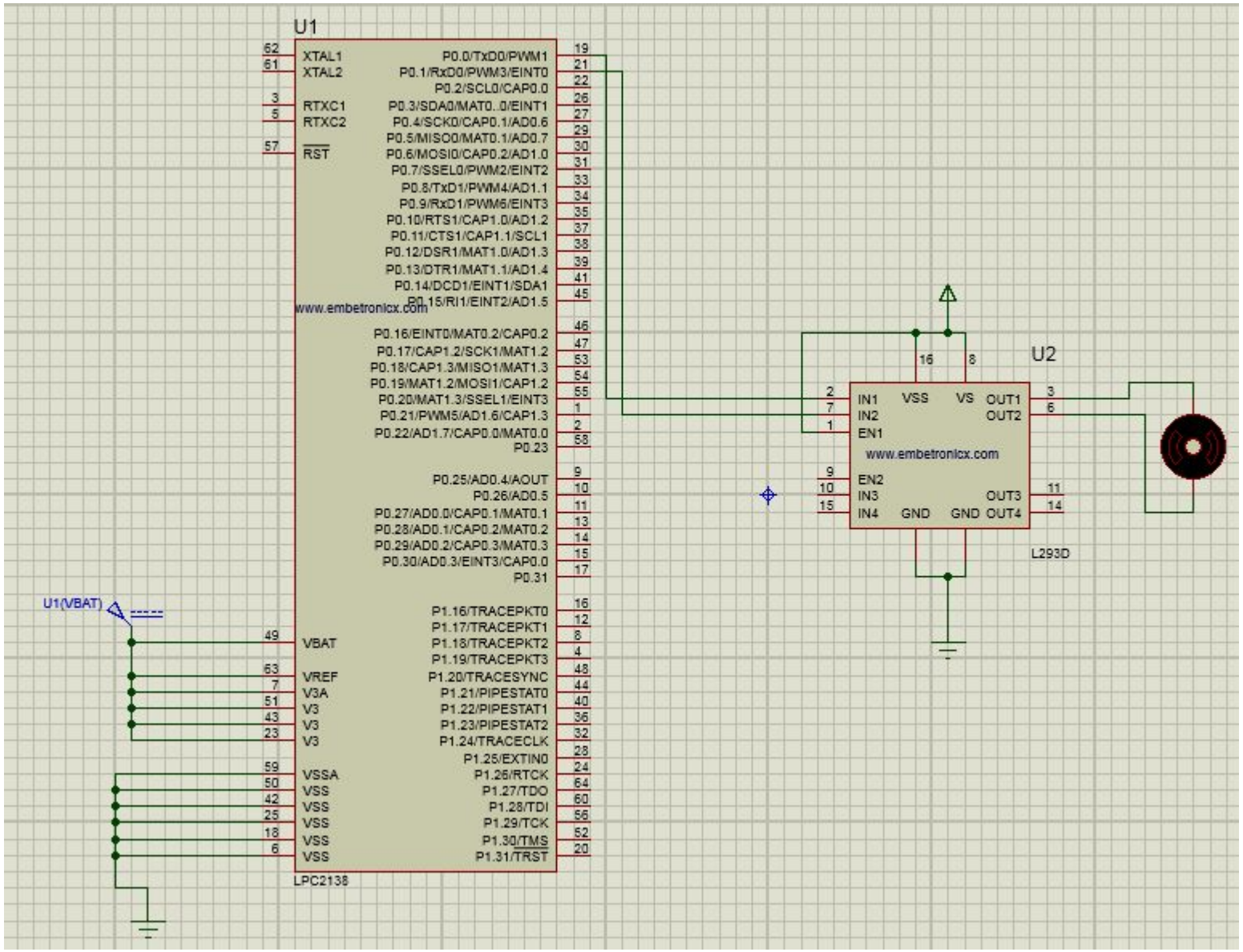

Circuit Diagram

Input 1 – Port 0.0

Input 2 – Port 0.1

Enable 1 – Directly giving 5v

Working Algorithm

Forward

EN Pin High (En1 = 1 or En2 = 1)

Input 1 or Input 3 Pin High (In1 = 1 or In3=1)

Input 2 or Input 4 Pin Low (In2 = 0 or In4 = 0)

Reverse

EN Pin High (En1 = 1 or En2 = 1)

Input 1 or Input 3 Pin Low (In1 = 0 or In3=0)

Input 2 or Input 4 Pin Low (In2 = 1 or In4 = 1)

```
#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 = 0
      delay;delay;
      /*Off*/
      IO0CLR=bit(0)|bit(1); //IN1 = IN2 = 0
      delay;delay;
   }
}
```

Output