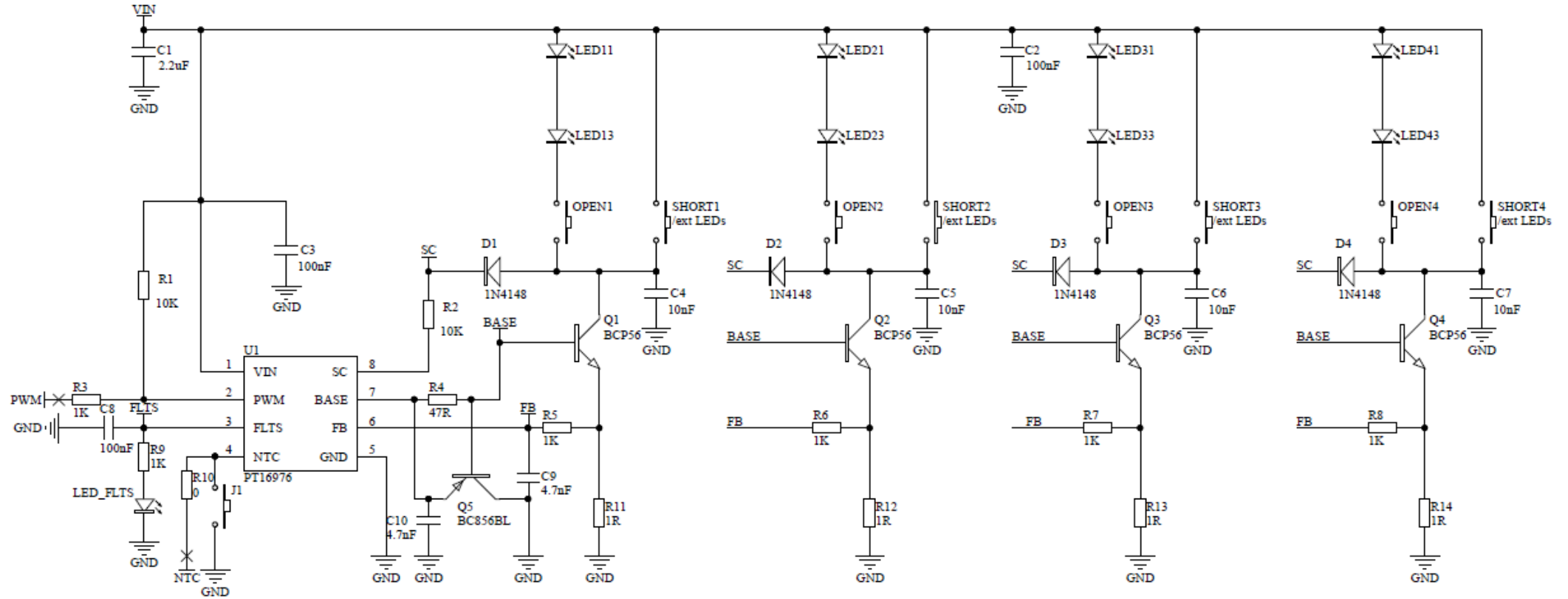




PT16976 demo test report

Parameter	Specifications
Input Voltage	9~30V
Number of LED series connections	2pcs
LED Current	150mA per Channel

1 Schematic





2 BOM

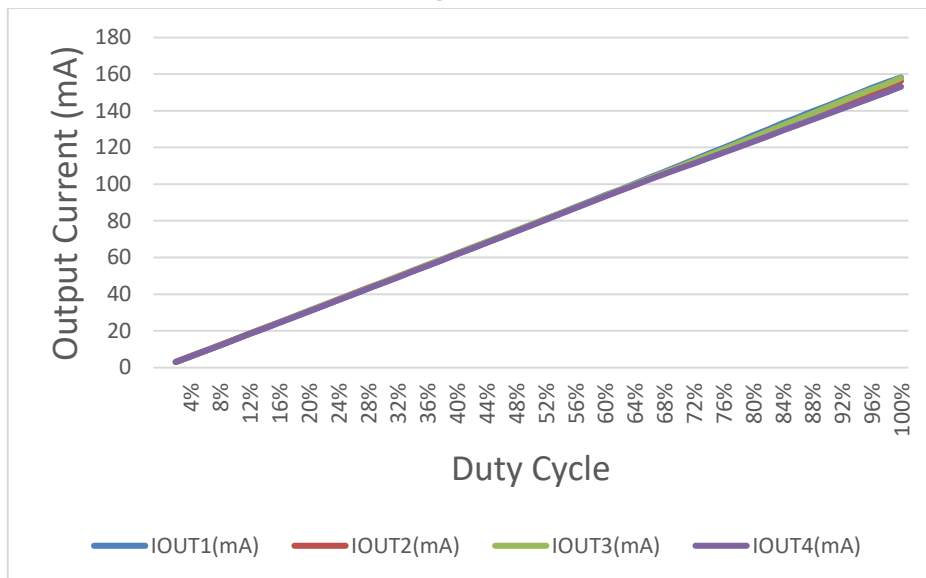
Designator	Qty	Value	Description	Package
C1	1	2.2uF	CAP, CERM, 2.2μF, 50 V, +/- 10%, X7R	1206
C2, C3, C8	3	100nF	CAP, CERM, 100nF, 50 V, +/- 10%, X7R	0805
C4, C5, C6, C7	4	10nF	CAP, CERM, 10nF, 50 V, +/- 10%, X7R	0805
C9, C10	2	4.7nF	CAP, CERM, 4.7nF, 50 V, +/- 10%, X7R	0805
R1, R2	2	10k	RES, 10kΩ, 5%, 0.125 W	0805
R3, R5, R6, R7, R8, R9	6	1k	RES, 1kΩ, 5%, 0.125 W	0805
R4	1	47Ω	RES, 47Ω, 1%, 0.125 W	0805
R10	1	0Ω	RES, 0Ω, 1%, 0.125 W	0805
R11, R12, R13, R14	4	1Ω	RES, 1Ω, 1%, 0.125 W	0805
Q1, Q2, Q3, Q4	4	BCP56	Transistor, NPN, 80 V, 1A	SOT-223
Q5	1	BC856BL	Transistor, PNP, -65 V, 100mA	SOT-23
D1, D2, D3, D4	1	IN4148	Diode, 75 V, 0.15A	SOD123
LED_FLTS	1	LED	LED RED	0805

