

[BST70T2P4K01-EVK-001] BOM



[Main Board]

No.	Device	Designator	Value	Description	Part Number	Manufacture	Quantity	DNP
1	Capacitor	C1,C19,	35V/1μ	CAP CER 1μF 35V X7R 0603	CGA3E1X7R1V105K080AC	TDK	2	
2	Capacitor	C2,C20,	10V/10μ	CAP CER 10μF 10V X7R 0805	C2012X7R1A106K125AC	TDK	2	
3	Capacitor	C3,C4,C5,C6,C7,C8,	50V/4700p	CAP CER 4700PF 50V C0G 0603	CGA3E2C0G1H472J080AA	TDK	6	
4	Capacitor	C9,C10,C11,C12, C15,C16,	630V/1μ	CAP STACKED 1μF 630V MLCC 2220	CAA572X7T2J105M640LH	TDK	6	
5	Capacitor	C13,	24V/1μ	CAP CER 1μF 25V X7R 0805	C2012X7R1E105K125AB	TDK	1	
6	Capacitor	C14,	50V/10n	CAP CER 10000PF 50V C0G 0805	C2012C0G1H103J060AA	TDK	1	
7	Capacitor	C17,	1.3KV/10μ	CAP FILM 10μF 1.3KVDC	B32776G1106K000	TDK	1	
8	Capacitor	C18,C21,C22,C23,C24,	50V/0.1μ	CAP CER 0.1μF 50V X7R 0402	CGA2B3X7R1H104K050BB	TDK	5	
9	LED	D1,D8,	GREEN	LED GREEN DIFFUSED 1608 SMD	SML-D12P8WT86	ROHM Semiconductor	2	
10	Diode	D2,D3,D4,D5,D6,D7,	60V/1A	DIODE SCHOTTKY 60V 1A TUMD2M	RB160VAM-60	ROHM Semiconductor	6	
11	SiC Power Module	HSDIP1,	1200V/70A	HSDIP20, 1200V, 70A, 3-Phase-bridge,	BST70T2P4K01-VC	ROHM Semiconductor	1	
12	Connector	I/F1,	B34B-PHDSS	CONN HEADER VERT 34POS 2MM	B34B-PHDSS	JST	1	
13	Connector	I/F2,	TSW-117-07-S-D	CONN HEADER VERT 34POS 2.54MM	TSW-117-07-S-D	SAMTEC	1	
14	Connector	Q1_Gate1,Q2_Gate1,Q3_Gate1,Q4_Gate1,Q5_Gate1,Q6_Gate1,	B12P-MQ	CONN RCPT 12POS 0.098 TIN PCB	B12P-MQ	JST	6	
15	Connector	Idc_ad1,Iu_ad1,Iw_ad1,Vdc_ad1,Vuv_ad1,	B8P-MQ-C	CONN RCPT 8POS 0.098 TIN PCB	B8P-MQ-C	JST	5	
16	Connector	J1,J15,J17,	B2B-XH-A	CONN HEADER VERT 2POS 2.5MM	B2B-XH-A	JST	3	
17	Connector	J2,J3,J4,J5,J6,J7,J8,J9,J10	73415-2061	CONN MMCX JACK STR 50 OHM SMD	73415-2061	Molex	9	

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[Main Board]

No.	Device	Designator	Value	Description	Part Number	Manufacture	Quantity	DNP
18	Terminal	J11,J12,J13,J14,J16,	7808	TERM SCREW M5 6PIN PCB	7808	Keystone Electronics	5	
19	IC	IC1,IC2,IC3,IC4,IC5,	LMR1802G-LBTR	IC CMOS 1 CIRCUIT 5SSOP	LMR1802G-LBTR	ROHM Semiconductor	5	
20	IC	PS1,PS2,	NME1205SC	DC DC CONVERTER 5V 1W	NME1205SC	Murata Electronics	2	
21	Resistor	R1,R15,	470	RES SMD 470 OHM 1% 1/8W 0805	MCR10EZPF4700	ROHM Semiconductor	2	
22	Resistor	R2,	10k	RES SMD 10K OHM 1% 1/8W 0805	MCR10ERTF1002	ROHM Semiconductor	1	
23	Resistor	R3,	56	RES SMD 56 OHM 1% 1/8W 0805	MCR10ERTF56R0	ROHM Semiconductor	1	
24	Resistor	R4,R5,R6,	1m	RES SMD 1m OHM 1% 8W 2512	PSR100KTQFH1L00	ROHM Semiconductor	3	
25	Resistor	R7,R8,R9,R10,R11,R22,R23,R24,R25,R26,	300k	RES SMD 300K OHM 1% 1/4W 1206	MCR18ERTF3003	ROHM Semiconductor	10	
26	Resistor	R12,R27,	360	RES SMD 360 OHM 1% 1/4W 1206	MCR18ERTF3600	ROHM Semiconductor	2	DNP
27	Resistor	R13,R17,R19,R21,R29,	0	RES SMD 0 OHM JUMPER 1/8W 0805	MCR10ERTJ000	ROHM Semiconductor	5	DNP
28	Resistor	R14,R16,R18,R20,R28,	0	RES SMD 0 OHM JUMPER 1/8W 0805	MCR10ERTJ000	ROHM Semiconductor	5	

