2020-2-27 Rev.2.0

TOSHIBA

RD Number: RD096

RD Title: TC78S121FNG Evaluation circuit BOM

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package	Not Mount
1	OSCM	1	Check terminal	–	–	Logic pin		
2	OUT_A+	1	Check terminal	–	–	Logic pin		
3	OUT_A-	1	Check terminal	–	–	Logic pin		
4	OUT_B+	1	Check terminal	–	–	Logic pin		
5	OUT_B-	1	Check terminal	–	–	Logic pin		
6	OUT_C+	1	Check terminal	–	–	Logic pin		
7	OUT_C-	1	Check terminal	–	–	Logic pin		
8	OUT_D+	1	Check terminal	–	–	Logic pin		
9	OUT_D-	1	Check terminal	–	–	Logic pin		
10	RSA	1	Check terminal	–	–	Logic pin		
11	RSB	1	Check terminal	–	–	Logic pin		
12	RSC	1	Check terminal	–	–	Logic pin		
13	RSD	1	Check terminal	–	–	Logic pin		
14	VCC	1	Check terminal	–	–	Logic pin		
15	VM	1	Check terminal	–	–	Logic pin		
16	VDD	1	Check terminal	–	–	Logic pin		
17	VREF_A	1	Check terminal	–	–	Logic pin		
18	VREF_B	1	Check terminal	–	–	Logic pin		
19	VREF_C	1	Check terminal	–	–	Logic pin		
20	VREF_D	1	Check terminal	–	–	Logic pin		
21	MODE0	1	Check terminal	–	–	Logic pin		
22	MODE1	1	Check terminal	–	–	Logic pin		
23	MODE2	1	Check terminal	–	–	Logic pin		
24	SLEEP	1	Check terminal	–	–	Logic pin		
25	ALERT	1	Check terminal	–	–	Logic pin		
26	PHASE_A	1	Check terminal	–	–	Logic pin		

27	PHASE_B	1	Check terminal	–	–	Logic pin		
28	PHASE_C	1	Check terminal	–	–	Logic pin		
29	PHASE_D	1	Check terminal	–	–	Logic pin		
30	D_TBLANK_AB	1	Check terminal	–	–	Logic pin		
31	D_TBLANK_CD	1	Check terminal	–	–	Logic pin		
32	IN_A1	1	Check terminal	–	–	Logic pin		
33	IN_A2	1	Check terminal	–	–	Logic pin		
34	IN_B1	1	Check terminal	–	–	Logic pin		
35	IN_B2	1	Check terminal	–	–	Logic pin		
36	IN_C1	1	Check terminal	–	–	Logic pin		
37	IN_C2	1	Check terminal	–	–	Logic pin		
38	IN_D1	1	Check terminal	–	–	Logic pin		
39	IN_D2	1	Check terminal	–	–	Logic pin		
40	GND1	1	Check terminal	–	–	Logic pin		
41	GND2	1	Check terminal	–	–	Logic pin		
42	GND3	1	Check terminal	–	–	Logic pin		
43	GND4	1	Check terminal	–	–	Logic pin		
44	GND5	1	Check terminal	–	–	Logic pin		
45	GND6	1	Check terminal	–	–	Logic pin		
46	GND7	1	Check terminal	–	–	Logic pin		
47	GND8	1	Check terminal	–	–	Logic pin		
48	C_OSCM	1	270pF 50V	–	–	Ceramic capacitor		
49	C_VCC	1	1µF 50V	–	–	Chip capacitor		
50	C_VM1	1	100µF 50V	–	–	Electrolytic capacitor		
51	C_VDD	0	10µF 50V	–	–	Electrolytic capacitor		✓
52	C_VRFA	1	0.1µF 50V	–	–	Chip capacitor		
53	C_VRFB	1	0.1µF 50V	–	–	Chip capacitor		
54	R_ALERT	1	10kΩ 0.25W	–	–	Resistor		
55	R_OSCM	1	120kΩ 0.25W	–	–	Resistor		
56	R_VREFA	0	Not mount	–	–	Variable resistor		✓
57	R_VREFB	0	Not mount	–	–	Variable resistor		✓
58	R_VREFC	0	Not mount	–	–	Variable resistor		✓
59	R_VREFD	0	Not mount	–	–	Variable resistor		✓
60	R_RSA	1	0.22Ω 0.5W	–	–	Chip resistor		

61	R_RSB	1	0.22Ω 0.5W	−	−	Chip resistor		
62	R_RSC	1	0.22Ω 0.5W	−	−	Chip resistor		
63	R_RSD	1	0.22Ω 0.5W	−	−	Chip resistor		
64	C_VM2	1	0.1μF 50V	−	−	Chip capacitor		
65	C_VRFC	1	0.1μF 50V	−	−	Chip capacitor		
66	C_VRFD	1	0.1μF 50V	−	−	Chip capacitor		
67	SW1	1	Pin header 3P	−	−	Jumper		
68		1	Jumper socket	−	−	Jumper Short		
69	SW2	0	Pin header 3P	−	−	Jumper		✓
70		0	Jumper socket	−	−	Jumper Short		✓
71	SW3	0	Pin header 3P	−	−	Jumper		✓
72		0	Jumper socket	−	−	Jumper Short		✓
73	SW4	0	Pin header 3P	−	−	Jumper		✓
74		0	Jumper socket	−	−	Jumper Short		✓
75	SW5	0	Pin header 3P	−	−	Jumper		✓
76		0	Jumper socket	−	−	Jumper Short		✓
77	SW6	1	Pin header 3P	−	−	Jumper		
78		1	Jumper socket	−	−	Jumper Short		
79	SW7	1	Pin header 3P	−	−	Jumper		
80		1	Jumper socket	−	−	Jumper Short		
81	SW8	1	Pin header 3P	−	−	Jumper		
82		1	Jumper socket	−	−	Jumper Short		
83	SW9	1	Pin header 3P	−	−	Jumper		
84		1	Jumper socket	−	−	Jumper Short		
85	SW10	1	Pin header 3P	−	−	Jumper		
86		1	Jumper socket	−	−	Jumper Short		
87	SW11	1	Pin header 3P	−	−	Jumper		
88		1	Jumper socket	−	−	Jumper Short		
89	SW12	1	Pin header 3P	−	−	Jumper		
90		1	Jumper socket	−	−	Jumper Short		
91	SW13	1	Pin header 3P	−	−	Jumper		
92		1	Jumper socket	−	−	Jumper Short		
93	SW14	1	Pin header 3P	−	−	Jumper		
94		1	Jumper socket	−	−	Jumper Short		

95	SW15	1	Pin header 3P	–	–	Jumper		
96		1	Jumper socket	–	–	Jumper Short		
97	SW16	1	Pin header 3P	–	–	Jumper		
98		1	Jumper socket	–	–	Jumper Short		
99	SW17	1	Pin header 3P	–	–	Jumper		
100		1	Jumper socket	–	–	Jumper Short		
101	SW18	1	Pin header 3P	–	–	Jumper		
102		1	Jumper socket	–	–	Jumper Short		
103	CON1	1	CONN HEADER 4P	–	–	Socket 4P-2.5		
104	CON2	1	CONN HEADER 4P	–	–	Socket 4P-2.5		
105	IC1	1	TC78S121FNG	TC78S121FNG	TOSHIBA	Motor driver IC	HTSSOP48	

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