3 Performance Data

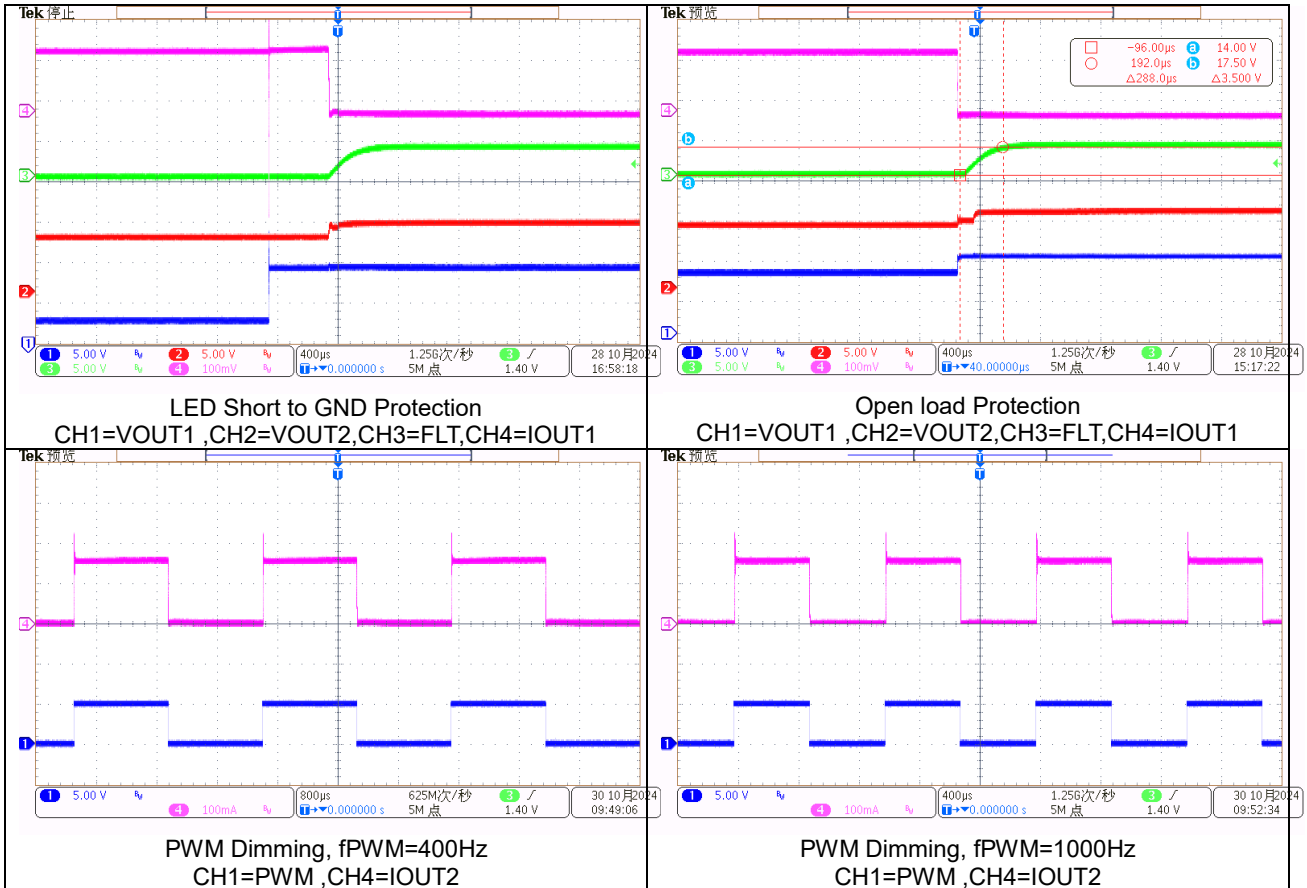
3.1 LED Current Line Regulation

VIN(V)	LED Current per channel (mA)			
	CH1	CH2	CH3	CH4
9	154.5	156.1	152.7	151
10	154.2	156.3	152.5	151
11	154.1	156.7	152.3	151
12	153.9	157.1	152.1	151
13	153.8	157.4	151.8	150.8
14	153.7	157.9	151.6	150.8
15	153.5	158.4	151.2	150.7
16	153.4	158.7	150.7	150.5
17	153.2	159.4	150.3	150.4
18	153.2	159.8	149.7	150.2
