

RD Number: RD114

RD Title: TC78B006FNG Evaluation circuit BOM

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package	Not Mount
1	IC1	1	TC78B006FNG	TC78B006FNG	TOSHIBA	Single phase pre-driver IC	SSOP16	
2	IC2	1	LT1121CST-5	LT1121CST-5	Linear Technology	5V regulator		
3	IC3	1	TLC555QDR	TLC555QDR	Texas Instruments	OSC Timer		
4	D1	1	CUS10I40A	CUS10I40A	TOSHIBA	Schottky barrier diode	US-FLAT	
5	D2	1	CUS10I40A	CUS10I40A	TOSHIBA	Schottky barrier diode	US-FLAT	
6	FET1	1	TPCP8406	TPCP8406	TOSHIBA	Power MOSFET	PS-8	
7	FET2	1	TPCP8406	TPCP8406	TOSHIBA	Power MOSFET	PS-8	
8	LED1	1	LED	—	—	LED (Green)		
9	LED2	1	LED	—	—	LED (Blue)		
10	CVM1	1	10μF 50V JB	—	—	CAP, CER	1206 (3212)	
11	CVM2	1	0.1μF 50V B	—	—	CAP, CERM	1608	
12	C1	1	1μF 50V X5R	—	—	CAP, CERM	3212	
13	C2	1	1μF 50V X5R	—	—	CAP, CERM	3212	
14	C3	1	0.1μF 50V B	—	—	CAP, CERM	1608	
15	C4	1	0.01μF 50V B	—	—	CAP, CERM	1608	
16	CCONT	1	0.01μF 50V B	—	—	CAP, CERM	1608	
17	CVREG	1	0.1μF 50V B	—	—	CAP, CERM	1608	
18	CHALL	0	Not mount	—	—	open		✓
19	CVSP	0	Not mount	—	—	open		✓
20	COC	0	Not mount	—	—	open		✓
21	RPWM	1	10kΩ ±5% 0.1W	—	—	Chip resistor	1608	
22	RP	1	51kΩ ±5% 0.1W	—	—	Chip resistor	1608	
23	RF/R	1	51kΩ ±5% 0.1W	—	—	Chip resistor	1608	
24	RVSP	1	0Ω 1A	—	—	Chip resistor	1608	
25	ROC	1	0Ω 1A	—	—	Chip resistor	1608	
26	RHB	1	1kΩ ±5% 0.1W	—	—	Chip resistor	1608	

27	RLED_1	1	5.1k $\Omega$ $\pm$ 5% 0.1W	—	—	Chip resistor	1608	
28	RLED_2	1	5.1k $\Omega$ $\pm$ 5% 0.1W	—	—	Chip resistor	1608	
29	R1P1	1	1k $\Omega$ $\pm$ 5% 0.1W	—	—	Chip resistor	1608	
30	R2P1	1	1k $\Omega$ $\pm$ 5% 0.1W	—	—	Chip resistor	1608	
31	R1P2	1	0 $\Omega$ 1A	—	—	Chip resistor	1608	
32	R2P2	1	0 $\Omega$ 1A	—	—	Chip resistor	1608	
33	R1N1	0	Not mount	—	—	open		✓
34	R2N1	0	Not mount	—	—	open		✓
35	R1N2	1	0 $\Omega$ 1A	—	—	Chip resistor	1608	
36	R2N2	1	0 $\Omega$ 1A	—	—	Chip resistor	1608	
37	RS1	1	0.1 $\Omega$ $\pm$ 1% 0.5W	—	—	Chip resistor	3225	
38	VR1	1	5k $\Omega$	—	—	POT THUMBWHEEL CERM ST		
39	VR2	1	50k $\Omega$ 0.25W	—	—	TRIMMER SMD		
40	VR3	1	50k $\Omega$ 0.25W	—	—	TRIMMER SMD		
41	VR4	1	50k $\Omega$ 0.25W	—	—	TRIMMER SMD		
42	OUT1	1	Check terminal	—	—	Logic pin		
43	OUT2	1	Check terminal	—	—	Logic pin		
44	VM	1	Check terminal	—	—	Logic pin		
45	GND	1	Check terminal	—	—	Logic pin		
46	FG RDO	1	Check terminal	—	—	Logic pin		
47	TSP VSP	1	Check terminal	—	—	Logic pin		
48	VMI	1	Check terminal	—	—	Logic pin		
49	VSOFT	1	Check terminal	—	—	Logic pin		
50	SS	1	Check terminal	—	—	Logic pin		
51	CT	1	Check terminal	—	—	Logic pin		
52	HM	1	Check terminal	—	—	Logic pin		
53	HP	1	Check terminal	—	—	Logic pin		
54	HB	1	Check terminal	—	—	Logic pin		
55	CN1	1	Connector 2P	—	—	Connector 2P-2.5		
56	CN2	1	Connector 4P	—	—	Connector 4P-2.5		
57	CN3	1	Connector 2P	—	—	Connector 2P-2.5		
58	J1	1	Slit land	—	—	Short		
59	J2	1	Pin header 3P	—	—	Jumper		
60	J2A	1	Jumper socket	—	—	Jumper Short		

61	J3	1	Pin header 2P	—	—	Jumper		
62	J3A	1	Jumper socket	—	—	Jumper Short		

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