**Çamaşır Makinesi Program Akışı**

400 adım ileri (adımlar arası 30ms)

ad

START

1sn Bekle

1sn Bekle

400 adım geri (adımlar arası 30ms)

ad

800 adım ileri (adımlar arası 20ms)

ad

1sn Bekle

1sn Bekle

800 adım geri (adımlar arası 20ms)

ad

800 adım ileri (adımlar arası 10ms)

ad

1sn Bekle

800 adım geri (adımlar arası 10ms)

ad

STOP

**Çamaşır Makinesi PIC C Programı**

#if defined (\_\_PCM\_\_)

#include <16F628A.h>

#use delay(clock=4000000)

#fuses NOWDT,PUT,NOLVP,NOBROWNOUT,NOMCLR,INTRC\_IO,NOPROTECT

#endif

#byte PORTA = 0x05

char i=0;

int16 a=0;

void main()

{

delay\_ms(2000);

while(TRUE)

{

output\_b(0b00010000);

dur:

if(bit\_test(PORTA,0)==0) // Start

{

//\*\*\*\*\*\*\*\*\*\*\*\* 2 tur ileri 30ms

a=0;

while(a<400)

{

i=i+1; // adım sayacı

if(i==5){i=1;}

switch (i)

{

case 1: output\_b(1); break; // aşama 1

case 2: output\_b(2); break; // aşama 2

case 3: output\_b(4); break; // aşama 3

case 4: output\_b(8); break; // aşama 4

}

delay\_ms(30);

a=a+1;

if(bit\_test(PORTA,1)==0){goto dur; output\_b(0);}

}

delay\_ms(1000);

//\*\*\*\*\*\*\*\*\*\*\*\* 2 tur geri 30ms

a=0;

while(a<400)

{

i=i-1; // adım sayacı

if(i==0){i=4;}

switch (i)

{

case 1: output\_b(1); break; // aşama 1

case 2: output\_b(2); break; // aşama 2

case 3: output\_b(4); break; // aşama 3

case 4: output\_b(8); break; // aşama 4

}

delay\_ms(30);

a=a+1;

if(bit\_test(PORTA,1)==0){goto dur; output\_b(0);}

}

delay\_ms(1000);

//\*\*\*\*\*\*\*\*\*\*\*\* 2 tur ileri 20ms sıkma

a=0;

while(a<800)

{

i=i+1; // adım sayacı

if(i==5){i=1;}

switch (i)

{

case 1: output\_b(1); break; // aşama 1

case 2: output\_b(2); break; // aşama 2

case 3: output\_b(4); break; // aşama 3

case 4: output\_b(8); break; // aşama 4

}

delay\_ms(20);

a=a+1;

if(bit\_test(PORTA,1)==0){goto dur; output\_b(0);}

}

//\*\*\*\*\*\*\*\*\*\*\*\* 2 tur geri 20ms

a=0;

delay\_ms(1000);

while(a<800)

{

i=i-1; // adım sayacı

if(i==0){i=4;}

switch (i)

{

case 1: output\_b(1); break; // aşama 1

case 2: output\_b(2); break; // aşama 2

case 3: output\_b(4); break; // aşama 3

case 4: output\_b(8); break; // aşama 4

}

delay\_ms(20);

a=a+1;

if(bit\_test(PORTA,1)==0){goto dur; output\_b(0);}

}

//\*\*\*\*\*\*\*\*\*\*\*\* 2 tur ileri 10ms sıkma

a=0;

while(a<800)

{

i=i+1; // adım sayacı

if(i==5){i=1;}

switch (i)

{

case 1: output\_b(1); break; // aşama 1

case 2: output\_b(2); break; // aşama 2

case 3: output\_b(4); break; // aşama 3

case 4: output\_b(8); break; // aşama 4

}

delay\_ms(10);

a=a+1;

if(bit\_test(PORTA,1)==0){goto dur; output\_b(0);}

}

//\*\*\*\*\*\*\*\*\*\*\*\* 2 tur geri 10ms

a=0;

delay\_ms(1000);

while(a<800)

{

i=i-1; // adım sayacı

if(i==0){i=4;}

switch (i)

{

case 1: output\_b(1); break; // aşama 1

case 2: output\_b(2); break; // aşama 2

case 3: output\_b(4); break; // aşama 3

case 4: output\_b(8); break; // aşama 4

}

delay\_ms(10);

a=a+1;

if(bit\_test(PORTA,1)==0){goto dur; output\_b(0);}

}

}

}

}

**Çamaşır Makinesi PIC HEX Code**

|  |  |
| --- | --- |
|| :1002500086003C29831686010230831286003C29E1  :10026000831686010430831286003C29831686019A  :100270000830831286003C291430A4000420013089  :10028000A1070318A20A85184A292E288316860179  :10029000831286010C29A201A1012208033C031C40  :1002A0008D29031D572921081F3C031C8D2901306E  :1002B000A0072008053C031D5F290130A000013084  :1002C0002002FC3E03187E29043EF729831686018E  :1002D0000130831286007E29831686010230831244  :1002E00086007E29831686010430831286007E29CB  :1002F000831686010830831286007E290A30A40006  :1003000004200130A1070318A20A85188C292E2881  :1003100083168601831286014D29A201A1010430B2  :10032000A300FA30A4000420A30B91292208033C67  :10033000031CD529031DA02921081F3C031CD52916  :100340000130A002A008031DA7290430A00001303D  :100350002002FC3E0318C629043EFF2983168601AD  :10036000013083128600C62983168601023083126B  :100370008600C62983168601043083128600C629AA  :1003800083168601083083128600C6290A30A4002D  :1003900004200130A1070318A20A8518D4292E28A9  :1003A00083168601831286019629292863000A1480  :1003B0008A100A1182074B28512857285D280A14F1  :1003C0008A100A118207932899289F28A5280A14C1  :1003D0008A100A118207DC28E228E828EE280A148D  :1003E0008A100A11820724292A29302936290A1459  :1003F0008A100A11820766296C29722978290A1045  :0E0400008A140A118207AE29B429BA29C0292C  :02400E00103F61  :00000001FF  ;PIC16F628A  ;CRC=6B66 CREATED="02-Mar-11 23:53" |