20	78.1	82.6	74.8	75.5
22	77.8	83.7	73.6	75.3
24	77.8	84.6	72.3	74.9
26	76.3	85.1	70.9	73.9
28	75.6	86.6	68.5	73.4
30	74.9	87.6	65.3	71.4

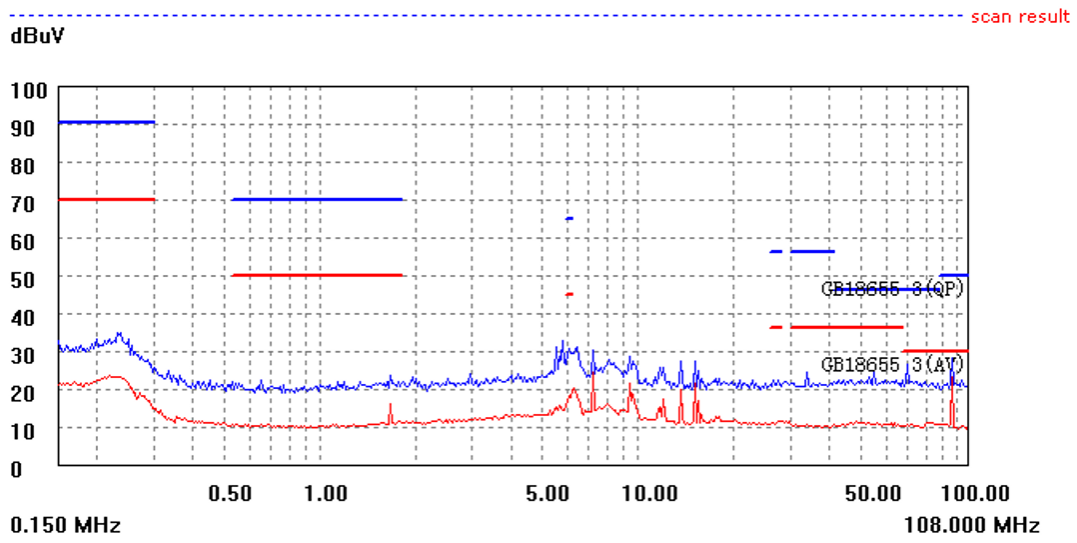
3.2 LED Current PWM dimming



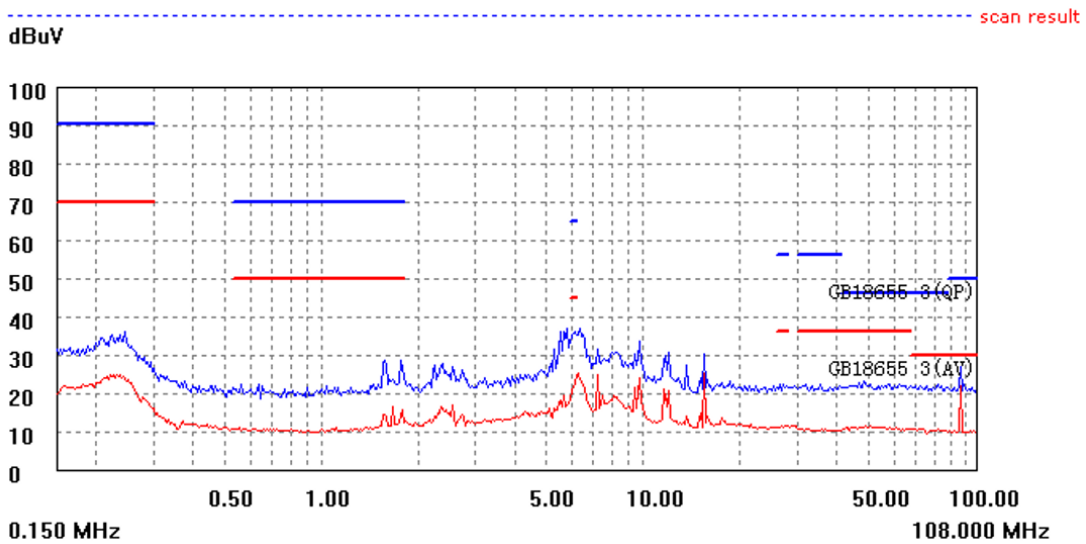
4 Typical Characteristics



5 Conducted Emission



Conducted Emission Based on GB18655 Class 3 Limits_VIN



Conducted Emission Based on GB18655 Class 3 Limits_GND