

센서를 이용한 6족 로봇

99004042

99004178

1.

2.

3. ()

3-1.

3-2. ()

3-3. (1)(2)(3)

4. (1)(2)(3)(4)

5.

6.

7.

1. Project

•

.

•

가 .

⇒ 가
6

가

.

2.

1) C

2)

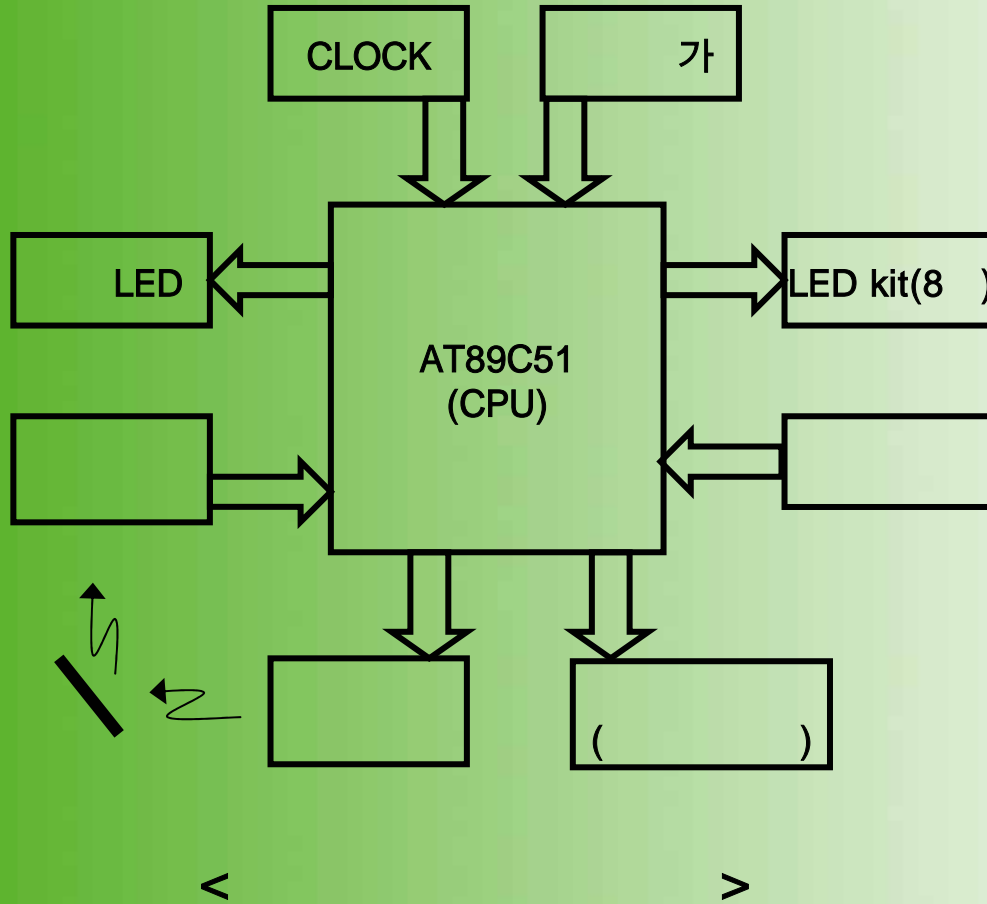
가

3)

4)

,

3.



3-1.

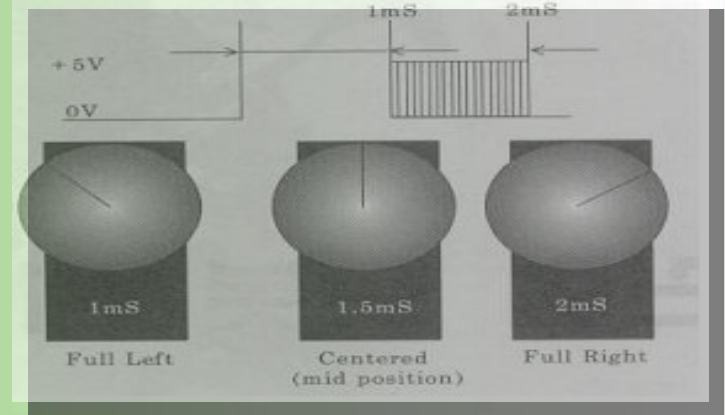
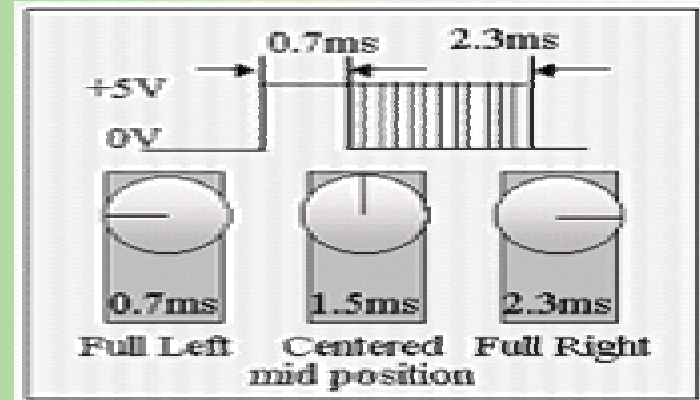
: HS-311

