

DC Motor Driver(DRV8830)

20140413

Reference;
i2c_utility_0.2.1.f
DRV8830_0.4.f

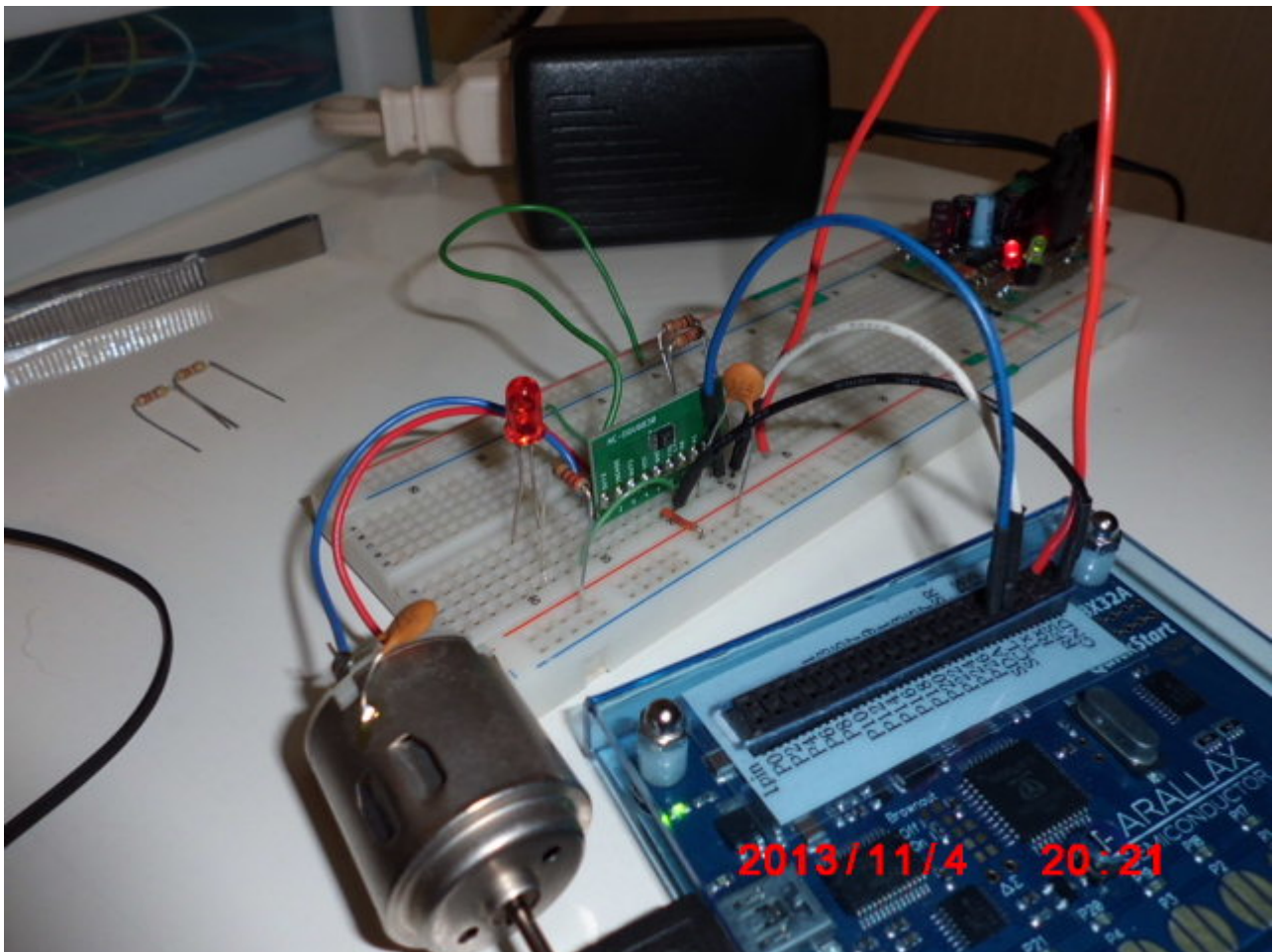
This can drive DC-motor or 1-phase of stepping motor and also control 9 devices on one I2C bus.

There is pull-up resister(10kohm) at scl/sda on QS-board.

This is too big in case of adding DRV8830.

If no pull-up resister (less than 2kohm) at scl/sda on DRV8830, QS-board don't operate correctly.

When rebooting, QS-board hang up.



```

Prop0 Cog6 ok
i2c_detect
  0 1 2 3 4 5 6 7 8 9 A B C D E F
00: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
10: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
20: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
30: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
40: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
50: 50 -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
60: 60 -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- <-- DRV8830's address is h60 [A0=A1=GND]
70: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
i2c_device:2

Prop0 Cog6 ok

```

Add 1.29V on DC motor

test

Prop0 Cog6 ok

Display FAULT register

FAULT?

