

Thermometer and Thermostat DS1631

20140413

Reference;

i2c_utility_0.2.1.f

DS1631_0.2.f

DS1631 operate from -55degree to +125degree.

DS1631_0.2.f is incomplete but basic function operate finely.

```
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: ----- 48 ----- <-- DS1631's address is h48.
50: 50 -----
60: -----
70: -----
i2c_device:2
```

Register on power-up below;

Register-values refer page7[Tablr3] in “DS1631-DS1731.pdf”.

Prop0 Cog6 ok

hex

Prop0 Cog6 ok

rd_config .

8C Prop0 Cog6 ok

rd_Temp swap 8 lshift or .

C400 Prop0 Cog6 ok

rd_TH swap 8 lshift or .

F00 Prop0 Cog6 ok

rd_TL swap 8 lshift or .

A00 Prop0 Cog6 ok

-- Set TH to 20.7500degree

Prop0 Cog6 ok

hC0 h14 wr_TH

Temperature-Hi-Flag rise up when TL-register's value exceed Temperature-value.

But this flag must be erased by user.

Prop0 Cog6 ok

measure

Temp	TH	TL	TempFlag
20 .5625	20 .7500	10 .0000	0
20 .5625	20 .7500	10 .0000	0
20 .5625	20 .7500	10 .0000	0
20 .5625	20 .7500	10 .0000	0
20 .5625	20 .7500	10 .0000	0
20 .5625	20 .7500	10 .0000	0
20 .1250	20 .7500	10 .0000	0
20 .1250	20 .7500	10 .0000	0
20 .1250	20 .7500	10 .0000	0
20 .1250	20 .7500	10 .0000	0
20 .1250	20 .7500	10 .0000	0
20 .3125	20 .7500	10 .0000	0
20 .3125	20 .7500	10 .0000	0
20 .3125	20 .7500	10 .0000	0
20 .3125	20 .7500	10 .0000	0
20 .3125	20 .7500	10 .0000	0
20 .6875	20 .7500	10 .0000	0
20 .6875	20 .7500	10 .0000	0
20 .6875	20 .7500	10 .0000	0
20 .6875	20 .7500	10 .0000	0

Temp:	TH	TL	TempFlag
20 .6875	20 .7500	10 .0000	0
20 .6875	20 .7500	10 .0000	0
21 .0000	20 .7500	10 .0000	2
21 .0000	20 .7500	10 .0000	2
21 .0000	20 .7500	10 .0000	2
21 .0000	20 .7500	10 .0000	2
21 .0000	20 .7500	10 .0000	2
21 .3125	20 .7500	10 .0000	2
21 .3125	20 .7500	10 .0000	2
21 .3125	20 .7500	10 .0000	2
21 .3125	20 .7500	10 .0000	2
21 .3125	20 .7500	10 .0000	2
21 .4375	20 .7500	10 .0000	2
21 .4375	20 .7500	10 .0000	2
21 .4375	20 .7500	10 .0000	2
21 .4375	20 .7500	10 .0000	2
21 .4375	20 .7500	10 .0000	2
21 .4375	20 .7500	10 .0000	2
21 .5625	20 .7500	10 .0000	2
21 .5625	20 .7500	10 .0000	2

Temp:	TH	TL	TempFlag
21 .5625	20 .7500	10 .0000	2
21 .5625	20 .7500	10 .0000	2
21 .5625	20 .7500	10 .0000	2
21 .5000	20 .7500	10 .0000	2
21 .5000	20 .7500	10 .0000	2
21 .5000	20 .7500	10 .0000	2
21 .5000	20 .7500	10 .0000	2
21 .5000	20 .7500	10 .0000	2
21 .5000	20 .7500	10 .0000	2
21 .5000	20 .7500	10 .0000	2
21 .5000	20 .7500	10 .0000	2
21 .5000	20 .7500	10 .0000	2

[illegible][illegible]

Temp:	TH	TL	TempFlag
21 .1250	20 .7500	10 .0000	2
21 .1250	20 .7500	10 .0000	2
21 .1250	20 .7500	10 .0000	2
21 .1250	20 .7500	10 .0000	2
21 .1250	20 .7500	10 .0000	2
21 .1250	20 .7500	10 .0000	2
21 .1250	20 .7500	10 .0000	2
21 .1250	20 .7500	10 .0000	2
21 .1250	20 .7500	10 .0000	2
21 .1250	20 .7500	10 .0000	2
21 .0625	20 .7500	10 .0000	2
21 .0625	20 .7500	10 .0000	2
21 .0625	20 .7500	10 .0000	2
21 .0625	20 .7500	10 .0000	2
21 .0625	20 .7500	10 .0000	2
21 .0625	20 .7500	10 .0000	2
21 .0000	20 .7500	10 .0000	2
21 .0000	20 .7500	10 .0000	2
21 .0000	20 .7500	10 .0000	2
21 .0000	20 .7500	10 .0000	2

Temp:	TH	TL	TempFlag
21 .0000	20 .7500	10 .0000	2
21 .0000	20 .7500	10 .0000	2
21 .0000	20 .7500	10 .0000	2
21 .0000	20 .7500	10 .0000	2
21 .0000	20 .7500	10 .0000	2

21.0000	20.7500	10.0000	2
20.9375	20.7500	10.0000	2
20.9375	20.7500	10.0000	2
20.9375	20.7500	10.0000	2
20.9375	20.7500	10.0000	2
20.9375	20.7500	10.0000	2
20.9375	20.7500	10.0000	2
20.9375	20.7500	10.0000	2
20.9375	20.7500	10.0000	2
20.9375	20.7500	10.0000	2
20.9375	20.7500	10.0000	2
20.9375	20.7500	10.0000	2
20.9375	20.7500	10.0000	2
20.8750	20.7500	10.0000	2
20.8750	20.7500	10.0000	2
20.8750	20.7500	10.0000	2

Temp:	TH	TL	TempFlag
20 .8750	20 .7500	10 .0000	2
20 .8750	20 .7500	10 .0000	2
20 .8750	20 .7500	10 .0000	2
20 .8750	20 .7500	10 .0000	2
20 .8750	20 .7500	10 .0000	2
20 .8750	20 .7500	10 .0000	2
20 .8750	20 .7500	10 .0000	2
20 .8750	20 .7500	10 .0000	2
20 .8125	20 .7500	10 .0000	2
20 .8125	20 .7500	10 .0000	2
20 .8125	20 .7500	10 .0000	2
20 .8125	20 .7500	10 .0000	2
20 .8125	20 .7500	10 .0000	2
20 .8125	20 .7500	10 .0000	2
20 .8125	20 .7500	10 .0000	2
20 .8125	20 .7500	10 .0000	2
20 .8125	20 .7500	10 .0000	2
20 .8125	20 .7500	10 .0000	2
20 .7500	20 .7500	10 .0000	2
20 .7500	20 .7500	10 .0000	2

[illegible]

Temp:	TH	TL	TempFlag
20 .6875	20 .7500	10 .0000	2
20 .6875	20 .7500	10 .0000	2
20 .6875	20 .7500	10 .0000	2
20 .6875	20 .7500	10 .0000	2
20 .6875	20 .7500	10 .0000	2
20 .6875	20 .7500	10 .0000	2
Prop0 Cog6 ok			