```
1    GPIO_PORTB_DATA EQU      0x400053FC
2                    AREA     main, READONLY, CODE
3                    THUMB
4                    EXTERN   delay
5                    EXPORT   stepper
6
7    stepper         PROC
8                    LDR      R1,=GPIO_PORTB_DATA
9                    LDR      R1,[R1]
10                   AND      R0,R1,#0xF0
11                   LDR      R5,=0x20000400
12                   LDRB     R2,[R5]
13                   CMP      R2,#1
14                   BEQ      clockw
15                   LDRB     R2,[R5]
16                   CMP      R2,#2
17                   BEQ      counterw
18                   BX       LR
19
20   clockw          CMP      R0,#0x00
21                   MOVEQ    R0,#0x10
22                   BEQ      finish
23                   CMP      R0,#0x80
24                   MOVEQ    R0,#0x10
25                   BEQ      finish
26                   CMP      R0,#0x10
27                   MOVEQ    R0,#0x20
28                   BEQ      finish
29                   CMP      R0,#0x20
30                   MOVEQ    R0,#0x40
31                   BEQ      finish
32                   CMP      R0,#0x40
33                   MOVEQ    R0,#0x80
34                   BEQ      finish
35
36
37   counterw        CMP      R0,#0x80
38                   MOVEQ    R0,#0x40
39                   BEQ      finish
40                   CMP      R0,#0x40
41                   MOVEQ    R0,#0x20
42                   BEQ      finish
43                   CMP      R0,#0x20
44                   MOVEQ    R0,#0x10
45                   BEQ      finish
46                   CMP      R0,#0x10
47                   MOVEQ    R0,#0x80
48                   BEQ      finish
49
50   finish          BFC      R1,#4,#4
51                   ORR      R1,R1,R0
52                   LDR      R4,=GPIO_PORTB_DATA
53                   STR      R1,[R4]
54                   LDR      R1,=0x20000400
55                   MOV      R0,#0
56                   STRB     R0,[R1]
57
58                   BX       LR
59                   ENDP
60                   ALIGN
61                   END
```