

Bill of materials

No.	Ref.	Q'ty	Value	Part Number	Manufacturer	Description	Package Name	Standard Dimensions in mm (inches)
1	U1	1		TPD7106F	TOSHIBA	IPD (Gate driver)	SSOP-16	5.5×6.4
2	U2	1		LTC6101BCS5	LT	Current sense amplifier	TSOT-23	2.9×2.8
3	U3	1		TA7805F	TOSHIBA	Regulator	HSOP-3	6.5×9.5
4	Q1,Q2,Q3,Q4,Q5,Q6	6		TKR74F04PB	TOSHIBA	MOSFET	TO-220SM(W)	10.0×13.0
5	D1,D2	2		1SS352	TOSHIBA	Switching diode	SOD-323	2.5×1.25
6	D3	1		CRG09A	TOSHIBA	Rectifier diode	S-FLAT	1.6×3.5
7	D4,D5	2		CRZ16	TOSHIBA	Zener diode	S-FLAT	1.6×3.5
8	D6,D7	2		CMZ27	TOSHIBA	Zener diode	M-FLAT	2.4×4.7
9	R1,R2,R3,R4,R7	5	10k			Chip resistor, ±1%	1608	1.6×0.8 (0603)
10	R5	1	10			Chip resistor, ±1%	1608	1.6×0.8 (0603)
11	R6	1	47k			Chip resistor, ±1%	1608	1.6×0.8 (0603)
12	R8	1	1k			Chip resistor, ±1%	1608	1.6×0.8 (0603)
13	R9	1	100			Chip resistor, ±1%	1608	1.6×0.8 (0603)
14	R10	1	200			Chip resistor, ±1%	1608	1.6×0.8 (0603)
15	R11	1	200k			Chip resistor, ±1%	1608	1.6×0.8 (0603)
16	R12	1	0.5m	BVS-M-R0005	isabellenhuette	Shunt resistance, ±1%		6.35×3.05
17	C1,C4	2	1.0uF			Ceramic, 50V, ±10%	3216	3.2×1.6 (1206)
18	C2,C3,C6	3	0.1uF			Ceramic, 50V, ±10%	1608	1.6×0.8 (0603)
19	C5	1	10uF			Ceramic, 50V, ±10%	3216	3.2×1.6 (1206)
20	C7	1	1000pF			Ceramic, 50V, ±10%	1608	1.6×0.8 (0603)
21	C8	1	15pF			Ceramic, 50V, ±10%	2012	2.0×1.25
22	CN1	1		22-23-2061	molex	6-pole 1-row connector		
23	SW1,SW2,SW3	3		SS-12SDP2	NKK	Switch		
24	T1,T2,T3,T4	4		OP-486	OSADA	Terminal		
25	JP1,JP2,JP3,JP4,JP5,JP6	6		XJ8B-0211	OMRON	Jumper		
26	TP1~TP14	14		ST-2-2	MAC8	Monitor pin		

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