

Board : RTK0EM0000B14030BJ (Part number)

Schematic : R12TU0261EJ0100 (Document number)

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No.	Reference	Description	Manufacturer	PartNumber	Qty
1	CN1,CN4	Connector	Weidmuller	1826210000	2
2	CN2	Connector	On Shore Technology Inc.	OSTOQ030151	1
3	CN3	Connector	TE Connectivity	282861-2	1
4	CN5	Connector	On Shore Technology Inc.	OSTOQ040151	1
5	CN6,CN7	Connector	On Shore Technology Inc.	OSTVN02A150	2
6	CN8,CN9	Connector	Sullins Connector Solutions	PREC017DAAN-RC	2
7	CN10	Connector	Harwin	M20-9990446	1
8	CN11	Connector	On Shore Technology Inc.	OSTVN08A150	1
9	CN12	Connector	JAE Electronics	DX07S016JA3R1500	1
10	CN13	Connector	MOLEX	534269040	1
11	CN14	Connector	MOLEX	533750410	1
12	C14,C15,C46,C47,C48,C49,C50,C51,C61,C62,C63,C67	Capacitor	TDK	C1005X7R1H471K050BA	12
13	C2,C8	Capacitor	Murata	DE2E3SA222MA3BY02F	2
14	C3	Capacitor	TDK	B32922P3224K000	1
15	C23,C24,C27,C28,C29,C33,C34,C36,C37,C38,C70,C71,C75,C79,C80,C82,C84,C85,C87,C107,C110,C126,C130,C134,C135,C137	Capacitor	-	-	0
16	C4	Capacitor	-	-	0
17	C16,C30	Capacitor	-	-	0
18	C5	Capacitor	Panasonic	ECW-FE2W475K	1
19	C6,C7	Capacitor	United Chemi-Con	ESMQ451VSN561MR50S	2
20	C9,C40,C42,C44,C53,C54,C127,C136	Capacitor	Murata Electronics	GRM219R7YA105KA12D	8
21	C72,C73,C76,C77	Capacitor	TDK	CGA2B3X7R1H103K050BB	4
22	C17,C31	Capacitor	Murata Electronics	GCM32ER71H475KA55L	2
23	C10,C11,C12,C18,C19,C22,C25,C32,C65,C68,C69,C78,C83,C88,C97,C102,C103,C108,C109,C118,C119,C91,C124,C129,C133	Capacitor	Murata Electronics	GRT155R71H104KE01D	25

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24	C39,C41,C43	Capacitor	Nichicon	UCM1H220MCL1GS	3
25	C45	Capacitor	Panasonic	ECW-FG2J105PA	1
26	C52,C92,C120	Capacitor	Panasonic	EEE-FK1E470P	3
27	C95,C96,C117	Capacitor	TDK	C3225X7R1E226M250AB	3
28	C1,C58,C59,C60	Capacitor	Murata Electronics	GCM155L81H472KA37D	4
29	C66,C131,C132,C138	Capacitor	Murata Electronics	GCM155R71H102KA37J	4
30	C89	Capacitor	TDK	CGA2B2C0G1H4R7C050BA	1
31	C90	Capacitor	Rubycon	35SGV220M10X10.5	1
32	C55,C56,C57,C64,C112,C113,C114	Capacitor	Murata Electronics	GRM188D71A106KA73D	7
33	C93,C94,C98,C101,C111,C115,C116,C128	Capacitor	Murata Electronics	GCM32EC71H106KA03K	8
34	C99	Capacitor	TDK	C1005X5R1E223K050BA	1
35	D1,D5,D6,D11,D14,D33	Diode	Rohm	RF05VAM1STR	6
36	D2,D3	Schottky Barrier Diode	Rohm	SCS315AM	2
37	D4	Bridge Rectifiers	Vishay	LVB2560-M3/45	1
38	D7,D31,D32	Diode	Rohm	RFN1LAM7STR	3
39	D10	Zener Diode	Rohm	EDZVT2R15B	1
40	D12,D13,D15,D16,D21,D22,D23,D24,D25,D26,D27,D29,D30	Diode	Diodes	MMBD7000HS-7-F	13
41	D17,D18,D19,D20	Zener Diode	Rohm	TDZVTR22	4
42	JP1,JP2,JP3,JP4,JP5,JP6,JP7,JP8,JP9,JP10,JP11,JP12,JP13,JP15,JP16	Jumper	Harwin	M20-9990346	15
43	LED1,LED2,LED3,LED4,LED5,LED6,LED7	LED	Rohm	SML-D12Y8WT86	7
44	L1,L2	Inductor	Nippon chemi-con	LHDM010401DYBD0E	2
45	L3	Inductor	TDK	VLS6045EX-4R7M	1
46	Q1,Q7	MOSFET	Toshiba	SSM3K72KFS,LF	2
47	Q5,Q6	MOSFET	Rohm	R6020ENJTL	2
48	Q3,Q4	IGBT	Renesas	RJH65T04BDPM-A0	2
49	R1,R25	Resistor	Yageo	RC0805JR-07150RL	2

