

RTK0EM0000B11020BJ BOM LIST

Product Name: Evaluation System for Stepping Motor with Resolver

Board Name : Inverter board (RTK0EM0000B11020BJ)

Schematic No : R12TU0083

Date : 2019/11/29

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	C6,C8,C17,C20,C43,C49	Chip capacitor (1608)	MURATA	GCJ188R72A104KA01D	6
10	C7,C10,C14,C18,C22,C24,C41,C44,C47,C54,C56,C60	Chip capacitor (0603)	MURATA	GRM033R61A104KE15D	12
11	C9	Chip capacitor (3216)	MURATA	GCM32DC72A475KE02L	1
12	C11,C35,C36,C52,C53,C57,C58	Chip capacitor (0603)	MURATA	GRM033R71E102KA01D	7
13	C38,C59,C61	Chip capacitor (1005)	MURATA	GRM155C81E105KE11D	3
14	C21,C50	Chip capacitor (3216)	MURATA	GRT31CC81H155KE01L	2
15	C16,C23,C46,C55,C42	Chip capacitor (2012)	MURATA	GRM21BR61E106MA73L	5
16	C27	Chip capacitor	PANASONIC	EEE-FK1K470P	1
17	C28,C31	Chip capacitor (0603)	MURATA	GRM033R71E103KE14D	2
18	C37	Chip capacitor	Panasonic	EEE-1VA101XP	1
19	C40	Chip capacitor (2012)	MURATA	GCM219R71H334KA55D	1

R12TU0085EJ0100



© 2019 Renesas Electronics Corporation. All rights reserved.

RTK0EM0000B11020BJ BOM LIST

No.	Reference	Description	Manufacturer	PartNumber	Qty
20	C102,C103,C104	Chip capacitor (1608)	MURATA	GRM1885C1H101JA01J	3
21	D1	DIODE_Dual_Series	ON Semiconductor	VF20100C-M3/4W	1
22	D2,D6,D9,D16,D22,D24	DIODE_Dual_Series	toshiba	1SS302A,LF	6
23	D3,D4,D5,D7,D8,D10,D15,D17,D18,D19,D20,D21	DIODE	Rohm	RF05VAM1STR	12
24	D12	DIODE	Rohm	RB160MM-60TR	1
25	D23,D25	DIODE	toshiba	1SS387,L3F	2
26	F1	Fuse	Bourns	SF-2410FP800W-2	1
27	HS1	Heatsink	ABL Components	PPD38BP	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	Q1,Q2,Q3,Q4,Q5,Q6,Q7,Q8	Nch MOSFET	Renesas	RJK1054DPB-00#J5	8
33	R1	Chip resistor (6432)	KOA	UR73D3ATTE20L0F	1
34	R2,R8,R12,R22,R32,R34,R44,R69,R72,R81,R92,R101,R105,R159,R162	Chip resistor (1608)	KOA	RK73H1JTDD1002F	15
35	R3,R15,R26,R41,R66,R74,R88,R98	Chip resistor (1608)	Panasonic	ERJ-PA3J101V	8
36	R4,R20,R40,R77,R108,R160,R163	Chip resistor (1608)	KOA	RK73H1JTDD4700F	7
37	R5	Chip resistor (1608)	KOA	RK73H1JTDD3302F	1
38	R6,R28,R64,R112,R113,R114	Chip resistor (1608)	KOA	RK73H1JTDD4701F	6
39	R7,R21,R33,R43,R68,R79,R91,R100	Chip resistor (1608)	KOA	RK73B1JTDD150J	8

R12TU0085EJ0100



© 2019 Renesas Electronics Corporation. All rights reserved.