➤ HS-311

• : +90 -90

• : 5V

< 1.5ms <



<

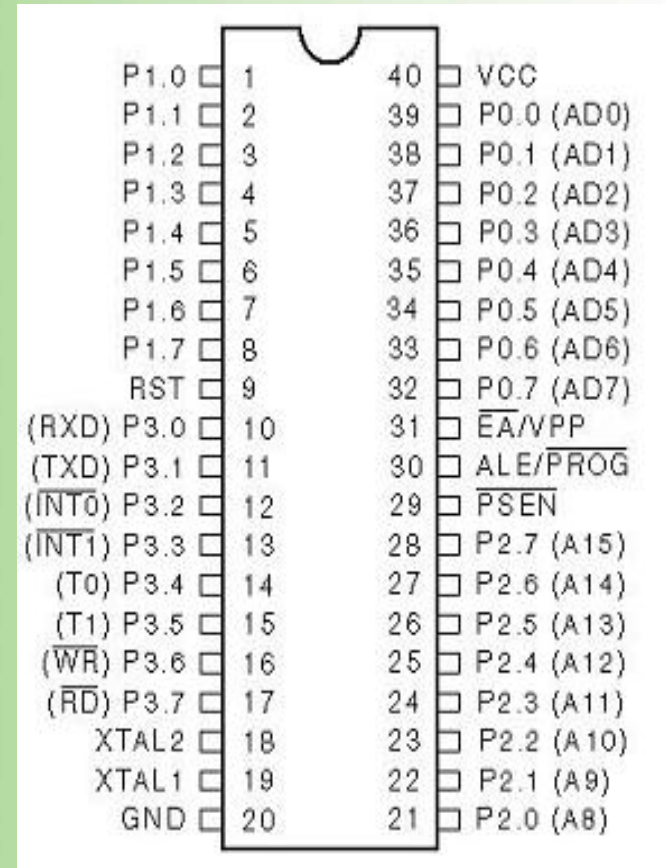
>

3-2.

CPU : AT89C51

➤ AT89C51

- 8 (P0.0 ~ P0.7, P1.0 ~ P1.7, P2.0 ~ P2.7, P3.0 ~ P3.7)
- 2 16 / (T0, T1)
- 1 (I/O 가)
- IDLE (CPU STOP)
POWER DOWN (CPU /
CPU I/O STOP)



< AT89C51 >

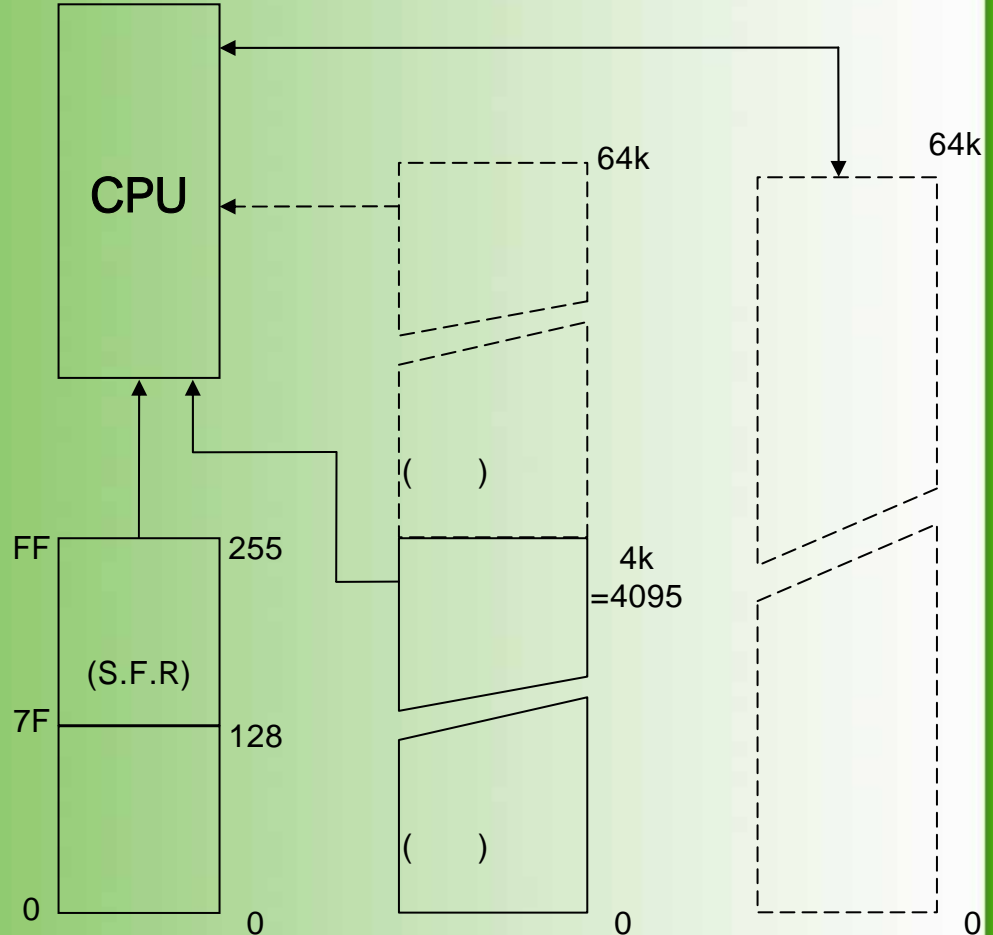
3-2. ()

