2020-12-02 Rev.1.0

TOSHIBA

RD Number: RD195

RD Title: TC78B041FNG/TPD4204F Fan Motor Drive Board BOM

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package	Not Mount
1	IC1	1	TC78B041FNG	TC78B041FNG	TOSHIBA	Brushless Motor Controller IC	SSOP30	+
2	IPD	1	TPD4204F	TPD4204F	TOSHIBA	Intelligent Power Device High Voltage 3-phase motor driver	SSOP30	
3	Q2	1	RN1403	RN1403	TOSHIBA	NPN Transistor with built in	SOT-346	
4	D1	1	CRG04	CRG04	TOSHIBA	Rectifier Diode 600V/1A	S-FLAT	
5	ZD1	1	CRZ18	CRZ18	TOSHIBA	Zener Diode 18V/0.7W	S-FLAT	
6	PTC	1	PTC	_	_	PTC Resistor (Bottom side)	R 0603	
7	HU	1	HW101A	_	_	Hall element (Bottom side)		
8	HV	1	HW101A	_	_	Hall element (Bottom side)		
9	HW	1	HW101A	_	_	Hall element (Bottom side)		
10	R1	1	0.22Ω 0.25W	_	_	Chip Resistor	R 1206	
11	R2	1	100Ω	_	_	Chip Resistor	R 0603	
12	R3	1	330Ω	_	_	Chip Resistor	R 0603	
13	R4	1	330Ω	_	_	Chip Resistor	R 0603	
14	R5	1	22kΩ	_	_	Chip Resistor	R 0603	
	R6	0	Not mount	_	_	Chip Resistor	R 0603	1
	R7	1	0Ω	_	_	Chip Resistor	R 0603	
17	R8	1	12kΩ	_	_	Chip Resistor	R 0603	
	R9	1	10kΩ	_	_	Chip Resistor	R 0603	
	R10	0	Not mount	_	_	Chip Resistor	R 0603	1
20	R11	1	0Ω	_	_	Chip Resistor	R 0603	
	R12	0	Not mount	_	_	Chip Resistor	R 0603	/
	R13	1	0Ω	_	_	Chip Resistor	R 0603	
	R14	0	Not mount	_	_	Chip Resistor	R 0603	/
24	R15	1	0Ω	_	_	Chip Resistor	R 0603	
	R16	1	1kΩ	_	_	Chip Resistor	R 0603	
	R17	1	10kΩ	_	_	Chip Resistor	R 0603	
	R18	1	10kΩ	_	_	Chip Resistor	R 0603	
	R19	1	5.1kΩ	_	_	Chip Resistor	R 0603	
	R20	1	120kΩ	_	_	Chip Resistor	R 0603	
	R21	1	0Ω	_	_	Chip Resistor	R 0603	
	R22	0	Not mount	_	_	Chip Resistor	R 0603	/
	R23	1	0Ω	_	_	Chip Resistor	R 0603	
	R24	1	0Ω	_	_	Chip Resistor	R 0603	

34	RS1	1	1Ω 0.5W	_	_	Chip Resistor	R 2010
35	RS2	1	1Ω 0.5W	_	_	Chip Resistor	R 2010
36	C1	1	100nF 630V	_	_	CBB Capacitor	
37	C2	1	22nF 630V	_	_	Chip Capacitor	C 1206
38	C3	1	22nF 630V	_	_	Chip Capacitor	C 1206
39	C4	1	10µF 25V	_	_	Chip Capacitor	C 0805
40	C5	1	100nF 50V	_	_	Chip Capacitor	C 0603
41	C6	1	1nF 50V	_	_	Chip Capacitor	C 0603
42	C7	1	10nF 50V	_	_	Chip Capacitor	C 0603
43	C8	1	10nF 50V	_	_	Chip Capacitor	C 0603
44	C9	1	10nF 50V	_	_	Chip Capacitor	C 0603
45	C10	1	10nF 50V	_	_	Chip Capacitor	C 0603
46	C11	1	1μF 50V	_	_	Chip Capacitor	C 0603
47	C12	1	1nF 50V	_	_	Chip Capacitor	C 0603
48	C13	1	100nF 50V	_	_	Chip Capacitor	C 0603
49	C14	1	10μF 25V	_	_	Chip Capacitor	C 0805
50	C15	1	10μF 25V	_	_	Chip Capacitor	C 0805
51	C16	1	100nF 50V	_	_	Chip Capacitor	C 0603
52	C17	1	1µF 50V	_	_	Chip Capacitor	C 0603
53	C18	1	100nF 50V	_	_	Chip Capacitor	C 0603
54	C19	1	100pF 50V	_	_	Chip Capacitor	C 0603
55	C20	1	2.2µF 50V	_	_	Chip Capacitor	C 0805
56	C21	1	2.2µF 50V	_	_	Chip Capacitor	C 0805
57	C22	1	2.2µF 50V	_	_	Chip Capacitor	C 0805
58	C23	1	100nF 50V	_	_	Chip Capacitor	C 0603
59	C24	1	1µF 50V	_	_	Chip Capacitor	C 0603
60	C25	1	1µF 50V	_	_	Chip Capacitor	C 0603
61	CY1	1	1nF 250V	_	_	High voltage ceramic capacitor	

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