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50	R2,R17,R18,R28,R47,R51,R56,R63,R64,R65,R71,R78,R102,R113,R121,R126,R131,R135,R140,R141,R146,R155,R156,R162,R163,R164,R165,R166,R167,R168,R169,R170,R171,R172,R173,R174,R175,R176,R177,R222,R228,R229,R230,R232,R234,R235,R236	Resistor	Yageo	RC0402FR-0710KL	47
51	R3	Thermistor	SEMITEC	10D2-18LD	1
52	R4,R9,R85,R86,R87,R88,R89,R90,R223,R224,R225,R226	Resistor	KOA	RK73B2ETTD105J	12
53	R6	Varistor	Panasonic	ERZE14A471	1
54	R7,R16	Resistor	KOA	RK73B2ETTD104J	2
55	R8,R19	Resistor	KOA	RK73B2ETTD474J	2
56	R10,R11	Resistor	KOA	RK73H2ATTD39R0F	2
57	R13,R14	Resistor	KOA	RK73H2ATTD1000F	2
58	R15	Resistor	TE Connectivity	SQMR58K2J	1
59	R22,R23,R30,R31	Resistor	Yageo	RC1210FR-07200KL	4
60	R26,R27,R33,R35,R91,R92,R93,R105	Resistor	KOA	TLRH3APTTE10L0F	8
61	R29	Resistor	Yageo	RC0402JR-07240KL	1
62	R37,R39,R103,R157,R158,R159,R214,R215,R216,R242	Resistor	Yageo	RC0402FR-071KL	10
63	R38,R40,R43,R44,R79,R80,R81,R82,R83,R84,R94,R95,R96	Resistor	Yageo	RC0402FR-07100RL	15
64	R45,R48,R53,R57,R67,R72,R108,R114,R123,R127,R132,R133	Resistor	Yageo	RE0402FRE0720KL	14
65	R41,R50,R73,R227	Resistor	Yageo	RC0402FR-074K7L	4
66	R54,R60,R69,R75,R111,R119,R124,R129,R133,R138,R160	Resistor	Yageo	RC0402JR-070RP	25
67	R62,R66,R110,R122,R199	Resistor	Yageo	RC0402FR-131K8L	5
68	R77	Resistor	Yageo	RC0402FR-13510RL	1
69	R97,R101	Resistor	Yageo	RC0402FR-132KL	2
70	R106	Resistor	Yageo	RT0402FRE073KL	1
71	R107,R142,R145,R151,R152	Resistor	Yageo	RC0805JR-070RL	5
72	R109	Thermistor	Vishay	NTCS0603E3103JLT	1
73	R115,R117,R212,R213	Resistor	Yageo	RC0402FR-075K1L	4
74	R144	Resistor	Yageo	RC0402FR-072K61L	1
75	R147	Resistor	Yageo	RC0402FR-07287RL	1

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76	R68,R98,R99,R100	Resistor	Yageo	RC0402FR-076K8L	4
77	R181,R183,R184,R185,R186,R187,R188,R190,R192,R19	Resistor	-	-	0
78	U1	Relay	TE Connectivity	T9GV1L14-15	1
79	U2	Gate Driver	Renesas	ISL89410IBZ	1
80	U3,U5,U8,U11,U12,U13,U23	Opamp	Renesas	ISL28191FHZ	7
81	U4,U6,U10	Comparator	STMicro	TS332IQ2T	3
82	U7	Gate Driver	Renesas	ISL89412IBZ	1
83	U9	IGBT module	Rohm	BM64378S-VA	1
84	U14	Linear Regulator	Renesas	ISL80102IRAJZ-TK	1
85	U15	AC/DC converter	Recom Power	RAC20-15SK	1
86	U16	Buck Regulator	Renesas	ISL85003AFRZ	1
87	U17	Green PAK	Renesas	SLG7RN46386	1
88	U18	Receiver	Renesas	ISL32173EIVZ	1
89	U19	Digital Isolators	Skyworks	SI8622BD-B-IS	1
90	R182,R189,R191	Resistor	KOA	RK73H2ATTD1200F	3
91	U20	Digital Isolators	Skyworks	SI8640BD-B-IS	1
92	R217,R218,R219	Resistor	YAGEO	RC0402FR-07680RL	3
93	R52,R220	Resistor	YAGEO	RC0402FR-07470RL	2
94	C100,C106	Capacitor	TDK	C1608X7R1C105K080AC	2
95	C20,C21,C125	Capacitor	TDK	C1005C0G1H470J050BA	3
96	C26,C35,C74,C81,C86,C121,C122,C123	Capacitor	TDK	C1005C0G1H221J050BA	8
97	R34,R238	Resistor	KOA	RK73H1ETTP1152F	2
98	R46,R49,R55,R61,R70,R76	Resistor	KOA	RK73H1ETTP1201F	6
99	R58	Resistor	KOA	RK73H1ETTP3002F	1
100	R59,R74,R116,R128,R137	Resistor	KOA	RK73H1ETTP2200F	5
101	R118	Resistor	KOA	RK73H1ETTP3601F	1
102	R143	Resistor	KOA	RK73H1ETTP3303F	1
103	R148	Resistor	KOA	RK73H1ETTP5602F	1
104	Q2	MOSFET	-	-	0
105	JP14	Jumper	HARWIN	M20-9990246	1
106	R153	Resistor	-	-	0
107	U21	Linear Regulator	Renesas	RAA2142504GNP	1

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108	R221	Resistor	Yageo	RC0402FR-0788K7L	1
109	U22	Opamp	Renesas	ISL28291FRUZ	1
110	R5	Resistor	YAGEO	HHV1WSJT-73-2M	1
111	U24,U25	TVS Diodes	Texas Instruments	TPD6E001RSER	2
112	U26	Power switch	Texas Instruments	TPS22810DBVR	1
113	R112,R120,R125,R130,R134,R139	Resistor	KOA	RK73H1ETTP2401F	6
114	TP2,TP11,TP16,TP17,TP18,TP19,TP20,TP21,TP22,TP23	test pin	-	-	0
115	TP5,TP6,TP7,TP8,TP9,TP10,TP12,TP13,TP14,TP15	test pad	-	-	0
116	R239	Resistor	Yageo	RC0402FR-074K3L	1