•64K
- ROM
가

•256
-128
(RAM)

-128
(SFR : Special Function Register)

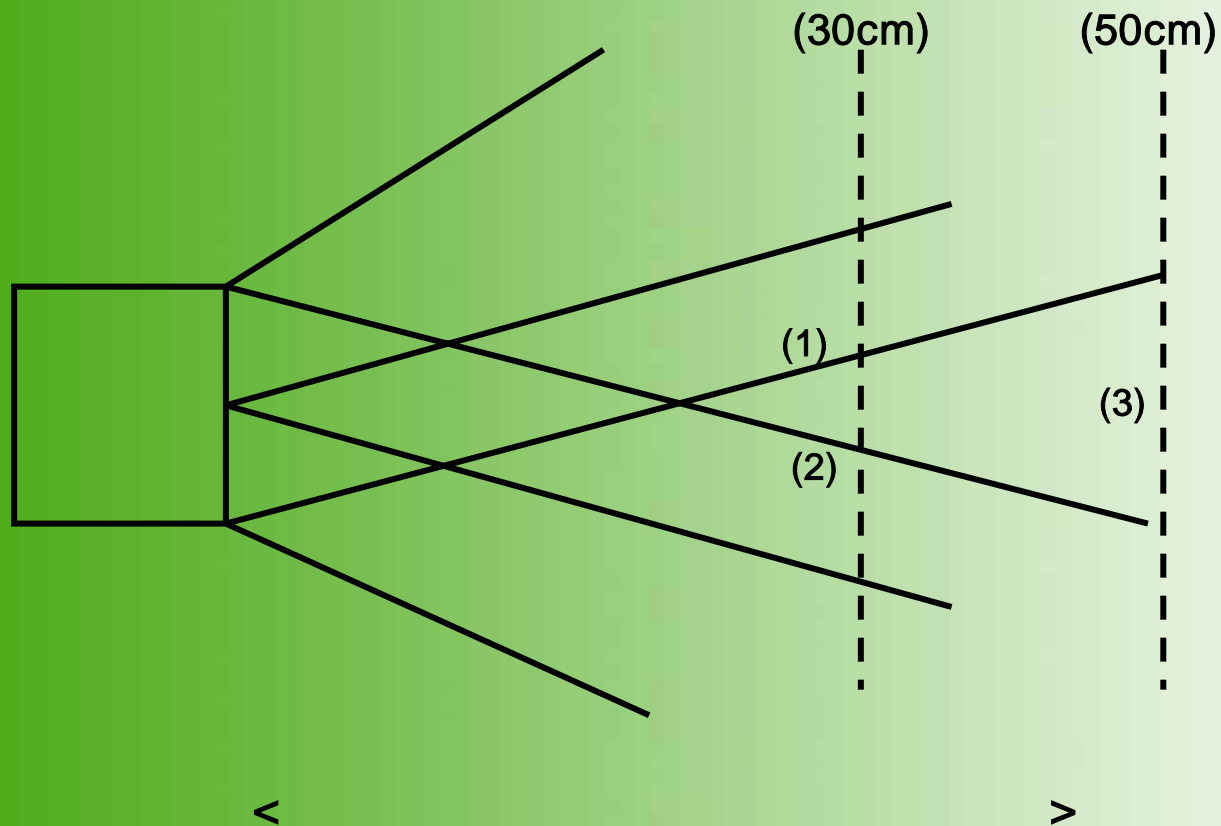
•64K



3-3.

(1)

(2 , 1)



3-3.

(2)

00	0	0
01	0	1
10	1	0
11	1	1

<

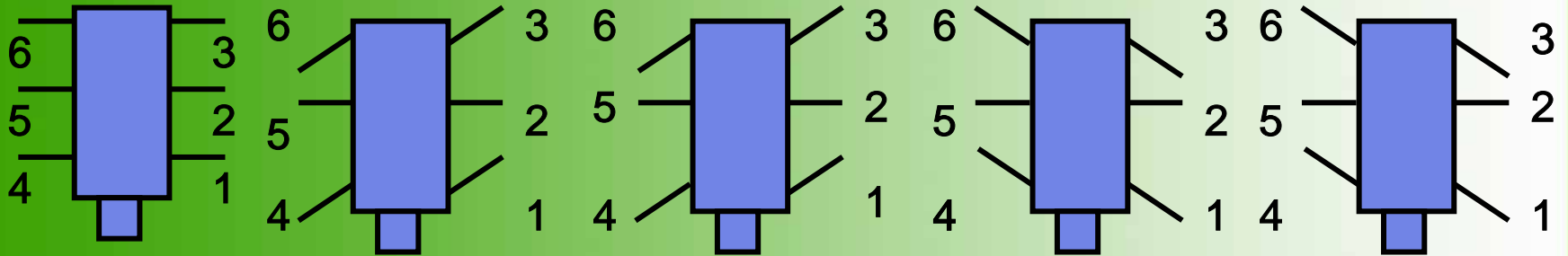
>

00	0	0
01	0	1
10	1	0
11	1	1

<

>

4. (1) :