RTK0EM0000B11020BJ BOM LIST

No.	Reference	Description	Manufacturer	PartNumber	Qty
40	R9	Chip resistor (1608)	KOA	RK73B1JTDD102J	1
41	R13,R38,R73,R95	Chip resistor (1608)	KOA	RK73B1JTDD4R7J	4
42	R14	Chip resistor (1608)	KOA	RK73H1JTDD2202F	1
43	R45,R54,R86,R125,R126,R127,R129,R130,R131,R132,R133,R134,R136,R137,R138,R139,R16,R19,R80,R82,R106,R107,R115,R117,R118,R120,R123,R128,R135,R30,R31,R70,R71	Chip resistor (0603)	KOA	RK73Z1HTTC	33
44	R25	Chip resistor (2012)	KOA	RK73Z2ATTD	1
45	R27,R50,R61,R67,R96,R102,R110	Chip resistor (6432)	KOA	UR73D3ATTE25L0F	7
46	R36,R93	Chip resistor (1608)	KOA	RK73B1JTDD332J	2
47	R37,R94,R197	Chip resistor (1608)	KOA	RK73Z1JTDD	3
48	R10,R11,R53,R62,R90,R97,R109,R111	Chip resistor (1608)	KOA	RK73H1JTDD1000F	8
49	R164,R165	Chip resistor (1608)	KOA	RK73B1JTDD101J	2
50	R55	Chip resistor (1608)	KOA	RK73B1JTDD474J	1
51	R56	Chip resistor (1608)	KOA	RK73H1JTDD4702F	1
52	R58	Chip resistor (1608)	KOA	RK73B1JTDD1R0J	1
53	R63	Chip resistor (1608)	KOA	RK73H1JTDD2402F	1
54	R65	Chip resistor (1608)	KOA	RK73H1JTDD2701F	1
55	R161	Chip resistor (1608)	KOA	RK73B1JTDD202J	1
56	R190,R191,R192	Chip resistor (1608)	KOA	RK73B1JTDD104J	3
57	SW2	switch	Panasonic	EVQ-5PN04K	1
58	SW1	Toggle switch	Nidec Copal	ATE1D-2M3-10-Z	1

R12TU0085EJ0100



© 2019 Renesas Electronics Corporation. All rights reserved.

RTK0EM0000B11020BJ BOM LIST

No.	Reference	Description	Manufacturer	PartNumber	Qty
59	U1	Current detection amp	Maxim Integrated	MAX4080TAUA+	1
60	U2	Comparator	STMicroelectronics	TS332IQ2T	1
61	U4,U10	Gate driver	Renesas	HIP4082IBZT	2
62	U5,U9	Current detection amp	Analog Devices	AD8418ABRMZ	2
63	U7	Switching regulator	Texas Instruments	LM5017MRX	1
64	U8	5V regulator	STMicroelectronics	L78M05CDT-TR	1
65	VR1	Potentiometer	Tokyo Cosmos Electric	GF063P1KB103	1
66	C12,C13	Chip capacitor (1608)	murata	G CJ188R71H102KA01D	2
67	C15,C19,C39,C45,C48	Chip capacitor (1608)	murata	GCM188R71E105KA64D	5

Unmounted

68	CNE	CN_PinHeader-50pin	-	-	-
69	R29,C30,R46,R47,R48,R49,R51,C51,R57,R59,R60,R87,C88,C89,C90,C91,C92,C93,C94,C95,C96,C97,C98,C99,R176,R193,R194,R195,R196	Chip capacitor / Chip resistor (1608)	-	-	-
70	C25,C29,C32,C33,C84,C85,C86,C87	Chip capacitor	-	-	-
71	C34	Chip capacitor (0603)	-	-	-
72	D11,D13,D14	DIODE	-	-	-

R12TU0085EJ0100



© 2019 Renesas Electronics Corporation. All rights reserved.

RTK0EM0000B11020BJ BOM LIST

No.	Reference	Description	Manufacturer	PartNumber	Qty
73	R17,R18,R78,R83,R144,R147,R148,R151,R152,R154,R155,R156,R157,R158,R140,R141,R142,R143,R145,R146,R149,R150,R153,R23,R24,R84,R85,R103,R104,R116,R119,R121,R122,R124,R35,R39,R75	Chip resistor (0603)	-	-	-
74	R42,R99	Chip resistor (6432)	-	-	-
75	R52,R89	Chip resistor (1608)	-	-	-
76	U3,U11	Current detection amp	-	-	-
77	U6	Gate driver	-	-	-
78	U15	3.3V regulator	-	-	-