

```
1  RCGCADC EQU 0x400FE638
2  ADC0_ACTSS EQU 0x40038000
3  ADC0_RIS EQU 0x40038004
4  ADC0_IM EQU 0x40038008
5  ADC0_EMUX EQU 0x40038014
6  ADC0_PSSI EQU 0x40038028
7  ADC0_SSMUX3 EQU 0x400380A0
8  ADC0_SSCTL3 EQU 0x400380A4
9  ADC0_SSFIFO3 EQU 0x400380A8
10 ADC0_PC EQU 0x40038FC4
11 ADC0_ISC EQU 0x4003800C
12
13 AREA main, READONLY, CODE
14 THUMB
15
16 EXTERN delay
17 EXPORT atd_conv
18
19
20 atd_conv PROC
21 PUSH {LR}
22 BL delay
23 LDR R3, =ADC0_RIS
24 LDR R4, =ADC0_SSFIFO3
25 LDR R2, =ADC0_PSSI
26 LDR R6, = ADC0_ISC
27 ;sampling
28 LDR R0, [R2]
29 ORR R0, R0, #0x08
30 STR R0, [R2]
31 loop LDR R0, [R3]
32 ANDS R0, R0, #8
33 BEQ loop
34 LDR R0, [R4]
35 STR R0, [R6]
36 POP {LR}
37 BX LR
38 ENDP
39 END
```