5
2 ,
↓
1,5,3

1,3
↓
4,6
↓

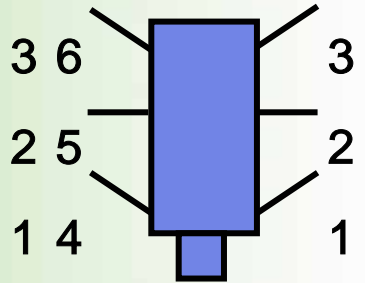
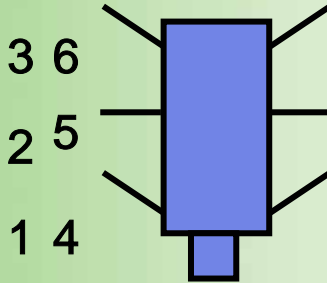
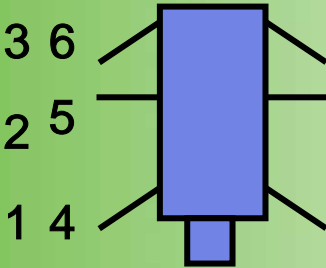
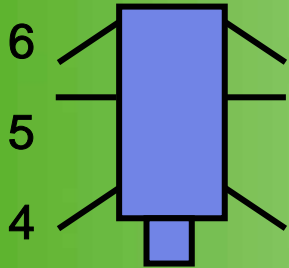
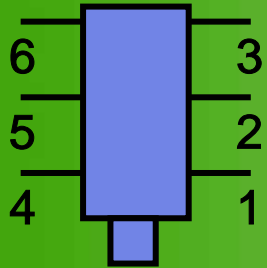
2
5 ,
↓
4,2,6

4,6
↓
1,3
↓

5
2 ,
↓
1,5,3



4. (2) :



