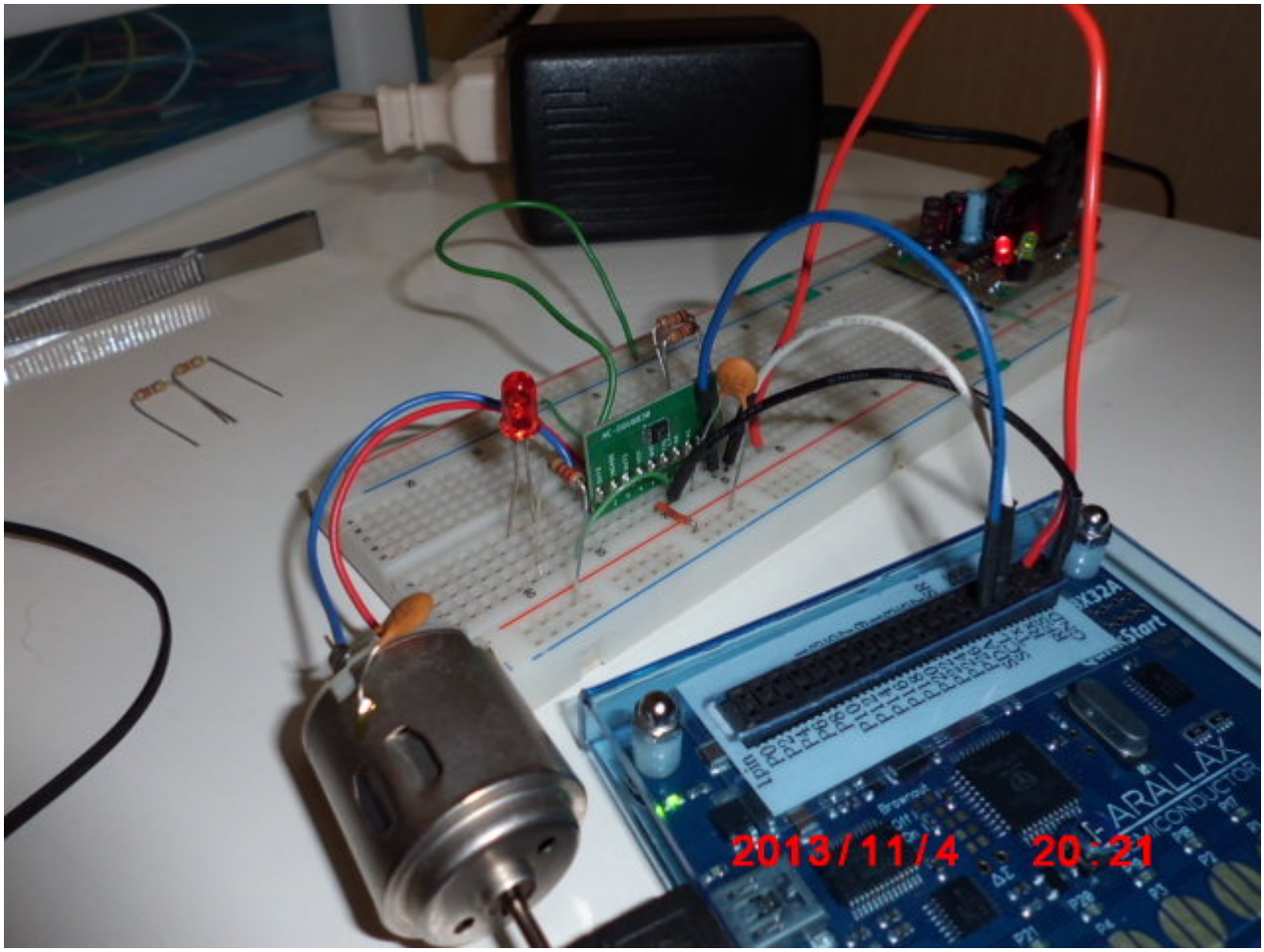
DC Motor Driver(DRV8830)

20131108
This use i2c_rd and i2c_wr.

Reference;
DRV8830_0.3.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.



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
```