10segcolorled_i2c_attiny2313
https://github.com/rimksky/10segcolorled_i2c_attiny2313

ATtiny2313 fuse factory default LOW:0x64 HIGH:0xDF EXT:0xFF LOCK:0xFF
I2C Address:
d0:NC d1:NC 0x55 (default)
d0:L d1:NC 0x56
d0:NC d1:L 0x57
d0:L d1:L 0x58

port mapping [ATtiny2313]

```
bit     7   6   5   4   3   2   1   0
PORTA   -   -   -   -   -   -  d1  d0
PORTB   -   r   -   b   g   J   I   H
PORTD   -   G   F   E   D   C   B   A
```

10seg fullcolor [OSX10201-LRPB2]

ABCDEFJHIJ (VCC)
rbg----gbr (GND) -> The side where the string is printed

r - 150R - GND
b - 100R - GND
g - 100R - GND

d0 - sw - GND
d1 - sw - GND

[Color CODE] RGB

binary	decimal	color
0b000	0	black(off)
0b001	1	blue
0b010	2	green
0b011	3	lightblue
0b100	4	red
0b101	5	magenta
0b110	6	yellow
0b111	7	white

I2C Command (Write)

register	data	do
0x00	[Color Code]	LED:A lights [Color Code]
0x01	[Color Code]	LED:B lights [Color Code]
0x02	[Color Code]	LED:C lights [Color Code]
0x03	[Color Code]	LED:D lights [Color Code]
0x04	[Color Code]	LED:E lights [Color Code]
0x05	[Color Code]	LED:F lights [Color Code]
0x06	[Color Code]	LED:G lights [Color Code]
0x07	[Color Code]	LED:H lights [Color Code]
0x08	[Color Code]	LED:I lights [Color Code]
0x09	[Color Code]	LED:J lights [Color Code]
0x0a		N/A
0x0b		N/A
0x0c		N/A
0x0d		N/A
0x0e		N/A
0x0f		N/A
0x10	[Color Code]	All LED light [Color Code]
0x11	[Color Code]	shift LEDs right and LED:A lights [Color Code]
0x12	[Color Code]	shift LEDs left and LED:J lights [Color Code]
0x13		N/A
0x14		N/A
0x15		N/A
0x16		N/A
0x17		N/A
0x18		N/A
0x19		N/A

I2C Command (select register for request)

register	data	do
0x00	N/A	request [Color Code] of LED:A
0x01	N/A	request [Color Code] of LED:B
0x02	N/A	request [Color Code] of LED:C
0x03	N/A	request [Color Code] of LED:D
0x04	N/A	request [Color Code] of LED:E
0x05	N/A	request [Color Code] of LED:F
0x06	N/A	request [Color Code] of LED:G
0x07	N/A	request [Color Code] of LED:H
0x08	N/A	request [Color Code] of LED:I
0x09	N/A	request [Color Code] of LED:J

Example on Raspberry Pi 3

i2c commands can be issued sequentially in the following order.

pi@rasp:~ $ i2cset -y 1 0x55 0x00 0x04
LED:A lights [Color Code]:4 red
[ABCDEFGHIJ]
pi@rasp:~ $ i2cset -y 1 0x55 0x01 0x02 0x02 0x01 i
LED:B lights [Color Code]:2 green, LED:C lights [Color Code]:1 blue
[ABCDEFGHIJ]
pi@rasp:~ $ i2cset -y 1 0x55 0x10 0x05 0x09 0x00 0x03 i
pi@rasp:~ $ i2cget -y 1 0x55
0x06
All LEDs light [Color Code]:5 magenta, LED:I light off, request [Color Code]:5 magenta of LED:D
get [Color Code]:5(0x05) of LED:D
[ABCDEFGHIJ]
pi@rasp:~ $ i2cset -y 1 0x55 0x10 0x00
All LEDs light off
[ABCDEFGHIJ]
pi@rasp:~ $ i2cset -y 1 0x55 0x10 0x04 0x11 0x01 0x11 0x01 i
All LEDs light [Color Code]:4 red, shift LEDs left and LED:A lights [Color Code]:1 blue (2 times)
[ABCDEFGHIJ]
pi@rasp:~ $ i2cset -y 1 0x55 0x12 0x02 0x12 0x02 i
shift LEDs left and LED:J lights [Color Code]:2 green (2 times)
[ABCDEFGHIJ]