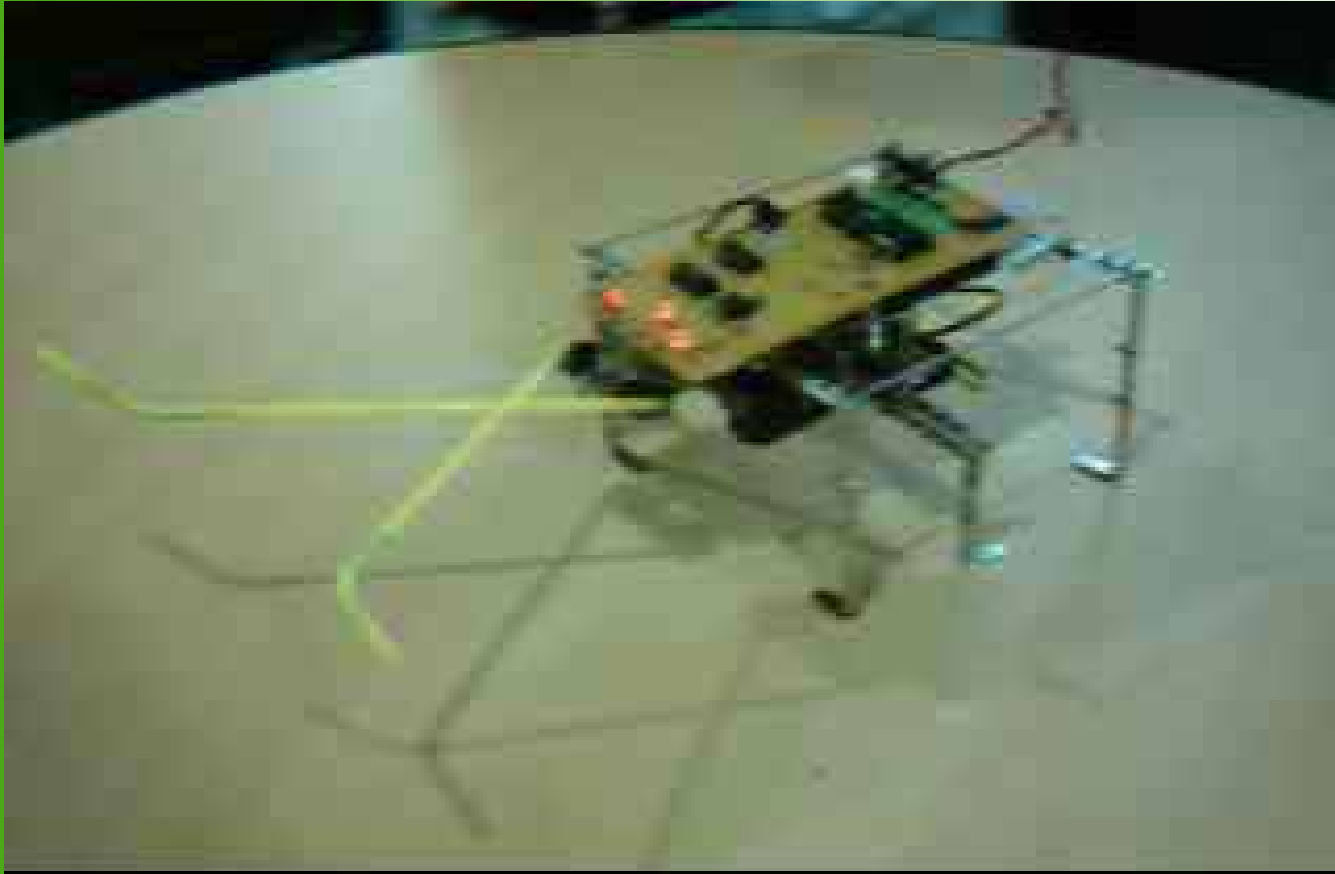
5 ,
2
↓
1,5,3

1,3
↓
4,6
↓

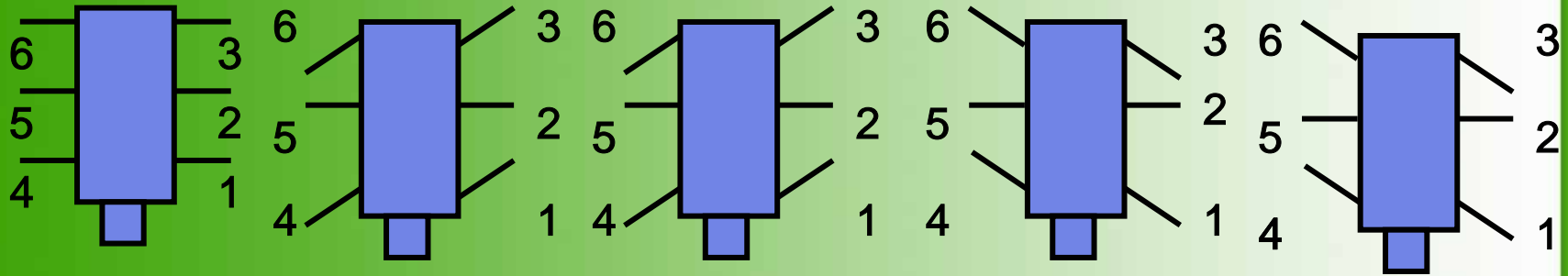
2 ,
5
↓
4,2,6

4,6
↓
1,3
↓

5 ,
2
↓
1,5,3



4. (3) :



2
5 ,
↓
4,2,6

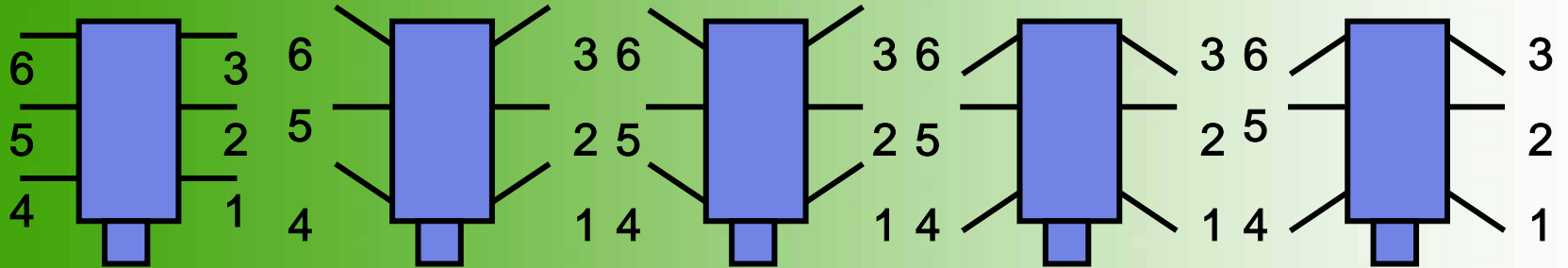
1,3
↓
4,6
↓

5
2 ,
↓
1.5.3

4,6
↓
1,3
↓

2
5 ,
↓
4,2,6

4. (4) :



