CMOS

5~24V@

OUT   26V

256

16mA

DIN   DOUT

800Kbps

SOP8

LED

LED   /

SM16703PB   LED

SPWM

RC

SM16703PB	SOP8	100 /	4000	/	13

SOP8

深圳市明微电子股份有限公司
SHENZHEN SUNMOON MICROELECTRONICS CO.,LTD.
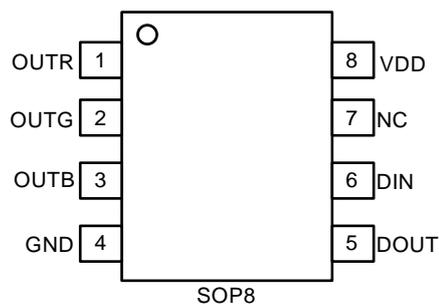
OUTR			1	RED
OUTG			2	GREEN
OUTB			3	BLUE
GND			4	
DOUT			5	
DIN			6	
NC			7	
VDD			8	

Ta = 25

	VCC	5——24	V
R/G/B	V_{DS}	26	V
	V_{I1}	-0.5——5.5	V

875.7000 655.800 87.4966090.3400 reW994036.3840 596.0600 87.49660606.00 ref*9940BT/E2.9.00 Tf1 0 0 1 109.15000

"0" "1"

	0		T0L	
1		T1H	T1L	
Reset		Treset		
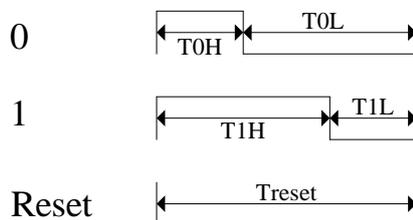
T0H	0	-	0.3	-	±0.05	us
T1H	1	-	0.9	-	±0.05	us
T0L	0	-	0.9	-	±0.05	us
T1L	1	-	0.3	-	±0.05	us
Trst	Reset	-	80	-	-	us

RGB

R7	R6	R5	R4	R3	R2	R1	R0	G7	G6	G5	G4	G3	G2	G1	G0	B7	B6	B5	B4	B3	B2	B1	B0
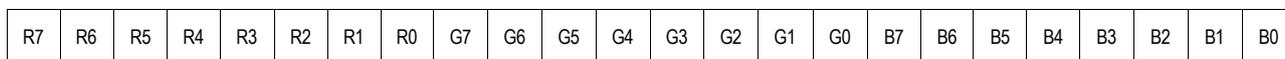
bit23……bit0

DIN Trst+ 1 24bit + 2 24bit +……+ N 24bit

Data → [1] → [2] → [3] → [4] — →

| 1 | 24bit | 24bit | 24bit | RST CODE | | |

| 2 | | 24bit | 24bit | RST CODE | |

| 3 | | 24bit | RST CODE |

| 4 |
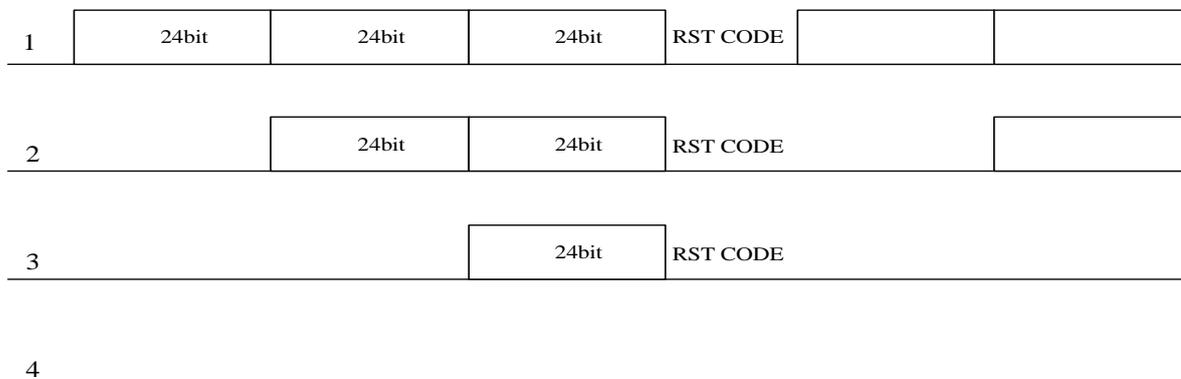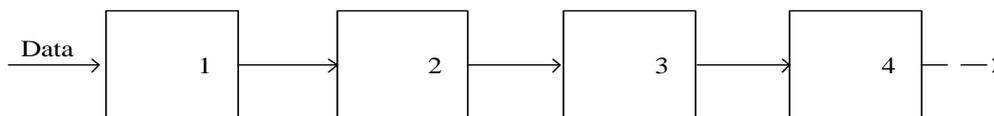
1   5V   LED
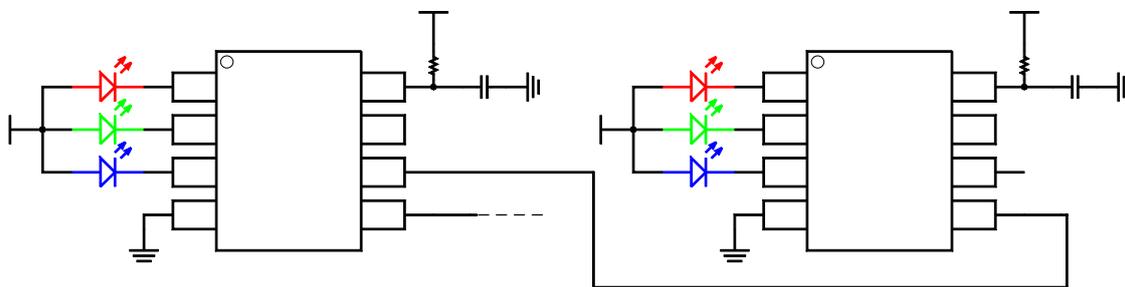
5V   30m

