Flow Chart

Start

**go:**

Is carry = set ?

It delays on operation from execution for some time

Clearing port 2.0 and 2.1

Initializing timer register

**delay:**

Yes

No

tlab: tlab1:

Sends data to Accumulator using serial line

trans: trans:

Displays No power

Is carry = not set?

Unconditional jump

Is carry = not set?

Sends data to Accumulator using serial line

Displays Power Existence

second: second:

Yes Yes

No

No

Assembly Language Program code

org 00h

go:

CLR P2.0

CLR P2.1

SETB P0.0

MOV SCON,#50h

MOV TMOD,#20h

MOV TH1,#0FDh

SETB TR1

JB P0.0,tlab

JNB P0.0,tlab1

ACALL delay

ACALL delay

ACALL delay

SJMP go

tlab:

SETB P2.0

MOV A,#"P"

ACALL trans

MOV A,#"O"

ACALL trans

MOV A,#"W"

ACALL trans

MOV A,#"E"

ACALL trans

MOV A,#"R"

ACALL trans

MOV A, #"-"

ACALL trans

SJMP go

tlab1:

SETB P2.1

MOV A,#"N"

ACALL trans

MOV A,#"O"

ACALL trans

MOV A,#"-"

ACALL trans

MOV A,#"P"

ACALL trans

MOV A,#"O"

ACALL trans

MOV A,#"W"

ACALL trans

MOV A,#"E"

ACALL trans

MOV A,#"R"

ACALL trans

MOV A,#"-"

ACALL trans

;ACALL delay

SJMP go

trans: MOV sbuf,A

second: JNB TI,second

clr TI

RET

delay:

loopb:MOV r2,#250

loopa:MOV r3,#250

NOP

NOP

MOV th0,#00h

DJNZ r2,loopb

DJNZ r3,loopa

RET

END