5
2 ,
↓
1,5,3

1,3
↓
4,6
↓

2
5 ,
↓
4,2,6

4,6
↓
1,3
↓

5
2 ,
↓
1,5,3

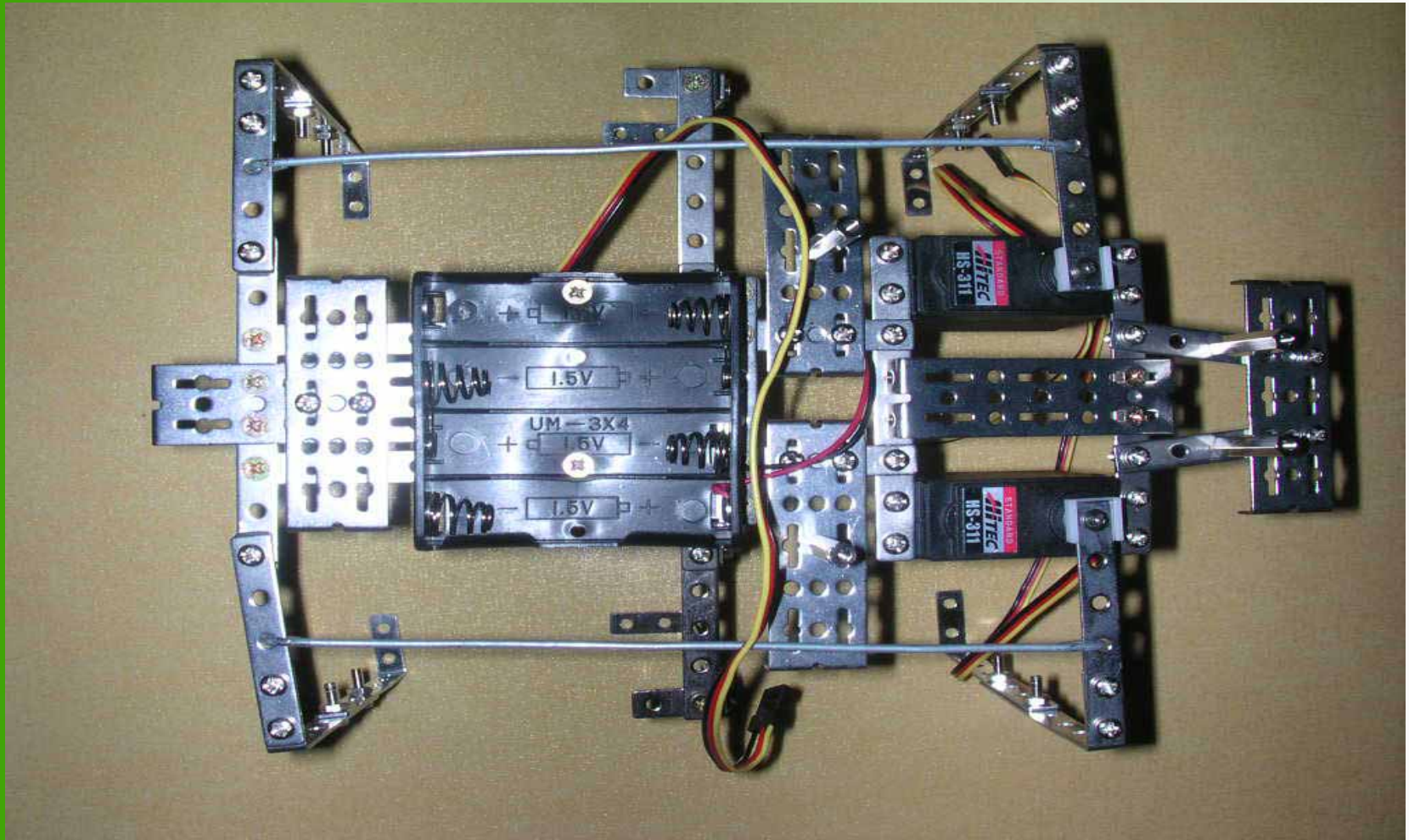
2 :

< : >
Board : PCB
CPU: AT89C51
MOS-TTL : 74HC14
TR : ULN2003
: MC7805CT
: HS-311
OPAMP : LM358
X-tal : 12MHz
: DIP-4
: Toggle sw 3p
:
LED : ,