2   12V   3   LED
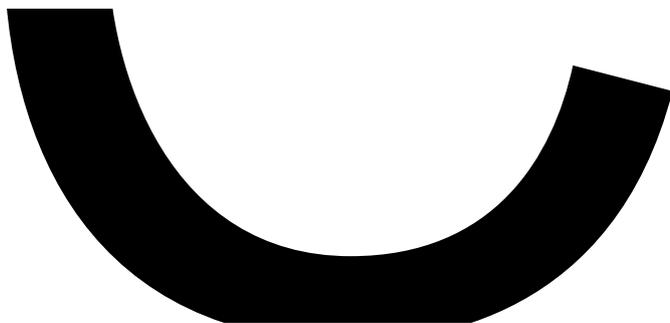
12V   180 R_{SER}

IC   180 R_{SER} 10m

3   24V   6   LED
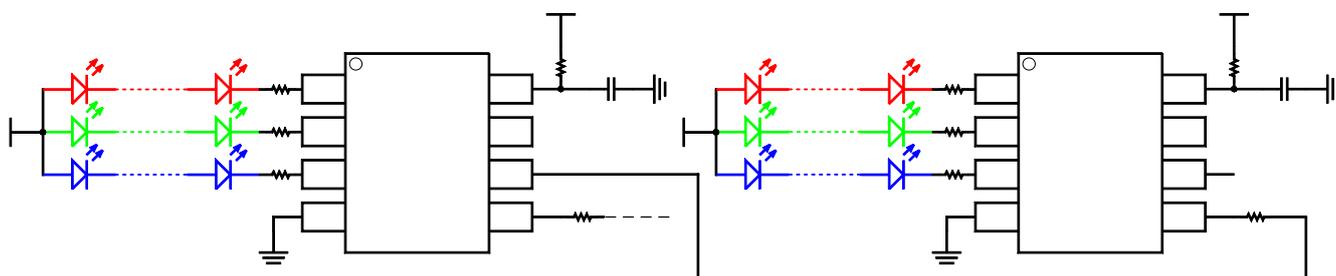
24V   470 R_{SER}

IC   470 R_{SER} 5 m

SM16703PB   VCC R_{IN} VDD C_{IN} R/G/B LED

R_L

VDD   VDD=VCC-(I_{DD}+I_{IN})*R_{IN}

I_{IN} I_{DD} R_{IN} VDD > 4V

R_{IN} R_{IN}

R_{IN} VCC R_{IN}

VCC(V)	5	6	9	12	15	18	24
$R_{IN}(\Omega)$	33	100	470	1K	1.5K	2K	3K

SM16703PB   DOUT C_L DOUT C_L

60mA R_{IN} VDD C_{IN} VDD C_L

1nF C_{IN} 0.1uF

LED R_L $R_L = \dfrac{VCC \quad N*V_{LED} \quad V_{DS}}{I_{LED}}$

VCC V_{LED} LED V_{DS} 1V I_{LED}

SOP8
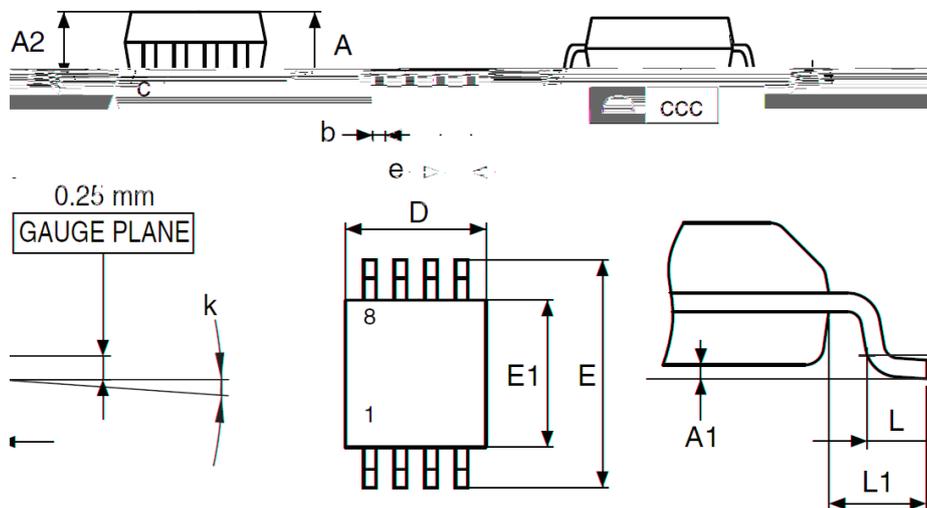
DEMENSIONS						
REF.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A			1.75			0.0689
A1	0.1		0.25	0.0039		0.0098
A2	1.25			0.0492		
b	0.28		0.48	0.011		0.0189
c	0.17		0.23	0.0067		0.0091
ccc			0.1			0.0039
D	4.8	4.9	5	0.189	0.1929	0.1969
E	5.8	6	6.2	0.2283	0.2362	0.2411
E1	3.8	3.9	4	0.1496	0.1535	0.1575
e		1.27			0.05	
h	0.25		0.5	0.0098		0.0197
k	0		8	0		8
L	0.4		1.27	0.0157		0.05
L1		1.04			0.0409	