2020-12-22 Rev.1.0

# **TOSHIBA**

RD Number: RD194

RD Title: TC78B027FTG/TMPM373FWDUG Fan Motor Drive Board BOM

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package	Not Mount
1	U1	1	TC78B027FTG	TC78B027FTG	TOSHIBA	Motor driver IC	VQFN24	
2	U6	1	HW-101A	_	_	Hall element		
3	U8	1	TMPM373FWDUG	TMPM373FWDUG	TOSHIBA	Microcontroller	LQFP48	
	D2	1	Zener Diode	_	_	Zener Diode 13V		
	D3	1	FM240-MH-H	_	_	Schottky Barrier Rectifier		
6	Q1	1	SSM6K513NU	SSM6K513NU	TOSHIBA	MOSFET	UDFN6B	
7	Q2	1	SSM6K513NU	SSM6K513NU	TOSHIBA	MOSFET	UDFN6B	
	Q3	1	SSM6K513NU	SSM6K513NU	TOSHIBA	MOSFET	UDFN6B	
9	Q4	1	SSM6K513NU	SSM6K513NU	TOSHIBA	MOSFET	UDFN6B	
10	Q9	1	SSM6K513NU	SSM6K513NU	TOSHIBA	MOSFET	UDFN6B	
11	Q10	1	SSM6K513NU	SSM6K513NU	TOSHIBA	MOSFET	UDFN6B	
12	C1	1	0.1μF 25V	_	_	Chip capacitor		
13	C2	1	0.01µF 50V	_		Chip capacitor		
14	C6	1	0.1µF 16V	_	_	Chip capacitor		
15	C7	1	0.1µF 16V	_	_	Chip capacitor		
16	C8	1	10μF 25V	_	_	Chip capacitor		
17	C9	1	22μF 25V	_	_	Chip capacitor		
18	C10	1	0.1μF 25V	_	_	Chip capacitor		
19	C11	1	0.1µF 16V	_	_	Chip capacitor		
20	C12	1	0.1µF 16V	_	_	Chip capacitor		
21	C13	1	0.1µF 25V	_	_	Chip capacitor		
22	C14	1	0.1µF 25V	_	_	Chip capacitor		
23	C16	1	0.1µF 16V	_	_	Chip capacitor		
24	C17	1	0.1µF 16V	_	_	Chip capacitor		
	C18	1	0.1μF 16V	_	_	Chip capacitor		
26	C21	1	0.1µF 16V	_	_	Chip capacitor		
27	C28	1	4.7µF 16V	_	_	Chip capacitor		
28	C29	1	4.7μF 16V	_	_	Chip capacitor		
	R1	1	50mΩ	_	_	Chip resistor		
30	R2	1	50mΩ	_	_	Chip resistor		
	R3	1	4.7kΩ	_	_	Chip resistor		
32	R4	1	1kΩ	_	_	Chip resistor		
33	R5	0	Not mount	_	_	Chip resistor		<b>✓</b>

34	R6	1	1kΩ	_	_	Chip resistor	
35	R7	0	Not mount	_	_	Chip resistor	1
36	R8	0	Not mount	_	_	Chip resistor	1
37	R11	0	Not mount	_	_	Chip resistor	1
38	R12	1	4.7kΩ	_	_	Chip resistor	
39	R13	0	Not mount	_	_	Chip resistor	✓
40	R14	0	Not mount	_	_	Chip resistor	✓
41	R15	1	4.7kΩ	_	_	Chip resistor	
42	R17	4	0Ω			Chip resistor	
		1		_	_	R17 and R18 for internal control.	
43	R18	-	0Ω			Chip resistor	
		1		_	_	R17 and R18 for internal control.	
	R19		00			Chip resistor	1
		0	0Ω	_	_	R19 and R20 for external control.	
						Chip resistor	
45	R20	0	0Ω	_	_	R19 and R20 for external control.	/
46	R26	1	1kΩ	_	_	Chip resistor	
47	R27	1	1kΩ	_	_	Chip resistor	
48	R28	0	Not mount	_	_	Chip resistor	/
49	R30	1	51kΩ	_	_	Chip resistor	
50	R31	1	51kΩ	_	_	Chip resistor	
51	R32	1	51kΩ	_	_	Chip resistor	
52	R38	1	1kΩ	_	_	Chip resistor	
53	R52	0	Not mount	_	_	Chip resistor	✓
54	PCB	1	_	_	_	FR4 40mm × 40mm × 1mm 4L	

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