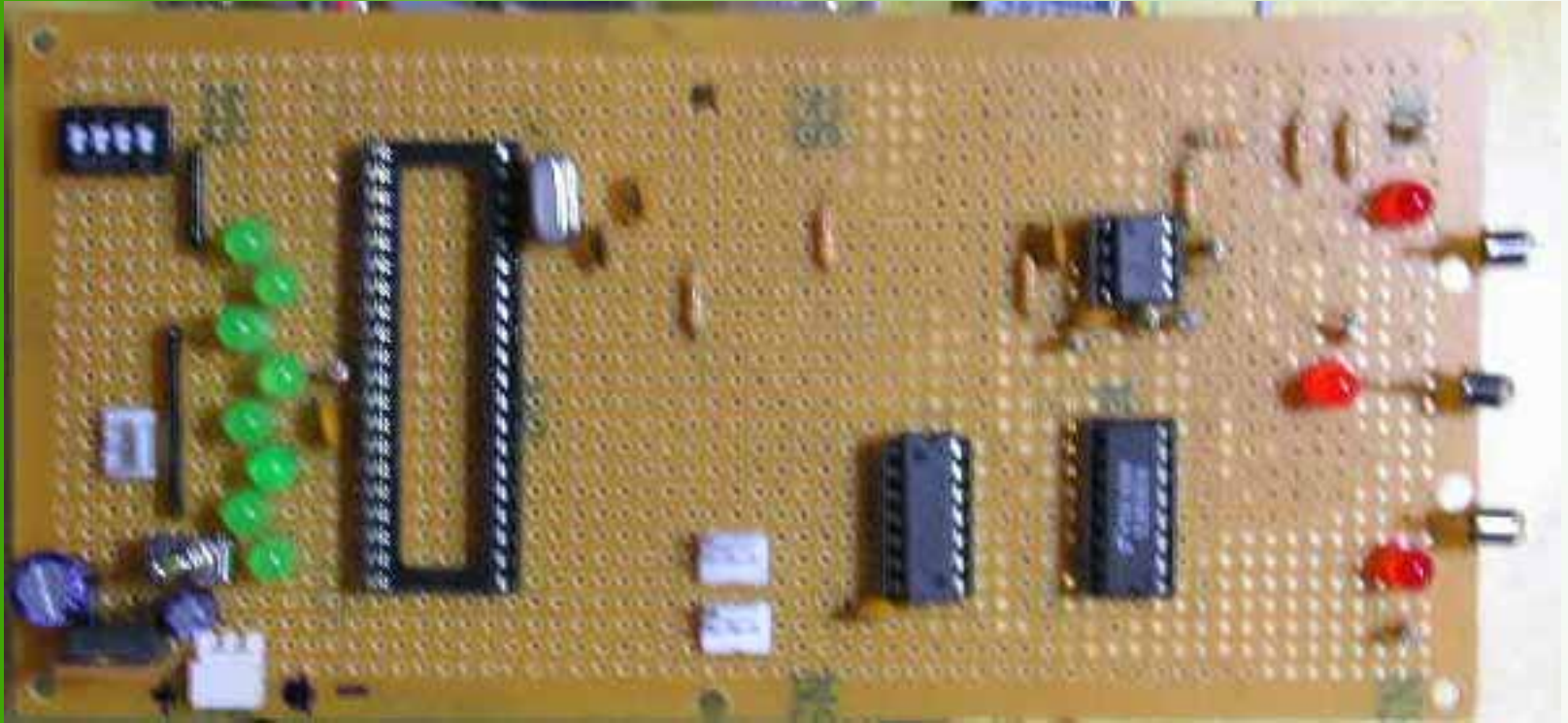
:
EL-1KL3, ST-1KLA
: 10 , 330 , 1K , 5K , 10K , 47K , 100K
:
10KM4, 330M8
:
AA*4
:
30mm, 10mm
:
2p / ,3p

:
10 μ F/16V 220 μ F /25v 22 μ F 33p 104 103
:
MRB1-05 MRB1-06 MRB1-08 MRB1-0A MRB1-12 MRB2-25 7mm

