sweep and Hop Other Functions Features

RF Settings

Output VCO

RF Frequency: 1296.200 2592.4 MHz

Channel spacing: 1 2 kHz

Output divider: 2

Reference Frequency: 25 MHz

R counter: 1 Ref Doubler: Ref /2:

PFD Frequency: 25 MHz

Prescaler: 8/9

Feedback signal: Fundamental 2592.4 MHz

INT 87 FRAC 25 PFD (MHz) Div 2 RFout (MHz)

(103 +) x = 1296.2

MOD 125 N = 103.696

Phase adjust: 0. Off Phase Value: 1

Register 2

Low Noise/Spur Mode: Low spur mode LDP: 10 ns

Muxout: Digital Lock dete PD Polarity: Positive

Double buff: Disabled Powerdown: Disabled

Charge pump current: 5.00 CP 3-state: Disabled

LDF: FRAC-N Counter reset: Disabled

Register 3

Band Select Clock Mode: Low ABP: 6 ns (FRAC-N)

Charge Cancellation: Disabled CSR: Disabled

Clock Divider Value: 150

CLK Div Mode: Clock Divider Off

Register 4

VCO Powerdown: Disabled

MTLD: Disabled

Aux Output Select: Fundamental

Aux Output Enable: 0. Disabled

Aux Output Power: -4 dBm

RF Output Enable: 1. Enabled

RF Output Power: +5 dBm

Band Select Clock

☒ Auto set Divider: 200

Freq (kHz): 125,000

Registers

0x 3382B8 0x 80083E9 0x 78005E42 0x 4B3 0x 9C823C 0x 580005

Write R0 Write R1 Write R2 Write R3 Write R4 Write R5 Write All Registers

ADF_4351_f5ubz - Bloc-notes

Fichier Edition Format Affichage ?

```

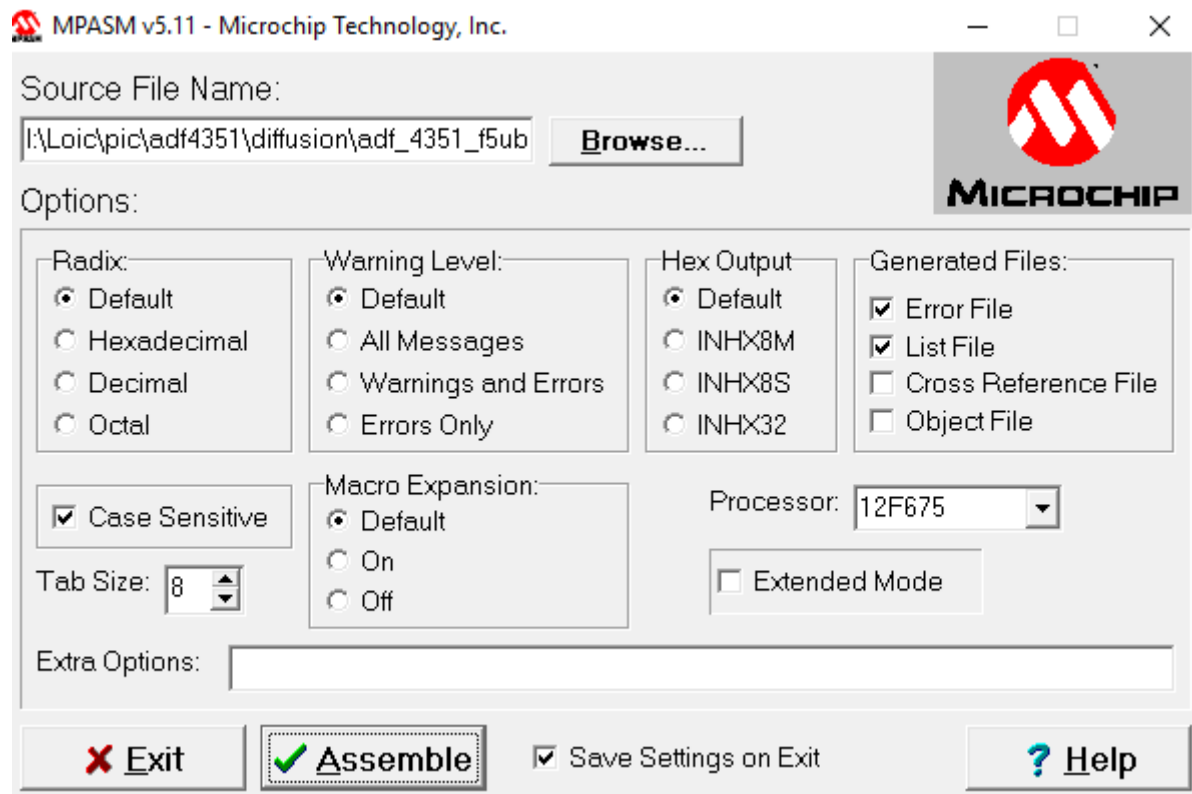
ORG    0x2100

DE     0x00, 0x33, 0x82, 0xB8 ; register R0 1296,200Mhz // ok
DE     0x08, 0x00, 0x83, 0xE9 ; register R1
DE     0x78, 0x00, 0x5E, 0x42 ; register R2
DE     0x00, 0x00, 0x04, 0xB3 ; register R3
DE     0x00, 0x9C, 0x82, 0x3C ; register R4
DE     0x00, 0x58, 0x00, 0x05 ; register R5

DE     0x00, 0x2E, 0x03, 0x28 ; register R0 2320,200Mhz // ok
DE     0x08, 0x00, 0x83, 0xE9 ; register R1
DE     0x78, 0x00, 0x5E, 0x42 ; register R2
DE     0x00, 0x00, 0x04, 0xB3 ; register R3
DE     0x00, 0x8C, 0x82, 0x3C ; register R4
DE     0x00, 0x58, 0x00, 0x05 ; register R5

```

Then compile ADF_4351_f5ubz.asm source with MPASMWIN.exe (12F675 as processor)



The file ADF_4351_f5ubz.HEX is ready for your favorite programmer

Thanks' to Jean-Louis F6ABX.

----73 de LOIC F5UBZ ----