[BST70T2P4K01-EVK-001] BOM



[Gate Driver Board]

No.	Device	Designator	Value	Description	Part Number	Manufacture	Quantity	DNP
1	Capacitor	C1,C11,	35V/1μ	CAP CER 1μF 35V X7R 0603	CGA3E1X7R1V105K080AC	TDK	2	
2	Capacitor	C2,C12,C13,C15,	50V/0.1μ	CAP CER 0.1μF 50V X7R 0402	CGA2B3X7R1H104K050BB	TDK	4	
3	Capacitor	C3,C5,C6,	35V/10μ	CAP CER 10μF 35V X7R 1206	CGA5L1X7R1V106M160AC	TDK	3	
4	Capacitor	C4,	25V/10μ	CAP CER 10μF 25V X7S 0805	CGA4J1X7S1E106K125AC	TDK	1	
5	Capacitor	C9,C10,	50V/1000p	CAP CER 1000PF 50V C0G 0603	CGA3E2C0G1H102J080AA	TDK	2	
6	Capacitor	C14,	50V/1000p	CAP CER 1000PF 50V C0G 0603	CGA3E2C0G1H102J080AA	TDK	1	DNP
7	LED	D1,	GREEN	LED GREEN DIFFUSED 1608 SMD	SML-D12P8W	ROHM Semiconductor	1	
8	Diode	D2,	40V/1A	DIODE SCHOTTKY 40V 1A PMDU	RB160MM-40TR	ROHM Semiconductor	1	
9	Diode	D3,D4,	60V/1A	DIODE SCHOTTKY 60V 1A TUMD2M	RB160VAM-60TR	ROHM Semiconductor	2	
10	Connector	J1,	12MQ-ST	CONN RCPT 12P 0.098 TIN PCB R/A	12MQ-ST	JST	1	
11	Resistor	JP1,	-	—	—	—	1	DNP
12	Filter	L1,	DLW21PH201XQ2L	CMC 500MA 2LN 200 OHM SMD AECQ200	DLW21PH201XQ2L	Murata Electronics	1	
13	Resistor	R1,R3,R4,	100	RES SMD 100 OHM 5% 1/8W 0805	MCR10EZPJ101	ROHM Semiconductor	3	
14	Resistor	R2,	470	RES SMD 470 OHM 1% 1/8W 0805	MCR10EZPF4700	ROHM Semiconductor	1	
15	Resistor	R6,	6.8	RES SMD 6.8 OHM 5% 3/4W 1206	ESR18EZPJ6R8	ROHM Semiconductor	1	
16	Resistor	R7,	6.8	RES SMD 6.8 OHM 5% 3/4W 1206	ESR18EZPJ6R8	ROHM Semiconductor	1	
17	Resistor	R8,	4.7k	RES SMD 4.7K OHM 5% 1/8W 0805	MCR10EZPJ472	ROHM Semiconductor	1	
18	Resistor	R9,	0	RES SMD 0 OHM JUMPER 1/8W 0805	MCR10ERTJ000	ROHM Semiconductor	1	DNP
19	IC	U1,	18V/-2.5V, 80mA/80mA	DC DC CONVERTER 18V -2.5V 2W	MGJ2D121802SC	Murata Electronics	1	
20	IC	U2,	200mA/5.0V	IC REG LINEAR 5V 200MA 8HTSOP	BD450M2WEFJ-CE2	ROHM Semiconductor	1	
21	IC	U3,	BM61M41RFV-CE2	DGT ISO 3.75KV 1CH GT DVR 10SSOP	BM61M41RFV-CE2	ROHM Semiconductor	1	

Note : Gate Driver Board × 6

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