

INTERFACING OF STEPPER MOTOR USING ATMEGAR328

PROGRAM

```
#define F_CPU 8000000UL /* Define CPU Frequency 8MHz */

#include /* Include AVR std. library file */

#include /* Include delay header file */

{

int period;

DDRD = 0x0F; /* Make PORTD lower pins as output */

Period = 100; /* Set period in between two steps */

While (1) {

/* Rotate Stepper Motor clockwise with Half step sequence */

For (int i=0; i<12;i++)

{

PORTD = 0x09;

_delay_ms (period);

PORTD = 0x08;

_delay_ms (period);

PORTD = 0x0C;

_delay_ms (period);

PORTD = 0x04;

_delay_ms (period);

PORTD = 0x06;

_delay_ms (period);

PORTD = 0x02;

_delay_ms (period);

PORTD = 0x03;

_delay_ms (period);

PORTD = 0x01;
```

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```
_delay_ms (period);

}

PORTD = 0x09; /* Last step to initial position */

_delay_ms (period);

_delay_ms (1000); /* Anticlockwise with Full step sequence */

for(int i=0;i<12;i++)

{

PORTD = 0x09;

_delay_ms (period);

PORTD = 0x03;

_delay_ms (period);

PORTD = 0x06;

_delay_ms (period);

PORTD = 0x0C;

_delay_ms (period);

} PORTD = 0x09;

_delay_ms(period);

_delay_ms(1000);

}

- }
```