

RD Number: RD056

RD Title: TB67S109AFNG Evaluation circuit BOM

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package	Not Mount
1	IC1	1	TB67S109AFNG	TB67S109AFNG	TOSHIBA	Motor driver IC	HTSSOP48	
2	C_VCC	1	0.1μF 25V	—	—	Chip capacitor	3.2mm×1.6mm	
3	C_VM2	1	0.1μF 50V	—	—	Chip capacitor	3.2mm×1.6mm	
4	C_VRFA	1	0.1μF 25V	—	—	Chip capacitor	3.2mm×1.6mm	
5	C_VRFB	1	0.1μF 25V	—	—	Chip capacitor	3.2mm×1.6mm	
6	C_VM1	1	100μF 50V	—	—	Electrolytic capacitor		
7	C_VDD	0	10μF 25V	—	—	Electrolytic capacitor		✓
8	C_OSCM	0	Socket pin	—	—	Socket pin		✓
9	C_OSCM1	0	270pF 25V	—	—	Chip capacitor	3.2mm×1.6mm	✓
10	C_OSCM2	1	270pF 25V	—	—	Chip capacitor	3.2mm×1.6mm	
11	C_OAP	0	Not mount	—	—	Chip capacitor		✓
12	C_OAM	0	Not mount	—	—	Chip capacitor		✓
13	C_OBM	0	Not mount	—	—	Chip capacitor		✓
14	C_OBP	0	Not mount	—	—	Chip capacitor		✓
15	CON1	1	Connector	—	—	CONN HEADER VERT 4POS		
16	CON2	0	Connector	—	—	CONN HEADER VERT 4POS		✓
17	CON3	0	Connector	—	—	CONN HEADER VERT 4POS		✓
18	CON4	0	Connector	—	—	CONN HEADER VERT 4POS		✓
19	OUT_A-	1	Check terminal	—	—	Check terminal for logic		
20	OUT_A+	1	Check terminal	—	—	Check terminal for logic		
21	OUT_B-	1	Check terminal	—	—	Check terminal for logic		
22	OUT_B+	1	Check terminal	—	—	Check terminal for logic		
23	RSA	0	Check terminal	—	—	Check terminal for oscilloscope		✓
24	RSB	0	Check terminal	—	—	Check terminal for oscilloscope		✓
25	VCC	1	Check terminal	—	—	Check terminal for oscilloscope		

26	VDD	1	Check terminal	—	—	Check terminal for oscilloscope		
27	VM	1	Check terminal	—	—	Check terminal for logic		
28	45	1	Check terminal	—	—	Check terminal for oscilloscope		
29	44	1	Check terminal	—	—	Check terminal for oscilloscope		
30	VREFA	1	Check terminal	—	—	Check terminal for oscilloscope		
31	VREFB	1	Check terminal	—	—	Check terminal for logic		
32	OSCM	1	Check terminal	—	—	Check terminal for oscilloscope		
33	3	1	Check terminal	—	—	Check terminal for oscilloscope		
34	4	1	Check terminal	—	—	Check terminal for oscilloscope		
35	5	1	Check terminal	—	—	Check terminal for oscilloscope		
36	7	1	Check terminal	—	—	Check terminal for oscilloscope		
37	8	1	Check terminal	—	—	Check terminal for oscilloscope		
38	9	1	Check terminal	—	—	Check terminal for oscilloscope		
39	10	1	Check terminal	—	—	Check terminal for oscilloscope		
40	GND1	1	Check terminal	—	—	Check terminal for logic		
41	GND2	1	Check terminal	—	—	Check terminal for logic		
42	GND3	1	Check terminal	—	—	Check terminal for logic		
43	GND4	1	Check terminal	—	—	Check terminal for logic		
44	GND5	1	Check terminal	—	—	Check terminal for logic		
45	GND6	1	Check terminal	—	—	Check terminal for logic		
46	GND7	1	Check terminal	—	—	Check terminal for logic		
47	JP_VRF1	1	Pin header 2P	—	—	Single row plugs		
48		1	Jump socket	—	—	Position Shunt Connector		
49	JP_VRF2	1	Pin header 2P	—	—	Single row plugs		
50		1	Jump socket	—	—	Position Shunt Connector		
51	JP_VCC	1	Pin header 2P	—	—	Single row plugs		
52		1	Jump socket	—	—	Position Shunt Connector		
53	R_ID	0	100kΩ 0.25W	—	—	Leaded resistor	2.54mm pitch	✓
54	R_MOUT	1	100kΩ 0.25W	—	—	Leaded resistor	2.54mm pitch	
55	R_LOUT	1	100kΩ 0.25W	—	—	Leaded resistor	2.54mm pitch	
56	R_OSCM	0	Socket pin	—	—	Socket pin		✓
57	R_OSCM1	0	3.6kΩ	—	—	Leaded resistor	2.54mm pitch	✓



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