DC Motor

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211039002

```c
#include<lpc214x.h>
#define bit(x) (1<<x)
#define delay for(i=0;i<=60000;i++)
unsigned int i;
int main()
{
    IO0DIR=0xf;             //Declaring as a output
    IO0PIN=0;               //Clear all IO Pins in P0
    VPBDIV=0x01;            //PCLK = 60MHz
    while(1) {
        /*Forward*/
        IO0SET=bit(0);      //IN1 = 1
        IO0CLR=bit(1);      //IN2 = 0
        delay;delay;
        /*Off*/
        IO0CLR=bit(0)|bit(1); //IN1 = IN2 = 0
        delay;delay;
        /*Reverse*/
        IO0SET=bit(1);      //IN2 = 1
        IO0CLR=bit(0);      //IN0 = 1
        delay;delay;
        /*Off*/
        IO0CLR=bit(0)|bit(1); //IN1 = IN2 = 0
        delay;delay;
    }
}
```

U1

Pin	Left Label		Right Label	Pin
62	XTAL1		P0.0/TxD0/PWM1	19
61	XTAL2		P0.1/RxD0/PWM3/EINT0	21
			P0.2/SCL0/CAP0.0	22
3	RTXC1		P0.3/SDA0/MAT0..0/EINT1	26
5	RTXC2		P0.4/SCK0/CAP0.1/AD0.6	27
			P0.5/MISO0/MAT0.1/AD0.7	29
57	RST		P0.6/MOSI0/CAP0.2/AD1.0	30
			P0.7/SSEL0/PWM2/EINT2	31
			P0.8/TxD1/PWM4/AD1.1	33
			P0.9/RxD1/PWM6/EINT3	34
			P0.10/RTS1/CAP1.0/AD1.2	35
			P0.11/CTS1/CAP1.1/SCL1	37
			P0.12/DSR1/MAT1.0/AD1.3	38
			P0.13/DTR1/MAT1.1/AD1.4	39
			P0.14/DCD1/EINT1/SDA1	41
			P0.15/RI1/EINT2/AD1.5	45
			P0.16/EINT0/MAT0.2/CAP0.2	46
			P0.17/CAP1.2/SCK1/MAT1.2	47
			P0.18/CAP1.3/MISO0/MAT1.3	53
			P0.19/MAT1.2/MOSI1/CAP1.2	54
			P0.20/MAT1.3/SSEL1/EINT3	55
			P0.21/PWM5/AD1.6/CAP1.3	1
			P0.22/AD1.7/CAP0.0/MAT0.0	2
			P0.23	58
			P0.25/AD0.4/AOUT	9
			P0.26/AD0.5	10
			P0.27/AD0.0/CAP0.1/MAT0.1	11
			P0.28/AD0.1/CAP0.2/MAT0.2	13
			P0.29/AD0.2/CAP0.3/MAT0.3	14
			P0.30/AD0.3/EINT3/CAP0.0	15
			P0.31	17
			P1.16/TRACEPKT0	16
			P1.17/TRACEPKT1	12
49	VBAT		P1.18/TRACEPKT2	8
			P1.19/TRACEPKT3	4
63	VREF		P1.20/TRACESYNC	48
7	V3A		P1.21/PIPESTAT0	44
51	V3		P1.22/PIPESTAT1	40
43	V3		P1.23/PIPESTAT2	36
23	V3		P1.24/TRACECLK	32
			P1.25/EXTIN0	28
59	VSSA		P1.26/RTCK	24
50	VSS		P1.27/TDO	64
42	VSS		P1.28/TDI	60
25	VSS		P1.29/TCK	56
18	VSS		P1.30/TMS	52
6	VSS		P1.31/TRST	20

LPC2138

211039002

U1(VBAT)

U2

Pin	Left		Right	Pin
2	IN1	VSS VS	OUT1	3
7	IN2		OUT2	6
1	EN1	16 8		
9	EN2		OUT3	11
10	IN3		OUT4	14
15	IN4	GND		

L293D