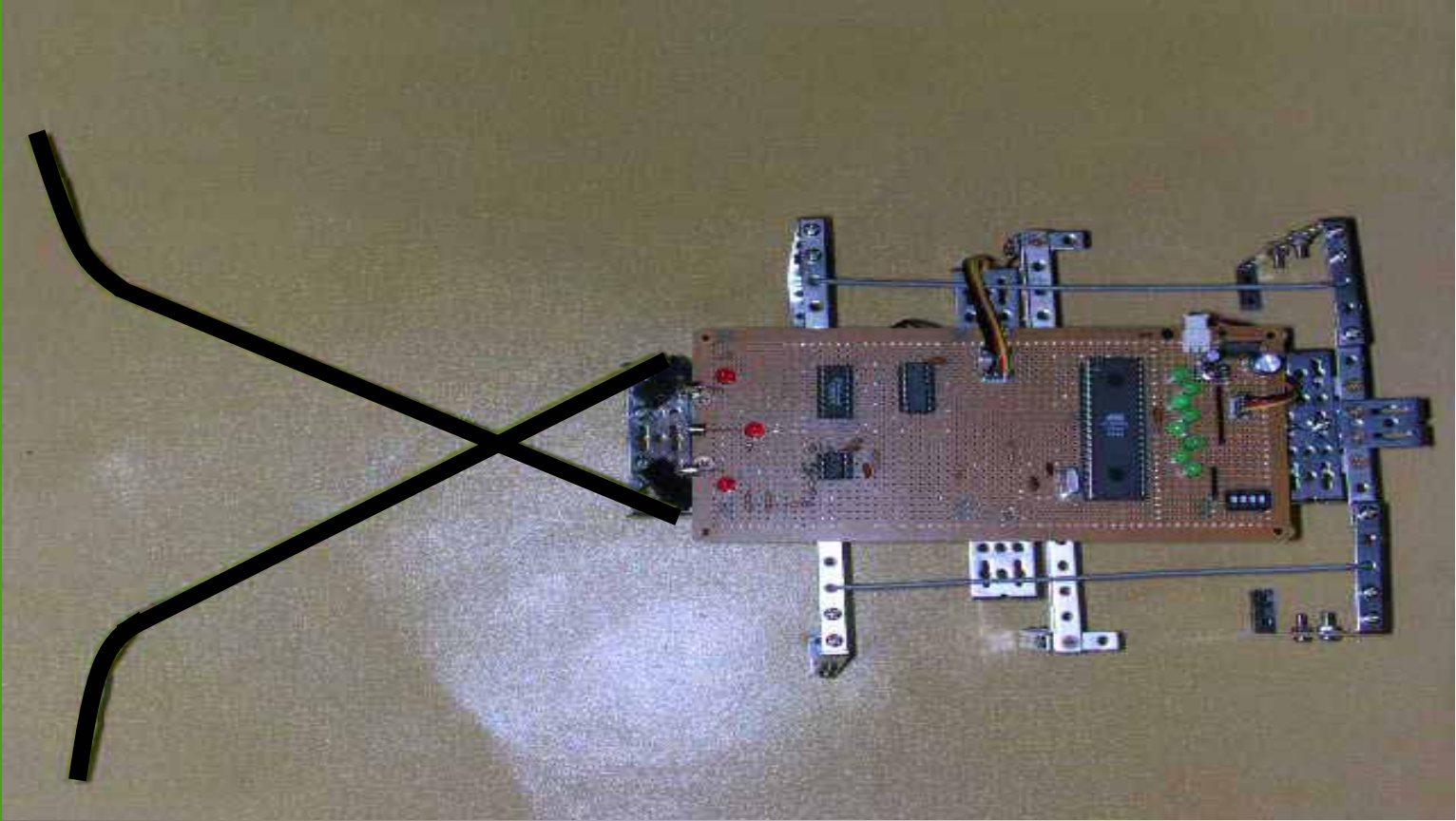
3 : Body



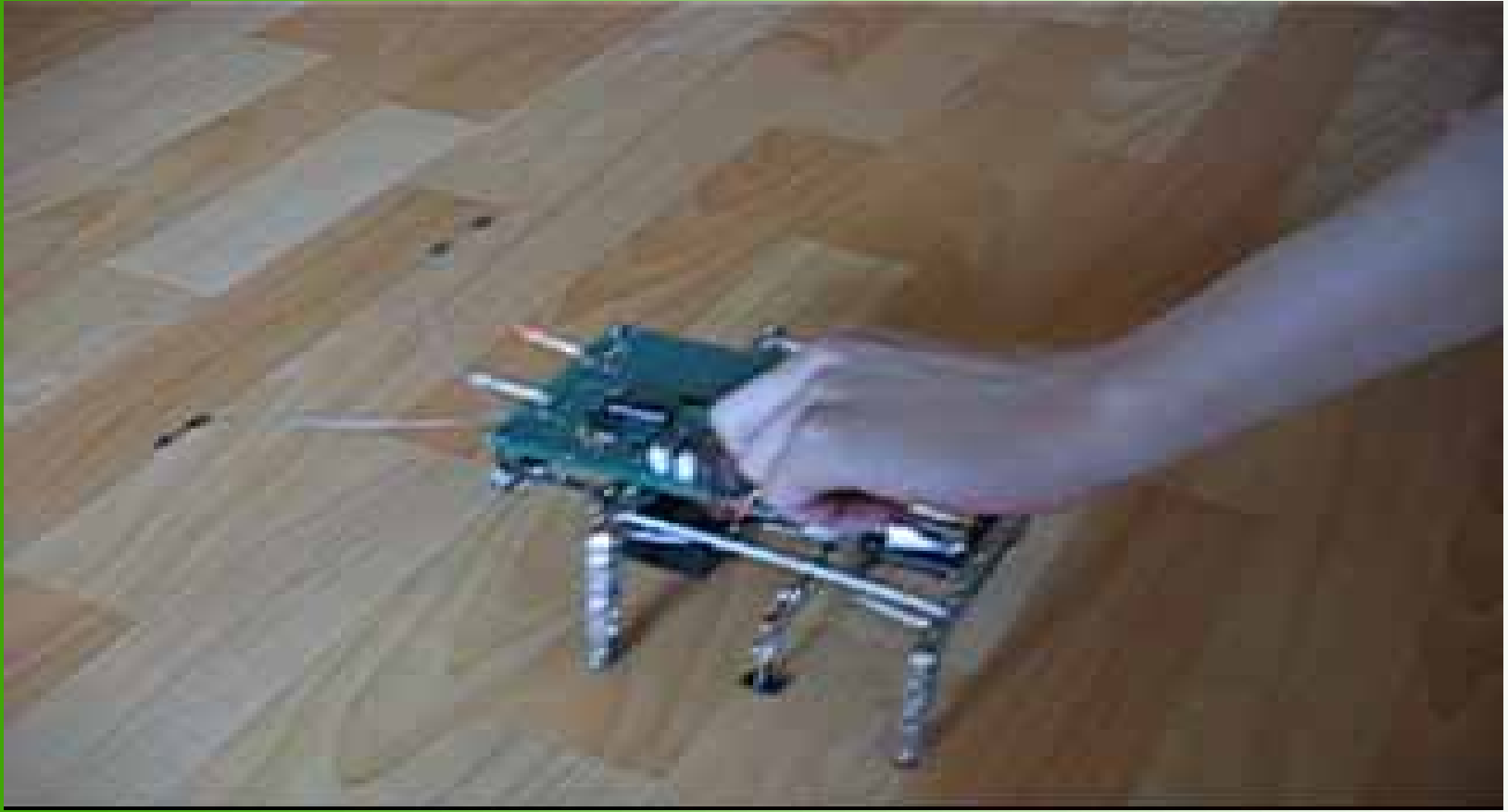
4 :



5 :



6 :



6.

