

RTK0EM0000B10020BJ BOM LIST

Board Name : Inverter board (RTK0EM0000B10020BJ) rev. 1.1

Schematic No : R12TU0072

Date : 2020/10/21

No.	Reference	Description	Manufacturer	PartNumber	Qty
1	CNB,CNA	CONN HEADER 2.54MM 20POS GOLD	Sullins Connector Solutions	SBH11-PBPC-D10-ST-BK	2
2	CN1	5.08MM TOP ENTRY MSC 3P_GY	Phoenix Contact	1729131	1
3	CN2	TERM BLOCK HDR 5POS 90DEG 5.08MM	Phoenix Contact	1757271	1
4	CN3	CONN HEADER XH TOP 4POS 2.5MM	JST	B4B-XH-A	1
5	CNF	CONN HEADER .100 SNGL STR 4POS	Sullins Connector Solutions	PREC004SAAN-RC	1
6	C1,C2	Chip capacitor(1005)	MURATA	GCM155R72A332JA37D	2
7	C3,C4	Capacitor	Nippon chemi-con	EKZN800ELL681ML25S	2
8	C5,C26	Chip capacitor(2012)	MURATA	GCM21BC72A105KE36L	2
9	C7,C10,C18,C22,C24,C35,C36,C41, C44,C47,C52,C53,C54,C56,C57, C58,C60	Chip capacitor(0603)	MURATA	GRM033R61A104KE15D	17
10	C8,C20,C43,C49	Chip capacitor(1608)	MURATA	GCM155R72A104KA01D	4
11	C9	Chip capacitor(3216)	MURATA	GCM32DC72A475KE02L	1
12	C11	Chip capacitor(0603)	MURATA	GRM033R71E102KA01D	1
13	C23,C46,C55,C42	Chip capacitor(2012)	MURATA	GRM21BR61E106MA73L	4
14	C38,C59,C61	Chip capacitor(1005)	MURATA	GRM155C81E105KE11D	3
15	C27	Chip capacitor	PANASONIC	EEE-FK1K470P	1
16	C28,C31	Chip capacitor(0603)	MURATA	GRM033R71E103KE14D	2
17	C34	Chip capacitor(0603)	MURATA	GRM033R71E471KA01D	1
18	C37	Chip capacitor	Panasonic	EEE-1VA101XP	1

R12TU0073EJ0110



© 2020 Renesas Electronics Corporation. All rights reserved.

1/5

RTK0EM0000B10020BJ BOM LIST

No.	Reference	Description	Manufacturer	PartNumber	Qty
19	C40	Chip capacitor(2012)	MURATA	GCM219R71H334KA55D	1
20	C102,C103,C104	Chip capacitor(1608)	MURATA	GRM1885C1H101JA01J	3
21	D1	DIODE_Dual_Series	ON Semiconductor	VF20100C-M3/4W	1
22	D2,D9,D16,D22,D24	DIODE_Dual_Series	toshiba	1SS302A,LF	5
23	D8,D10,D15,D18,D20,D21,D11, D13,D14	DIODE	Rohm	RF05VAM1STR	9
24	D12	DIODE	Rohm	RB160MM-60TR	1
25	D23,D25	DIODE	toshiba	1SS387,L3F	2
26	F1	Fuse	Bourns	SF-2410FP1000W-2	1
27	HS1	Heatsink	ABL Components	PPD0380P	1
28	J1	DC jack	Kycon	KLDX-SMT2-0202-ATR	1
29	LED1,LED2,LED3	LED	Rohm	SML-D12D8WT86	3
30	LED4	LED	Rohm	SML-D12P8WT86	1
31	L1	Inductor	TDK	SLF12555T-681MR43-PF	1
32	Q3,Q4,Q5,Q6,Q7,Q8	Nch MOSFET	Renesas	RJK1054DPB-00#J5	6
33	R1,R27,R67,R102,R61,R96,R110	Chip resistor(6432)	Panasonic	ERJ-M1WSF10MU	7
34	R2,R32,R34,R44,R69,R72,R81, R92,R101,R105,R159,R162,R9	Chip resistor(1608)	KOA	RK73H1JTDD1002F	13
35	R4,R40,R77,R108,R160,R163	Chip resistor(1608)	KOA	RK73H1JTDD4700F	6
36	R5	Chip resistor(1608)	KOA	RK73H1JTDD3302F	1
37	R6,R28,R64,R112,R113,R114	Chip resistor(1608)	KOA	RK73H1JTDD4701F	6
38	R14	Chip resistor(1608)	KOA	RK73H1JTDD2202F	1
39	R25	Chip resistor(2012)	KOA	RK73Z2ATTD	1
40	R26,R41,R66,R74,R88,R98,R164 ,R165	Chip resistor(1608)	KOA	RK73B1JTDD101J	8

R12TU0073EJ0110



© 2020 Renesas Electronics Corporation. All rights reserved.

