



RD Number: RD114

RD Title: TC78B006FNG Evaluation circuit

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package	Not Mount
1	IC1	1		TC78B006FNG	Toshiba	single phase pre-driver		
2	IC2	1		LT1121CST-5	Linear Technology	5V regulator		
3	IC3	1		TLC555QDR	Texas Instruments	OSC Timer		
4	D1	1		CUS10I40A	Toshiba			
5	D2	1		CUS10I40A	Toshiba			
6	FET1	1		TPCP8406	Toshiba			
7	FET2	1		TPCP8406	Toshiba			
8	LED1	1		SMLE12P8WT86	Rohm	LED (Green)		
9	LED2	1		SMLE13BC8TT86	Rohm	LED (Blue)		
10	CVM1	1	10uF, 50V, JB	C3216JB1H106K160AB	TDK	CAP, CER	1206 (3212)	
11	CVM2	1	0.1uF, 50V, B	GRM188B31H104KA92		CAP, CERM	1608	
12	C1	1	1uF, 50V, X5R	GRM31MB31H105KA87		CAP, CERM	3212	
13	C2	1	1uF, 50V, X5R	GRM31MB31H105KA87		CAP, CERM	3212	
14	C3	1	0.1uF, 50V, B	GRM188B31H104KA92		CAP, CERM	1608	
15	C4	1	0.01uF, 50V, B	GRM188B11H103KA01D		CAP, CERM	1608	
16	CCONT	1	0.01uF, 50V, B	GRM188B11H103KA01D		CAP, CERM	1608	
17	CVREG	1	0.1uF, 50V, B	GRM188B31H104KA92		CAP, CERM	1608	
18	CHALL	0				open		✓
19	CVSP	0				open		✓
20	COC	0				open		✓
21	RPWM	1	10k ohm, 5%, 0.1W	RK73B1JTTD103J	KOA	RES	1608	
22	RP	1	51k ohm, 5%, 0.1W	RK73B1JTTD513J	KOA	RES	1608	
23	RF/R	1	51k ohm, 5%, 0.1W	RK73B1JTTD513J	KOA	RES	1608	
24	RVSP	1	0 ohm, 1A	RK73Z1JTTD	KOA	RES	1608	
25	ROC	1	0 ohm, 1A	RK73Z1JTTD	KOA	RES	1608	
26	RHB	1	1k ohm, 5%, 0.1W	RK73B1JTTD102J	KOA	RES	1608	

27	RLED_1	1	5.1k ohm, 5%, 0.1W	RK73B1JTTD512J	KOA	RES	1608	
28	RLED_2	1	5.1k ohm, 5%, 0.1W	RK73B1JTTD512J	KOA	RES	1608	
29	R1P1	1	1k ohm, 5%, 0.1W	RK73B1JTTD102J	KOA	RES	1608	
30	R2P1	1	1k ohm, 5%, 0.1W	RK73B1JTTD102J	KOA	RES	1608	
31	R1P2	1	0 ohm, 1A	RK73Z1JTTD	KOA	RES	1608	
32	R2P2	1	0 ohm, 1A	RK73Z1JTTD	KOA	RES	1608	
33	R1N1	0				open		✓
34	R2N1	0				open		✓
35	R1N2	1	0 ohm, 1A	RK73Z1JTTD	KOA	RES	1608	
36	R2N2	1	0 ohm, 1A	RK73Z1JTTD	KOA	RES	1608	
37	RS1	1	0.1ohm, 1%,0.5W	ERJ14BSFR10U		RES	3225	
38	VR1	1	5.0K OHM	3352T-1-502LF	Bourns	POT THUMBWHEEL CERM ST		
39	VR2	1	50K OHM 0.25W	PVG3A503C01R00	Bourns	TRIMMER SMD		
40	VR3	1	50K OHM 0.25W	PVG3A503C01R00	Bourns	TRIMMER SMD		
41	VR4	1	50K OHM 0.25W	PVG3A503C01R00	Bourns	TRIMMER SMD		
42	OUT1	1		ST-1-3	MAC8	Logic pin		
43	OUT2	1		ST-1-3	MAC8	Logic pin		
44	VM	1		ST-1-3	MAC8	Logic pin		
45	GND	1		ST-1-3	MAC8	Logic pin		
46	FG RDO	1		ST-1-3	MAC8	Logic pin		
47	TSP VSP	1		ST-1-3	MAC8	Logic pin		
48	VMI	1		ST-1-3	MAC8	Logic pin		
49	VSOFT	1		ST-1-3	MAC8	Logic pin		
50	SS	1		ST-1-3	MAC8	Logic pin		
51	CT	1		ST-1-3	MAC8	Logic pin		
52	HM	1		ST-1-3	MAC8	Logic pin		
53	HP	1		ST-1-3	MAC8	Logic pin		
54	HB	1		ST-1-3	MAC8	Logic pin		
55	CN1	1		DF1BZ-2P-2.5DSA	HRS	Connector		
56	CN2	1		DF1BZ-4P-2.5DSA	HRS	Connector		
57	CN3	1		DF1BZ-2P-2.5DSA	HRS	Connector		
58	J1	1				Short		
59	J2	1		2130S1*3GSE	Linkman	Jumper		
60		1		2180BBA	Linkman	Jumper Short		

61	J3	1	2130S1*2GSE	Linkman	Jumper		
62		1	2180BBA	Linkman	Jumper Short		
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