```
 1    SYSCTL_RCGCGPIO      EQU     0x400FE608
 2
 3    GPIO_PORTE_DATA      EQU     0x400243FC
 4    GPIO_PORTE_DIR       EQU     0x40024400
 5    GPIO_PORTE_AMSEL     EQU     0x40024428
 6    GPIO_PORTE_AFSEL     EQU     0x40024420
 7    GPIO_PORTE_DEN       EQU     0x4002451C
 8    GPIO_PORTE_PUR       EQU     0x40024510
 9    IOE                  EQU     0x00
10    PUE                  EQU     0x00
11
12    RCGCADC              EQU     0x400FE638
13    ADC0_ACTSS           EQU     0x40038000
14    ADC0_RIS             EQU 0x40038004
15    ADC0_IM              EQU 0x40038008
16    ADC0_EMUX            EQU 0x40038014
17    ADC0_PSSI            EQU 0x40038028
18    ADC0_SSMUX3          EQU 0x400380A0
19    ADC0_SSCTL3          EQU 0x400380A4
20    ADC0_SSFIFO3         EQU 0x400380A8
21    ADC0_PC              EQU 0x40038FC4
22
23                        AREA        main, READONLY, CODE
24                        THUMB
25
26                        EXPORT      adc_initial
27
28
29    adc_initial         PROC
30                        LDR R1, =RCGCADC
31                        LDR R0, [R1]
32                        ORR R0, R0, #0x01
33                        STR R0, [R1]
34                        NOP
35                        NOP
36                        NOP
37                        NOP
38                        NOP
39
40                        LDR R1,=SYSCTL_RCGCGPIO
41                        LDR R0,[R1]
42                        ORR R0,#0x10
43                        STR R0 ,[R1]
44                        NOP
45                        NOP
46                        NOP
47
48                        LDR R1, =GPIO_PORTE_AFSEL
49                        LDR R0, [R1]
50                        ORR R0, R0, #0x08
51                        STR R0, [R1]
52
53                        LDR R1, =GPIO_PORTE_DIR
54                        LDR R0,[R1]
55                        BIC R0, R0, #0x08
56                        STR R0, [R1]
57
58                        LDR R1, =GPIO_PORTE_DEN
59                        LDR R0, [R1]
60                        BIC R0, R0, #0x08
61                        STR R0, [R1]
62
63                        LDR R1, =GPIO_PORTE_AMSEL
64                        LDR R0, [R1]
65                        ORR R0, R0, #0x08
66                        STR R0, [R1]
67
68                        LDR R1, =ADC0_ACTSS
69                        LDR R0, [R1]
70                        BIC R0, R0, #0x08
71                        STR R0, [R1]
72
73                        LDR R1, =ADC0_EMUX
74                        LDR R0, [R1]
75                        BIC R0, R0, #0xF000
76                        STR R0, [R1]
77
```

```
 78
 79                    LDR R1, =ADC0_SSMUX3
 80                    LDR R0, [R1]
 81                    BIC R0, R0, #0x000F
 82                    STR R0, [R1]
 83
 84                    LDR R1, =ADC0_SSCTL3
 85                    LDR R0, [R1]
 86                    ORR R0, R0, #0x06
 87                    STR R0, [R1]
 88
 89                    LDR R1, =ADC0_PC
 90                    LDR R0, [R1]
 91                    ORR R0, R0, #0x01
 92                    STR R0, [R1]
 93
 94                    LDR R1, =ADC0_ACTSS
 95                    LDR R0, [R1]
 96                    ORR R0, R0, #0x08
 97                    STR R0, [R1]
 98
 99                    BX LR
100                    ENDP
101                    END
102
```