

3-Axis Digital Compass(HMC5883L)

20131110

This use i2c_rd and i2c_wr and i2c_rd_multi.

Reference;

HMC5883L_0.2.f

Display register value (After power on)

Prop0 Cog6 ok

disp_reg

Address value(hex)

0	70
1	20
2	00
3	00
4	0A
5	FE
6	A6
7	01
8	0E
9	03
10	48
11	34
12	33

Prop0 Cog6 ok

Status register(address9)'s LOCK(bit1) is 1, because word'disp_reg' read out byte step byte.

This is different from default values on manual.

I have no idea.

But it seems to operate finely.

Prop0 Cog6 ok

contMeasure

...

X=-1 Y=272 Z=-345 <--- Rotating chip on horizontal

X=-1 Y=272 Z=-345

X=-1 Y=272 Z=-345

X=-1 Y=272 Z=-345

X=-1 Y=272 Z=-345

X=-1 Y=272 Z=-345

X=-1 Y=272 Z=-345

X=0 Y=273 Z=-345

X=0 Y=273 Z=-345

X=0 Y=273 Z=-345

X=0 Y=273 Z=-345

...

X=-273 Y=-1 Z=-336 <--- Rotating chip on horizontal

X=-273 Y=-1 Z=-336

X=-273 Y=-1 Z=-336

X=-273 Y=-1 Z=-336

X=-273 Y=-1 Z=-336

X=-273 Y=-1 Z=-336

X=-273 Y=-1 Z=-336

X=-273 Y=-1 Z=-336

X=-273 Y=-1 Z=-336

X=-273 Y=-1 Z=-336

X=-273 Y=-1 Z=-336

X=-273 Y=-1 Z=-336

X=-273 Y=-1 Z=-336

X=-273 Y=-1 Z=-336

...

X=28 Y=402 Z=-3 <--- Tilting chip on vertical

X=28 Y=402 Z=-3

X=28 Y=402 Z=-3

X=28 Y=402 Z=-3

X=28 Y=401 Z=-6

X=27 Y=401 Z=-6

X=27 Y=401 Z=-6

X=27 Y=401 Z=-6

X=27 Y=401 Z=-6

X=27 Y=401 Z=-6

X=27 Y=401 Z=-6

X=27 Y=401 Z=-6

X=27 Y=401 Z=-6

X=27 Y=401 Z=-6

X=27 Y=401 Z=-6

Not yet self-test operation.