RTK0EM0000B10020BJ BOM LIST

No.	Reference	Description	Manufacturer	PartNumber	Qty
41	R35,R39,R45,R54,R75,R76,R86, R106,R107,R118,R120,R123, R125,R126,R127,R129,R130, R131,R132,R133,R134,R136,R137, R138,R139,R128,R135	Chip resistor(0603)	KOA	RK73Z1HTTC	29
42	R33,R43,R68,R79,R91,R100,R60	Chip resistor(1608)	KOA	RK73Z1JTDD	7
43	R38,R73,R95	Chip resistor(1608)	KOA	RK73B1JTDD4R7J	3
44	R53,R62,R90,R97,R109,R111	Chip resistor(1608)	KOA	RK73B1JTDD220J	6
45	R55	Chip resistor(1608)	KOA	RK73B1JTDD474J	1
46	R56	Chip resistor(1608)	KOA	RK73H1JTDD4702F	1
47	R57	Chip resistor(1608)	KOA	RK73B1JTDD102J	1
48	R58	Chip resistor(1608,1/4W)	KOA	RK73B1JTDD1R0J	1
49	R63	Chip resistor(1608)	KOA	RK73H1JTDD2402F	1
50	R65	Chip resistor(1608)	KOA	RK73H1JTDD2701F	1
51	R161	Chip resistor(1608)	KOA	RK73B1JTDD202J	1
52	R197	Chip resistor(1608)	KOA	RK73Z1JTDD	1
53	R190,R191,R192	Chip resistor(1608)	KOA	RK73B1JTDD104J	3
54	SW2	switch	Panasonic	EVQ-5PN04K	1
55	SW1	Toggle switch	Nidec Copal	ATE1D-2M3-10-Z	1
56	U1	Current detection amp	Maxim Integrated	MAX4080TAUA+	1
57	U2	Comparator	STMicroelectronics	TS332IQ2T	1
58	U5,U9,U11	Current detection amp	Analog Devices	AD8418ABRMZ	3
59	U6	Gate driver	Renesas	HIP4086ABZT	1
60	U7	Switching regulator	Texas Instruments	LM5017MRX	1
61	U8	5V regulator	STMicroelectronics	L78M05CDT-TR	1

R12TU0073EJ0110



© 2020 Renesas Electronics Corporation. All rights reserved.

RTK0EM0000B10020BJ BOM LIST

No.	Reference	Description	Manufacturer	PartNumber	Qty
62	VR1	Potentiometer	Tokyo Cosmos Electric	GF063P1KB103	1
63	C25,C29,C32,C33,C39	Chip capacitor(1608)	murata	GCM188R71E105KA64D	5
64	R198,R199,R200		KOA	RK73H1ETTP6800F	3
65	C105,C106,C107	Chip capacitor(1005)	Taiyo Yuden	UMK105B7332KVHF	3

Unmounted

64	CNE	CN_PinHeader-50pin	-	-	-
65	C6	Chip capacitor(1608,80V)	-	-	-
66	C14,C16,C84,C85,C86,C87	Chip capacitor	-	-	-
67	C15,C19,C45,C48,C21,C50	Chip capacitor(25V)	-	-	-
68	R10,R11,C12,C13,C17,R29,C30, R46,R47,R48,R49,R51,C51,R59, R87,C88,C89,C90,C91,C92,C93, C94,C95,C96,C97,C98,C99,R193, R194,R195,R196	Chip capacitor/Chip resistor(1608)	-	-	-
69	D3,D4,D5,D7,D17,D19	DIODE	-	-	-
70	D6	DIODE_Dual_Series	-	-	-
71	Q1,Q2	Nch MOSFET	-	-	-
72	R3,R7,R13,R15,R20,R21,R36,R37, R52,R89,R93,R94	Chip resistor(1608)	-	-	-
73	R8,R12,R22	Chip resistor	-	-	-

R12TU0073EJ0110



© 2020 Renesas Electronics Corporation. All rights reserved.

RTK0EM0000B10020BJ BOM LIST

No.	Reference	Description	Manufacturer	PartNumber	Qty
74	R16,R17,R18,R19,R30,R31,R70, R71,R78,R80,R82,R83,R103,R104, R115,R116,R117,R119,R121,R122, R124,R144,R147,R148,R151,R152, R154,R155,R156,R157,R158,R23, R24,R84,R85,R140,R141,R142, R143,R145,R146,R149,R150,R153	Chip resistor(0603)	-	-	-
75	R42,R99	Chip resistor(6432)	-	-	-
76	R50	Chip resistor(1W)	-	-	-
77	U3	Current detection amp	-	-	-
78	U4,U10	Gate driver	-	-	-
79	U15	3.3V regulator	-	-	-

R12TU0073EJ0110



© 2020 Renesas Electronics Corporation. All rights reserved.