4

Prop0 Cog6 ok

Display CONTROL register

CONTROL?

VSET DAC	H-Bridge
10	forward

Stop motor without brake

stop1

Prop0 Cog6 ok

Display CONTROL and FAULT register

CONTROL?

VSET DAC	H-Bridge
0	standby

Prop0 Cog6 ok

FAULT?

0

Prop0 Cog6 ok

Accelaration and deccelaration

Motor_test

Foward

VSET DAC H-Bridge

6 forward

FAULT data4

VSET DAC H-Bridge

7 forward

FAULT data4

VSET DAC H-Bridge

8 forward

FAULT data4

VSET DAC H-Bridge

9 forward

FAULT data4

VSET DAC H-Bridge

A forward

FAULT data4

VSET DAC H-Bridge

B forward

FAULT data4

VSET DAC H-Bridge

C forward

FAULT data4

VSET DAC H-Bridge

D forward

FAULT data4

VSET DAC H-Bridge

E forward

FAULT data4

VSET DAC H-Bridge

F forward

FAULT data4

VSET DAC H-Bridge

10 forward
FAULT data4

VSET DAC H-Bridge
11 forward
FAULT data4

VSET DAC H-Bridge
12 forward
FAULT data4

VSET DAC H-Bridge
13 forward
FAULT data4

VSET DAC H-Bridge
14 forward
FAULT data4

VSET DAC H-Bridge
15 forward
FAULT data4

VSET DAC H-Bridge
16 forward
FAULT data4

VSET DAC H-Bridge
17 forward
FAULT data4

VSET DAC H-Bridge
18 forward
FAULT data4

VSET DAC H-Bridge
19 forward
FAULT data4

VSET DAC H-Bridge
1A forward
FAULT data4

VSET DAC H-Bridge

1B forward

FAULT data4

VSET DAC H-Bridge

1C forward

FAULT data4

VSET DAC H-Bridge

1D forward

FAULT data4

VSET DAC H-Bridge

1E forward

FAULT data4

VSET DAC H-Bridge

1F forward

FAULT data4

VSET DAC H-Bridge

20 forward

FAULT data4

VSET DAC H-Bridge

21 forward

FAULT data4

VSET DAC H-Bridge

22 forward

FAULT data4

VSET DAC H-Bridge

23 forward

FAULT data4

VSET DAC H-Bridge

24 forward

FAULT data4

VSET DAC H-Bridge

25 forward

FAULT data4

Reverse
VSET DAC H-Bridge
6 reverse
FAULT data4

VSET DAC H-Bridge
7 reverse
FAULT data4

VSET DAC H-Bridge
8 reverse
FAULT data4

VSET DAC H-Bridge
9 reverse
FAULT data4

VSET DAC H-Bridge
A reverse
FAULT data4

VSET DAC H-Bridge
B reverse
FAULT data4

VSET DAC H-Bridge
C reverse
FAULT data4

VSET DAC H-Bridge
D reverse
FAULT data4

VSET DAC H-Bridge
E reverse
FAULT data4

VSET DAC H-Bridge
F reverse
FAULT data4

VSET DAC H-Bridge
10 reverse
FAULT data4

VSET DAC H-Bridge

11 reverse

FAULT data4

VSET DAC H-Bridge

12 reverse

FAULT data4

VSET DAC H-Bridge

13 reverse

FAULT data4

VSET DAC H-Bridge

14 reverse

FAULT data4

VSET DAC H-Bridge

15 reverse

FAULT data4

VSET DAC H-Bridge

16 reverse

FAULT data4

VSET DAC H-Bridge

17 reverse

FAULT data4

VSET DAC H-Bridge

18 reverse

FAULT data4

VSET DAC H-Bridge

19 reverse

FAULT data4

VSET DAC H-Bridge

1A reverse

FAULT data4

VSET DAC H-Bridge

1B reverse

FAULT data4

VSET DAC H-Bridge
1C reverse
FAULT data4

VSET DAC H-Bridge
1D reverse
FAULT data4

VSET DAC H-Bridge
1E reverse
FAULT data4

VSET DAC H-Bridge
1F reverse
FAULT data4

VSET DAC H-Bridge
20 reverse
FAULT data4

VSET DAC H-Bridge
21 reverse
FAULT data4

VSET DAC H-Bridge
22 reverse
FAULT data4

VSET DAC H-Bridge
23 reverse
FAULT data4

VSET DAC H-Bridge
24 reverse
FAULT data4

VSET DAC H-Bridge
25 reverse
FAULT data4

Display FAULT and CONTROL register

FAULT?

0

Prop0 Cog6 ok

CONTROL?

VSET DAC H-Bridge

0 standby

Prop0 Cog6 ok