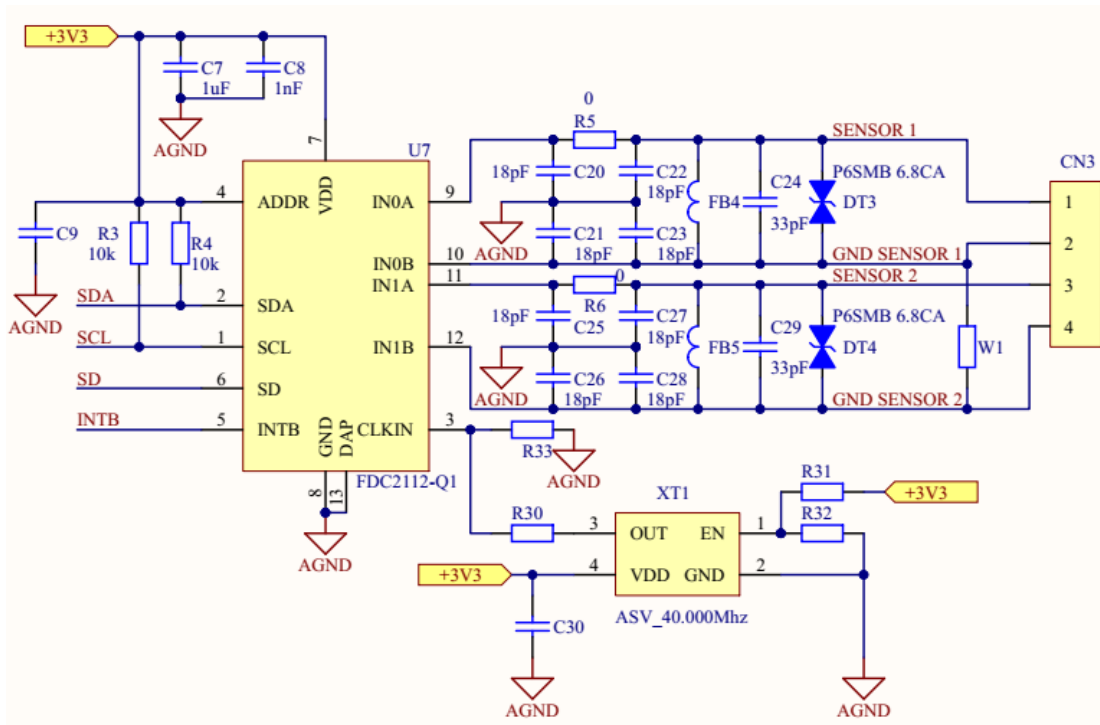


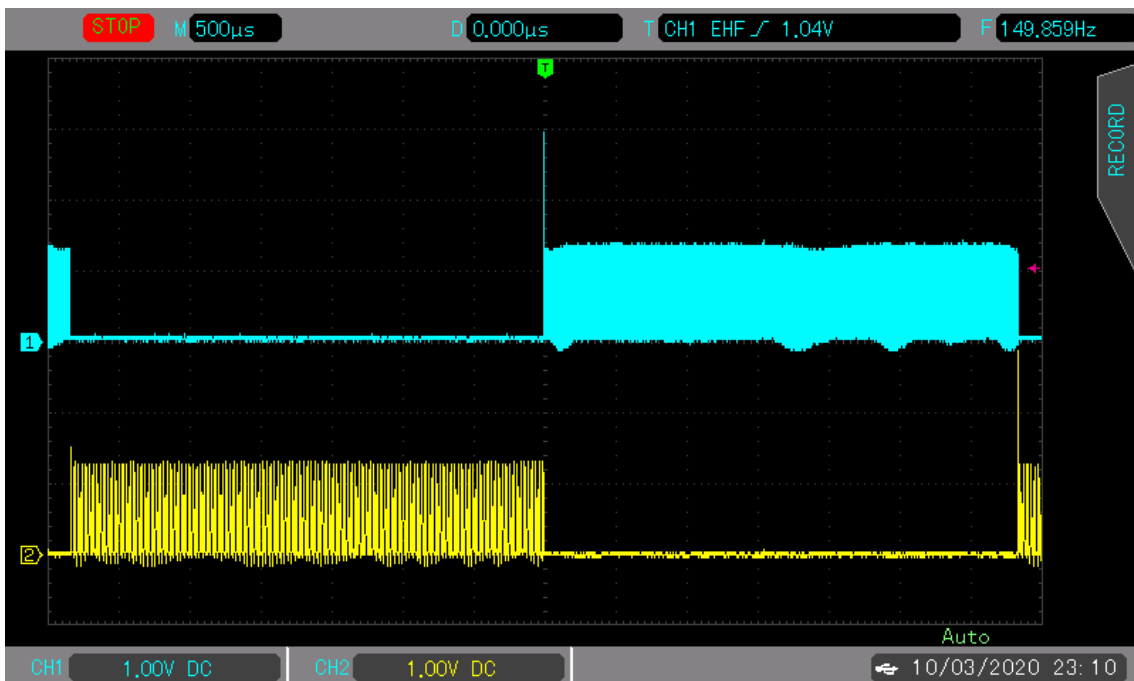
1) Schematic:



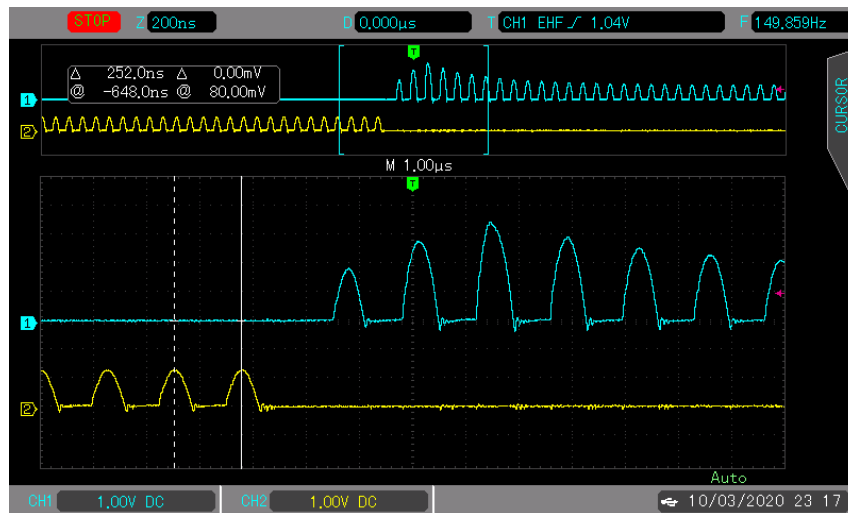
(The DT3 and DT4 are removed)

(I have tried without C20,21,22,23,25,26,27,and 28 with the same poor signals results)

2) Sensor signals: Vpeak between 1.2V and 2V; frequency around 4MHz (250ns), Time sample 3.3mS:



Detail:

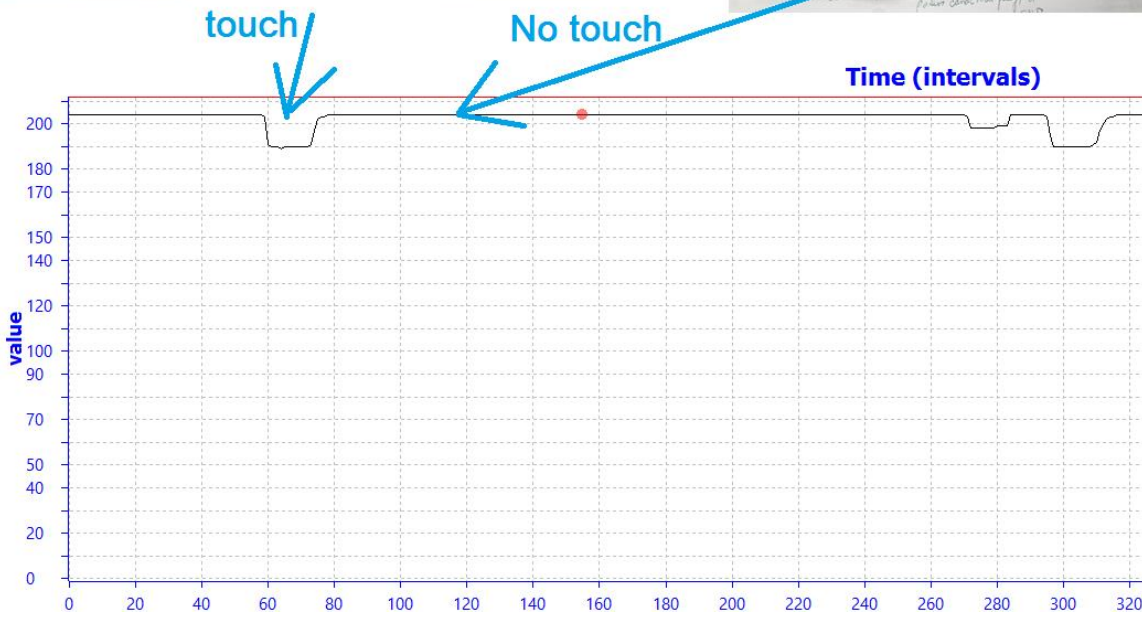
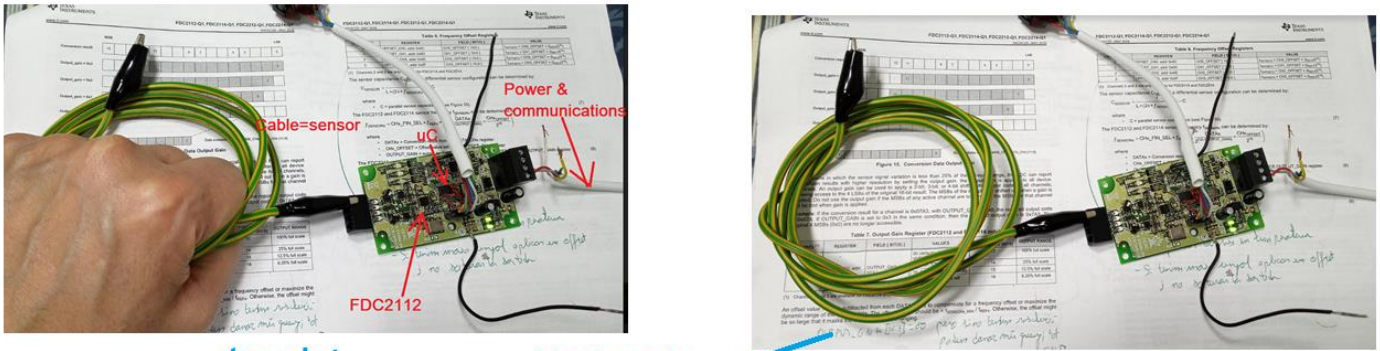


3) Software configuration:

```
SendI2CBuffer[0]=RCOUNT_CH0_REG;
SendI2CBuffer[1]=0x20; //RCOUNT_CH0
SendI2CBuffer[2]=0x89;
.....
SendI2CBuffer[0]=RCOUNT_CH1_REG;
SendI2CBuffer[1]=0x20; //RCOUNT_CH1
SendI2CBuffer[2]=0x89;
.....
SendI2CBuffer[0]=SETTLECOUNT_CH0_REG;
SendI2CBuffer[1]=0x00; //SETTLECOUNT_CH0
SendI2CBuffer[2]=0x0A;
.....
SendI2CBuffer[0]=SETTLECOUNT_CH1_REG;
SendI2CBuffer[1]=0x00; //SETTLECOUNT_CH1
SendI2CBuffer[2]=0x0A;
.....
SendI2CBuffer[0]=CLOCK_DIVIDERS_CH0_REG;
SendI2CBuffer[1]=0x20; //CLOCK_DIVIDERS_CH0
SendI2CBuffer[2]=0x01;
.....
SendI2CBuffer[0]=CLOCK_DIVIDERS_CH1_REG;
SendI2CBuffer[1]=0x20; //CLOCK_DIVIDERS_CH1
SendI2CBuffer[2]=0x01;
.....
SendI2CBuffer[0]=MUX_CONFIG_REG;
SendI2CBuffer[1]=0x82; //MUX_CONFIG
SendI2CBuffer[2]=0x0D;
.....
SendI2CBuffer[0]=DRIVE_CURRENT_CH0_REG;
SendI2CBuffer[1]=0x6C; //DRIVE_CURRENTCH0
SendI2CBuffer[2]=0x00;
.....
SendI2CBuffer[0]=DRIVE_CURRENT_CH1_REG;
SendI2CBuffer[1]=0x6C; //DRIVE_CURRENT_CH1
SendI2CBuffer[2]=0x00;
.....
SendI2CBuffer[0]=CONFIG_REG;
SendI2CBuffer[1]=0x16; //CONFIG_REG
SendI2CBuffer[2]=0x01;
```

4) Results:

Regarding the software, I don't check the status registers. I just read the DATA_CH0 and DATA_CH1 **every 10ms**; and finally getting this results:



The black is one channel, and the red the other one.

From touch to not touch means, from 190 counts to 205. Just only 15 counts, which is a really poor signal.