

[modified] one : one.asm - MCU 8051 IDE

File Edit View Project Simulator Virtual MCU Virtual HW Tools Utilities Configure Help

graph one Find a string in the text

Project Files:

one.asm

one.asm

1 org 0000h
2
3
4 end

Type in your program here

Line: 3 Column: 1 Total: 4 INS NORM one.asm ASM

Simulator C variables IO Ports Messages Notes Calculator Find in files Hide

00 00 00 00 00 00 00 00
08 00 00 00 00 00 00 00
10 00 00 00 00 00 00 00
18 00 00 00 00 00 00 00
20 00 00 00 00 00 00 00
28 00 00 00 00 00 00 00
30 00 00 00 00 00 00 00
38 00 00 00 00 00 00 00
40 00 00 00 00 00 00 00
48 00 00 00 00 00 00 00
50 00 00 00 00 00 00 00

HEX DEC BIN OCT CHAR
A: 00 0 00000000 0
B: 00 0 00000000 0

PSW: C AC F0 RS1 RS0 OV - P
R7 R6 R5 R4 R3 R2 R1 R0
00 00 00 00 00 00 00 00

TH2 TL2 RCAP2H RCAP2L T2 RCAP2 T2CON T2MOD
00 00 00 00 0 0 00 00
T2CON: TF2 EXF2 RCLK TCLK EXEN2 TR2 CT2 CPRL2

AUXR: - - - WDIDLE DISRTO - - DISALE HEX 00
AUXR1: - - - - - - - DPS HEX 00

Watchdog: OFF 0000
WDTRST: 78

TIMERS 0 & 1
TH1 TL1 TH0 TL0 T1 T0 TCON TMOD
00 00 00 00 0 0 00 00
TCON: TF1 TR1 TF0 TR0 IE1 IT1 IE0 IT0
TMOD: G1 CT1 M11 M10 G0 CT0 M01 M00

INTERRUPTS
IE: EA - ET2 ES ET1 EX1 ET0 EX0 HEX 00
IP: - - PT2 PS PT1 PX1 PT0 PX0 HEX 00

P0: 11111111 FF DPTR0: 00 00 SP: 07
P1: 11111111 FF DPTR1: 00 00 SBUF R: 82
P2: 11111111 FF Clock: 12000 SBUF T: F4
P3: 11111111 FF PC: HEX 00 DEC 0
Time:

PCON: SMOD - - - GF1 GF0 PD IDL H: 00
SCON: SM0 SM1 SM2 REN TB8 RB8 TI RI H: 00

ABC 2 Find a string in the text

AT89S52

one : one.asm - MCU 8051 IDE

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graph one

Project Files:

one.asm

```

1      org 0000h
2      sjmp start
3      org 030h
4
5 start:
6      setb p2.1
7      setb p2.0
8
9 while:
10     setb p3.6
11     acall delay
12     clr p3.6
13     acall delay
14     jb p2.1, toggle
15     sjmp while
16 toggle:
17     mov a, R2
18     jnz turnon
19     inc R2
20     setb p3.7
21     sjmp while
22 turnon:
23     dec R2
24     clr p3.7
25     sjmp while
26 delay:
27     mov R1, #0dh
28 loop: djnz R1, loop
29
30 end

```

Start / Shutdown simulator

Once typed corectly Start the sim

Simulator mode INS NORM one.asm ASM

Simulator C variables IO Ports Messages Notes Calculator Find in files Hide

	x0	x1	x2	x3	x4	x5	x6	x7
00	00	00	00	00	00	00	00	00
08	00	00	00	00	00	00	00	00
10	00	00	00	00	00	00	00	00
18	00	00	00	00	00	00	00	00
20	00	00	00	00	00	00	00	00
28	00	00	00	00	00	00	00	00
30	00	00	00	00	00	00	00	00
38	00	00	00	00	00	00	00	00
40	00	00	00	00	00	00	00	00
48	00	00	00	00	00	00	00	00
50	00	00	00	00	00	00	00	00

HEX DEC BIN OCT CHAR

A: 00 0 00000000 0

B: 00 0 00000000 0

PSW: C AC F0 RS1 RS0 OV - P

R7 R6 R5 R4 R3 R2 R1 R0

00 00 00 00 00 00 00 00

TH2 TL2 RCAP2H RCAP2L T2 RCAP2 T2CON T2MOD

00 00 00 00 0 0 00 00

AUXR: - - - WDIDLE DISRTO - - DISALE HEX 00 Watchdog: OFF 0000

AUXR1: - - - - - DPS HEX 00

TIMERS 0 & 1

TH1	TL1	TH0	TL0	T1	T0	TCON	TMOD
00	00	00	00	0	0	00	00

TCON: TF1 TR1 TF0 TR0 IE1 IT1 IE0 IT0

TMOD: G1 CT1 M11 M10 G0 CT0 M01 M00

INTERRUPTS

IE: EA - ET2 ES ET1 EX1 ET0 EX0 HEX 00

IP: - - PT2 PS PT1 PX1 PT0 PX0 HEX 00

BIN HEX DPH DPL HEX

P0: 11111111 FF DPTR0: 00 00 SP: 07

P1: 11111111 FF DPTR1: 00 00 SBUF R: 40

P2: 11111111 FF Clock: 12000 SBUF T: DA

P3: 11111111 FF PC: 0000 DEC 0

Time: 00:00:00

PCON: SMOD - - - GF1 GF0 PD IDL H: 00

SCON: SM0 SM1 SM2 REN TB8 RB8 TI RI H: 00

ABC 2 Load debug file into simulator engine

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graph one

Project Files:

one.asm

```

1 org 0000h
2 sjmp start
3 org 030h
4
5 start:
6 setb p2.1
7 setb p2.0
8
9 while:
10 setb p3.6
11 acall delay
12 clr p3.6
13 acall delay
14 jb p2.1, toggle
15 sjmp while
16 toggle:
17 mov a, R2
18 jnz turnon
19 inc R2
20 setb p3.7
21 sjmp while
22 turnon:
23 dec R2
24 clr p3.7
25 sjmp while
26 delay:
27 mov R1, #0dh
28 loop: djnz R1, loop
29 ret
30 end

```

Variables

Step through the code with this button

SFR's

Simulator mode INS NORM one.asm ASM

Simulator C variables IO Ports Messages Notes Calculator Find in files Hide

Step over

TIMERS 0 & 1

TH1	TL1	TH0	TL0	T1	T0	TCON	TMOD
00	00	00	00	0	0	00	00

TCON: TF1 TR1 TF0 TR0 IE1 IT1 IE0 IT0

TMOD: G1 CT1 M11 M10 G0 CT0 M01 M00

PSW: C AC F0 RS1 RS0 OV - P

R7	R6	R5	R4	R3	R2	R1	R0
00	00	00	00	00	00	00	00

AUXR: - - - WDIDLE DISRTO - - DISALE HEX 00

AUXR1: - - - - - DPS HEX 00

Watchdog: OFF 0000

WDTCON: RA

IO Ports

P0	P1	P2	P3
11111111	11111111	11111111	11111111

DPTR0: 00 00 DPTR1: 00 00

Clock: 12000

PC: 0000

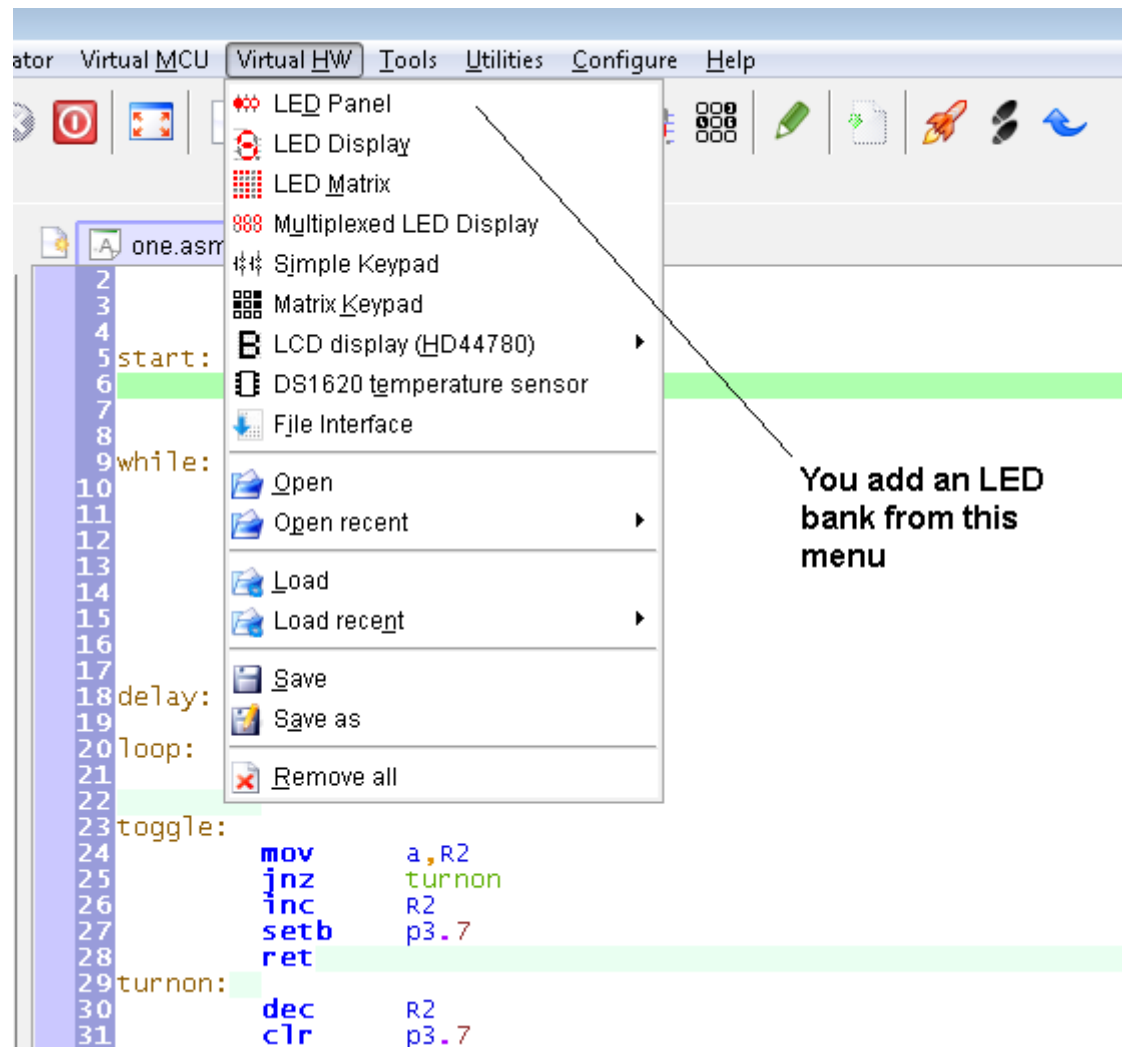
Time: 0

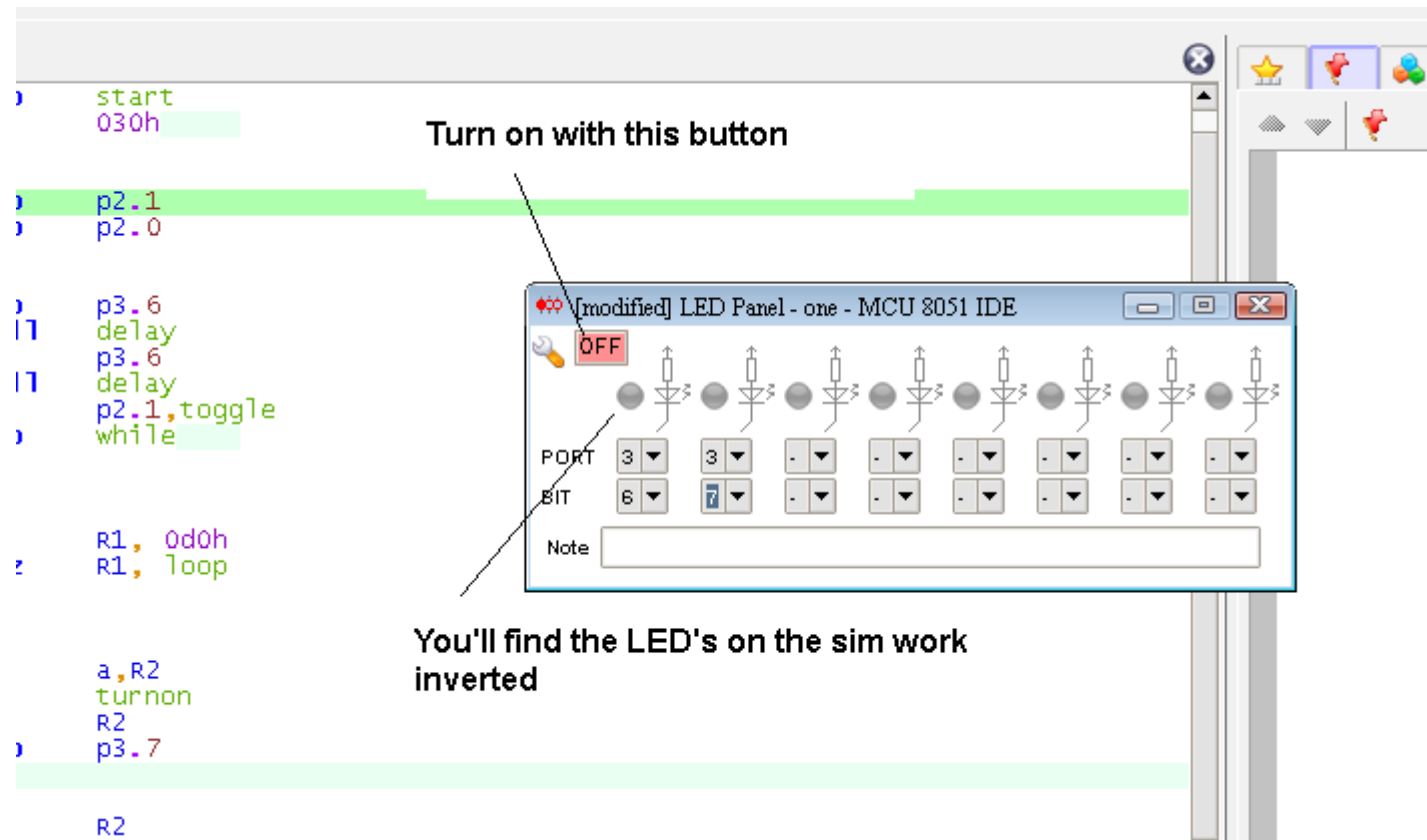
PCON: SMOD - - - GF1 GF0 PD IDL H: 00

SCON: SM0 SM1 SM2 REN TB8 RB8 TI RI H: 00

ABC 2 Step by 1 line of code

AT89S52





You need to toggle P2.0 by inserting directly into the SFR window at the bottom of the screen