2020-2-27 Rev.2.0

RD Number: RD095

RD Title: TC78S122FTG Evaluation circuit BOM

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package	Not Mount
1	C_OSCM	1	270pF 1000V	–	–	Chip capacitor		
2	C_VCC	1	0.1μF 100V	–	–	Chip capacitor		
3	C_VDD	1	10μF 50V	–	–	Electrolytic capacitor		
4	C_VM1	1	100μF 50V	–	–	Electrolytic capacitor		
5	R_MO_AB	1	100kΩ 0.25W	–	–	Chip resistor		
6	R_MO_CD	1	100kΩ 0.25W	–	–	Chip resistor		
7	R_ALERT	1	10kΩ 0.25W	–	–	Chip resistor		
8	R_OSCM	1	120kΩ 0.25W	–	–	Chip resistor		
9	R_VRFA	0	Not mount	–	–	Variable resistor		✓
10	R_VRFB	0	Not mount	–	–	Variable resistor		✓
11	R_VRFC	0	Not mount	–	–	Variable resistor		✓
12	R_VRFD	0	Not mount	–	–	Variable resistor		✓
13	R_RSA	1	0.22Ω 0.5W	–	–	Chip resistor		
14	R_RSB	1	0.22Ω 0.5W	–	–	Chip resistor		
15	R_RSC	1	0.22Ω 0.5W	–	–	Chip resistor		
16	R_RSD	1	0.22Ω 0.5W	–	–	Chip resistor		
17	C_VM2	1	0.1μF 100V	–	–	Chip capacitor		
18	C_VRFA	1	0.1μF 100V	–	–	Chip capacitor		
19	C_VRFB	1	0.1μF 100V	–	–	Chip capacitor		
20	C_VRFC	1	0.1μF 100V	–	–	Chip capacitor		
21	C_VRFD	1	0.1μF 100V	–	–	Chip capacitor		
22	MO_CD	1	Check terminal	–	–	Check terminal		
23	CD_MODE2	1	Check terminal	–	–	Check terminal		
24	CD_MODE1	1	Check terminal	–	–	Check terminal		
25	VDD	1	Check terminal	–	–	Check terminal		
26	GND	10	Check terminal	–	–	Check terminal		

27	VREF_A	1	Check terminal	−	−	Check terminal		
28	VREF_B	1	Check terminal	−	−	Check terminal		
29	VREF_C	1	Check terminal	−	−	Check terminal		
30	VREF_D	1	Check terminal	−	−	Check terminal		
31	OSCM	1	Check terminal	−	−	Check terminal		
32	VCC	1	Check terminal	−	−	Check terminal		
33	SLEEP	1	Check terminal	−	−	Check terminal		
34	ALERT	1	Check terminal	−	−	Check terminal		
35	CLK_AB	1	Check terminal	−	−	Check terminal		
36	ENABLE_AB	1	Check terminal	−	−	Check terminal		
37	CLK_CD	1	Check terminal	−	−	Check terminal		
38	ENABLE_CD	1	Check terminal	−	−	Check terminal		
39	D_TBLANK_AB	1	Check terminal	−	−	Check terminal		
40	D_TBLANK_CD	1	Check terminal	−	−	Check terminal		
41	MODE2	1	Check terminal	−	−	Check terminal		
42	MODE1	1	Check terminal	−	−	Check terminal		
43	MODE0	1	Check terminal	−	−	Check terminal		
44	CW/CCW_AB	1	Check terminal	−	−	Check terminal		
45	CW/CCW_CD	1	Check terminal	−	−	Check terminal		
46	VM	1	Check terminal	−	−	Check terminal		
47	MO_AB	1	Check terminal	−	−	Check terminal		
48	AB_MODE2	1	Check terminal	−	−	Check terminal		
49	AB_MODE1	1	Check terminal	−	−	Check terminal		
50	SW1	0	Pin header 3P	−	−	Jumper		✓
51		0	Jumper socket	−	−	Jumper Short		✓
52	SW2	1	Pin header 3P	−	−	Jumper		
53		1	Jumper socket	−	−	Jumper Short		
54	SW3	1	Pin header 3P	−	−	Jumper		
55		1	Jumper socket	−	−	Jumper Short		
56	SW4	1	Pin header 3P	−	−	Jumper		
57		1	Jumper socket	−	−	Jumper Short		
58	SW5	0	Pin header 3P	−	−	Jumper		✓
59		0	Jumper socket	−	−	Jumper Short		✓
60	SW6	1	Pin header 3P	−	−	Jumper		

No.	Ref	Qty	Description	Part number	Manufacturer	Note	Package	
61		1	Jumper socket	–	–	Jumper Short		
62	SW7	0	Pin header 3P	–	–	Jumper		✓
63		0	Jumper socket	–	–	Jumper Short		✓
64	SW8	1	Pin header 3P	–	–	Jumper		
65		1	Jumper socket	–	–	Jumper Short		
66	SW9	1	Pin header 3P	–	–	Jumper		
67		1	Jumper socket	–	–	Jumper Short		
68	SW10	1	Pin header 3P	–	–	Jumper		
69		1	Jumper socket	–	–	Jumper Short		
70	SW11	1	Pin header 3P	–	–	Jumper		
71		1	Jumper socket	–	–	Jumper Short		
72	SW12	1	Pin header 3P	–	–	Jumper		
73		1	Jumper socket	–	–	Jumper Short		
74	SW13	1	Pin header 3P	–	–	Jumper		
75		1	Jumper socket	–	–	Jumper Short		
76	SW14	1	Pin header 3P	–	–	Jumper		
77		1	Jumper socket	–	–	Jumper Short		
78	SW15	0	Pin header 3P	–	–	Jumper		✓
79		0	Jumper socket	–	–	Jumper Short		✓
80	SW16	1	Pin header 3P	–	–	Jumper		
81		1	Jumper socket	–	–	Jumper Short		
82	SW17	1	Pin header 3P	–	–	Jumper		
83		1	Jumper socket	–	–	Jumper Short		
84	SW18	1	Pin header 3P	–	–	Jumper		
85		1	Jumper socket	–	–	Jumper Short		
86	JP1	1	Pin header 3P	–	–	Jumper		
87		1	Jumper socket	–	–	Jumper Short		
88	CON1	1	CONN HEADER 4P	–	–	Socket		
89	CON2	1	CONN HEADER 4P	–	–	Socket		
90	IC1	1	TC78S122FTG	TC78S122FTG	TOSHIBA	Motor driver IC	QFN48	

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